syngenta flowers

Annuals

2020–2021

2020 Featured New Varieties

FotoFinish™
Spreading Petunia

Fastest to the finish.

See page 84.

FotoFinish™ Pink

FlashForward™ Lavender

Flash Forward™
Mini Spreading Petunia

Plays well alone and with others.

See page 86.

BACK TO CONTENTS

Sunfinity® Yellow Dark Center

Welcome

Hello and welcome to Syngenta Flowers! I am pleased to present to you our 2020–2021 catalog of seed and vegetative annuals.

This will prove to be another prolific year of genetic introductions, with the release of over 100 varieties from our vast breeding pipeline. Once again, you'll see Syngenta Flowers introduce innovative breeding and demonstrate firsthand that our team is moving full speed ahead, with grower efficiency and product performance as our focus.

With this, we are proud to introduce two new spreading Petunia series from seed: FotoFinish™ and FlashForward™. Both offer earliness and programmability as the most uniform series in their class for timing, habit, and garden fill. In addition, we are releasing many core improvements and color additions to our best-selling seed portfolio.

Last year we introduced the XDR (Xtreme Disease Resistance) brand to the market. We are pleased to add a very important core color, apricot, to the market-leading Cora® XDR vinca series, as well as five new mixes of Imara™ XDR, the first Impatiens with high levels of resistance to Impatiens downy mildew.

There is equal excitement within our vegetative assortment, including five new series, great new colors and improvements to core series, and a plethora of garden-tested Kwik Kombos™. Florencio™ hybrid Begonia hosts five vibrant, grower-friendly colors with outstanding outdoor performance. Stand-alone items Rosalie™ zonal geranium with its classic rosebud-like florets and mini trailing Petunia Itsy™ that is "tough and tiny" are both sure to provide something new at retail.

All our products are backed by our best-in-class technical support team, who I believe are second to none. We know our products and their performance inside and out, better than anyone in the industry. Most importantly, the team at Syngenta Flowers is obsessed with product quality and we will never be satisfied with the status quo; we will strive for continuous improvement at our farms, ensure that we deliver superior quality that maximizes your profits, and bring plant potential to life.

Thank you for your business and we look forward to serving you!

Scott Valentine
President, Syngenta Flowers, LLC

BACK TO CONTENTS

Outstanding Product Quality

Supply & Sustainability

Top-quality seeds and cuttings are critical to your business' success. We emphasize being the best in product quality; this is especially true for our hard-working teams at our farms throughout the world.

We look forward to sharing more quality improvements in 2020 and beyond, but we could not do this without the great feedback we get from you which helps us focus on what matters most and continue to raise the quality bar.

Our teams at our vegetative farms in **Guatemala**, **Mexico**, and **Alva**, **Florida** continually work to improve key crops like geranium, Lantana, and Calibrachoa.

Our seed supply chain continues to improve in product quality, notably in the development of new seed enhancements that make sowing more efficient and germination more reliable and consistent.

BACK TO CONTENTS

GLOBALG.A.P.

GLOBALG.A.P. is one of the world's leading agricultural standards. Syngenta Flowers has adopted the GLOBALG.A.P. standards at our North American and Central American facilities to encourage sustainability, raise efficiency of farm operations, and protect environmental resources.

RECOGNIZED IN OVER 120 COUNTRIES

Technical Support

Harvey Lang

Jamie Gibson

Mark Smith

Don Snow

Alicain Carlson

Mike Fischer

Karl Trellinger

Keith Francis

Steffi Hugo

BACK TO CONTENTS

XDR

Xtreme Disease Resistance

ENGINEERED FOR CONFIDENCE
VERIFIED
ENGINEERED FOR CONFIDENCE

- Best-in-class genetic performance under disease pressure
- Rigorous, controlled testing for disease resistance in laboratory and field settings
- Independent verification of testing and results by 3rd party experts

Performance assessments are based upon results or analysis of public information, field observations and/or internal Syngenta evaluations.

Learn more about XDR at www.syngentaflowers-us.com/campaign/xdr

BACK TO CONTENTS

XDR Compared to Non-Resistant Varieties

(Garden setting with NO fungicides applied to any varieties)

Learn more about Cora® XDR on page 111.

Trial photos: Huntersville, NC, July 2018

Learn more about Imara™ XDR on page 46.

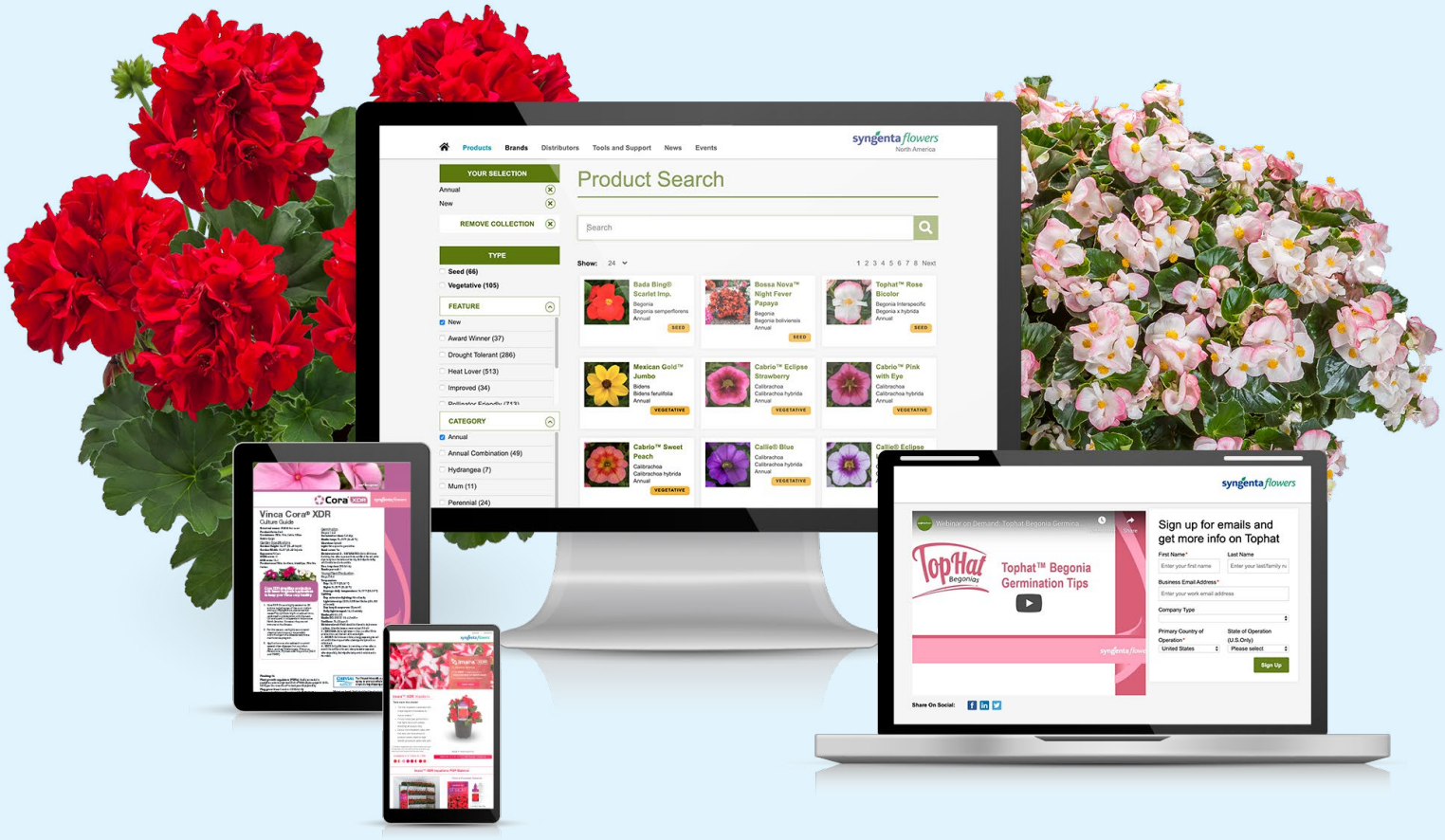
Trial photos: Jealott's Hill, UK, September 2017

BACK TO CONTENTS

Digital Tools Available Online

Gain instant access to relevant product information on all of our Syngenta Flowers—at the office or on the go.

www.syngentaflowers-us.com



- Product Availability
- Online Image Library
- Culture Sheets
- Technical Docs
- Webinars & Videos
- Catalogs & Brochures

Sign up for e-mail updates!

CONNECT WITH US

BACK TO CONTENTS

Hot Blooded™ Red

Table of Contents

BACK TO CONTENTS

Table of Contents

Welcome 1
Product Quality & Technical Support 2
XDR 4
Digital Tools Available Online 6

Seed Annuals

Begonia 11
Begonia Interspecific 16
Calendula 19
Celosia 19
Cleome 20
Corn Ornamental 20
Cosmos 21
Cuphea 21
Cyclamen 22
Dahlia 24
Dianthus 25
English Daisy / Bellis 26
Gazania 27
Geranium 30
Geranium Ivy 35
Gerbera 37
Hibiscus 41
Impatiens 42
Impatiens New Guinea 50
Laurentia 50
Lavatera 51
Marigold African 51
Marigold French Anemone 54
Marigold French Dwarf Crested 55
Marigold Triploid 56
Mimulus 57
Nemesia 58
Nicotiana 59
Osteospermum 61
Pansy 62
Pansy Spreading 70
Penstemon 73
Pentas 74
Petunia 75
Petunia Grandiflora 76
Petunia Milliflora 80
Petunia Multiflora 81
Petunia Spreading 84
Petunia Spreading Grandiflora 88
Petunia Spreading Milliflora 86
Phlox 89
Primula 90
Ranunculus 92
Salvia 94
Sanvitalia 97
Schizanthus 97
Snapdragon 98
Snapdragon Dwarf 100
Sunflower 103
Torenia 106
Verbena 107
Vinca 110
Viola 118
Wallflower 123
Zinnia 124

Kwik Kombos™

About Kwik Kombos™ 127
Early Season 128
Mid Season 135
Late Season 141
At-a-Glance 144

Vegetative Annuals

Angelonia 149
Argyranthemum 150
Bacopa 150
Begonia 151
Bidens 153
Calendula 153
Calibrachoa 154
Calocephalus 157
Curry Plant 226
Dahlia 158
Diascia 164
Dipladenia 165
Dorotheanthus 167
Euphorbia 167
Geranium 168
Geranium Interspecific 169
Geranium Ivy 181
Geranium Zonal 184
Heliotrope 190
Impatiens 191
Impatiens New Guinea 192
Ipomoea 196
Lantana 197
Lavender Spanish 203
Licorice Plant 226
Lobelia 204
Lysimachia 206
Osteospermum 207
Penstemon 208
Pentas 208
Petunia 210
Salvia 218
Scaevola 218
Variegated Swedish Ivy 226
Verbena 220
Vinca 224

Resources

Grower Success Guide 227
- Technical Key 227
- Seed Propagation 228
- Seed Finishing 242
- Vegetative Propagation 268
- Vegetative Finishing 278

Wholesale Broker List 303
Root ‘n’ Sells 305
Drops & Substitutions 307
Utility Patents 308

Seed Annuals

BEGONIA
Bada Bing®/Bada Boom® 13
Bossa Nova™ 12
Eureka™ 14
Topspin™ 15
Volumia™ 15

BEGONIA INTERSPECIFIC
Braveheart® 18
Ikon™ 18
Tophat™ 16

CALENDULA
Costa™ 19

CELOSIA
Bright Sparks™ 19

CLEOME
Sparkler™ 20

CORN ORNAMENTAL
Field of Dreams™ 20

COSMOS
Apollo™ 21

CUPHEA
Sriracha™ 21

CYCLAMEN
At-a-Glance 23

DAHLIA
Fresco™ 24
Harlequin™ 24

DIANTHUS
Diabunda® 26
Super Parfait™ 25
Venti Parfait™ 25

ENGLISH DAISY / BELLIS
Bam Bam™ 26

GAZANIA
Big Kiss™ 28
Frosty Kiss™ 29
Gazoo™ 27
Kiss™ 29

GERANIUM
BullsEye™ 30
Landscaper™ 30
Maverick™ 31
Multibloom™ 32
Pinto™ Premium 33
Quantum™ 34
Ringo 2000™ 34

GERANIUM IVY
Reach Out™ 35
Tornado™ 36

GERBERA
Bengal™ 38
Cartwheel® 39
Elephant™ 39
Jaguar™ 40

HIBISCUS
Honeymoon™ 41

IMPATIENS
Accent™ 44
Accent™ Premium 43
Athena™ 45
Imara™ XDR 46
Xtreme™ 49

IMPATIENS NEW GUINEA
Florific® 50

LAURENTIA
Starshine™ 50

LAVATERA
Novella™ 51

MARIGOLD AFRICAN
Antigua™ 51
Big Top™ 52
Inca II™ 53
Perfection™ 53

MARIGOLD FRENCH ANEMONE
Alumia™ 54

MARIGOLD FRENCH DWARF CRESTED
Happy™ 55

MARIGOLD TRIPLOID
Zenith™ 56

MIMULUS
Magic™ 57
Maximus™ 57

NEMESIA
Pretty Please™ 58
Seventh Heaven™ 58

NICOTIANA
Perfume™ 60
Saratoga™ 59

OSTEOSPERMUM
Asti™ 61

PANSY
Colossus™ 63
Delta™ 68
Delta™ Premium 65
Delta™ Speedy 69

PANSY SPREADING
Freefall™ 70
Freefall™ XL 71
WonderFall™ 72

PENSTEMON
Arabesque® 73
Partybells™ 73

PENTAS
BeeBright™ 74
HoneyCluster™ 74

PETUNIA GRANDIFLORA
Duvet™ 76
Frost™ 77
TriTunia™ 78

PETUNIA MILLIFLORA
Picobella™ 80

PETUNIA MULTIFLORA
Damask™ 81
Horizon™ 82
Hurrah™ 83

PETUNIA SPREADING
FotoFinish™ 84

PETUNIA SPREADING GRANDIFLORA
Skybox™ 88

PETUNIA SPREADING MILLIFLORA
FlashForward™ 86

PHLOX
Popstars™ 89

PRIMULA
Libre™ 91
Primera™ 90

RANUNCULUS
Maché™ 92
Magic™ 93

SALVIA
Mojave™ 95
Rhea™ 94
Sentry™ 95
Sizzler™ 96
Strata™ 94
Victoria™ 94

SANVITALIA
Queen of Sunlight™ 97

SCHIZANTHUS
Atlantis™ 97

SNAPDRAGON
Liberty™ Classic 98
Madame Butterfly™ 98
Snaptastic™ 99

SNAPDRAGON DWARF
Snaptini™ 100

SUNFLOWER
Sunfinity® 103

TORENIA
Duchess™ 106

VERBENA
Obsession™ 107
Obsession™ Cascade 108
Tuscany® 109

VINCA
Blockbuster™ 115
Cora® Cascade 114
Cora® Classic 113
Cora® XDR 111
SunStorm® 116
Vitesse™ 117

VIOLA
Deltini™ 118
Endurio® 120
Penny™ 121
Tiger Eye™ 123

WALLFLOWER
Sugar Rush™ 123

ZINNIA
Magellan™ 124
Short Stuff™ 125
Swizzle™ 126
Uproar™ 126
Zowie!™ 126

BACK TO CONTENTS

Vegetative Annuals

ANGELONIA
Carita™ 149
Carita™ Cascade 149

ARGYRANTHEMUM
Sassy® 150

BACOPA
Calypso™ 150

BEGONIA
Florencio™ 151
Grace™ 152

BIDENS
Mexican Gold™ 153

CALENDULA
Caleo™ 153

CALIBRACHOA
Cabrio™ 156
Callie® 154

CALOCEPHALUS
Whimsy™ 157

CURRY PLANT
Helichrysum 226

DAHLIA
Dahlegria® 159
Goldalia™ 160
Grandalia™ 161
Happy Days™ 162
Sincerity 163

DIASCIA
Darla® 164

DIPLADENIA
Madinia® 165
Madinia® Maximo 166

DOROTHEANTHUS
Mezoo™ 167

EUPHORBIA
Euphoric™ 167

GERANIUM INTERSPECIFIC
Caldera™ 169
Caliente® 170
Calliope® Large 174
Calliope® Medium 176
Mojo™ 178
Moxie!™ 179
Pretty Little™ 180

GERANIUM IVY
Blizzard™ 181
Cascade 182
Ivy League™ 183

GERANIUM ZONAL
Americana® 184
Rocky Mountain™ 186
Rosalie™ 187
Tango™ 188

HELIOTROPE
Scentropia™ 190

IMPATIENS
Silhouette® 191

IMPATIENS NEW GUINEA
Sonic® 192
Super Sonic® 194

IPOMOEA
Sidekick™ 196

LANTANA
Bandana® 198
Bandito™ 199
Bandolero™ 200
Hot Blooded™ 201
Landscape Bandana® 202

LAVENDER SPANISH
Javelin™ Forte 203

LICORICE PLANT
Helichrysum 226

LOBELIA
Techno® 204
Techno® Upright 205

LYSIMACHIA
Goldii 206

OSTEOSPERMUM
Tradewinds® 207

PENSTEMON
Phoenix™ 208

PENTAS
Falling Star™ 208
Starcluster™ 209

PETUNIA
Dekko™ 212
Itsy™ 211
Sanguna® 214
Sanguna® Patio 216
Shortcake™ 217

SALVIA
Velocity™ 218

SCAEVOLA
Bombay® 218

VARIEGATED SWEDISH IVY
Plectranthus 226

VERBENA
Lanai® 220
Lanai® Compact 222
Lanai® Upright 223
Magelana™ 224

VINCA
Nirvana® Cascade 224

All-Star Variety
Award Winner
Drought Tolerant
Heat Lover
NEW New Variety
Utility Patent
Utility Patent Applied For
Pollinator Friendly
Shade
STERILE Sterile

BACK TO CONTENTS

New Varieties

SEED NEW SERIES

MARIGOLD FRENCH DWARF CRESTED

Happy™ 55

PETUNIA SPREADING

FotoFinish™ 84

PETUNIA SPREADING MILLIFLORA

FlashForward™ 86

SEED NEW COLORS

CUPHEA

Sriracha™ 21
- Lavender Bicolor

DIANTHUS

Venti Parfait™ 25
- Blueberry Eye
- Strawberry Shades

GERANIUM

Pinto™ Premium 33
- Deep Rose Imp.

GERBERA

Jaguar™ 40
- White

IMPATIENS

Imara™ XDR 46
- Hot! Mix
- Pastel Mix
- ProFormula Mix
- Rosy Mix
- Tango Mix

MARIGOLD FRENCH ANEMONE

Alumia™ 54
- Creme Brulee

PANSY

Delta™ Speedy 69
- Violet and White

PANSY SPREADING

Freefall™ 70
- True Blue

Freefall™ XL 71
- Fire
- White

PETUNIA MILLIFLORA

Picobella™ 80
- Lavender Imp.
- Salmon Imp.

PETUNIA MULTIFLORA

Damask™ 81
- White

PHLOX

Popstars™ 89
- Red Imp.

RANUNCULUS

Maché™ 92
- Lemon Rose Bicolor

Magic™ 93
- Purple

VERBENA

Obsession™ 107
- White Imp.

Tuscany® 109
- Twister™ Purple Shades

VINCA

Cora® Cascade 114
- Bright Rose

Cora® XDR 111
- Apricot

VIOLA

Penny™ 121
- Orange Jump-up Imp.
- Violet Imp.

VEGETATIVE NEW SERIES

BEGONIA

Florencio™ 151

Grace™ 152

GERANIUM INTERSPECIFIC

Caldera™ 169

GERANIUM ZONAL

Rosalie™ 187

PETUNIA

Itsy™ 211

VEGETATIVE NEW COLORS

CALIBRACHOA

Callie® 154
- Purple Imp.

DAHLIA

Dahlegria® 159
- Magenta Bicolor
- Red Imp.
- Sunrise

Happy Days™ 162
- Fuchsia Halo
- Purple Imp.

EUPHORBIA

Euphoric™ 167
- Double White
- White Imp.

GERANIUM INTERSPECIFIC

Calliope® Medium 176
- Cherry

Mojo™ 178
- Cranberry Splash
- Orange
- Salmon
- White

Moxie!™ 179
- Orange
- Violet
- White Imp.

GERANIUM IVY

Ivy League™ 183
- Cherry Blossom

GERANIUM ZONAL

Americana® 184
- Scarlet Fire

OSTEOSPERMUM

Tradewinds® 207
- Sunset

PETUNIA

Dekko™ 212
- Banana

SCAEVOLA

Bombay® 218
- Compact Dark Blue
- Yellow

VERBENA

Lanai® 220
- Purple
- White Imp.

Lanai® Compact 222
- Candy Pink

Lanai® Upright 223
- Merlot with Eye
- Peach
- Purple with Eye Imp.

KWIK KOMBOS™ NEW COLORS

COMBINATIONS

Kwik Kombos™ 127
- All That Glitters™ Mix
- Crushed Velvet™ Mix
- Curb Appeal™ Mix Imp.
- Endless Love™ Mix
- Harvest Moon™ Mix
- In a Jam™ Mix
- Light Bright™ Mix
- Little Piece of My Heart™ Mix
- Love Potion™ Mix
- Makin' Me Blush™ Mix
- Mermaid Tails™ Mix
- Royal Duchess™ Mix Imp.
- Spring Breeze™ Mix Imp.
- That's the Spirit™ Mix
- World's Fair™ Mix Imp.

BACK TO CONTENTS

Sunfinity® Yellow Dark Center

Seed Annuals

SEED ANNUALS
BACK TO CONTENTS

Tophat™ Scarlet

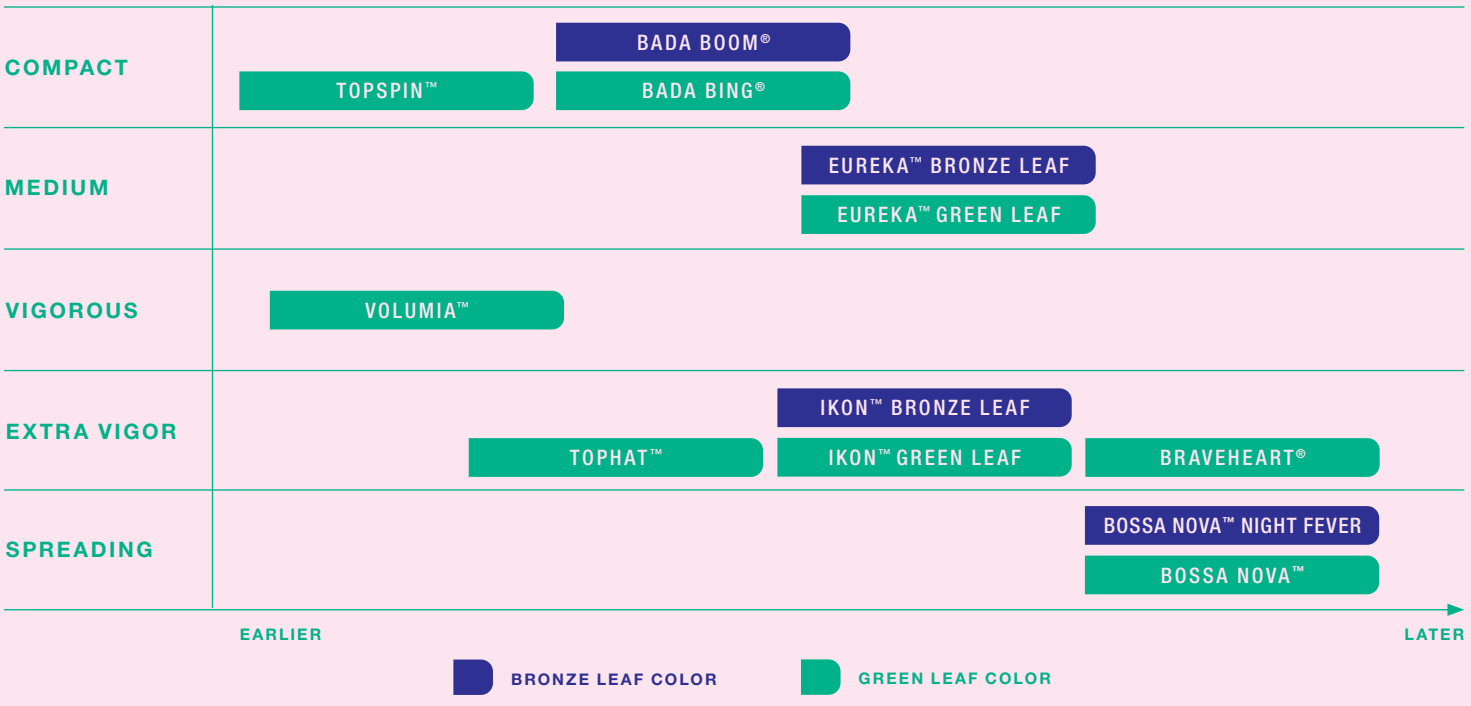
Begonia

No compromise required!

Consistently deliver beautiful plants at retail through to the garden with easy and efficient production.

Syngenta Flowers offers a Begonia for every application. The assortment ranges from compact green and bronze leaf *Begonia semperflorens* types, for high-density production in packs, up to vigorous interspecific varieties, for premium patio, hanging basket, and landscape planting.

Across all types, Syngenta Begonias excel in offering the grower ease and efficiency of production without compromising best-in-class garden and patio performance for the end user.



SEED ANNUALS
BACK TO CONTENTS

BEGONIA *F1 Begonia boliviensis*

Bossa Nova™

Brings the carnival to your containers!

- Brilliant blooms in a full range of colors offer a perfect seed alternative to vegetative varieties.
- Fills multiple container sizes with an abundance of color due to the well-branched habit and short internodes.
- Excels in a variety of climates and conditions including heat, sun, and shade.

DIMENSIONS 16–20” W x 12–16” H

HABIT Trailing

FORMS Pelleted

Bossa Nova™ Night Fever Papaya

Bossa Nova™ Night Fever Papaya
70087660

Bossa Nova™ Orange
70060442

Bossa Nova™ Pink Glow
70091946

Bossa Nova™ Pure White
70069946

Bossa Nova™ Red
70060443

Bossa Nova™ Rose
70060444

Bossa Nova™ Yellow
70086671

Bossa Nova™ Mix
70091945

SEED ANNUALS
BACK TO CONTENTS

Bada Boom® Mix

BEGONIA *F1 Begonia semperflorens*

Bada Bing®/ Bada Boom®

Matching, early flowering, green and bronze leaf varieties, perfect for main season sales.

- Strong germination and seedling vigor to optimize production from sow to finish.
- Very early flowering with a narrow bloom window for quick turns and bench-run production.
- Compact, well-branched plants ideally sized for high-density production in packs and small pots.

DIMENSIONS 6–8" W x 8–10" H

HABIT Mounded

FORMS Raw, Pelleted

Bada Bing® Pink
70018251

Bada Bing® Rose
70018249

Bada Bing® Rose Bicolor
70018269

Bada Bing® Scarlet Imp.
70071001

Bada Bing® White
70040712

Bada Boom® Pink
70018245

Bada Boom® Rose
70040718

Bada Boom® Rose Bicolor
70018271

Bada Boom® Scarlet
70018246

Bada Boom® White
70018259

Bada Bing® Mix
70018267

Bada Boom® Mix
70018268

SEED ANNUALS
BACK TO CONTENTS

BEGONIA *F1 Begonia semperflorens*

Eureka™

Strike it big with built-in heat tolerance for mid to late season sales.

- Exhibits strong plant vigor and branching for fast container fill and outstanding landscape performance.
- A free-flowering beauty in the garden that delivers season long color.
- Full assortment of well-matched green and dark bronze leaved varieties that hold their foliage color in the heat.

DIMENSIONS 7–9" W x 9–12" H

HABIT Mounded

FORMS Raw, Pelleted

Eureka™ Green Leaf White

Eureka™ Bronze Pink
70001153

Eureka™ Bronze Rose
70001156

Eureka™ Bronze Scarlet
70018255

Eureka™ Bronze White
70001155

Eureka™ Green Leaf Pink
70001157

Eureka™ Green Leaf Rose
70001160

Eureka™ Green Leaf Scarlet
70003236

Eureka™ Green Leaf White
70001166

SEED ANNUALS
BACK TO CONTENTS

BEGONIA *F1 Begonia semperflorens*

Topspin™

Cool finishing temperatures won't slow this Begonia down!

- Can be grown successfully alongside other annual bedding plant crops at temperatures as low as 58 °F (14 °C).
- Save up to 14% on production costs with earlier flowering and faster finish times under any production environment.
- Excels at retail and in the garden with outstanding branching and large, premium flowers.

DIMENSIONS 8–10" W x 8–10" H | **HABIT** Mounded | **FORMS** Raw, Pelleted

Topspin™ Mix

Topspin™ Pink
70054592

Topspin™ Rose
70058992

Topspin™ Scarlet
70054594

Topspin™ White
70048975

Topspin™ Mix
70069588

BEGONIA *F1 Begonia semperflorens*

Volumia™

Voluptuous plants with large, vivid flowers.

- More vigorous than other *Begonia semperflorens* varieties, offering full plants and noticeably larger flowers.
- Early enough for quick turns, with the necessary vigor to achieve maximum impact in pots and the landscape.
- Ideal for premium retail and bedding applications in small to large pots.

DIMENSIONS 12–14" W x 12–14" H | **HABIT** Mounded | **FORMS** Pelleted

Volumia™ Scarlet

Volumia™ Pink
70001167

Volumia™ Rose Bicolor
70001169

Volumia™ Scarlet
70001168

Volumia™ White
70001170

SEED ANNUALS
BACK TO CONTENTS

Tophat™ Rose Bicolor

BEGONIA INTERSPECIFIC *F1 Begonia × hybrida*

Tophat™

The biggest blooms and fastest finish put Tophat ahead of the pack.

- Finishes at least one week earlier than the leading competitors.
- Largest blooms in its class—up to 20% larger than BIG® and Megawatt™.
- Bred for versatility, Tophat is easy to finish in 306–packs up to large patio containers.
- A pure white, perfectly matched to the rest of the series, brightens shady spots and offers expanded opportunities for uniform mixes.

DIMENSIONS 20–24" W x 16–20" H | **HABIT** Upright | **FORMS** Pelleted

Tophat™ Pink
70054554

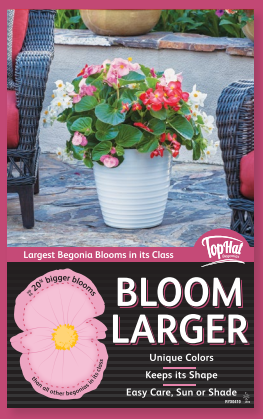
Tophat™ Rose Bicolor
70076221

Tophat™ Scarlet
70054555

Tophat™ White
70067189

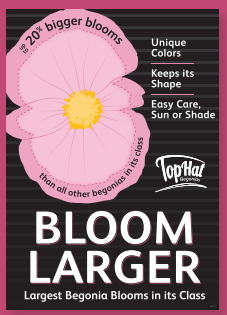
Point of Purchase Materials

To order all other POP materials, call (866) 448–8300 or visit **brands.syngentaflowers-us.com**



Poster

Cart Banner



Benchcard

Locking Hang Tag

Pack Handle

SEED ANNUALS
BACK TO CONTENTS

Tophat™ Pink and Scarlet

SEED ANNUALS
BACK TO CONTENTS

Braveheart® Rose Bicolor
70001138

BEGONIA INTERSPECIFIC *F1 Begonia × hybrida*

Braveheart®

Not your typical Begonia.

- An enchanting bicolored hybrid that excels in landscape performance.
- Large, showy plants need little maintenance and continue flowering through periods of water stress.
- Flowers early for faster finish in large premium pots, combinations, and baskets.

DIMENSIONS 22–24" W x 22–24" H
HABIT Upright
FORMS Pelleted

Ikon™ Bronze
70091943

BEGONIA INTERSPECIFIC *F1 Begonia × hybrida*

Ikon™

A Begonia as unique as it is resilient.

- Delightfully tactile foliage and pleasing architecture is perfect for impulse purchases.
- Exhibits impressive garden performance in a range of conditions including extreme heat.

DIMENSIONS 16–20" W x 12–16" H
HABIT Spreading
FORMS Pelleted

Ikon™ Green
70091944

SEED ANNUALS
BACK TO CONTENTS

Costa™ Mix
70092111

CALENDULA *Calendula officinalis*

Costa™

A cheerful addition to your cool weather assortment.

- Dwarf and compact, with excellent basal branching.
- A sweetly scented, perfect accompaniment to autumn and spring pansy and Viola programs.
- Makes full and efficient packs and small pots.

DIMENSIONS 10–12” W x 10–12” H | **HABIT** Upright | **FORMS** Raw

Costa™ Light Yellow
70092110

Costa™ Orange
70092112

Costa™ Yellow
70092113

Bright Sparks™ Mix
70092244

CELOSIA *Celosia plumosa erecta*

Bright Sparks™

Blazing garden performance.

- Boasts large plumes of brilliant color on an ultra-branched, intermediate plant habit.
- Excels in quarts, gallons, and larger upgraded planters.
- High heat tolerance and garden vigor make for an excellent show in the landscape, even under the harshest of conditions.

DIMENSIONS 10–12” W x 11–13” H | **HABIT** Upright | **FORMS** Raw

Bright Sparks™ Bright Yellow
70092246

Bright Sparks™ Burgundy
70092247

Bright Sparks™ Scarlet
70092245

SEED ANNUALS
BACK TO CONTENTS

Sparkler™ Mix

CLEOME *F1 Cleome hassleriana*

Sparkler™

Big, bold color for season-extending programs.

- F1 hybrid vigor and uniformity offer easy production and superior landscape performance.
- Heat-loving annual holds up to summer stress and provides reliable height and structure to landscape beds.
- Primed seed offers uniform germination to optimize production from sow to finish.

DIMENSIONS 24–36" W x 42–48" H

HABIT Upright

FORMS Primed

Sparkler™ Blush
70006560

Sparkler™ Lavender
70018910

Sparkler™ Rose
70006561

Sparkler™ White
70002676

Sparkler™ Mix
70018911

Field of Dreams™

CORN ORNAMENTAL *F1 Zea mays*

Field of Dreams™

- The striking foliage is layered with stripes of rose, pink, yellow, white, and green.
- The compact nature of the variety makes it perfect for thriller components in combinations.
- Great for use in fall promotions and produces small ears of corn, which are perfect for popping!

DIMENSIONS 31–39" W x 59–70" H

HABIT Upright

FORMS Raw

Field of Dreams™
70046025

SEED ANNUALS
BACK TO CONTENTS

Apollo™ Mix
70092114

COSMOS *Cosmos bipinnatus*

Apollo™

Performance fit for an Olympian.

- Naturally dwarf plants robustly fill the container for quick and efficient production.
- Well-formed, large flowers build a rich canopy of color.
- Longer flowering window allows for extended sales in a greater variety of formats.

DIMENSIONS 20–24" W x 18–26" H
HABIT Upright
FORMS Raw

Apollo™ Carmine
70092117

Apollo™ Lovesong
70092118

Apollo™ Pink
70092116

Apollo™ White
70092115

CUPHEA *F1 Cuphea llavea*

Sriracha™

Spice up your summer programs.

- A premium heat and drought tolerant variety that offers season-extending opportunities for summer sales.
- Compact, well-branched plants now come in four vibrant colors that are very well matched for uniform production.
- Easy to program and a faster, cost-effective alternative to specialty vegetative varieties.

DIMENSIONS 12–14" W x 14–18" H | **HABIT** Upright | **FORMS** Raw

Sriracha™ Lavender Bicolor NEW
70058804

Sriracha™ Pink
70036329

Sriracha™ Rose
70036330

Sriracha™ Violet
70036333

Sriracha™ Lavender Bicolor

SEED ANNUALS
BACK TO CONTENTS

Cyclamen

One of the broadest Cyclamen assortments in the market.

Starting with the introduction of the first F1 hybrid Cyclamen to the market almost 50 years ago, Syngenta Flowers continues a long tradition of innovation in this important global product.

The acquisition of the Varinova Cyclamen business in 2019 was one additional step in securing a strong pipeline for the future. Growers and retailers can now choose from one of the broadest Cyclamen assortments in the market, offering different plant, flower and leaf types, adapted to their specific seasonal and production needs.

At Syngenta Flowers, we understand the highly technical requirements growers have for Cyclamen; but we'll also never forget the beauty of each plant that drives consumer demand for this timeless crop.

	STANDARD	INTERMEDIATE	MINI
SOLID & BICOLOR FLOWERS	RAINIER™, SIERRA™ SYNCHRO, SNOWRIDGE™ MAXI, MAGNIA™ / MAGNIA™ SHINE, CONTIGA™ / CONTIGA™ SHINE	LASER™ SYNCHRO, SNOWRIDGE™ MIDI, MERITA™/ MERITA™ SHINE	WINFALL®, MELODY OUTDOOR®, PICOLA™ / PICOLA™ SHINE
FRINGED FLOWERS	FRILLER®, MAXORA FRINGED™	ROCOLINA™	KYOTO™
NOVELTY FLOWERS	FLEUR EN VOGUE™		GOBLET™
SILVER LEAVES	WINTER ICE™		SILVERADO™
RECOMMENDED POT SIZE RANGE	8", 6", 5"	5", 4.5"	4.5", 4", 3"

BRED BY SYNGENTA BRED BY VARINOVA

SEED ANNUALS
BACK TO CONTENTS

Cyclamen At-a-Glance

	STANDARD CYCLAMEN LARGE BLOOMS AND VIGOROUS PLANTS	INTERMEDIATE CYCLAMEN MEDIUM BLOOMS AND MID-SIZED PLANTS	MINIATURE CYCLAMEN MINI BLOOMS AND COMPACT PLANTS	
SOLID AND BICOLOR FLOWERS	**CONTIGA™** • Compact growing • Abundant, high-quality flowers • Includes unique SHINE Bicolors **SIERRA™ SYNCHRO** • Early, uniform flowering • Programable production • High-quality plants and flowers **SNOWRIDGE™ MAXI** • Bicolor blooms with strong weather tolerance • Can be programmed with Sierra™ Synchro **RAINIER™** • Vigorous pot fill • Easy to grow under low light and temperatures • Large, high-quality flowers **MAGNIA™** • Robust growth • Large, very high-quality flowers • Includes unique SHINE Bicolors	**MERITA™** • Compact, mounded plant holds longer • Early and free flowering • Includes unique SHINE Bicolors **LASER™ SYNCHRO** • Earliest flowering intermediate • Highly programmable • Perfect for landscape applications **SNOWRIDGE™ MIDI** • Bicolor blooms with strong weather tolerance • Can be programmed with Laser™ Synchro	**PICOLA™** • Micro type for miniature pots • Very compact and round shape • Includes unique SHINE Bicolors **MELODY OUTDOOR®** • Strong weather tolerance for landscape use • Compact with decorative leaves • Includes unique SHINE Bicolors **WINFALL®** • Botrytis tolerant • Early flowering under low light and temperatures • Versatile for pot or landscape use	INCREASING VIGOR ↓
FRINGED AND NOVELTY FLOWERS	**FRILLER®** • Novelty fringed flowers • Very early flowering **MAXORA FRINGED™** • Uniformly high flower quality • Well-branched plants **FLEUR EN VOGUE™** • Novelty umbrella-shaped flowers • High-quality, vigorous plants	**ROCOLINA™** • Unique flower shape • Very free flowering mid size plants	**KYOTO™** • Fancy, bicolor fringed flowers • Early and free flowering compact plants **GOBLET™** • Unique chalice flower shape • Compact plant with strong weather tolerance • Includes unique SHINE Bicolors	INCREASING VIGOR ↓
SILVER LEAVES	**WINTER ICE™** • Striking foliage and flower contrast • Ideal for holiday sales • High-quality, vigorous plants		**SILVERADO™** • Petite, contrasting silver leaves • Very early flowering • Perfect for holiday gift giving or landscape use	

SEED ANNUALS
BACK TO CONTENTS

DAHLIA *Dahlia hybrida*

Fresco™

- A compact garden Dahlia, loaded with fully double blooms.
- Uniform in height, habit, and timing.
- Brilliantly colored mixture.

DIMENSIONS 7–9” W x 10–12” H
HABIT Upright
FORMS Raw, Coated

Fresco™ Mix
70001039

DAHLIA *Dahlia hybrida*

Harlequin™

- Whimsical, semi-double bicolor mixture is sure to delight at retail and in the garden.
- Early to bloom, uniform and well-branched habit.

DIMENSIONS 7–9” W x 12–14” H
HABIT Upright
FORMS Raw, Coated

Harlequin™ Mix
70001040

SEED ANNUALS
BACK TO CONTENTS

Super Parfait™ Red Peppermint

DIANTHUS *F1 Dianthus chinensis*

Super Parfait™

Showstopping blooms.

- Large, showy bicolor flowers drive early spring retail traffic.
- Economical to produce—adaptable to high-density production and requires minimal heating inputs.
- Well branched and vigorous growing in the garden for season-extending color.

DIMENSIONS 8–10" W x 6–8" H
HABIT Mounded
FORMS Raw, Pelleted

Super Parfait™ Raspberry
70002705

Super Parfait™ Red Peppermint
70019271

Super Parfait™ Strawberry
70002706

Super Parfait™ Mix
70019285

DIANTHUS *F1 Dianthus chinensis*

Venti Parfait™

- The next generation of Super Parfait™ Dianthus, with mega-sized, showy blooms on compact and well-branched plants.
- Greater plant vigor easily fills retail-ready containers and provides extended garden color.
- Bold bicolors add class and vibrancy to the series.

DIMENSIONS 8–10" W x 8–10" H | **HABIT** Mounded | **FORMS** Raw, Pelleted

Venti Parfait™ Strawberry Shades

Venti Parfait™ Blueberry Eye NEW
70064366

Venti Parfait™ Crimson
70038525

Venti Parfait™ Crimson Eye
70027330

Venti Parfait™ Strawberry Shades NEW
70064365

SEED ANNUALS
BACK TO CONTENTS

DIANTHUS *F1 Dianthus × barbatus*

Diabunda®

A bounty of bicolors.

- A compact Sweet William type that is programmable with uniform habits and timing for easy, efficient production in packs or in pots.
- Faster and easier to flower for early-spring and fall sales compared to traditional *Dianthus barbatus*.
- Striking colors, including bicolors make these familiar flowers a hit at retail.

DIMENSIONS 8–10" W x 8–10" H | **HABIT** Mounded | **FORMS** Raw, Pelleted

Diabunda® Rose

Diabunda® Pink Pearl
70019221

Diabunda® Purple
70019213

Diabunda® Purple Picotee
70019219

Diabunda® Red
70019212

Diabunda® Red Picotee
70019218

Diabunda® Rose
70019220

Diabunda® Mix
70006748

Bam Bam™ Mix

ENGLISH DAISY / BELLIS *F1 Bellis perennis*

Bam Bam™

- Unique, fully double flowers on non-stretching stems.
- Compact plants with clean foliage are perfect for packs and small pots.
- 100% annual flowering with no vernalization needed—Ideal for both autumn and spring production.

DIMENSIONS 6–8" W x 4–6" H | **HABIT** Upright | **FORMS** Pelleted

Bam Bam™ Red
70092107

Bam Bam™ Rose
70092108

Bam Bam™ Mix
70092109

SEED ANNUALS
BACK TO CONTENTS

Gazoo™ Red with Ring

GAZANIA *Gazania rigens*

Gazoo™

- A lower cost, open pollinated alternative to hybrid Gazanias.
- Distinctive extra large flowers on vigorous plants are ideal for large, showy pots.
- An assortment of unique, clear color flowers, plus those with traditional rings, make a compelling retail offer.

DIMENSIONS 12–14" W x 10–12" H

HABIT Mounded

FORMS Raw

Gazoo™ Clear Orange
70000988

Gazoo™ Clear Vanilla
70000991

Gazoo™ Clear Yellow
70000989

Gazoo™ Orange with Ring
70000993

Gazoo™ Red with Ring
70000990

Gazoo™ Yellow with Ring
70000994

Gazoo™ Mix
70000995

SEED ANNUALS
BACK TO CONTENTS

GAZANIA *F1 Gazania rigens*

Big Kiss™

- Huge, striking 4.5–inch blooms held en masse above attractive foliage make a striking display on the retail bench or in the garden.
- Full, bushy habits easily fill large containers.
- This heat-loving, drought tolerant beauty creates a dependable product to extend the season for premium retail sales.

DIMENSIONS 10–12” W x 10–12” H

HABIT Mounded

FORMS Raw

Big Kiss™ White Flame Imp.

Big Kiss™ Orange
70045980

Big Kiss™ Red
70045987

Big Kiss™ White
70034962

Big Kiss™ White Flame Imp.
70045993

Big Kiss™ Yellow
70034958

Big Kiss™ Yellow Flame
70007597

Big Kiss™ Mix
70019466

SEED ANNUALS
BACK TO CONTENTS

GAZANIA *F1 Gazania rigens*

Frosty Kiss™

- Silver foliage companion to Kiss™ series, provides additional retail and garden interest even when flowers are closed.
- Earlier and more uniform flowering than other Gazania series with silver leaves for easier and more economical production.

DIMENSIONS 8–10" W x 8–10" H | **HABIT** Mounded | **FORMS** Raw

Frosty Kiss™ Orange

Frosty Kiss™ Orange
70041324

Frosty Kiss™ Orange Flame
70034746

Frosty Kiss™ Red
70035166

Frosty Kiss™ White
70019469

Frosty Kiss™ White Flame
70027332

Frosty Kiss™ Yellow
70019470

Frosty Kiss™ Flame Mix
70035991

Frosty Kiss™ Mix
70059481

GAZANIA *F1 Gazania rigens*

Kiss™

- Green foliage with multiple, large blooms on tightly mounded plants that work perfectly in premium 1 qt. pots and larger.
- Uniform habit and flowering for easy production, even at higher densities.

DIMENSIONS 8–10" W x 8–10" H | **HABIT** Mounded | **FORMS** Raw

Kiss™ Yellow Flame

Kiss™ Orange
70007963

Kiss™ Orange Flame
70019468

Kiss™ Rose
70007964

Kiss™ White
70007965

Kiss™ Yellow
70041326

Kiss™ Yellow Flame
70003658

Kiss™ Flame Mix
70019462

Kiss™ Mix
70002733

SEED ANNUALS
BACK TO CONTENTS

GERANIUM *F1 Pelargonium × hortorum*

BullsEye™

Eye-catching leaf color sets BullsEye apart.

- Rich, chocolate foliage contrasts beautifully with brightly colored flowers.
- Works well alone or in mixed containers where the foliage provides added interest.
- Versatile plant habit, with high responsiveness to Plant Growth Regulators (PGRs), can be grown in a wide range of small to large containers.

DIMENSIONS 11–13” W x 13–15” H
HABIT Upright
FORMS Coated

BullsEye™ Salmon

BullsEye™ Cherry
70002899

BullsEye™ Light Pink
70002900

BullsEye™ Red
70034977

BullsEye™ Salmon
70002901

BullsEye™ Scarlet
70002902

BullsEye™ Mix
70004126

Landscaper™ Red
70092127

GERANIUM *F1 Pelargonium × hortorum*

Landscaper™

The go-to red geranium for landscapes!

- Vigorous plants are ideal for landscape applications.
- Large, showy flower heads create high visual impact in garden settings.
- Because of their dense branching, fewer plants can be used in landscape plantings with no reduction in visual appeal.

DIMENSIONS 12–14” W x 12–16” H
HABIT Upright
FORMS Coated

SEED ANNUALS
BACK TO CONTENTS

Maverick™ Violet

GERANIUM *F1 Pelargonium × hortorum*

Maverick™

A classic garden beauty.

- High-quality, vigorous plants quickly fill larger pots.
- Large, premium flowers have high retail impact.
- Strong garden vigor fills beds quickly for season-long color.

DIMENSIONS 12–14" W x 14–16" H
HABIT Upright
FORMS Coated

Maverick™ Appleblossom
70020496

Maverick™ Coral
70020467

Maverick™ Orange Imp.
70058297

Maverick™ Pink
70007882

Maverick™ Quicksilver
70020524

Maverick™ Red
70007883

Maverick™ Rose
70035016

Maverick™ Salmon
70007884

Maverick™ Scarlet
70007885

Maverick™ Scarlet Picotee
70035176

Maverick™ Star
70007886

Maverick™ Violet
70035174

Maverick™ Violet Picotee
70045907

Maverick™ White
70007887

Maverick™ Mix
70020575

SEED ANNUALS
BACK TO CONTENTS

GERANIUM *F1 Pelargonium × hortorum*

Multibloom™

Fast to the finish.

- A dwarf habit and fast flowering make this the perfect series for spring promotions.
- Easy to finish in small pots/packs at high densities without PGRs.
- Very early to flower with incredible flower power.
- An average of 15–20 blooms per plant provide a blast of color at retail for fast sell-through.

DIMENSIONS 10–12” W x 10–12” H
HABIT Upright
FORMS Coated

Multibloom™ Red

Multibloom™ Capri
70020561

Multibloom™ Lavender
70041413

Multibloom™ Pink
70020472

Multibloom™ Red
70034994

Multibloom™ Salmon
70020474

Multibloom™ Violet
70034995

Multibloom™ White
70020477

Multibloom™ Mix
70020563

SEED ANNUALS
BACK TO CONTENTS

Pinto™ Premium Deep Rose Imp.

GERANIUM *F1 Pelargonium × hortorum*

Pinto™ Premium

The market leading seed geranium… with good reason!

- Well-branched, vigorous plants adapt easily to high-density production in small pots, yet have outstanding garden vigor.
- Very uniform and early flowering simplifies planning and production to reliably target spring promotions.
- Large, high-quality flowers on short stems are easier to ship and have high-impact at retail.
- Offered in a broad assortment of vibrant colors and novelty patterns.

DIMENSIONS 12–14" W x 14–16" H | **HABIT** Upright | **FORMS** Coated

Pinto™ Premium Coral
70006966

Pinto™ Premium Deep Red
70006959

Pinto™ Premium Deep Rose Imp. NEW
70045935

Pinto™ Premium Deep Scarlet
70020522

Pinto™ Premium Lavender
70006965

Pinto™ Premium Lavender Rose
70035014

Pinto™ Premium Orange
70058303

Pinto™ Premium Orange Bicolor
70035017

Pinto™ Premium Rose Bicolor
70041412

Pinto™ Premium Salmon
70000819

Pinto™ Premium Salmon Splash
70006957

Pinto™ Premium Violet
70006956

Pinto™ Premium White
70020520

Pinto™ Premium White to Rose
70035021

Pinto™ Premium Mix
70056148

SEED ANNUALS
BACK TO CONTENTS

Quantum™ Mix
70092128

GERANIUM *F1 Pelargonium × hortorum*

Quantum™

Delivers star power!

- Unique, star-shaped flowers are less prone to shattering, giving a great display of color late into the season.
- With the added benefit of serrated foliage, Quantum™ adds class and novelty to any geranium assortment!
- Outstanding heat tolerance with season-long flowering even in less-than-ideal climates.

DIMENSIONS 12–16" W x 12–16" H | **HABIT** Upright | **FORMS** Coated

Quantum™ Red
70092129

GERANIUM *F1 Pelargonium × hortorum*

Ringo 2000™

Makes spring promotions effortless.

- Compact and versatile habit is ideal for small pots and large packs grown at high densities.
- Very early flowering to target the first spring sales.
- Strong garden vigor provides reliable, season-long color.

DIMENSIONS 10–12" W x 12–14" H | **HABIT** Upright | **FORMS** Coated

Ringo 2000™ Deep Rose

Ringo 2000™ Cardinal
70000807

Ringo 2000™ Deep Red
70000816

Ringo 2000™ Deep Rose
70000791

Ringo 2000™ Deep Scarlet
70020465

Ringo 2000™ Lavender
70000803

Ringo 2000™ Pink
70000802

Ringo 2000™ Rose Star
70000804

Ringo 2000™ Salmon
70000808

Ringo 2000™ Scarlet Star
70000806

Ringo 2000™ Violet
70000809

Ringo 2000™ White
70000801

SEED ANNUALS
BACK TO CONTENTS

Reach Out™ Lilac Bicolor

GERANIUM IVY *F1 Pelargonium peltatum*

Reach Out™

Tough as nails.

- Early to flower and easy to produce due to its compact habit and short internodes.
- Produces abundant flowers all over the plant and does not get 'tangled up' in production.
- Superb landscape, container, and basket performance.

DIMENSIONS 10–14" W x 6–8" H

HABIT Trailing

FORMS Coated

Reach Out™ Hot Pink
70092149

Reach Out™ Light Purple
70092151

Reach Out™ Lilac Bicolor
70092148

Reach Out™ Pink
70092152

Reach Out™ Red
70092145

Reach Out™ White
70092150

Reach Out™ Mix
70092146

SEED ANNUALS
BACK TO CONTENTS

GERANIUM IVY *F1 Pelargonium peltatum*

Tornado™

A basket sensation.

- Perfect for basket programs, a naturally trailing and free-flowering alternative to cutting ivy geraniums.
- Economical to produce with a fast crop time and no need to pinch or apply PGRs.
- High tolerance to edema makes more salable plants and reduces shrink.

DIMENSIONS 12–14” W x 8–10” H

HABIT Trailing

FORMS Coated

Tornado™ Mix
70000777

Tornado™ Bicolor Duet
70000782

Tornado™ Carmine
70000778

Tornado™ Fuchsia
70000783

Tornado™ Lilac
70000784

Tornado™ Pink
70000780

Tornado™ Red
70000786

Tornado™ Rose
70000779

Tornado™ White
70000785

SEED ANNUALS
BACK TO CONTENTS

Jaguar™ Deep Orange

Gerbera

Efficient, high-density production in a wide range of colors.

The Syngenta Flowers Gerbera assortment is designed to maximize grower profits with top-performing series to match any production and retail need.

The Jaguar™, Bengal™, and Cartwheel® series are all tuned for efficient, high-density production in quarts to gallon containers. Elephant™ is an excellent novelty selection for large pots in premium programs.

Each series offers the most uniform flower timing, with short stems and controlled plant habits for bench run production and efficient shipping. A wide range of important colors, flower types and sizes create a retail assortment that consumers crave.

	CARTWHEEL®	
SEMI-DOUBLE FLOWER TYPE		
JAGUAR™	BENGAL™	ELEPHANT™
SINGLE FLOWER TYPE		
COMPACT	MEDIUM	VIGOROUS

SEED ANNUALS
BACK TO CONTENTS

GERBERA *F1 Gerbera jamesonii*

Bengal™

High impact color right off the rack.

- More vigorous than Jaguar™, with a full, yet controlled, plant habit that is ideal for 1.25 qt. pots and larger.
- Early, uniform flowering, producing more flowers at first flush, for high-impact retail displays.
- Large blooms on short, thick stems allow for efficient racking and shipping and have high consumer appeal.

DIMENSIONS 7–9" W x 10–12" H

HABIT Upright

FORMS SatinCoat™

Bengal™ Red with Eye

Bengal™ Orange
70035512

Bengal™ Orange with Eye
70035514

Bengal™ Red with Eye
70035498

Bengal™ Rose with Eye
70035518

Bengal™ White
70035487

Bengal™ White with Eye
70035509

Bengal™ Yellow with Eye
70040767

Bengal™ Mix
70066334

SEED ANNUALS
BACK TO CONTENTS

Cartwheel® Strawberry Twist
70019515

GERBERA *F1 Gerbera jamesonii*

Cartwheel®

Beautiful shades at every turn.

- Large, semi-double blooms come in distinctive designer hues.
- Multi-blooming, vigorous plants are ideal for larger premium pot programs.
- Superior shelf life compared to the competition, with reduced leaf stretch and yellowing, and longer flower life.
- Seed-produced plants offer a cost-effective and efficient alternative to tissue culture liners.

DIMENSIONS 12–16" W x 16–18" H

HABIT Upright

FORMS Raw, SatinCoat™

Cartwheel® Autumn Colors
70019519

Cartwheel® Chardonnay
70019517

Elephant™ Scarlet

GERBERA *F1 Gerbera jamesonii*

Elephant™

Big and bright.

- Giant daisy-like flowers held above robust, beefy plants create a premium product in larger containers.
- Easy to ship and merchandise with thick, sturdy flower stems that resist breaking.
- An economical alternative to expensive tissue culture liners—combines all the efficiency of seed with a unique, premium look that can capture higher value at retail.

DIMENSIONS 12–16" W x 16–18" H

HABIT Upright

FORMS SatinCoat™

Elephant™ Scarlet
70019504

SEED ANNUALS
BACK TO CONTENTS

Jaguar™ Red Imp.

GERBERA *F1 Gerbera jamesonii*

Jaguar™

Maximum efficiency for high-density production.

- Earliest and most uniform flowering Gerbera series on the market offers synchronized flowering for bench run sales.
- Compact plants and short flower stems are ideal for efficient, high-density production in small pots and easy racking and shipping.
- Maximizes sell through and shelf life, with 3–5 blooms per plant, at first flush.

DIMENSIONS 6–8” W x 8–10” H

HABIT Upright

FORMS SatinCoat™

Jaguar™ Deep Orange
70000973

Jaguar™ Deep Rose
70019516

Jaguar™ Fire
70000979

Jaguar™ Fire Dark Center
70007957

Jaguar™ Lemon Dark Center
70019523

Jaguar™ Pink
70000984

Jaguar™ Rose Dark Center
70000970

Jaguar™ Rose Picotee
70000977

Jaguar™ Red Imp.
70019518

Jaguar™ Scarlet Shades Dark Center
70000983

Jaguar™ Tangerine
70000978

Jaguar™ White NEW
70066066

Jaguar™ Yellow
70000976

Jaguar™ Yellow Dark Center
70000969

Jaguar™ Fall Colors Mix
70036931

Jaguar™ Mix
70000972

Jaguar™ Salsa Mix
70036932

Jaguar™ Spring Time Mix
70036930

SEED ANNUALS
BACK TO CONTENTS

Honeymoon™ Mix
70092153

Honeymoon™ Deep Red
70092156

Honeymoon™ Light Rose
70092155

Honeymoon™ Rose
70092157

Honeymoon™ White with Eye
70092154

HIBISCUS *F1 Hibiscus moscheutos*

Honeymoon™

Bring home the tropics!

- Massive flowers adorn compact and well-branched plants.
- Excellent uniformity and PGR response make for easy and efficient production.
- Well-suited for larger containers and perennial gardens.

DIMENSIONS 20–24” W x 24–32” H

HABIT Upright

FORMS Coated

SEED ANNUALS
BACK TO CONTENTS

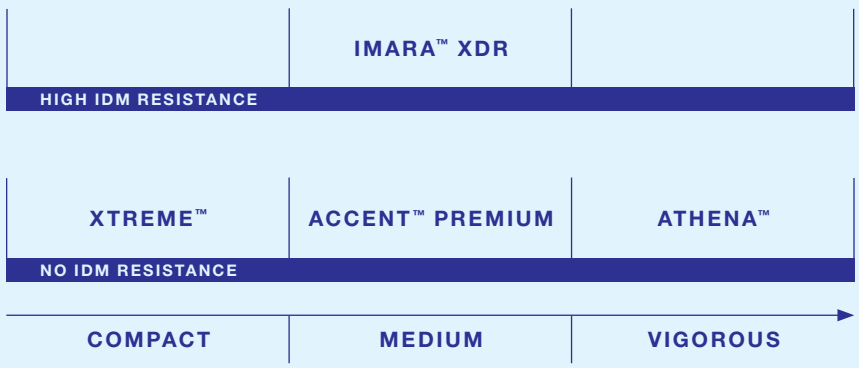
Impatiens

A shady garden favorite, new and improved.

Syngenta Flowers has been an innovator in the Impatiens market for many years, and with the launch of Imara™ XDR in 2019, we reinforced our commitment to take back the shade!

Traditional varieties, like Accent™ Premium and the more compact Xtreme™ series remain as mainstays of the Syngenta Flowers Impatiens assortment, especially in regions where downy mildew is not a significant disease problem.

However, for growers and retailers who have stopped growing Impatiens due to the risks of downy mildew, Imara™ XDR offers a complete range of colors, all with a high degree of resistance to this devastating disease. This new series exemplifies Syngenta's ongoing mission to provide innovative new products that help solve real problems growers face each day.



Imara™ XDR Mix

SEED ANNUALS
BACK TO CONTENTS

Accent™ Premium Pink

IMPATIENS *F1 Impatiens walleriana*

Accent™ Premium

When large, high-quality blooms and strong garden vigor matter most.

- Ideal for larger retail-ready containers, but also adaptable to production in small pots or packs where its large flowers can handle PGR applications.
- Excels in climates with short growing seasons, where strong plant vigor provides consumers with full flower beds.
- Withstands cooler growing conditions and other environmental stresses.

DIMENSIONS 10–12" W x 10–12 H

HABIT Mounded

FORMS Raw

Accent™ Premium Bright Eye
70034868

Accent™ Premium Deep Orange
70034874

Accent™ Premium Lilac
70034871

Accent™ Premium Orange Star
70034792

Accent™ Premium Pink
70034869

Accent™ Premium Red
70034875

Accent™ Premium Rose
70034870

Accent™ Premium Salmon
70034873

Accent™ Premium Violet
70034872

Accent™ Premium Violet Star
70034876

Accent™ Premium White
70034867

Accent™ Premium Mix
70038516

Accent™ Premium Mystic Mix
70048608

Accent™ Premium Pastel Mix
70048606

Accent™ Premium Peppermint Mix
70048607

SEED ANNUALS
BACK TO CONTENTS

Accent™ Star Mix

IMPATIENS *F1 Impatiens walleriana*

Accent™

- Slightly more vigorous than the Accent™ Premium varieties, these additional Accent varieties broaden the range with more high-demand star pattern colors and unique solid hues.

DIMENSIONS 10–12” W x 10–12 H

HABIT Mounded

FORMS Raw

Accent™ Burgundy
70003719

Accent™ Deep Pink
70003717

Accent™ Lavender Blue
70019609

Accent™ Red Star
70019615

Accent™ Rose Star
70034240

Accent™ Star Mix
70002765

SEED ANNUALS
BACK TO CONTENTS

Athena™ Mix

IMPATIENS *F1 Impatiens walleriana*

Athena™

Blooms fit for a goddess.

- The only F1 semi-double Impatiens on the market today.
- Consistent, semi-double blooms layered over a gracefully spreading habit make beautiful hanging baskets.
- Available in a full range of delightful colors.

DIMENSIONS 14–16” W x 10–12” H

HABIT Spreading

FORMS Raw

Athena™ Appleblossom
70091962

Athena™ Bright Purple
70091958

Athena™ Coral
70091961

Athena™ Orange
70091959

Athena™ Orange Flash
70091960

Athena™ Red
70091963

Athena™ Mix
70091964

Athena™ Sweetheart Mix
70091965

SEED ANNUALS
BACK TO CONTENTS

IMPATIENS *F1 Impatiens walleriana*

Imara™ XDR

Take back the shade!

- The first *Impatiens walleriana* with a high degree of resistance to downy mildew. [1]
- Proven landscape performance that fights back with reliable flowering all season long.
- Easy and economical to produce, with a compact branching habit ideal for high-density growing in packs and pots.
- A complete range of core and novelty colors in one disease resistant series.

[1] Confirmed in independent trials in North America and Europe including trials in 2017 and 2018 at Cornell University's Long Island Horticultural Research and Extension Center.

DIMENSIONS 10–12" W x 10–12" H

HABIT Mounded

FORMS Raw

Imara™ XDR Mix

SEED ANNUALS
BACK TO CONTENTS

Imara™ XDR Orange Imp.
70078042

Imara™ XDR Orange Star
70072427

Imara™ XDR Pink
70085088

Imara™ XDR Purple Imp.
70078047

Imara™ XDR Red Imp.
70078040

Imara™ XDR Red Star
70085103

Imara™ XDR Rose
70072423

Imara™ XDR Salmon Shades
70078043

Imara™ XDR White
70072429

Imara™ XDR Hot! Mix NEW
70099071

Imara™ XDR Mix
70082997

Imara™ XDR Pastel Mix NEW
70098828

Imara™ XDR ProFormula Mix NEW
70099072

Imara™ XDR Rosy Mix NEW
70098820

Imara™ XDR Tango Mix NEW
70098827

SEED ANNUALS
BACK TO CONTENTS

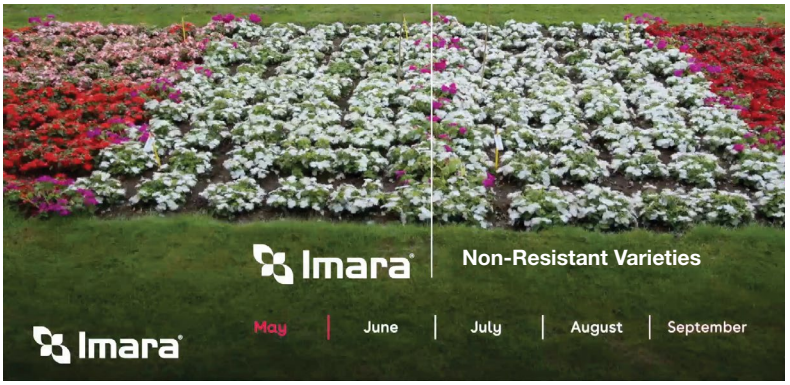
The **FIRST Impatiens** with a **HIGH DEGREE OF RESISTANCE** to Impatiens downy mildew.

Imara™ XDR

Imara™ XDR Red

Imara™ XDR Compared to Non-Resistant Varieties

(Garden setting with NO fungicides applied to any varieties)



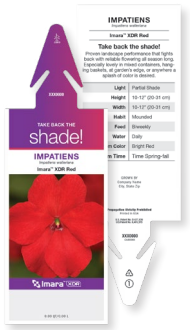
Trial photos: Jealott's Hill, UK, September 2017.

Trial photos: Jealott's Hill, UK, September 2017.

Performance assessments are based upon results or analysis of public information, field observations and/or internal Syngenta evaluations.

Point of Purchase Materials

Cart Banner



Locking Hang Tag

Stake Tag

Pack Handle

SEED ANNUALS
BACK TO CONTENTS

Xtreme™ Bright Rose

IMPATIENS *F1 Impatiens walleriana*

Xtreme™

Excellence under high-density pressure.

- Perfect for high-volume, high-density pack and pot production with no compromise in plant quality at retail or in the landscape.
- Uniform and early flowering with short internodes and incredible branching across the series.
- Non-stretching habit extends shelf life with minimal-to-no PGRs.

DIMENSIONS 8–10" W x 8–10" H | **HABIT** Mounded | **FORMS** Raw

Xtreme™ Bright Eye
70036399

Xtreme™ Bright Rose
70036401

Xtreme™ Lavender
70007941

Xtreme™ Lilac
70007942

Xtreme™ Orange
70007944

Xtreme™ Pink
70007945

Xtreme™ Red
70007946

Xtreme™ Salmon
70041356

Xtreme™ Scarlet
70041357

Xtreme™ Violet
70007950

Xtreme™ White
70007951

Xtreme™ Hot! Mix
70019645

Xtreme™ Little Gem Mix
70019643

Xtreme™ Mix
70007943

Xtreme™ Pastel Mix
70019646

Xtreme™ Rosy Mix
70019647

Xtreme™ Sapphire Mix
70019648

Xtreme™ Tango Mix
70019649

Xtreme™ Utopia Mix
70019642

SEED ANNUALS
BACK TO CONTENTS

Florific® Violet

IMPATIENS NEW GUINEA *F1 Impatiens hawkeri*

Florific®

Award-winning performance from seed.

- Sets the new standard for economical and fast, high-density production of New Guinea Impatiens from seed.
- Uniform and well-branched plants are paired with large, flat flowers help on top of the foliage.
- A great alternative to *Impatiens walleriana* where downy mildew exists in the landscape.

DIMENSIONS 10–12” W x 8–12” H

HABIT Mounded

FORMS Raw

Florific® Lavender
70019983

Florific® Red
70019984

Florific® Sweet Orange
70019990

Florific® Violet
70019982

Florific® White
70019978

Florific® Mix
70019980

Starshine™ Blue

LAURENTIA *F1 Laurentia axillaris*

Starshine™

- A great seed alternative to cuttings, with a rounded and mounded habit that works well in baskets and combos.
- Unlike many other Laurentia, Starshine creates well-branched plants that flower without the need for long days.
- This unique, early-season annual offers a touch of blue to the retail assortment and exhibits very good heat tolerance.

DIMENSIONS 8–12” W x 8–12” H

HABIT Mounded

FORMS Raw

Starshine™ Blue
70002817

SEED ANNUALS
BACK TO CONTENTS

Novella™

LAVATERA *F1 Lavatera trimestris*

Novella™

Reinventing Lavatera as we know it.

- Fleuroselect Gold Medal Winner.
- Compact and well branched.
- Ideal for mid-summer pot sales as well as for the landscape.

DIMENSIONS 12” W x 20” H

HABIT Upright

FORMS Raw

Novella™
70092158

Antigua™ Yellow

MARIGOLD AFRICAN *F1 Tagetes erecta*

Antigua™

The trusted choice for bedding and borders.

- Less day-length sensitivity makes Antigua a programmable, easy-to-grow marigold for early spring shipping.
- Naturally dwarf and branching plants are ideal for large packs and small pots and fit perfectly on racks with little to no PGRs required.
- Strong flower stems support beautifully rounded 3–inch blooms that hold up well in shipping and the garden.

DIMENSIONS 10–12” W x 10–12” H

HABIT Upright

FORMS Detailed, SatinCoat™

Antigua™ Gold
70000562

Antigua™ Orange
70000561

Antigua™ Primrose
70000563

Antigua™ Yellow
70000560

Antigua™ Mix
70020845

SEED ANNUALS
BACK TO CONTENTS

Big Top™ Gold

MARIGOLD AFRICAN *F1 Tagetes erecta*

Big Top™

Quality is the main attraction!

- Massive blooms adorn this sturdy plant and create an impressive display of fully double flowers.
- Perfect for quarts, gallons and upgraded planters.
- The multi-branched habit and fantastic flower quality bring an improvement in garden performance and plant stability.

DIMENSIONS 16–20" W x 16–20" H | **HABIT** Upright | **FORMS** Coated, Detailed

Big Top™ Gold
70092003

Big Top™ Orange
70092004

Big Top™ Yellow
70092002

Big Top™ Mix
70092787

SEED ANNUALS
BACK TO CONTENTS

Inca II™ Yellow

MARIGOLD AFRICAN *F1 Tagetes erecta*

Inca II™

Long or short days, Inca II delivers.

- Well-branched, intermediate-sized plants with large double blooms meet the market demand for showy, retail-ready containers.
- Early flowering, even under increasing day lengths, make Inca II easily adaptable for both early or late spring production.
- An outstanding choice for color and fill in sunny landscape applications.

DIMENSIONS 12–14" W x 12–14" H

HABIT Upright

FORMS Detailed, SatinCoat™

Inca II™ Deep Orange
70041091

Inca II™ Gold
70000567

Inca II™ Orange
70000568

Inca II™ Primrose
70000570

Inca II™ Yellow
70000569

Inca II™ Mix
70000566

Perfection™ Yellow

MARIGOLD AFRICAN *F1 Tagetes erecta*

Perfection™

An impeccable garden beauty.

- The landscaper's marigold of choice for color, consistent performance, and stately height in the garden.
- Sturdy plants work well in larger pots and provide instant retail and garden color.
- Large, double flowers are long-lasting, shed water easily, and exhibit superior weather tolerance.

DIMENSIONS 12–14" W x 14–16" H

HABIT Upright

FORMS Detailed, SatinCoat™

Perfection™ Orange
70002947

Perfection™ Yellow
70002948

SEED ANNUALS
BACK TO CONTENTS

MARIGOLD FRENCH ANEMONE *Tagetes patula nana*

Alumia™

- Early blooming with large unique flowers.
- Novelty primrose color brightens combinations and designer mixes.
- Well-branched habit and compact plants are perfect for efficient pack production.

DIMENSIONS 6–8" W x 10–12" H

HABIT Upright

FORMS Detailed, SatinCoat™

Alumia™ Creme Brulee

Alumia™ Creme Brulee NEW
70098057

Alumia™ Vanilla Cream
70092006

Happy™ Harmony

SEED ANNUALS
BACK TO CONTENTS

NEW SERIES

MARIGOLD FRENCH DWARF CRESTED *Tagetes patula nana*

Happy™

Joyful color for the harshest climates.

- Heat tolerant extra-dwarf series resists stretching.
- Compact, with superb basal branching and fantastic uniformity in the pack.
- Superior flower form and flower coverage.
- Just the right amount of vigor to perform beautifully in hot, harsh garden conditions.

DIMENSIONS 6–8" W x 6–7" H

HABIT Mounded

FORMS Detailed, SatinCoat™

Happy™ Yellow

Happy™ Gold NEW
70092032

Happy™ Harmony NEW
70092035

Happy™ Orange NEW
70092033

Happy™ Spry NEW
70092034

Happy™ Yellow NEW
70092031

Happy™ Mix NEW
70092030

SEED ANNUALS
BACK TO CONTENTS

MARIGOLD TRIPLOID *F1 Tagetes triploid*

Zenith™

- This unique African-French hybrid offers an abundance of large flowers with great heat tolerance and repeat flowering.
- Zenith does not set seed, promising phenomenal flower power all summer long.

DIMENSIONS 14" W x 14" H

HABIT Upright

FORMS Coated, Detailed

Zenith™ Lemon Yellow

Zenith™ Deep Orange
70092027

Zenith™ Golden Yellow
70092025

Zenith™ Lemon Yellow
70034268

Zenith™ Orange
70092028

Zenith™ Red
70034269

Zenith™ Red & Gold
70092026

Zenith™ Yellow
70092029

Zenith™ Mix
70034421

SEED ANNUALS
BACK TO CONTENTS

Magic™ Blotch Mix

MIMULUS *F1 Mimulus × hybrida*

Magic™

- A highly flexible, quick turn product; Magic™ makes a great cash crop during production down times.
- Easy and fast to finish in just 7–8 weeks from sowing with a minimum requirement of 12.5-hour days to initiate flowering.
- Tolerates light frost and can be produced outside for early season sales.
- A compact, floriferous habit makes it well suited to pack and pots.

DIMENSIONS 8–10" W x 8–10" H | **HABIT** Spreading | **FORMS** Pelleted

Magic™ Blotch Mix
70092161

Magic™ Mix
70002530

Magic™ Spring Blossom Mix
70092160

Maximus™ Mix
70092159

MIMULUS *F1 Mimulus × hybrida*

Maximus™

Mimulus of grand proportions.

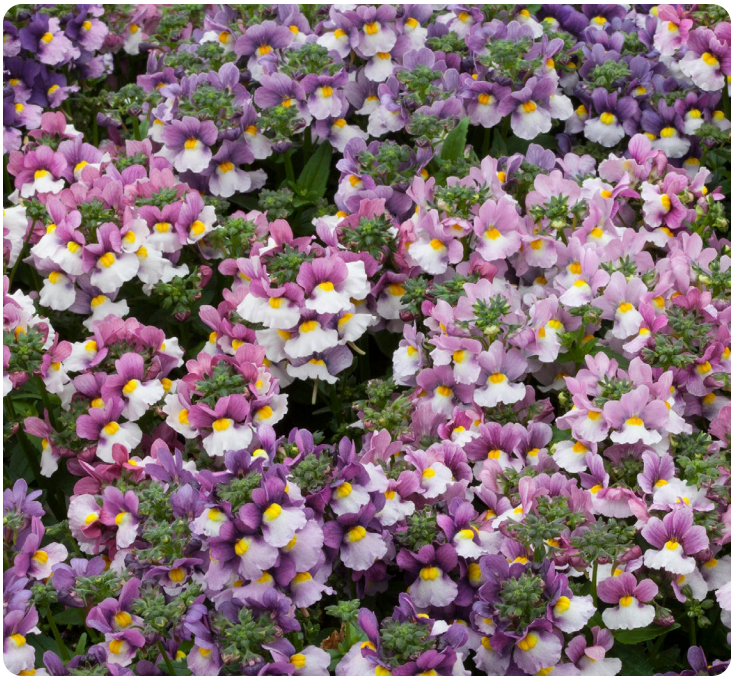
- The only series of grandiflora Mimulus on the market extensively selected for garden performance.
- Quick flowering, requiring just 12.5-hour days to initiate.
- Vigorous habit quickly fills 4–inch and larger pots for ultra fast finishing.

DIMENSIONS 8–10" W x 10–12" H

HABIT Spreading

FORMS Pelleted

SEED ANNUALS
BACK TO CONTENTS



Pretty Please™ Pink Bicolor
70092169

NEMESIA *F1 Nemesia foetens*

Pretty Please™

- A fantastic alternative to vegetative Nemesia, offering large, bold, bicolor flowers on a compact and densely-branched habit.
- Sweet fragrance adds additional appeal.
- Tidy, but robust plant structure is perfect for small pots and pack production.

DIMENSIONS 8–10” W x 8–10” H
HABIT Upright
FORMS Pelleted

Pretty Please™ Blue Bicolor
70092168

NEMESIA *F1 Nemesia foetens*

Seventh Heaven™

- The performance of vegetative in an easier to handle seed format.
- Denser and better branched foliage, as well as larger flowers, compared to other seed varieties.
- Selected colors also have the added benefit of powerfully sweet fragrance.

DIMENSIONS 14–16” W x 12–14” H
HABIT Upright
FORMS Pelleted

Seventh Heaven™ Mix

Seventh Heaven™ Deep Blue
70092165

Seventh Heaven™ Lavender Bicolor
70092167

Seventh Heaven™ Pink
70092166

Seventh Heaven™ White
70092164

Seventh Heaven™ Mix
70092163

SEED ANNUALS
BACK TO CONTENTS

Saratoga™ Mix
70002856

NICOTIANA *F1 Nicotiana × alata*

Saratoga™

- Bushy plants are easy to manage and bloom in packs and small containers.
- Eye-catching flowers are held upright for maximum visual impact.
- Great when used in sunny or shaded gardens and as accent plants in combinations.

DIMENSIONS 10–12” W x 10–12” H
HABIT Upright
FORMS Pelleted

Saratoga™ Appleblossom
70002854

Saratoga™ Lime
70002855

Saratoga™ Purple Bicolor
70019992

Saratoga™ Red
70002851

Saratoga™ Rose
70002852

Saratoga™ White
70002853

SEED ANNUALS
BACK TO CONTENTS

NICOTIANA *F1 Nicotiana × sandrea*

Perfume™

- Bred for improved disease tolerance and garden performance.
- Vigorous, well-branched plants support a mass of upward facing blooms that thrive all summer long.
- Abundant flowers create masses of color in larger formats.

DIMENSIONS 10–12” W x 16–20” H

HABIT Upright

FORMS Pelleted

Perfume™ Red

Perfume™ Antique Lime
70092253

Perfume™ Blue
70092248

Perfume™ Bright Rose
70092249

Perfume™ Deep Purple
70092252

Perfume™ Lime
70092254

Perfume™ Red
70092251

Perfume™ White
70092250

Perfume™ Mix
70092255

SEED ANNUALS
BACK TO CONTENTS

Asti™ Purple

OSTEOSPERMUM *F1 Osteospermum ecklonis*

Asti™

- Uniformly compact and branching Osteospermum, ideal for high-density growing in small pots.
- Offers easy, no-pinch production with all the efficiencies of mechanical handling of seed grown plants.

DIMENSIONS 17–20" W x 17–20" H

HABIT Mounded

FORMS Raw

Asti™ Lavender Shades
70019997

Asti™ Purple
70007847

Asti™ Purple Bicolor
70041361

Asti™ White
70007848

Asti™ Mix
70019998

Asti™ White

SEED ANNUALS
BACK TO CONTENTS

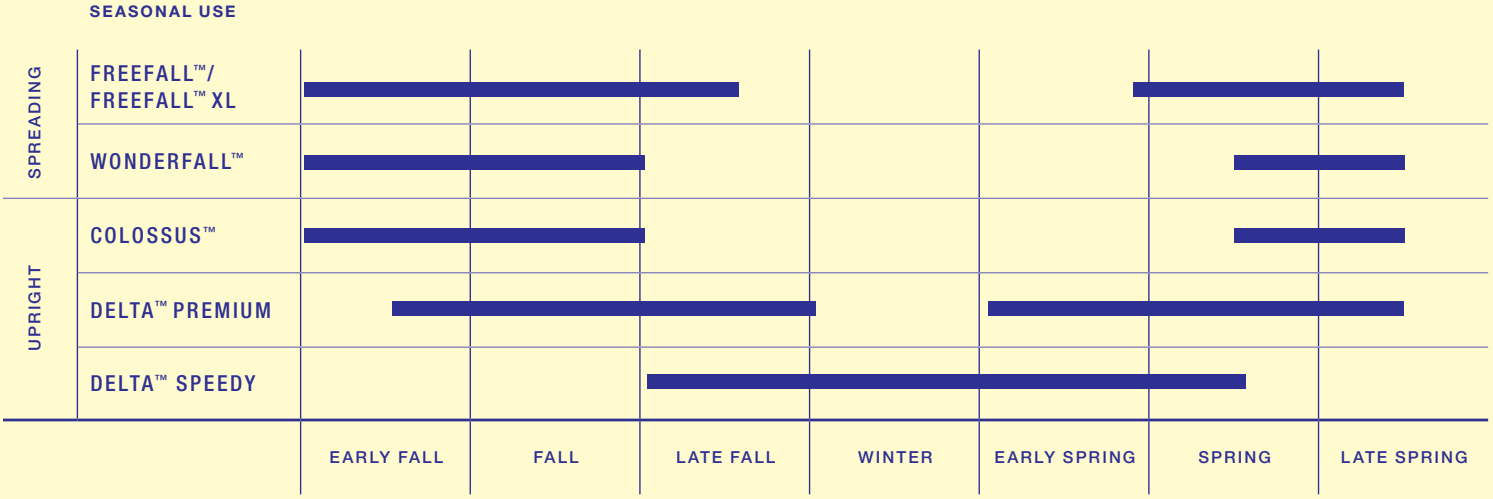
Delta™ Premium Primrose with Blotch

Pansy

Reliable and programmable in any season.

Syngenta Flowers has been the global market leader in pansies for over 20 years, for a good reason. Reliability and programmability for growers, regardless of season, combined with varieties that look great at retail and in the home garden, are hard to beat.

Continuous upgrades and additions to the core assortment keep the Syngenta pansy program performing ahead of the competition. With nearly 50% of the Delta™ Premium assortment refreshed over the past five years, it remains newer and more on trend than ever before.



SEED ANNUALS
BACK TO CONTENTS

Colossus™ Yellow with Blotch

PANSY *F1 Viola × wittrockiana*

Colossus™

Heat and humidity, meet Colossus.

- Tight, non-stretching habit developed specifically for high-density production requiring fewer PGRs—well-suited for late summer/early fall markets.
- Extra large blooms stand up to heat stress with less stretch to create consumer appeal even under hot and humid conditions.
- Fast turns, lower productions costs, increased shipping efficiencies and a long shelf-life—what's not to love about Colossus™?

DIMENSIONS 6–8" W x 4–5" H | **HABIT** Mounded | **FORMS** Raw, PreNova® 2.0

Colossus™ Deep Blue with Blotch
70000429

Colossus™ Fire
70007298

Colossus™ Lavender Medley
70000392

Colossus™ Lemon Shades
70007313

Colossus™ Neon Violet
70000380

Colossus™ Ocean
70007317

Colossus™ Purple with Blotch
70000449

Colossus™ Red with Blotch
70007629

Colossus™ Rose Medley
70000391

Colossus™ Rose with Blotch
70000428

SEED ANNUALS
BACK TO CONTENTS

Colossus™ Tricolor
70021122

Colossus™ White
70000378

Colossus™ White with Blotch
70000425

Colossus™ White with Purple Wing
70000389

Colossus™ Yellow
70021087

Colossus™ Yellow with Blotch
70020987

Colossus™ Blotched Mix
70000433

Colossus™ Mix
70000396

Colossus™ Ocean

SEED ANNUALS
BACK TO CONTENTS

Delta™ Premium Yellow with Purple Wing

PANSY *F1 Viola × wittrockiana*

Delta™ Premium

Multi-season, one series, no compromises.

- Spring or fall, the most uniform growing and flowering pansy series on the market.
- Identical growth and flowering windows across the premium range eliminates the need to pick and choose among series for colors or season.
- A tightly branched habit resists stretching, so plants require fewer growth regulators, ship easily and hold longer at retail. Ideal for high-density finishing.
- Extra early and uniform flowering under the short days of early spring and late fall, provides fast greenhouse turns and reliable color.
- Offers the widest range of perfectly matched core and novelty colors and mixes in its class, with large cheerful, upright facing flowers.

DIMENSIONS 6–8" W x 4–6" H | **HABIT** Mounded | **FORMS** Raw, PreNova® 2.0

Delta™ Premium Beaconsfield
70000447

Delta™ Premium Blue Morpho
70081399

Delta™ Premium Blue with Blotch
70008809

Delta™ Premium Deep Blue
70027668

Delta™ Premium Gold with Blotch
70008807

Delta™ Premium Lavender Blue Shades
70058898

Delta™ Premium Marina
70002992

Delta™ Premium Neon Violet
70021234

SEED ANNUALS
BACK TO CONTENTS

Delta™ Premium Persian Medley
70021051

Delta™ Premium Primrose with Blotch
70002988

Delta™ Premium Pure Golden Yellow
70000436

Delta™ Premium Pure Lemon
70021215

Delta™ Premium Pure Light Blue
70000382

Delta™ Premium Pure Orange
70008804

Delta™ Premium Pure Primrose
70000435

Delta™ Premium Pure Violet Imp.
70064740

Delta™ Premium Pure White
70000416

Delta™ Premium Pure Yellow
70046083

Delta™ Premium Red with Blotch
70008805

Delta™ Premium Rose with Blotch
70000445

Delta™ Premium Tapestry
70007297

Delta™ Premium True Blue
70021226

Delta™ Premium Violet & White
70055097

Delta™ Premium White with Blotch Imp.
70058884

SEED ANNUALS
BACK TO CONTENTS

Delta™ Premium Yellow with Blotch
70000437

Delta™ Premium Yellow with Purple Wing
70058914

Delta™ Premium Apple Cider Mix
70044658

Delta™ Premium Blotch Mix
70044723

Delta™ Premium Buttered Popcorn Mix
70021049

Delta™ Premium Citrus Mix
70000422

Delta™ Premium Cool Waters Mix
70000442

Delta™ Premium Mix
70000434

Delta™ Premium Tri-Color Mix
70000444

Delta™ Premium Lavender Blue Shades

SEED ANNUALS
BACK TO CONTENTS

Delta™ Fire

PANSY *F1 Viola × wittrockiana*

Delta™

- Matched for timing and flower size with the Delta™ Premium range, but with some variation in plant vigor, these unique colors and mixes can add further excitement and sales opportunities to your spring or fall pansy offer.

DIMENSIONS 6–8" W x 4–6" H

HABIT Mounded

FORMS Raw, PreNova® 2.0

Delta™ Fire
70000360

Delta™ Pink Shades
70000419

Delta™ Pure Red
70000354

Delta™ Pure Rose
70000344

Delta™ Berry Tart Mix
70021043

Delta™ Blaze Mix
70000441

Delta™ Cotton Candy Mix
70021041

Delta™ Mix
70000348

Delta™ Monet Mix
70000443

Delta™ Pure Colors Mix
70000347

Delta™ Watercolors Mix
70021048

Delta™ Wine & Cheese Mix
70044721

SEED ANNUALS
BACK TO CONTENTS

PANSY *F1 Viola × wittrockiana*

Delta™ Speedy

Delta™ Speedy Violet and White

Color when you need it most.

- Offers reliable and programmable production with near day-neutral flowering. Ideal for late fall through winter flowering in the south and west and early spring in the north.
- Efficient to produce with reliably fast crop times and a tight bloom window even under short day conditions.
- Like the rest of the Delta™ assortment, plants sport masses of large, upward facing blooms with strong weather tolerance for long lasting retail and garden displays.

DIMENSIONS 6–8" W x 4–6" H | **HABIT** Mounded | **FORMS** Raw, PreNova® 2.0

Delta™ Speedy Clear White
70027691

Delta™ Speedy Clear Yellow
70027692

Delta™ Speedy Deep Blue with Blotch
70046093

Delta™ Speedy Frost
70053728

Delta™ Speedy Purple
70058935

Delta™ Speedy Rose Medley
70027697

Delta™ Speedy True Blue
70027699

Delta™ Speedy Violet and White NEW
70069841

Delta™ Speedy Yellow and Purple
70021231

Delta™ Speedy Yellow with Blotch
70053727

Delta™ Speedy Mix
70081608

SEED ANNUALS
BACK TO CONTENTS

PANSY SPREADING *F1 Viola × wittrockiana*

Freefall™

The grower's choice for spring and autumn baskets.

- Super floriferous with a tidy habit, Freefall is easier to produce, ship, and display at retail than other spreading pansies.
- Excellent weather tolerance makes Freefall a great choice for use in a variety of harsh and challenging climates.

DIMENSIONS 14–20" W x 4–6" H

HABIT Spreading

FORMS Primed

Freefall™ Lavender

Freefall™ Cream
70092048

Freefall™ Deep Violet
70092046

Freefall™ Golden Yellow
70092043

Freefall™ Lavender
70092044

Freefall™ Marina
70092049

Freefall™ Morpho
70092050

Freefall™ Purple & White
70092045

Freefall™ Purple Wing
70092047

Freefall™ True Blue NEW
70098103

Freefall™ White
70092051

Freefall™ Little Faces Mix
70092040

Freefall™ Mix
70092042

Freefall™ Moonlight Mix
70092041

SEED ANNUALS
BACK TO CONTENTS

Freefall XL™ Yellow Blotch

PANSY SPREADING *F1 Viola × wittrockiana*

Freefall™ XL

The grower's choice for spring and autumn baskets.

- Offers the same tidy habit growers and consumers have come to love in the Freefall™ series, with the added benefit of much larger flowers.
- A favorite among growers thanks to its non-tangling habit and extremely quick flowering time.
- Perfect for hanging baskets, containers and landscape applications.
- Flowers prolifically throughout the season and has excellent weather tolerance.

DIMENSIONS 14–20" W x 4–6" H

HABIT Spreading

FORMS Primed

Freefall™ XL Bright Yellow
70092053

Freefall™ XL Fire NEW
70093664

Freefall™ XL Golden Yellow
70092057

Freefall™ XL Purple Face
70092054

Freefall™ XL Red Wing
70092055

Freefall™ XL Scarlet Blotch
70092058

Freefall™ XL Victoriana
70092059

Freefall™ XL White NEW
70093663

Freefall™ XL Yellow Blotch
70092060

Freefall™ XL Mix
70092056

SEED ANNUALS
BACK TO CONTENTS

WonderFall™ White

PANSY SPREADING *F1 Viola × wittrockiana*

WonderFall™

- With the largest blooms in its class, WonderFall stands out from other spreading pansies and Violas.
- Flowers cover the plant from crown to tip, creating high-impact baskets and mixed containers.
- A vigorously spreading habit covers more ground in the garden than traditional pansies, offering added consumer value.
- A wide range of core colors and trendy shades help drive impulse sale.

DIMENSIONS 18–30" W x 8–10" H

HABIT Spreading

FORMS Raw, PreNova® 2.0

WonderFall™ Blue Picotee Shades
70041128

WonderFall™ Blue with Blotch
70034805

WonderFall™ Lavender Picotee Shades
70041132

WonderFall™ Purple
70034806

WonderFall™ Purple and Blue Shades
70041129

WonderFall™ Purple with Face
70041134

WonderFall™ Rose Shades with Face
70041131

WonderFall™ White
70034810

WonderFall™ Yellow
70048754

WonderFall™ Yellow with Blotch
70048755

WonderFall™ Yellow with Red Wing
70041130

SEED ANNUALS
BACK TO CONTENTS

Arabesque® Pink

PENSTEMON *F1 Penstemon hartwegii*

Arabesque®

- Ideal for premium programs—offers the look of a perennial with the growing ease of an annual.
- Better branching with faster, more reliable crop timing than traditional Penstemon.
- Strong plants are easier to handle and ship without damage.

DIMENSIONS 18–20" W x 24–30" H | **HABIT** Upright | **FORMS** Raw

Arabesque® Appleblossom
70020707

Arabesque® Orchid
70020703

Arabesque® Pink
70020695

Arabesque® Red
70020697

Arabesque® Violet
70020701

Partybells™ Red

PENSTEMON *F1 Penstemon hartwegii*

Partybells™

The new summer snapdragon.

- Best choice for high-density production—naturally dwarf habits with strong lateral branching, create a fuller colorful plant that is easier to grow.
- Easy programming—schedule like an annual for summer sales.
- Heat lover—thrives in hot, dry conditions. Continuous flowering spikes resist lodging.

DIMENSIONS 12–16" W x 16–18" H | **HABIT** Upright | **FORMS** Raw

Partybells™ Red
70058326

Partybells™ Violet
70058334

SEED ANNUALS
BACK TO CONTENTS

BeeBright™ Lipstick

PENTAS *F1 Pentas lanceolata*

BeeBright™

Fastest finish for packs and small pots.

- On average one week faster than the competition.
- Tight uniformity and consistent compact habit across all colors.
- Extremely free flowering with fast flower follow up in the greenhouse and the garden.
- Available in five distinct colors including best-in-class BeeBright Red.

DIMENSIONS 12–14" W x 6–8" H | **HABIT** Mounded | **FORMS** Pelleted

BeeBright™ Lipstick
70052741

BeeBright™ Pink
70041063

BeeBright™ Red
70052740

BeeBright™ Violet
70070448

BeeBright™ White
70052739

BeeBright™ Mix
70069304

HoneyCluster™ Deep Rose

PENTAS *F1 Pentas lanceolata*

HoneyCluster™

Excellent value for midsize containers.

- Quick fill and fast finish for mid-to-large pots and landscape applications.
- Flowers held above the foliage provide high-impact color.
- Delivers the vigor and flower power to stand up to heat and make premium season extending containers.

DIMENSIONS 14–18" W x 12–14" H | **HABIT** Upright | **FORMS** Pelleted

HoneyCluster™ Deep Rose
70038537

HoneyCluster™ Pink
70038536

HoneyCluster™ Red
70041072

HoneyCluster™ White
70038535

HoneyCluster™ Mix
70069303

SEED ANNUALS
BACK TO CONTENTS

FotoFinish™ Red

Petunia

Under short or long days, deliver tidy, retail-ready plants.

From upright to spreading types, Syngenta Flowers offers the most grower-friendly range of bedding Petunias.

With a focus on naturally branching plant habits, the assortment features varieties that require fewer PGRs and are well-suited for higher density production.

All varieties are further screened under the shortest and darkest days of winter to create uniform series that are less day length sensitive. These features provide greater flexibility, programmability, and reliability for the grower to deliver tidy, retail-ready plants, packed with added flower power to delight the end consumer!

	DWARF	GENETIC COMPACT	TRADITIONAL UPRIGHT	SPREADING
GRANDIFLORA		DUVET™	TRITUNIA™ FROST™	SKYBOX™
MULTIFLORA		DAMASK™	HURRAH™	FOTOFINISH™
MILLIFLORA	PICOBELLA™			FLASHFORWARD™

SEED ANNUALS
BACK TO CONTENTS

Duvet™ Pink

PETUNIA GRANDIFLORA *F1 Petunia grandiflora*

Duvet™

A tidy blanket of color.

- Uniform series of genetic compact plants topped by large showy flowers.
- Ideally suited for high-density production in packs or small pots with little to no PGRs.
- Non-stretching plants are efficient to ship and merchandise on racks.
- Early and uniform flowering, even under short days.
- Compact but with good vigor in the garden.

DIMENSIONS 12–14" W x 6–8" H

HABIT Mounded

FORMS Pelleted

Duvet™ Blue
70040974

Duvet™ Burgundy
70059297

Duvet™ Pink
70040978

Duvet™ Red
70040981

Duvet™ Salmon
70040985

Duvet™ White
70040988

Duvet™ Mix
70048780

SEED ANNUALS
BACK TO CONTENTS

Duvet™ Mix

Frost™ Mix

PETUNIA GRANDIFLORA *F1 Petunia grandiflora*

Frost™

Fresh and bright.

- Large, showy blooms edged in white, provide striking bicolor contrast.
- Vigorous, upright and branching habit fills pots and garden beds.
- Makes magnificent, eye-catching displays at retail, in containers, and in landscape beds.

DIMENSIONS 14–16" W x 12–14" H

HABIT Mounded

FORMS Raw, Pelleted

Frost™ Blue
70020232

Frost™ Cherry
70020235

Frost™ Fire
70008781

Frost™ Velvet
70002531

Frost™ Mix
70020243

SEED ANNUALS
BACK TO CONTENTS

TriTunia™ Blue

PETUNIA GRANDIFLORA *F1 Petunia grandiflora*

TriTunia™

Best of the best.

- The most complete range of traditional, large flowered Petunias to meet your spring bedding needs: includes bright solids, crisp bicolors, veined, and other novelty patterns.
- Ideal for both packs and pots with strong garden vigor.
- Matched for uniformity in habit and flowering with a tight bloom window for easy scheduling.
- Selected for earliest flowering, especially under short dark winter and early spring days.

DIMENSIONS 12–14” W x 10–12” H

HABIT Mounded

FORMS Raw, Pelleted

TriTunia™ Blue
70065664

TriTunia™ Blue Star
70065668

TriTunia™ Blue Veined
70065676

TriTunia™ Burgundy
70065667

TriTunia™ Crimson Star
70065681

TriTunia™ Fresh White
70007924

TriTunia™ Lavender
70065666

TriTunia™ Pink
70065685

TriTunia™ Pink Morn
70065679

TriTunia™ Pink Veined
70037057

TriTunia™ Plum
70065678

TriTunia™ Purple
70000762

SEED ANNUALS
BACK TO CONTENTS

TriTunia™ Red

TriTunia™ Purple Star
70065677

TriTunia™ Red
70065673

TriTunia™ Red Star
70065669

TriTunia™ Rose
70065670

TriTunia™ Rose Star
70065671

TriTunia™ Salmon
70040996

TriTunia™ Salmon Veined
70065674

TriTunia™ Sky Blue
70065684

TriTunia™ Violet
70065680

TriTunia™ White Imp.
70000745

TriTunia™ Mix
70065675

TriTunia™ ProFormula Mix
70067443

TriTunia™ Star Mix
70065672

TriTunia™ Veined Mix
70065665

SEED ANNUALS
BACK TO CONTENTS

Picobella™ Salmon Imp.

PETUNIA MILLIFLORA *F1 Petunia milliflora*

Picobella™

Pretty and petite.

- Miniature flowers and petite plants offer a unique addition to the spring retail mix.
- Easy and economical to grow—extra early flowering with no special growing regime required and no need for PGRs.
- Perfect for small borders, beds, and mixed containers—strong vigor but won't overgrow companion plants.

DIMENSIONS 8–10" W x 8–10" H

HABIT Mounded

FORMS Pelleted

Picobella™ Blue
70007665

Picobella™ Carmine
70007666

Picobella™ Lavender Imp. NEW
70054309

Picobella™ Pink
70054306

Picobella™ Red
70035048

Picobella™ Rose
70007668

Picobella™ Rose Morn
70024118

Picobella™ Rose Star
70024119

Picobella™ Salmon Imp. NEW
70035049

Picobella™ White
70007670

Picobella™ Mix
70007838

SEED ANNUALS
BACK TO CONTENTS

Damask™ White Imp.

PETUNIA MULTIFLORA *F1 Petunia multiflora*

Damask™

Tough as nails.

- Bred for high-density production in packs and small pots with little-to-no PGRs.
- Naturally compact, non-stretching plants offer extended shelf life and are easy to ship and merchandise on racks.
- Early, uniform, and free-flowering plants finish fast even under the short days of early spring.
- Tidy plants have excellent weather tolerance and deliver season-long garden performance.

DIMENSIONS 12–14" W x 6–8" H

HABIT Mounded

FORMS Pelleted

Damask™ Blue
70041000

Damask™ Carmine
70041002

Damask™ Pink
70041004

Damask™ Purple
70059273

Damask™ Red
70037044

Damask™ Rose
70059270

Damask™ Salmon
70059267

Damask™ Violet
70037046

Damask™ White Imp. NEW
70067200

Damask™ Mix
70054382

SEED ANNUALS
BACK TO CONTENTS

Horizon™ Yellow
70000725

PETUNIA MULTIFLORA *F1 Petunia multiflora*

Horizon™

Bright and sunny!

- Multiflora Petunia available in a bright and cheery yellow!
- Compact plant habit and vivid color intensity makes Horizon Yellow your best option for packs, pots, and baskets!

DIMENSIONS 12–15" W x 12–15" H

HABIT Mounded

FORMS Pelleted

Hurrah™ Blue Veined and Hurrah™ Plum

SEED ANNUALS
BACK TO CONTENTS

Hurrah™ Blue Veined

PETUNIA MULTIFLORA *F1 Petunia multiflora*

Hurrah™

The fan favorite.

- Long-time, favorite standard, multiflora Petunia for early season blooms and long-lasting garden performance.
- Early and uniform flowering window even under low light conditions for easy scheduling and shipping.
- Fills garden beds fast with vigorous, mounded plants covered with medium size blooms.

DIMENSIONS 12–14" W x 8–10" H

HABIT Mounded

FORMS Pelleted

Hurrah™ Blue
70006995

Hurrah™ Blue Veined
70006996

Hurrah™ Lavender Tie Dye
70000722

Hurrah™ Pink
70000705

Hurrah™ Plum
70006994

Hurrah™ Red
70000726

Hurrah™ Red Star
70000727

Hurrah™ Rose
70000715

Hurrah™ Rose Star
70000711

Hurrah™ Salmon
70000706

Hurrah™ Velvet
70000735

Hurrah™ White
70000724

Hurrah™ Blueberry Muffin Mix
70020260

Hurrah™ Mix
70000709

SEED ANNUALS
BACK TO CONTENTS

FotoFinish™ Pink

NEW SERIES

PETUNIA SPREADING *F1 Petunia pendula*

FotoFinish™

FotoFinish™ Spreading Petunia

Fastest to the finish.

- Extremely uniform spreading Petunia series with perfectly matched plant habits and flower timing.
- Extra early flowering and reduced day length sensitivity provide programmable flowering in 9–10 weeks from sowing.
- Mounded and branching habit is ideal for high-density growing, holds better at retail and provides faster garden fill due to the need for fewer PGRs in production.
- Extremely free flowering with masses of color all over the plant for high-impact retail and long lasting garden displays.

DIMENSIONS 24–36” W x 10–14” H

HABIT Mounded-Trailing

FORMS Pelleted

SEED ANNUALS
BACK TO CONTENTS

FotoFinish™ Blue NEW
70061717

FotoFinish™ Burgundy NEW
70061720

FotoFinish™ Pink NEW
70067220

FotoFinish™ Red NEW
70067221

FotoFinish™ Rose Morn NEW
70083160

FotoFinish™ Rose Star NEW
70083162

FotoFinish™ Salmon NEW
70065697

FotoFinish™ White NEW
70083138

FotoFinish™ Mix NEW
70099727

FotoFinish™ Patriot Mix NEW
70099524

Behind the Breeding

With great excitement, we introduce this year a brand new Petunia series called FotoFinish™. This trailing Petunia series is one of the earliest flowering series on the market. The name FotoFinish refers to the start of the flowering of all the colors at the same time.

With the grower and consumer in mind, we started breeding and testing many years ago, we used the combination of science and green fingers to breed this new, rich-flowering and beautiful Petunia. FotoFinish has a versatile use for baskets, mixed containers and landscaping. The abundant quantity of large-sized flowers make a huge color impact, and the plants stay compact and full of flowers the whole summer. The plants can grow up to 30 inches wide in the garden or hanging basket.

We are very proud of this seed-raised Petunia and are confident in the quality after intensive trialing on many different locations and climate conditions. Try these FotoFinish Petunias and you will experience its earliness and rich-flowering.

“...experience its earliness and rich-flowering.”

Eric Giesen
SENIOR BREEDER
Andijk, the Netherlands

SEED ANNUALS
BACK TO CONTENTS

FlashForward™ Lavender

NEW SERIES

PETUNIA SPREADING MILLIFLORA *F1 Petunia pendula milliflora*

FlashForward™

Flash Forward™ Mini Spreading Petunia

Plays well alone and with others.

- A miniature flowering, spreading Petunia perfectly suited for basket, mixed container, and premium pack programs.
- Less day length sensitivity provides extra early flowering in 9–10 weeks from sowing, even under short day conditions.
- Tidy plants hold longer at retail than traditional trailing Petunias and don't overgrow companions in mixed containers.
- Extremely free flowering all summer long even under difficult garden and weather conditions.

DIMENSIONS 18–24" W x 6–10" H

HABIT Spreading

FORMS Pelleted

FlashForward™ Blue NEW
70099066

FlashForward™ Burgundy NEW
70099091

FlashForward™ Coral NEW
70099064

FlashForward™ Lavender NEW
70099068

SEED ANNUALS
BACK TO CONTENTS

FlashForward™ Pink NEW
70099065

FlashForward™ Pink Glo NEW
70098898

FlashForward™ Purple NEW
70099067

FlashForward™ Red NEW
70098899

FlashForward™ Salmon NEW
70098897

FlashForward™ Sky Blue NEW
70098900

FlashForward™ White NEW
70099063

FlashForward™ Cool Waters Mix NEW
70099093

FlashForward™ Mix NEW
70099092

FlashForward™ Patriot Mix NEW
70099069

Behind the Breeding

After extensive listening to the consumer and grower needs, we came together with our breeding team and started with new breeding lines. The breeding goal was an early, rich-flowering Petunia. which is flowering under short days. We used our large gene pool in petunia and with the combination of technology and green knowledge we bred, the new FlashForward™ Petunia series. This beautiful series has a versatile use for baskets, mixed container and pack programs.

The plants flower very early, even under short days. The plants are spreading and hold very well in the greenhouse, shop, and containers. The compact strong plant, rich-flowering and good branching make these petunias perfect for mixed containers where they will not overgrow other components in the pot. The large quantity of small-sized flowers make a huge color impact and recover quickly after rain. The plants can grow up to 18-inches wide in the garden, combo or hanging basket. After many years of trialing on locations in the US, Europe, and Asia, we are confident in the quality and very proud of this seed-raised Petunia.

> **“Use this series and you will experience a FlashForward in time.”**

Eric Giesen
SENIOR BREEDER
Andijk, the Netherlands

SEED ANNUALS
BACK TO CONTENTS

Skybox™ Rose Star

PETUNIA SPREADING GRANDIFLORA *Petunia pendula*

Skybox™

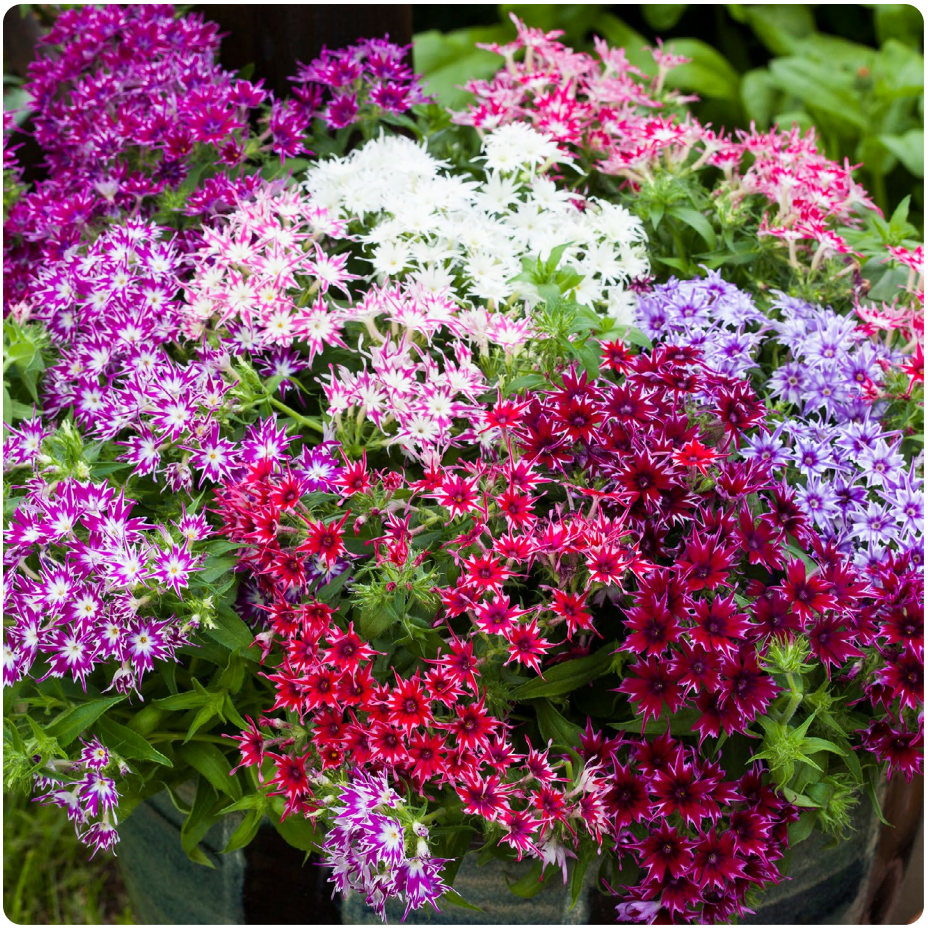
Expand the horizon of spreading petunias.

- New class of large-flowered spreading petunias for high-impact pots and hanging baskets.
- Reliably targets early season sales with extra early flowering, even under short days, on a tidy and easy to manage plant habit.
- Very uniform and showy star pattern provides a high-quality option at a great price for high volume spring promotions.

DIMENSIONS 24–28" W x 10–14" H | **HABIT** Spreading | **FORMS** Pelleted

Skybox™ Rose Star
70067243

SEED ANNUALS
BACK TO CONTENTS



Popstars™ Mix

PHLOX *F1 Phlox drummondii*

Popstars™

The Phlox that tops the charts!

- Unique star-shaped flowers adorn this sturdy F1 Phlox in a bold selection of solid colors and striking bicolors.
- Multi-branched habit makes tidy packs and pots, abundant hanging baskets, and intriguing combination plantings.
- Improved garden performance and elevated heat tolerance keep a profusion of whimsical flowers blooming longer into the season than regular Phlox.

DIMENSIONS 14–16" W x 10–12" H

HABIT Upright

FORMS Raw

Popstars™ Blue
70092177

Popstars™ Deep Blue
70092170

Popstars™ Purple
70092175

Popstars™ Purple with Eye
70092174

Popstars™ Red Imp. NEW
70098017

Popstars™ Rose with Eye
70092176

Popstars™ White
70092173

Popstars™ Mix
70092171

SEED ANNUALS
BACK TO CONTENTS

PRIMULA *F1 Primula acaulis*

Primera™

First of the season.

- Bred for early production from September through February, but can also be slotted through the entire primrose season.
- Minimal cool temperatures required to initiate flowering.
- Uniform plants and flowering, with large showy blooms.
- Compact habit fill pots with tidy, rounded leaves.

DIMENSIONS 5–6” W x 5–6” H

HABIT Mounded

FORMS Raw, Primed

Primera™ Mix

Primera™ Blue
70045479

Primera™ Carmine Imp.
70045466

Primera™ Lavender Shades
70020148

Primera™ Lilac Flame
70045472

Primera™ Orange
70045476

Primera™ Pink
70045464

Primera™ Scarlet
70020107

Primera™ Violet Shades
70020151

Primera™ White
70045461

Primera™ Wine Flame Shades
70007773

Primera™ Yellow
70041391

Primera™ Mix
70007757

SEED ANNUALS
BACK TO CONTENTS

Libre™ Rose Picotee

PRIMULA *F1 Primula obconica*

Libre™

Free-flowering color that lasts.

- Striking, flowering pot plant with outstanding retail appeal.
- Offers extended shelf-life—flower color intensifies and deepens as plants mature.
- Cold temperatures are not necessary to initiate flowering, but cooler growing conditions produce a more compact, free-flowering plant.

DIMENSIONS 6–8" W x 8–10" H

HABIT Mounded

FORMS Raw

Libre™ Blue Picotee
70004003

Libre™ Deep Blue
70000674

Libre™ Magenta
70020047

Libre™ Orange
70020184

Libre™ Red
70020183

Libre™ Rose Picotee
70020188

Libre™ Salmon Bicolor
70007956

Libre™ White
70020046

Libre™ Mix
70020043

SEED ANNUALS
BACK TO CONTENTS

RANUNCULUS *F1 Ranunculus asiaticus*

Maché™

Stimulate early spring sales with this irresistible cool crop.

- Ideal for 1 qt. and larger premium containers.
- Vigorous plants have brightly colored, fully double flowers.
- Easy to grow and manage with strong uniformity and high responsiveness to PGRs.

DIMENSIONS 10–12” W x 10–12” H

HABIT Upright

FORMS Raw, Pelleted

Maché™ Mix

Maché™ Fire
70058315

Maché™ Lemon Rose Bicolor NEW
70070459

Maché™ Orange
70035061

Maché™ Pink
70048730

Maché™ Purple
70007138

Maché™ Red
70035059

Maché™ Rose
70007140

Maché™ Scarlet
70007142

Maché™ White
70035058

Maché™ Yellow
70035060

Maché™ Bicolor Mix
70027334

Maché™ Mix
70007125

Maché™ Pastel Mix
70000631

Maché™ Vanilla Bicolor Medley
70048733

SEED ANNUALS
BACK TO CONTENTS

Magic™ Red

RANUNCULUS *F1 Ranunculus asiaticus*

Magic™

Cool and uniquely compact.

- Genetically compact habit requires no PGRs and is ideal for 1 pt. containers.
- Tidy plants are easy to grow and ship at high densities.
- Irresistible flowers on plants perfectly sized to stimulate early season, impulse sales.

DIMENSIONS 4–6” W x 4–6” H

HABIT Upright

FORMS Raw, Pelleted

Magic™ Chocolate
70063151

Magic™ Golden Yellow
70063132

Magic™ Orange
70007132

Magic™ Pink & Peach
70039327

Magic™ Purple NEW
70041079

Magic™ Red
70048731

Magic™ Rose
70007134

Magic™ Rose Delight
70063158

Magic™ White
70007135

Magic™ Yellow
70063133

Magic™ Mix
70004272

SEED ANNUALS
BACK TO CONTENTS

Rhea™
70057664

SALVIA *Salvia farinacea*

Rhea™

- Compact, multi-branched plants with densely packed spikes of cobalt blue flowers provide maximum impact at point of sale.
- Continuous, rigorous seed selection provides reliable uniform performance from year to year.

DIMENSIONS 8–10” W x 12–16” H
HABIT Upright
FORMS Raw

Strata™
70002934

SALVIA *Salvia farinacea*

Strata™

- Compact, multi-branched plants with densely packed spikes of gray-blue flowers provide maximum impact at point of sale.
- Continuous, rigorous seed selection provides reliable uniform performance from year to year.

DIMENSIONS 8–10” W x 12–16” H
HABIT Upright
FORMS Raw

Victoria™ Blue
70000627

SALVIA *Salvia farinacea*

Victoria™

- Compact, well branched and early flowering, with dense and tightly packed flower spikes that provide maximum impact at point of sale.
- Well-matched blue and white varieties are easy to combine in production and garden settings.
- Continuous, rigorous seed selection provides reliable uniform performance from year to year.

DIMENSIONS 10–12” W x 16–20” H
HABIT Upright
FORMS Raw

Victoria™ White
70000628

SEED ANNUALS
BACK TO CONTENTS

Mojave™ Red

SALVIA *Salvia splendens*

Mojave™

Strength and beauty.

- The absolute best option for landscape performance.
- Excellent heat tolerance, branching and repeat flowering.
- Low-profile, densely formed flower spikes and dark foliage provide excellent contrast in the garden.

DIMENSIONS 10–12” W x 8–12” H

HABIT Upright

FORMS Raw

Mojave™ Purple
70092187

Mojave™ Red
70034419

Mojave™ Red/White Bicolor
70092188

Mojave™ Salmon
70092189

Mojave™ White
70092190

Mojave™ Mix
70092191

Sentry™
70092184

SALVIA *Salvia splendens*

Sentry™

Perfect for packs.

- Bred to quickly fill the pot and produce vibrant red flower spikes ahead of the competition.
- Strong branching ensures not only excellent pack performance, but longevity in the garden as well.

DIMENSIONS 8–10” W x 8–10” H

HABIT Upright

FORMS Raw

SEED ANNUALS
BACK TO CONTENTS

SALVIA *Salvia splendens*

Sizzler™

Designed with the grower in mind.

- Compact, early flowering, and uniform across the colors, with short, strong flower spikes for a longer shelf life.
- Perfect for high-density pot and pack production, but with sufficient vigor to fill garden beds.

DIMENSIONS 8–10” W x 8–10” H

HABIT Upright

FORMS Raw

Sizzler™ Purple

Sizzler™ Burgundy
70002943

Sizzler™ Burgundy Halo
70034418

Sizzler™ Lavender
70092185

Sizzler™ Purple
70002933

Sizzler™ Red
70092186

Sizzler™ Salmon
70002942

Sizzler™ White
70002944

Sizzler™ Mix
70001247

SEED ANNUALS
BACK TO CONTENTS

Queen of Sunlight™

SANVITALIA *F1 Sanvitalia speciosa*

Queen of Sunlight™

Exceptional uniformity and compactness from seed.

- Heavily branched, uniform, and compact plants with masses of flowers make this seed-raised Sanvitalia a true alternative to cuttings.
- Easy to produce in small pots, at high densities, or as a premium hanging basket.
- Makes an excellent addition for mixed combinations or for use as a cheerful patio plant.

DIMENSIONS 8–10” W x 8–10” H

HABIT Mounded

FORMS Raw

Queen of Sunlight™
70055331

Atlantis™ Mix

SCHIZANTHUS *F1 Schizanthus × wisetonensis*

Atlantis™

Strike it rich with this stunning ‘Poor Man’s Orchid’.

- Premium pot plant in a mix of striking solid and bicolor flowers.
- Reduced day length sensitivity makes Atlantis easy to program for early spring holiday sales, prior to the main bedding season.
- Compact, branching plants require fewer PGRs.
- Economical to grow with low temperature requirements.

DIMENSIONS 8–10” W x 8–10” H

HABIT Upright

FORMS Raw

Atlantis™ Mix
70000573

SEED ANNUALS
BACK TO CONTENTS

Liberty Classic™ Mix

SNAPDRAGON *F1 Antirrhinum majus*

Liberty™ Classic

Timeless classic.

- Upright, intermediate height plants with shapely, central flower spikes that have timeless consumer appeal.
- Provide a classic snapdragon look with strong, sturdy stems that stand up tall at retail and in landscape beds.
- Ideal for 1 qt. pots or larger, but can also be grown in packs with PGRs for mass bedding use.

DIMENSIONS 12–14" W x 18–22" H

HABIT Upright

FORMS Raw

Liberty™ Classic Mix
70017986

Liberty™ Classic Bronze
70006428

Liberty™ Classic Crimson
70017981

Liberty™ Classic Lavender
70017916

Liberty™ Classic Rose Pink
70017918

Liberty™ Classic White
70017983

Liberty™ Classic Yellow
70024501

Madame Butterfly™ Mix
70017984

SNAPDRAGON *F1 Antirrhinum majus*

Madame Butterfly™

Graceful beauty.

- A unique range of tall, double-azalea flower snapdragons that create extra full and graceful flower spikes.
- Striking at the back of borders and when cut and used for indoor floral arrangements.

DIMENSIONS 14–16" W x 24–30" H | **HABIT** Upright | **FORMS** Raw

Madame Butterfly™ Bronze
70051944

Madame Butterfly™ Bronze White
70041196

Madame Butterfly™ Cherry Bronze
70041197

Madame Butterfly™ Ivory
70041198

Madame Butterfly™ Pink
70041199

Madame Butterfly™ Red
70041200

Madame Butterfly™ Rose
70041201

Madame Butterfly™ Yellow
70051896

SEED ANNUALS
BACK TO CONTENTS

Snaptastic™ Mix
70069302

SNAPDRAGON *F1 Antirrhinum majus*

Snaptastic™

The next generation of multi-season intermediate snapdragons.

Spring:

- The least day length sensitive intermediate snapdragon on the market, creating an easier to program crop.
- One to two weeks faster flowering than the competition.
- Better branching with more flowers and superior stem strength that holds up to the rigors of shipping and retail.

Fall:

- Stands up to the environmental challenges of warm season production for late summer and fall sales.
- Vigorous plants with sturdy branching habits are quick to fill containers before flowering and hold up to shipping.

DIMENSIONS 14–16" W x 14–16" H | **HABIT** Upright | **FORMS** Raw, Pelleted

Snaptastic™ Magenta
70048621

Snaptastic™ Orange Flame
70048614

Snaptastic™ Pink
70048619

Snaptastic™ Red
70048616

Snaptastic™ Yellow
70048611

SEED ANNUALS
BACK TO CONTENTS

Snaptini™ Mix
70074492

SNAPDRAGON DWARF *F1 Antirrhinum majus*

Snaptini™

Controlled and consistent across all seasons.

- Highly programmable with reduced photoperiod sensitivity offers consistent crop timing across all seasons.
- Bred for high-density production in packs and small pots with a reliable, tight flowering window for bench run finish.
- Strong central leader combined with sturdy branching creates an easy to ship plant and provides a classic look at retail.

DIMENSIONS 6–8” W x 6–8” H

HABIT Mounded

FORMS Raw, Pelleted

Snaptini™ Burgundy Bicolor
70048634

Snaptini™ Peach
70048628

Snaptini™ Red
70048632

Snaptini™ Rose Bicolor
70075985

Snaptini™ Scarlet
70048631

Snaptini™ Sunglow
70048629

Snaptini™ Violet
70048638

Snaptini™ White
70075984

Snaptini™ Yellow
70048627

SEED ANNUALS
BACK TO CONTENTS

Snaptini™ Scarlet, Sunglow, and Peach

SEED ANNUALS
BACK TO CONTENTS

Sunfinity® Yellow Dark Center

SEED ANNUALS
BACK TO CONTENTS

Sunfinity® Yellow Dark Center

SUNFLOWER *F1 Helianthus hybrida*

Sunfinity®

Endless Blooms. All Season Long.™

- The next generation of sunflower offers nonstop blooming and continuous flowers all season long.
- This facultative long day plant with fast crop times is well-suited for late spring and early summer.
- Extends the retail season with a premium product offer, ideal in 2.5-quart and larger containers for landscape use or in larger patio pots.
- Provides extended shelf-life compared to short-lived regular pot sunflowers that cannot be sold after first flower.
- Multi-blooming plants allow home gardeners the opportunity to cut and enjoy flowers indoors as well as in the garden.
- Resistant to many of the most devastating races of downy mildew that infect sunflowers in the garden.
- Complete branding package available to support and drive retail sales.

DIMENSIONS 24–32” W x 48” H | **HABIT** Upright | **FORMS** Raw

sunfinity
ENDLESS BLOOMS. ALL SEASON LONG.

GREENHOUSE GROWER MEDAL OF EXCELLENCE

Sunfinity® Yellow Dark Center
70052829

SEED ANNUALS
BACK TO CONTENTS

sunfinity®
ENDLESS BLOOMS. ALL SEASON LONG.

Point of Purchase Materials

Find out more at www.mysunfinity.com

Branded Pot

Pots available from East Jordan Plastics, Pöppelmann, and Summit Plastics.

To order all other POP materials, call (866) 448–8300 or visit **brands.syngentaflowers-us.com**

SEED ANNUALS
BACK TO CONTENTS

Cart Banner

Locking Hang Tag

Posters

Stake Tag

SEED ANNUALS
BACK TO CONTENTS

Duchess™ Blue & White

Duchess™ Blue & White
70020963

Duchess™ Burgundy
70020960

Duchess™ Deep Blue
70020961

Duchess™ Pink
70020959

Duchess™ Mix
70020958

TORENIA *F1 Torenia fournieri*

Duchess™

Fit for royalty.

- Tight, mounding habits are ideally suited for bedding plant production.
- Early to flower, compact, and uniform for both flower timing and plant habit.
- Works well in mixed containers and is great for both sunny and shady garden beds.

DIMENSIONS 6–8" W x 6–8" H

HABIT Mounded

FORMS Pelleted

SEED ANNUALS
BACK TO CONTENTS

VERBENA *Verbena hybrida*

Obsession™

Color that will mesmerize.

- Perfect for packs and small pots with strong branching and high uniformity that make production a breeze.
- Very early with fast follow-up flowering, so plants stay in bloom longer.
- Available in unique twister patterns previously found only in cuttings and a wide range of other bold colors and top notch mixes.

DIMENSIONS 10–12" W x 6–8" H | **HABIT** Mounded | **FORMS** Raw, Primed

Obsession™ Twister™ Purple

Obsession™ Apricot
70021267

Obsession™ Blue with Eye
70000522

Obsession™ Bordeaux
70000517

Obsession™ Burgundy with Eye
70000520

Obsession™ Coral with Eye
70000523

Obsession™ Light Blue with Eye
70000525

Obsession™ Lilac
70000538

Obsession™ Pink
70000524

Obsession™ Red
70000527

Obsession™ Red with Eye
70000534

Obsession™ Scarlet
70000533

Obsession™ Twister™ Purple
70060507

Obsession™ Twister™ Red
70060510

Obsession™ White Imp.
70083061

NEW

Obsession™ Berry Tart Mix
70021259

Obsession™ Eyed Mix
70000529

Obsession™ Mix
70000521

Obsession™ Pastel Mix
70000530

Obsession™ Spirit Mix
70021253

Obsession™ Wine & Cheese Mix
70021258

SEED ANNUALS
BACK TO CONTENTS

VERBENA *Verbena hybrida*

Obsession™ Cascade

First and only trailing Verbena from seed.

- Seed product form offers easy, no-pinch production with all the efficiencies that come with mechanized handling of seed grown plants.
- Ideal for value added baskets and combinations.
- Strong, branching vigor in containers and the garden with excellent powdery mildew tolerance.

DIMENSIONS 18–24" W x 8–10" H

HABIT Spreading

FORMS Raw, Primed

Obsession™ Cascade Purple Shades with Eye

Obsession™ Cascade Burgundy with Eye
70070995

Obsession™ Cascade Pink Shades
70054939

Obsession™ Cascade Purple Shades with Eye
70065566

Obsession™ Cascade Red with Eye
70021278

Obsession™ Cascade Scarlet
70065564

Obsession™ Cascade Twister™ Burgundy
70065567

Obsession™ Cascade Twister™ Violet
70038870

Obsession™ Cascade White
70070994

SEED ANNUALS
BACK TO CONTENTS

VERBENA *Verbena hybrida*

Tuscany®

Big blooms and sunny colors that last.

- Upright habits are perfect for small to medium-sized containers.
- Strong garden vigor outlasts other Verbena.
- Large, showy flowers in rich and novel colors bring added value and interest to premium programs.

DIMENSIONS 10–12” W x 8–10” H

HABIT Upright

FORMS Raw, Primed

Tuscany® Twister™ Purple Shades

Tuscany® Blue Imp.
70070991

Tuscany® Burgundy with Eye
70024255

Tuscany® Lavender Picotee
70024256

Tuscany® Orchid Frost
70024257

Tuscany® Peach
70024258

Tuscany® Pink Picotee
70024259

Tuscany® Rose with Eye
70024260

Tuscany® Scarlet
70024261

Tuscany® Scarlet with Eye
70049119

Tuscany® Twister™ Purple Shades NEW
70075870

Tuscany® White
70024264

Tuscany® Mix
70007911

Tuscany® Pastel Mix
70021305

SEED ANNUALS
BACK TO CONTENTS

Cora® Cascade Apricot

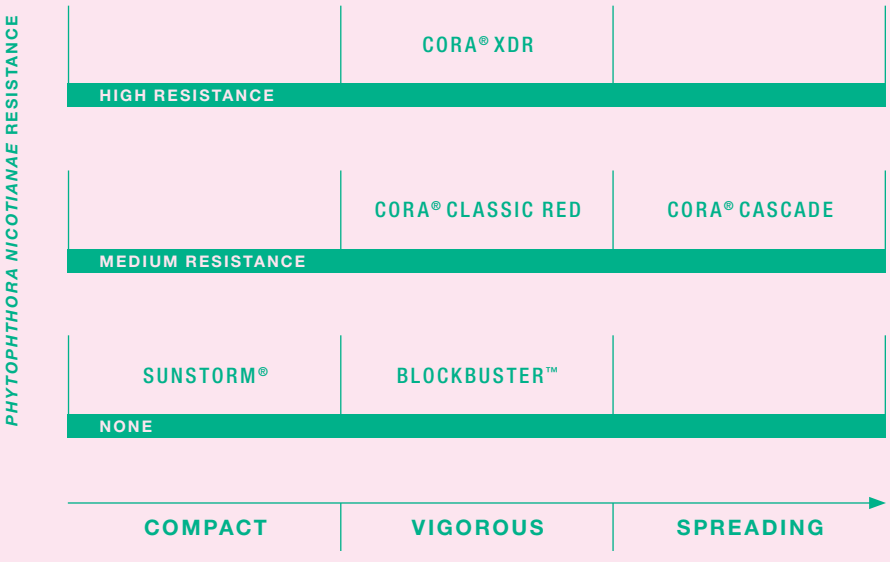
Vinca

Developed to maximize quality and profit.

Syngenta Flowers offers the most complete package of bedding vinca on the market. The assortment ranges from our economical, efficiency driven OP pack series SunStorm®, to our premium F1 hybrid series, Blockbuster™, which boasts excellent plant quality, extra-large flowers and renowned garden performance.

Setting the highest bar, Cora® Cascade and the newly upgraded Cora® XDR series offer premium plant and flower quality with market-leading disease resistance.

While different in appearance and performance, each Syngenta Flowers vinca series was developed with the same shared passion, to help growers maximize the quality of their finished products and their profits.



SEED ANNUALS
BACK TO CONTENTS

Cora® XDR Mix

VINCA *F1 Catharanthus roseus*

Cora® XDR

The vinca that fights back.

- Reduced Risk: offers season-long flowering and survival in landscape plantings. Highly resistant to ten of the most virulent isolates of *Phytophthora nicotianae* that cause *Phytophthora* blight on annual vinca.[1]
- Easier to grow: improved branching, uniformity, and floriferousness ideal for premium packs and small to larger pots.
- Higher consumer appeal: large showy flowers in the widest range of solid and high demand bicolor patterns of any disease resistant vinca on the market.

[1] Confirmed in collaboration with Clemson University; These isolates were found at growers and in landscapes across the southern U.S.

DIMENSIONS 18–20" W x 14–16" H | **HABIT** Mounded | **FORMS** Raw

Cora® XDR Apricot NEW
70076526

Cora® XDR Cranberry
70066888

Cora® XDR Deep Strawberry
70064212

Cora® XDR Hotgenta
70064215

Cora® XDR Light Pink
70066872

Cora® XDR Magenta Halo
70071665

Cora® XDR Orchid
70064217

Cora® XDR Pink Halo
70064213

Cora® XDR Polka Dot
70064211

Cora® XDR Punch
70071683

Cora® XDR White
70066855

Cora® XDR Mix
70081609

SEED ANNUALS
BACK TO CONTENTS

The vinca that FIGHTS BACK!

Cora® XDR Orchid

Cora® XDR Punch

Cora® XDR Compared to Non-Resistant Varieties

(Garden setting with NO fungicides applied to any varieties)

Cora® XDR | Non-Resistant Varieties

Trial photos: Huntersville, NC, July 2018.

Performance assessments are based upon results or analysis of public information, field observations and/or internal Syngenta evaluations.

Point of Purchase Materials

Cart Banner

Locking Hang Tag

Stake Tag

Pack Handle

SEED ANNUALS
BACK TO CONTENTS

Cora® Classic Red

VINCA *F1 Catharanthus roseus*

Cora® Classic

Rockin' red.

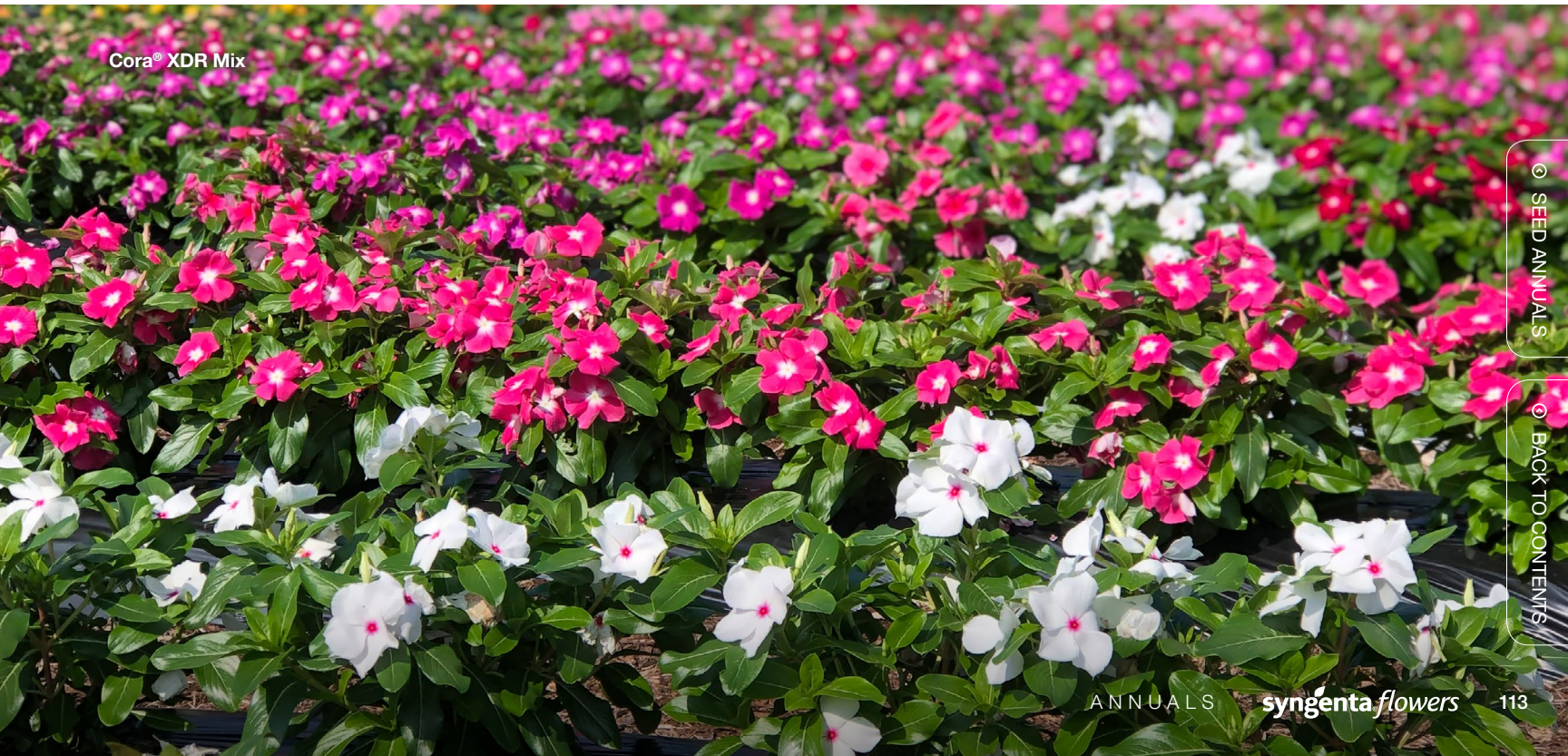
- Still the only true-red vinca on the market with resistance to aerial *Phytophthora*.
- Grow as a core color to round out the upgraded Cora® XDR range.

DIMENSIONS 18–20" W x 14–16" H

HABIT Mounded

FORMS Raw

Cora® Classic Red
70035155



Cora® XDR Mix

SEED ANNUALS
BACK TO CONTENTS

Cora® Cascade Bright Rose

VINCA *F1 Catharanthus roseus*

Cora® Cascade

There's none other like it.

- The only trailing vinca powered by high levels of resistance to multiple strains of aerial *Phytophthora*.
- The mounded, spreading habit is ideal for summer baskets, mixed containers, and large landscape beds.
- F1 hybrid uniformity and vigor build a premium package not found in other trailing vinca.
- Large, high-quality flowers completely cover plants creating blankets of color lasting all season long.

DIMENSIONS 32–36" W x 6–8" H | **HABIT** Spreading | **FORMS** Raw

Cora® Cascade Apricot
70038520

Cora® Cascade Bright Rose NEW
70071707

Cora® Cascade Cherry Imp.
70038519

Cora® Cascade Lavender with Eye
70064221

Cora® Cascade Lilac
70018417

Cora® Cascade Polka Dot
70018420

Cora® Cascade Shell Pink
70052738

Cora® Cascade Strawberry
70038521

Cora® Cascade Violet
70051971

Cora® Cascade White
70064219

Cora® Cascade Mix
70018422

SEED ANNUALS
BACK TO CONTENTS

Blockbuster™ Mix
70092220

VINCA *F1 Catharanthus roseus*

Blockbuster™

Packs a punch!

- The perfect series for both pack and pot production.
- Well-branched with improved earliness, and larger flowers that can reach 5.5–6 cm and maintain their well-rounded form—even in the most extreme conditions!
- Rich color intensity and floriferous plant habit provide ideal impact in the landscape.

DIMENSIONS 12–16" W x 10–12" H

HABIT Mounded

FORMS Raw

Blockbuster™ Apricot
70092221

Blockbuster™ Burgundy
70092222

Blockbuster™ Crimson
70092223

Blockbuster™ Dark Red
70092224

Blockbuster™ Icy Watermelon
70092225

Blockbuster™ Peppermint
70092226

Blockbuster™ Punch
70092227

Blockbuster™ Purple
70092228

Blockbuster™ Red With Eye
70092229

Blockbuster™ White
70092230

SEED ANNUALS
BACK TO CONTENTS

SunStorm® Red Halo

VINCA *Catharanthus roseus*

SunStorm®

Puts the heat on.

- Early flowering and compact habit—the perfect choice for packs and small pots.
- Low input costs for profitable high-density production.
- Well branched and naturally free-flowering plants require little to no PGRs.

DIMENSIONS 10–12” W x 8–10” H

HABIT Mounded

FORMS Raw

SunStorm® Apricot
70001114

SunStorm® Blush
70006504

SunStorm® Bright Red
70001128

SunStorm® Deep Lilac
70001133

SunStorm® Deep Orchid
70006501

SunStorm® Deep Pink
70018320

SunStorm® Light Blue
70006505

SunStorm® Orchid Halo
70018333

SunStorm® Pure White
70001134

SunStorm® Purple
70018358

SunStorm® Red
70018328

SunStorm® Red Halo
70028295

SunStorm® Rose with Eye
70001129

SunStorm® White with Eye
70001116

SunStorm® Mix
70001120

SEED ANNUALS
BACK TO CONTENTS

Vitesse™ Patriot Mix
70092788

VINCA *F1 Catharanthus roseus*

Vitesse™

- An excellent F1 vinca choice for larger pots and landscape applications.
- Well-branched plants provide ultimate reflowering and long-season performance.
- A vibrant blue that holds up in the sun and makes a perfect Patriot Mix; perfect for Memorial Day, 4th of July, and all late season sales.

DIMENSIONS 12–16” W x 10–12” H

HABIT mounded

FORMS Raw

Vitesse™ Blue
70092231

SEED ANNUALS
BACK TO CONTENTS

Deltini™ Rose Pink

VIOLA *F1 Viola cornuta*

Deltini™

Covered with color when you need it most!

- Offers reliable and programmable production in packs and small pots with near-day-neutral flowering.
- Ideal for winter flowering in the south and west and early spring in the north.
- Efficient to produce with reliably fast crop times and a 4–day bloom window between colors, even under short-day conditions.
- Mutliflora type: Plants are covered with masses of flowers, slightly smaller in size than Penny™.

DIMENSIONS 4–6” W x 3–5” H

HABIT Mounded

FORMS Raw, PreNova® 2.0

SEED ANNUALS
BACK TO CONTENTS

Deltini™ Blue
70046118

Deltini™ Blue Purple Wing
70007241

Deltini™ Burgundy
70000483

Deltini™ Copperfield
70021197

Deltini™ Honeybee
70008800

Deltini™ Purple with Golden Center
70000485

Deltini™ Rose Pink
70000482

Deltini™ Violet
70064767

Deltini™ Violet Blue
70007240

Deltini™ Violet Face
70058784

Deltini™ White
70058778

Deltini™ Yellow
70027735

Deltini™ Yellow and Purple
70021114

Deltini™ Yellow Jump Up
70069603

Deltini™ Mix
70059008

SEED ANNUALS
BACK TO CONTENTS

VIOLA *F1 Viola cornuta*

Endurio®

Winter Survivor—frost and snow tolerant spreading Viola.

- Strong roots that can handle the cold make Endurio exceptional for overwintering.
- Combines efficient production and outstanding shelf-life with a unique, tightly mounded habit that quickly fills and spills in containers.
- Near-day-neutral flowering provides reliable color for early spring and fall production.

DIMENSIONS 8–12” W x 4–6” H

HABIT Spreading

FORMS Raw, PreNova® 2.0

Endurio® Blue Yellow with Purple Wing

Endurio® Blue Yellow with Purple Wing
70000467

Endurio® Lavender
70003001

Endurio® Pink Shades
70021212

Endurio® Pure Violet
70000479

Endurio® Red Flare
70058789

Endurio® Red with Yellow Face
70000478

Endurio® Sky Blue Martien
70007721

Endurio® White
70046138

Endurio® Yellow
70058786

Endurio® Yellow with Purple Wing
70021214

Endurio® Yellow with Red Wing
70000471

SEED ANNUALS
BACK TO CONTENTS

Penny™ Violet Imp.

VIOLA *F1 Viola cornuta*

Penny™

Thoughtful growers grow Penny.

- Early flowering and uniformity across a wide range of colors make Penny suited for high-density production in packs and small pots for both fall and spring.
- Tightly branched and non-stretching habit under warm conditions offers longer shelf life and reduces the need for PGRs.
- A multitude of flowers creates long-lasting landscape displays, and a strong root system ensures reliable overwintering performance.

DIMENSIONS 4–6" W x 4–6" H

HABIT Mounded

FORMS Raw, PreNova® 2.0

Penny™ Azure Dawn
70035185

Penny™ Beaconsfield
70021035

Penny™ Black
70059706

Penny™ Blue
70007737

Penny™ Clear Yellow
70021163

Penny™ Deep Blue
70064551

Penny™ Denim Jump-up
70035184

Penny™ Marina
70002991

Penny™ Marlies
70007677

Penny™ Mickey
70021101

SEED ANNUALS
BACK TO CONTENTS

Penny™ Orange
70003023

Penny™ Orange Jump-up Imp. NEW
70074670

Penny™ Peach Jump-up
70003010

Penny™ Primrose Bicolor
70021102

Penny™ Primrose Picotee
70008662

Penny™ Purple Marina
70007528

Penny™ Purple Picotee
70003018

Penny™ Red Blotch
70002985

Penny™ Red Wing
70007250

Penny™ Rose Blotch
70021103

Penny™ Violet Face
70064553

Penny™ Violet Imp. NEW
70074687

Penny™ White
70021032

Penny™ White Blotch
70003017

Penny™ White Jump-up
70059676

Penny™ Yellow
70008221

Penny™ Yellow Blotch
70021036

Penny™ Yellow Jump-up
70059685

Penny™ All Seasons Mix
70021065

Penny™ Citrus Mix
70021044

Penny™ Jump-up Mix
70021045

Penny™ Lane Mix
70020977

Penny™ Winter Mix
70021047

SEED ANNUALS
BACK TO CONTENTS

VIOLA *F1 Viola cornuta*

Tiger Eye™

Wildly exciting color!

- Earlier flowering, much improved plant habit and better seed quality now mean these unique colors can be grown alongside mainstream Viola and pansy crops.
- An absolute must for any Halloween promotion!

DIMENSIONS 4–6" W x 5–7" H | **HABIT** Upright | **FORMS** Primed

Tiger Eye™ Red
70092089

Tiger Eye™ Yellow
70092077

Tiger Eye™ Mix
70092090

Sugar Rush™ Mix
70059652

WALLFLOWER *F1 Cheiranthus cheiri*

Sugar Rush™

Add something sweet to your shoulder seasons!

- The only F1 Cheiranthus from seed, with the added benefit of no vernalization requirement and season-long repeat flowering!
- Sweetly scented and withstands very cold temperatures.
- The color pallet is perfect for both fall and spring and can be produced in as little as 9 weeks from a summer sowing.

DIMENSIONS 8–10" W x 8–10" H | **HABIT** Upright | **FORMS** Raw

Sugar Rush™ Primrose
70059655

Sugar Rush™ Purple Bicolor
70059654

Sugar Rush™ Red
70092102

Sugar Rush™ Yellow
70059653

SEED ANNUALS
BACK TO CONTENTS

ZINNIA *F1 Zinnia elegans*

Magellan™

Profitably navigates spring and summer programs.

- Very grower friendly—bred for exceptional performance on the bench and in the garden.
- Superior flower quality—large, fully double blooms in clean, bright colors.
- Excellent choice for quick-turn, high-profit summer programs.

DIMENSIONS 10–12" W x 12–14" H

HABIT Upright

FORMS Detailed, SatinCoat™

Magellan™ Mix
70021362

Magellan™ Cherry
70024500

Magellan™ Coral
70024496

Magellan™ Ivory
70024495

Magellan™ Orange
70024494

Magellan™ Pink
70024497

Magellan™ Salmon
70024498

Magellan™ Scarlet
70007420

Magellan™ Yellow
70024499

SEED ANNUALS
BACK TO CONTENTS

Short Stuff™ Mix
70021357

ZINNIA *F1 Zinnia elegans*

Short Stuff™

Just the right size.

- Short in stature but not in flower power, this compact-growing Zinnia sports high-quality double flowers in a range of bright colors.
- Perfectly sized and uniform-growing for easy production in packs and small pots for bedding use.
- A heat-loving annual perfect for late spring and summer retail sales.

DIMENSIONS 10–12” W x 8–10” H
HABIT Upright
FORMS SatinCoat™

Short Stuff™ Cherry Shades
70021361

Short Stuff™ Coral
70021355

Short Stuff™ Deep Red
70021356

Short Stuff™ Gold
70021352

Short Stuff™ Orange
70021358

Short Stuff™ Scarlet
70021359

Short Stuff™ White
70021360

Short Stuff™ Fire Mix
70091865

SEED ANNUALS
BACK TO CONTENTS

Swizzle™ Zinnia

ZINNIA *F1 Zinnia elegans*

Swizzle™

Shake up your summer programs with these striking bicolors.

- Eye-catching, fully double, and bicolor flowers demand attention on the retail bench.
- Full, bushy plants covered with blooms are perfect for premium quart or larger pot program.
- A heat-loving plant with season extending properties and strong garden vigor.

DIMENSIONS 10–12” W x 12–14” H

HABIT Upright

FORMS Detailed, SatinCoat™

Swizzle™ Cherry & Ivory
70003053

Swizzle™ Scarlet & Yellow
70004413

Uproar™ Rose

ZINNIA *F1 Zinnia elegans*

Uproar™

Creates a garden commotion.

- Tall-growing, well-branched Zinnia with bright rose fully double flowers.
- A traditional summer favorite that can extend the sales season when offered in large premium containers.
- Can be direct sown for economical production, reducing transplanting and labor costs.

DIMENSIONS 24–27” W x 28–36” H

HABIT Upright

FORMS Detailed, SatinCoat™

Uproar™ Rose
70021364

Zowie!™ Yellow Flame

ZINNIA *F1 Zinnia elegans*

Zowie!™

Demands to be noticed.

- A vigorous and well-branched Zinnia with striking, fully double bicolor flowers.
- A season-extending heat lover that is ideal for large premium container summer programs.
- Strong landscape vigor well-suited for use in the middle or back of sunny garden beds.

DIMENSIONS 24–27” W x 24–30” H

HABIT Upright

FORMS Detailed, SatinCoat™

Zowie!™ Yellow Flame
70021363

SEED ANNUALS
BACK TO CONTENTS

Kwik Kombos™ Night in Pompeii™ Mix

Kwik Kombos™

BACK TO CONTENTS

Success without the guesswork!

Kwik Kombos™ gives you color for every season with options for single-species and multi-species combinations, which providing simplicity in the greenhouse and excitement at retail.

Select from this ready-made retail program, tested and selected for matching uniformity and longevity so you can be sure your combo makes customers say “I am a gardener.”

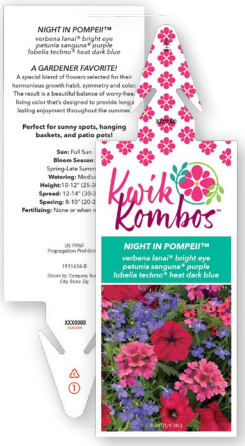
Kwik Kombos pulls from a wide selection of top-performing Syngenta Flowers genetics that makes growing plants and profits easy.

To order all other POP materials, call (866) 448-8300 or visit **brands.syngentaflowers-us.com**

Cart Banner

Bench Card

Poster



Locking Hang Tag

Kwik Kombos™ Night in Pompeii™ Mix

Kwik Kombos™ Fire and Ice™ Mix

Kwik Kombos™ Spring Breeze™ Mix Imp.

BACK TO CONTENTS

Early Season

Beach Bound™ Mix
70089730

Beach Bum™ Mix
70089731

Cabrio™ Life is a Highway™ Mix
70089755

Cabrio™ Ride Along™ Mix
70089753

Cabrio™ Road Trip™ Mix
70089752

Cabrio™ Speed Limit™ Mix
70089754

ID NUMBER	COMBO NAME	COMPONENTS	VIGOR	RECOMMENDED CONTAINERS		
				3 QT	1.5 GAL HB	2.5 GAL HB
70089730	Beach Bound™ Mix	Dekko™ Star Rose Cabrio™ Yellow Lanai® Peach	Medium	•	•	•
70089731	Beach Bum™ Mix	Dekko™ Star Coral Cabrio™ Yellow Lanai® Peach	Medium	•	•	•
70089755	Cabrio™ Life is a Highway™ Mix	Cabrio™ Amethyst Cabrio™ Eclipse Lilac Cabrio™ Grape	Compact	•	•	•
70089753	Cabrio™ Ride Along™ Mix	Cabrio™ Eclipse Lilac Cabrio™ Yellow Cabrio™ Amethyst	Medium	•	•	•
70089752	Cabrio™ Road Trip™ Mix	Cabrio™ Amethyst Cabrio™ Pink with Eye Cabrio™ Yellow	Medium	•	•	•
70089754	Cabrio™ Speed Limit™ Mix	Cabrio™ Burgundy Cabrio™ Yellow Cabrio™ Amethyst	Medium	•	•	•

BACK TO CONTENTS

Early Season *(cont.)*

Cabrio™ Zoom Zoom™ Mix
70089751

Chloe's™ Mix
70089732

Ciao Bella™ Mix
70082470

NEW **Crushed Velvet™ Mix**
70096353

NEW **Curb Appeal™ Mix Imp.**
70096564

Dekko™ Moody Blues™ Mix
70089738

ID NUMBER	COMBO NAME	COMPONENTS	VIGOR	RECOMMENDED CONTAINERS		
				3 QT	1.5 GAL HB	2.5 GAL HB
70089751	Cabrio™ Zoom Zoom™ Mix	Cabrio™ Pink with Eye Cabrio™ Yellow Cabrio™ Grape	Compact	•	•	•
70089732	Chloe's™ Mix	Sanguna® Patio Pink Morn Lanai® Compact White Cabrio™ Yellow	Compact	•	•	•
70082470	Ciao Bella™ Mix	Sanguna® Patio Pink Morn Callie® White Techno® Upright Light Blue	Medium	•	•	•
70096353	Crushed Velvet™ Mix NEW	Cabrio™ Amethyst Lanai® Sky Blue Sanguna® Deep Lavender Vein	Medium	•	•	•
70096564	Curb Appeal™ Mix Imp. NEW	Callie® Yellow Lanai® White Imp. Techno® Cobalt Blue	Medium	•	•	•
70089738	Dekko™ Moody Blues™ Mix	Dekko™ Blue Dekko™ Deep Lavender Vein Dekko™ White	Medium	•	•	•

BACK TO CONTENTS

Early Season *(cont.)*

Dekko™ Salute™ Mix
70089737

Dekko™ Starfish Mix
70089739

Fire and Ice™ Mix
70040791

NEW Harvest Moon™ Mix
70096345

NEW Little Piece of My Heart™ Mix
70096346

NEW Love Potion™ Mix
70096351

ID NUMBER	COMBO NAME	COMPONENTS	VIGOR	RECOMMENDED CONTAINERS		
				3 QT	1.5 GAL HB	2.5 GAL HB
70089737	Dekko™ Salute™ Mix	Dekko™ Blue Dekko™ Red Dekko™ White	Medium	•	•	•
70089739	Dekko™ Starfish Mix	Dekko™ Salmon Dekko™ Star Coral Dekko™ Star Rose	Medium	•	•	•
70040791	Fire and Ice™ Mix	Dekko™ Red Mexican Gold™ Jumbo Techno® Electric Blue	Medium	•	•	•
70096345	Harvest Moon™ Mix NEW	Callie® Star Orange Callie® Yellow Techno® Cobalt Blue	Medium		•	•
70096346	Little Piece of My Heart™ Mix NEW	Callie® Strawberry Lanai® Strawberry Lanai® Twister™ Red	Medium	•	•	•
70096351	Love Potion™ Mix NEW	Callie® Pink with Eye Lanai® Neon Rose Sanguna® Rose	Medium	•	•	•

BACK TO CONTENTS

Early Season *(cont.)*

Mai Tai™ Mix
70089715

NEW **Makin' Me Blush™ Mix**
70096343

NEW **Mermaid Tails™ Mix**
70096350

Paloma™ Mix
70089736

Pink Lemonade™ Mix
70049884

Pink Limeaide™ Mix
70082471

ID NUMBER	COMBO NAME	COMPONENTS	VIGOR	RECOMMENDED CONTAINERS		
				3 QT	1.5 GAL HB	2.5 GAL HB
70089715	Mai Tai™ Mix	Dekko™ Deep Lavender Vein Lanai® Peach Lanai® Compact Lime Green	Medium	•	•	•
70096343	Makin' Me Blush™ Mix NEW	Calypso® Jumbo Lilac Darla® Rose Techno® White	Medium	•	•	•
70096350	Mermaid Tails™ Mix NEW	Callie® Burgundy Lanai® Neon Rose Sanguna® Deep Lavender Vein	Medium	•		•
70089736	Paloma™ Mix	Callie® White Dekko™ White Lanai® Compact White	Medium	•	•	•
70049884	Pink Lemonade™ Mix	Dekko™ Star Rose Techno® Light Blue Callie® Yellow	Medium	•	•	•
70082471	Pink Limeaide™ Mix	Sanguna® Yellow Lanai® Compact Lime Green Dekko™ Star Rose	Medium	•	•	•

BACK TO CONTENTS

Early Season *(cont.)*

Pink Patio™ Mix
70075147

Plum-Tastic™ Mix
70089717

Powder Puff™ Mix
70082465

Rainy Days™ Mix
70089740

Rosewater™ Mix
70082464

Sea Monkey™ Mix
70082462

ID NUMBER	COMBO NAME	COMPONENTS	VIGOR	RECOMMENDED CONTAINERS		
				3 QT	1.5 GAL HB	2.5 GAL HB
70075147	Pink Patio™ Mix	Sanguna® Patio Pink Morn Lanai® Bright Eye	Medium	•	•	•
70089717	Plum-Tastic™ Mix	Techno® Violet Dekko™ Lavender Eye Lanai® Deep Purple	Vigorous	•	•	•
70082465	Powder Puff™ Mix	Dekko™ Salmon Lanai® Compact Lime Green Techno® Upright Light Blue	Medium	•	•	•
70089740	Rainy Days™ Mix	Sanguna® Patio Radiant Dark Blue Techno® Upright Dark Blue Lanai® Compact White	Medium	•	•	•
70082464	Rosewater™ Mix	Sanguna® Patio Purple Lanai® Bright Eye Techno® Upright Purple	Medium	•	•	•
70082462	Sea Monkey™ Mix	Dekko™ Red Lanai® Compact Lime Green Techno® Upright Light Blue	Medium	•	•	•

BACK TO CONTENTS

Early Season *(cont.)*

NEW **Spring Breeze™ Mix Imp.**
70096565

Spring Pop™ Mix
70089749

Spring Showers™ Mix
70089748

Spring Sunset™ Mix
70089743

Walk of Stars™ Mix
70089741

Wine Down™ Mix
70089742

ID NUMBER	COMBO NAME	COMPONENTS	VIGOR	RECOMMENDED CONTAINERS		
				3 QT	1.5 GAL HB	2.5 GAL HB
70096565	Spring Breeze™ Mix Imp. NEW	Lanai® White Imp. Sanguna® Patio Pink Morn Techno® Cobalt Blue	Medium	•	•	•
70089749	Spring Pop™ Mix	Darla® Orange Techno® Cobalt Blue Mexican Gold™ Jumbo	Medium	•	•	•
70089748	Spring Showers™ Mix	Sanguna® Patio Radiant Dark Blue Callie® White Lanai® Compact Twister™ Purple	Compact	•	•	•
70089743	Spring Sunset™ Mix	Darla® Red Calypso™ Jumbo White Cabrio™ Yellow	Medium	•	•	•
70089741	Walk of Stars™ Mix	Dekko™ Red Lanai® Compact Red Star Callie® White	Medium	•	•	•
70089742	Wine Down™ Mix	Lanai® Compact Twister™ Purple Cabrio™ Grape Dekko™ Deep Lavender Vein	Medium	•	•	•

BACK TO CONTENTS

Early Season *(cont.)*

NEW **World's Fair™ Mix Imp.**
70096566

ID NUMBER	COMBO NAME	COMPONENTS	VIGOR	RECOMMENDED CONTAINERS		
				3 QT	1.5 GAL HB	2.5 GAL HB
70096566	**World's Fair™ Mix Imp.** NEW	Lanai® White Imp. Sanguna® Patio Radiant Rose Techno® Cobalt Blue	Compact	•	•	•

Callie® Color Wheel™ Mix

BACK TO CONTENTS

Mid Season

A Touch Of Class™ Mix
70082478

NEW All That Glitters™ Mix
70096344

Blue Ridge™ Mix
70082463

Bright Spot™ Mix
70089747

Callie® Citrus Fire™ Mix
70082842

Callie® Color Wheel™ Mix
70082843

ID NUMBER	COMBO NAME	COMPONENTS	VIGOR	RECOMMENDED CONTAINERS		
				3 QT	1.5 GAL HB	2.5 GAL HB
70082478	A Touch Of Class™ Mix	Callie® Burgundy Callie® White Lanai® Twister™ Pink	Medium	•	•	•
70096344	All That Glitters™ Mix NEW	Callie® White Lanai® Twister™ Star Purple Techno® Violet	Medium	•	•	•
70082463	Blue Ridge™ Mix	Sanguna® Light Blue Lanai® Twister™ Purple Techno® Upright Purple	Vigorous	•	•	•
70089747	Bright Spot™ Mix	Sanguna® Hot Rose Callie® White with Rose Vein Lanai® Bright Eye	Vigorous		•	•
70082842	Callie® Citrus Fire™ Mix	Callie® Yellow Callie® Apricot Callie® Dark Red	Medium	•	•	•
70082843	Callie® Color Wheel™ Mix	Callie® Yellow Cabrio™ Amethyst Callie® Dark Red	Medium	•	•	•

BACK TO CONTENTS

Mid Season *(cont.)*

Callie® Patio Selfie™ Mix
70066224

Cherry Blossom™ Mix
70062641

Coral Kisses™ Mix
70089746

NEW **Endless Love™ Mix**
70096347

Grape Expectations™ Mix
70089714

Hot Tamale™ Mix
70089733

ID NUMBER	COMBO NAME	COMPONENTS	VIGOR	RECOMMENDED CONTAINERS		
				3 QT	1.5 GAL HB	2.5 GAL HB
70066224	Callie® Patio Selfie™ Mix	Callie® Rose Callie® White Callie® Light Blue	Medium	•	•	•
70062641	Cherry Blossom™ Mix	Callie® White with Rose Vein Dekko™ Star Rose Lanai® Twister™ Pink	Vigorous		•	•
70089746	Coral Kisses™ Mix	Dekko™ Star Coral Lanai® Compact Lime Green Callie® Coral	Medium	•	•	•
70096347	Endless Love™ Mix NEW	Callie® Strawberry Dekko™ White Techno® Large Blue Violet	Medium	•	•	•
70089714	Grape Expectations™ Mix	Techno® White Dekko™ Deep Lavender Vein Lanai® Royal Purple with Eye	Vigorous	•	•	•
70089733	Hot Tamale™ Mix	Mexican Gold™ Jumbo Callie® Star Orange Lanai® Early Dark Red	Medium	•	•	•

BACK TO CONTENTS

Mid Season *(cont.)*

NEW **In a Jam™ Mix**
70096352

NEW **Light Bright™ Mix**
70096349

Love Bird™ Mix
70082469

Mom's Chosen One™ Mix
70066217

Night in Pompeii™ Mix
70089716

Picotee Passion™ Mix
70089744

ID NUMBER	COMBO NAME	COMPONENTS	VIGOR	RECOMMENDED CONTAINERS		
				3 QT	1.5 GAL HB	2.5 GAL HB
70096352	In a Jam™ Mix NEW	Callie® Pink with Eye Lanai® White Imp. Sanguna® Purple	Medium	•	•	•
70096349	Light Bright™ Mix NEW	Dekko™ White Lanai® Neon Rose Techno® Light Blue	Medium	•	•	•
70082469	Love Bird™ Mix	Sanguna® Lipstick Lanai® Magenta Techno® Upright Purple	Vigorous	•	•	•
70066217	Mom's Chosen One™ Mix	Sanguna® Patio Purple Mexican Gold™ Jumbo Lanai® Bright Eye	Medium	•	•	•
70089716	Night in Pompeii™ Mix	Sanguna® Purple Techno® Cobalt Blue Lanai® Bright Eye	Vigorous	•	•	•
70089744	Picotee Passion™ Mix	Lanai® Cyclops Purple Sanguna® Picotee Punch Sanguna® White	Vigorous		•	•

BACK TO CONTENTS

Mid Season *(cont.)*

Pink Prism™ Mix
70082476

Primary Perfection™ Mix
70089718

Rock N' Roll™ Mix
70089719

NEW **Royal Duchess™ Mix Imp.**
70096563

Royal Gold™ Mix
70040794

Salsa™ Mix
70089750

ID NUMBER	COMBO NAME	COMPONENTS	VIGOR	RECOMMENDED CONTAINERS		
				3 QT	1.5 GAL HB	2.5 GAL HB
70082476	Pink Prism™ Mix	Sanguna® Lipstick Lanai® Twister™ Pink Callie® White	Vigorous	•	•	•
70089718	Primary Perfection™ Mix	Callie® Yellow Techno® Cobalt Blue Lanai® Scarlet with Eye	Vigorous	•	•	•
70089719	Rock N' Roll™ Mix	Sanguna® White Techno® Cobalt Blue Lanai® Bright Eye	Vigorous		•	•
70096563	Royal Duchess™ Mix Imp. NEW	Sanguna® Mega Purple Lanai® White Imp. Sanguna® Rose Vein	Vigorous	•	•	•
70040794	Royal Gold™ Mix	Sanguna® Burgundy Mexican Gold™ Jumbo Bombay® White	Vigorous		•	•
70089750	Salsa™ Mix	Mexican Gold™ Jumbo Callie® Star Orange Dekko™ Red	Medium	•	•	•

BACK TO CONTENTS

Mid Season *(cont.)*

Sanguna® Moody Blues™ Mix
70089722

Sanguna® Punk Rock™ Mix
70090747

Sanguna® Salute™ Mix
70091006

Sanguna® Summer Cooler™ Mix
70089723

Sedona™ Mix
70082466

Southwestern Summer™ Mix
70062644

ID NUMBER	COMBO NAME	COMPONENTS	VIGOR	RECOMMENDED CONTAINERS		
				3 QT	1.5 GAL HB	2.5 GAL HB
70089722	Sanguna® Moody Blues™ Mix	Sanguna® Deep Lavender Vein Sanguna® White Sanguna® Blue Vein	Vigorous		•	•
70090747	Sanguna® Punk Rock™ Mix	Sanguna® Blue Sanguna® Lipstick Sanguna® White	Vigorous		•	•
70091006	Sanguna® Salute™ Mix	Sanguna® Red Sanguna® White Sanguna® Blue	Vigorous		•	•
70089723	Sanguna® Summer Cooler™ Mix	Sanguna® Light Blue Sanguna® Lipstick Sanguna® White	Vigorous		•	•
70082466	Sedona™ Mix	Dekko™ Red Lanai® Peach Callie® Apricot	Medium	•	•	•
70062644	Southwestern Summer™ Mix	Dekko™ Red Callie® Orange Lanai® Blue	Vigorous		•	•

BACK TO CONTENTS

Mid Season *(cont.)*

Surfer Chick™ Mix
70082474

Sweet Sixteen™ Mix
70082475

NEW **That's the Spirit™ Mix**
70096348

The Red Carpet™ Mix
70082849

Water Lily™ Mix
70089728

ID NUMBER	COMBO NAME	COMPONENTS	VIGOR	RECOMMENDED CONTAINERS		
				3 QT	1.5 GAL HB	2.5 GAL HB
70082474	Surfer Chick™ Mix	Sanguna® Lipstick Mexican Gold™ Callie® Pink Morn	Medium	•	•	•
70082475	Sweet Sixteen™ Mix	Sanguna® Sweet Pink Callie® Yellow Callie® Pink Morn	Medium	•	•	•
70096348	That's the Spirit™ Mix NEW	Lanai® White Imp. Sanguna® Merlot Techno® Cobalt Blue	Medium	•	•	•
70082849	The Red Carpet™ Mix	Lanai® Candy Cane Lanai® Red Sanguna® Red	Vigorous		•	•
70089728	Water Lily™ Mix	Sanguna® Hot Rose Techno® Cobalt Blue Lanai® Compact Lime Green	Medium	•	•	•

BACK TO CONTENTS

Late Season

Bandana® Landscape I Like it HOT™ Mix
70066216

Bandana® Lava Flow™ Mix
70089734

Bandana® Lemon Meringue™ Mix
70049876

Bandana® Lemon Squeeze™ Mix
70049875

Bandana® Strawberry Daiquiri™ Mix
70089725

Bandana® Tequila Sunrise™ Mix
70089727

ID NUMBER	COMBO NAME	COMPONENTS	VIGOR	RECOMMENDED CONTAINERS		
				3 QT	1.5 GAL HB	2.5 GAL HB
70066216	Bandana® Landscape I Like it HOT™ Mix	Landscape Bandana® Red Landscape Bandana® Yellow	Vigorous		•	•
70089734	Bandana® Lava Flow™ Mix	Bandana® Lemon Zest Bandana® Orange Bandana® Red	Medium	•	•	•
70049876	Bandana® Lemon Meringue™ Mix	Bandana® White Bandana® Lemon Zest Bandana® Rose	Compact	•	•	•
70049875	Bandana® Lemon Squeeze™ Mix	Bandana® Peach Bandana® Lemon Zest Bandito™ Red	Compact	•	•	•
70089725	Bandana® Strawberry Daiquiri™ Mix	Bandana® Rose Bandana® Pink Bandana® White	Medium	•	•	•
70089727	Bandana® Tequila Sunrise™ Mix	Bandana® Yellow Bandana® Orange Bandana® Peach	Medium	•	•	•

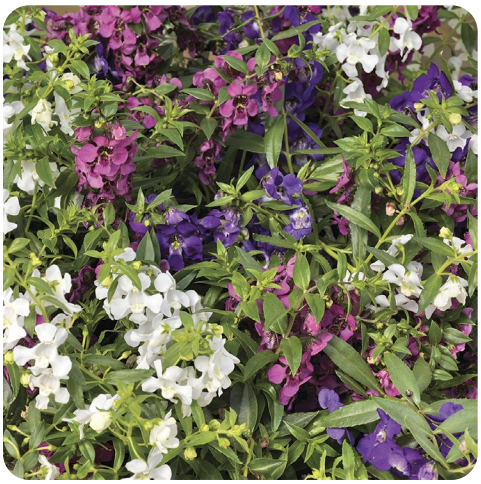
BACK TO CONTENTS

Late Season *(cont.)*

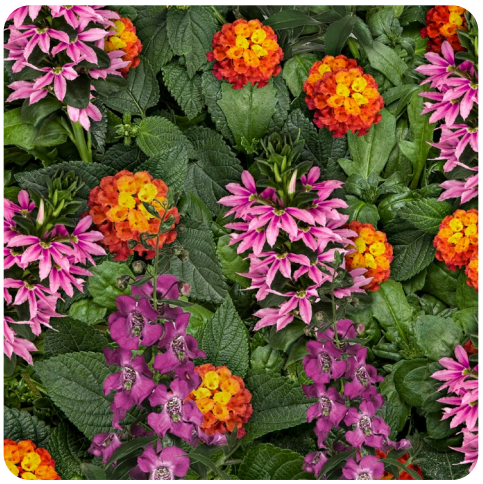
Bandana® Tropical Fruit™ Mix
70089735

Blue Lightning™ Mix
70089711

Bombay® Summer Sparkler™ Mix
70089712



Carita™ Summer Berry Blast™ Mix
70049874



Pink Flamingo™ Mix
70082477

Rockets' Red Glare™ Mix
70089720

ID NUMBER	COMBO NAME	COMPONENTS	VIGOR	RECOMMENDED CONTAINERS		
				3 QT	1.5 GAL HB	2.5 GAL HB
70089735	Bandana® Tropical Fruit™ Mix	Bandana® Cherry Sunrise Bandana® Lemon Zest Bandana® Orange	Medium	•	•	•
70089711	Blue Lightning™ Mix	Landscape Bandana® Gold Bombay® Dark Blue	Medium		•	•
70089712	Bombay® Summer Sparkler™ Mix	Bombay® White Bombay® Pink Bombay® Dark Blue	Medium		•	•
70049874	Carita™ Summer Berry Blast™ Mix	Carita™ Cascade White Carita™ Cascade Deep Purple Carita™ Raspberry	Medium		•	•
70082477	Pink Flamingo™ Mix	Bandana® Rose Bombay® Pink Carita™ Cascade Raspberry	Medium		•	•
70089720	Rockets' Red Glare™ Mix	Bombay® Dark Blue Landscape Bandana® Red Carita™ Cascade White	Vigorous		•	•

BACK TO CONTENTS

Late Season *(cont.)*

Summer Fun™ Mix
70089726

Summer to Remember™ Mix
70066219

ID NUMBER	COMBO NAME	COMPONENTS	VIGOR	RECOMMENDED CONTAINERS		
				3 QT	1.5 GAL HB	2.5 GAL HB
70089726	Summer Fun™ Mix	Landscape Bandana® Yellow Carita™ Raspberry Bombay® Dark Blue	Vigorous		•	•
70066219	Summer to Remember™ Mix	Landscape Bandana® Red Carita™ Purple Bombay® White	Vigorous		•	•

Summer to Remember™ Mix

BACK TO CONTENTS

At-a-Glance

ID NUMBER	COMBO NAME	COMPONENTS	VIGOR	TIMING	HEAT LOVER	FINISHING PROGRAM	TOP SELLER	SINGLE SPECIES
70082478	A Touch Of Class™ Mix	Callie® Burgundy *70035959* Callie® White *70052153* Lanai® Twister™ Pink *70008020*	Medium	Mid		3 qt. I 1 ppp I 7 weeks 1.5 gal. HB I 2 ppp I 8 weeks 2.5 gal. HB I 3 ppp I 8 weeks		
70096344	All That Glitters™ Mix NEW	Callie® White *70052153* Lanai® Twister™ Star Purple *70075211* Techno® Violet *70052763*	Medium	Mid		3 qt. I 1 ppp I 7 weeks 1.5 gal. HB I 2 ppp I 8 weeks 2.5 gal. HB I 3 ppp I 8 weeks		
70066216	Bandana® Landscape I Like it HOT™ Mix	Landscape Bandana® Red *70054204* Landscape Bandana® Yellow *70036136*	Vigorous	Late	•	1.5 gal. HB I 2 ppp I 7 weeks 2.5 gal. HB I 3 ppp I 7 weeks	•	•
70089734	Bandana® Lava Flow™ Mix	Bandana® Lemon Zest *70007850* Bandana® Orange *70051046* Bandana® Red *70054196*	Medium	Late	•	3 qt. I 1 ppp I 8 weeks 1.5 gal. HB I I 8 weeks 2.5 gal. HB I 4 ppp I 8 weeks		•
70049876	Bandana® Lemon Meringue™ Mix	Bandana® White *70007849* Bandana® Lemon Zest *70007850* Bandana® Rose *70019838*	Compact	Late	•	3 qt. I 1 ppp I 8 weeks 1.5 gal. HB I 3 ppp I 8 weeks 2.5 gal. HB I 4 ppp I 8 weeks	•	•
70049875	Bandana® Lemon Squeeze™ Mix	Bandana® Peach *70019840* Bandana® Lemon Zest *70007850* Bandito™ Red *70019835*	Compact	Late	•	3 qt. I 1 ppp I 8 weeks 1.5 gal. HB I 3 ppp I 8 weeks 2.5 gal. HB I 4 ppp I 8 weeks		•
70089725	Bandana® Strawberry Daiquiri™ Mix	Bandana® Rose *70019838* Bandana® Pink *70066193* Bandana® White *70007849*	Medium	Late	•	3 qt. I 1 ppp I 8 weeks 1.5 gal. HB I I 8 weeks 2.5 gal. HB I 4 ppp I 8 weeks		•
70089727	Bandana® Tequila Sunrise™ Mix	Bandana® Yellow *70070695* Bandana® Orange *70051046* Bandana® Peach *70019840*	Medium	Late	•	3 qt. I 1 ppp I 8 weeks 1.5 gal. HB I 3 ppp I 8 weeks 2.5 gal. HB I 4 ppp I 8 weeks		•
70089735	Bandana® Tropical Fruit™ Mix	Bandana® Cherry Sunrise *70003837* Bandana® Lemon Zest *70007850* Bandana® Orange *70051046*	Medium	Late	•	3 qt. I 1 ppp I 8 weeks 1.5 gal. HB I I 8 weeks 2.5 gal. HB I 4 ppp I 8 weeks		•
70089730	Beach Bound™ Mix	Dekko™ Star Rose *70020321* Cabrio™ Yellow *70074727* Lanai® Peach *70021288*	Medium	Early		3 qt. I 1 ppp I 7 weeks 1.5 gal. HB I 2 ppp I 8 weeks 2.5 gal. HB I 3 ppp I 8 weeks		
70089731	Beach Bum™ Mix	Dekko™ Star Coral *70066651* Cabrio™ Yellow *70074727* Lanai® Peach *70021288*	Medium	Early		3 qt. I 1 ppp I 7 weeks 1.5 gal. HB I 2 ppp I 7 weeks 2.5 gal. HB I 3 ppp I 8 weeks		
70089711	Blue Lightning™ Mix	Landscape Bandana® Gold *70036138* Bombay® Dark Blue *70020772*	Medium	Late	•	1.5 gal. HB I 2 ppp I 8 weeks 2.5 gal. HB I 3 ppp I 8 weeks	•	
70082463	Blue Ridge™ Mix	Sanguna® Light Blue *70055233* Lanai® Twister™ Purple *70054665* Techno® Upright Purple *70051508*	Vigorous	Mid		3 qt. I 1 ppp I 6 weeks 1.5 gal. HB I 2 ppp I 7 weeks 2.5 gal. HB I 3 ppp I 7 weeks		
70089712	Bombay® Summer Sparkler™ Mix	Bombay® White *70020780* Bombay® Pink *70050923* Bombay® Dark Blue *70020772*	Medium	Late	•	1.5 gal. HB I I 8 weeks 2.5 gal. HB I 3 ppp I 8 weeks		•
70089747	Bright Spot™ Mix	Sanguna® Hot Rose *70061526* Callie® White with Rose Vein *70003293* Lanai® Bright Eye *70008025*	Vigorous	Mid		1.5 gal. HB I 2 ppp I 7 weeks 2.5 gal. HB I 3 ppp I 7 weeks		
70089755	Cabrio™ Life is a Highway™ Mix	Cabrio™ Amethyst *70074743* Cabrio™ Eclipse Lilac *70074753* Cabrio™ Grape *70074736*	Compact	Early		3 qt. I 1 ppp I 7 weeks 1.5 gal. HB I 3 ppp I 8 weeks 2.5 gal. HB I 4 ppp I 8 weeks		•
70089753	Cabrio™ Ride Along™ Mix	Cabrio™ Eclipse Lilac *70074753* Cabrio™ Yellow *70074727* Cabrio™ Amethyst *70074743*	Medium	Early		3 qt. I 1 ppp I 7 weeks 1.5 gal. HB I 2 ppp I 8 weeks 2.5 gal. HB I 3 ppp I 8 weeks		•
70089752	Cabrio™ Road Trip™ Mix	Cabrio™ Amethyst *70074743* Cabrio™ Pink with Eye *70074739* Cabrio™ Yellow *70074727*	Medium	Early		3 qt. I 1 ppp I 7 weeks 1.5 gal. HB I 2 ppp I 8 weeks 2.5 gal. HB I 3 ppp I 8 weeks		•
70089754	Cabrio™ Speed Limit™ Mix	Cabrio™ Burgundy *70075993* Cabrio™ Yellow *70074727* Cabrio™ Amethyst *70074743*	Medium	Early		3 qt. I 1 ppp I 7 weeks 1.5 gal. HB I 2 ppp I 8 weeks 2.5 gal. HB I 3 ppp I 8 weeks		•

BACK TO CONTENTS

At-a-Glance *(cont.)*

ID NUMBER	COMBO NAME	COMPONENTS	VIGOR	TIMING	HEAT LOVER	FINISHING PROGRAM	TOP SELLER	SINGLE SPECIES
70089751	Cabrio™ Zoom Zoom™ Mix	Cabrio™ Pink with Eye *70074739* Cabrio™ Yellow *70074727* Cabrio™ Grape *70074736*	Compact	Early		3 qt. I 1 ppp I 7 weeks 1.5 gal. HB I I 8 weeks 2.5 gal. HB I 4 ppp I 8 weeks		•
70082842	Callie® Citrus Fire™ Mix	Callie® Yellow *70035954* Callie® Apricot *70035958* Callie® Dark Red *70068741*	Medium	Mid		3 qt. I 1 ppp I 7 weeks 1.5 gal. HB I 2 ppp I 8 weeks 2.5 gal. HB I 3 ppp I 8 weeks		•
70082843	Callie® Color Wheel™ Mix	Callie® Yellow *70035954* Cabrio™ Amethyst *70074743* Callie® Dark Red *70068741*	Medium	Mid		3 qt. I 1 ppp I 7 weeks 1.5 gal. HB I 2 ppp I 8 weeks 2.5 gal. HB I 3 ppp I 8 weeks	•	•
70066224	Callie® Patio Selfie™ Mix	Callie® Rose *70007858* Callie® White *70052153* Callie® Light Blue *70008012*	Medium	Mid		3 qt. I 1 ppp I 7 weeks 1.5 gal. HB I 2 ppp I 7 weeks 2.5 gal. HB I 3 ppp I 7 weeks		•
70049874	Carita™ Summer Berry Blast™ Mix	Carita™ Cascade White *70003173* Carita™ Cascade Deep Purple *70003172* Carita™ Raspberry *70003177*	Medium	Late	•	1.5 gal. HB I 2 ppp I 8 weeks 2.5 gal. HB I 3 ppp I 8 weeks		•
70062641	Cherry Blossom™ Mix	Callie® White with Rose Vein *70003293* Dekko™ Star Rose *70020321* Lanai® Twister™ Pink *70008020*	Vigorous	Mid		1.5 gal. HB I 2 ppp I 7 weeks 2.5 gal. HB I 3 ppp I 7 weeks		
70089732	Chloe's™ Mix	Sanguna® Patio Pink Morn *70055259* Lanai® Compact White *70065900* Cabrio™ Yellow *70074727*	Compact	Early		3 qt. I 1 ppp I 7 weeks 1.5 gal. HB I I 8 weeks 2.5 gal. HB I 4 ppp I 8 weeks		
70082470	Ciao Bella™ Mix	Sanguna® Patio Pink Morn *70055259* Callie® White *70052153* Techno® Upright Light Blue *70052754*	Medium	Early		3 qt. I 1 ppp I 7 weeks 1.5 gal. HB I 2 ppp I 8 weeks 2.5 gal. HB I 3 ppp I 8 weeks		
70089746	Coral Kisses™ Mix	Dekko™ Star Coral *70066651* Lanai® Compact Lime Green *70021307* Callie® Coral *70073020*	Medium	Mid		3 qt. I 1 ppp I 7 weeks 1.5 gal. HB I 2 ppp I 8 weeks 2.5 gal. HB I 3 ppp I 8 weeks		
70096353	Crushed Velvet™ Mix NEW	Cabrio™ Amethyst *70074743* Lanai® Sky Blue *70071225* Sanguna® Deep Lavender Vein *70071592*	Medium	Early		3 qt. I 1 ppp I 7 weeks 1.5 gal. HB I 2 ppp I 8 weeks 2.5 gal. HB I 3 ppp I 8 weeks		
70096564	Curb Appeal™ Mix Imp. NEW	Callie® Yellow *70035954* Lanai® White Imp. *70083036* Techno® Cobalt Blue *70069939*	Medium	Early		3 qt. I 1 ppp I 7 weeks 1.5 gal. HB I 2 ppp I 8 weeks 2.5 gal. HB I 3 ppp I 8 weeks		
70089738	Dekko™ Moody Blues™ Mix	Dekko™ Blue *70076419* Dekko™ Deep Lavender Vein *70076420* Dekko™ White *70071612*	Medium	Early		3 qt. I 1 ppp I 7 weeks 1.5 gal. HB I 2 ppp I 7 weeks 2.5 gal. HB I 3 ppp I 8 weeks		•
70089737	Dekko™ Salute™ Mix	Dekko™ Blue *70076419* Dekko™ Red *70008026* Dekko™ White *70071612*	Medium	Early		3 qt. I 1 ppp I 7 weeks 1.5 gal. HB I 2 ppp I 7 weeks 2.5 gal. HB I 3 ppp I 8 weeks		•
70089739	Dekko™ Starfish Mix	Dekko™ Salmon *70061518* Dekko™ Star Coral *70066651* Dekko™ Star Rose *70020321*	Medium	Early		3 qt. I 1 ppp I 7 weeks 1.5 gal. HB I 2 ppp I 7 weeks 2.5 gal. HB I 3 ppp I 8 weeks		•
70096347	Endless Love™ Mix NEW	Callie® Strawberry *70073025* Dekko™ White *70071612* Techno® Large Blue Violet *70065214*	Medium	Mid		3 qt. I 1 ppp I 7 weeks 1.5 gal. HB I 2 ppp I 8 weeks 2.5 gal. HB I 3 ppp I 8 weeks		
70040791	Fire and Ice™ Mix	Dekko™ Red *70008026* Mexican Gold™ Jumbo *70003253* Techno® Electric Blue *70003827*	Medium	Early		3 qt. I 1 ppp I 7 weeks 1.5 gal. HB I 2 ppp I 8 weeks 2.5 gal. HB I 3 ppp I 8 weeks	•	
70089714	Grape Expectations™ Mix	Techno® White *70019818* Dekko™ Deep Lavender Vein *70076420* Lanai® Royal Purple with Eye *70004391*	Vigorous	Mid		3 qt. I 1 ppp I 6 weeks 1.5 gal. HB I 2 ppp I 7 weeks 2.5 gal. HB I 3 ppp I 7 weeks	•	
70096345	Harvest Moon™ Mix NEW	Callie® Star Orange *70073033* Callie® Yellow *70035954* Techno® Cobalt Blue *70069939*	Medium	Early		1.5 gal. HB I 1 ppp I 7 weeks 2.5 gal. HB I 3 ppp I 8 weeks		
70089733	Hot Tamale™ Mix	Mexican Gold™ Jumbo *70003253* Callie® Star Orange *70073033* Lanai® Early Dark Red *70060817*	Medium	Mid		3 qt. I 1 ppp I 7 weeks 1.5 gal. HB I 2 ppp I 8 weeks 2.5 gal. HB I 3 ppp I 8 weeks		

BACK TO CONTENTS

At-a-Glance *(cont.)*

ID NUMBER	COMBO NAME	COMPONENTS	VIGOR	TIMING	HEAT LOVER	FINISHING PROGRAM	TOP SELLER	SINGLE SPECIES
70096352	In a Jam™ Mix NEW	Callie® Pink with Eye *70073038* Lanai® White Imp. *70083036* Sanguna® Purple *70076459*	Medium	Mid		3 qt. I 1 ppp I 7 weeks 1.5 gal. HB I 2 ppp I 8 weeks 2.5 gal. HB I 3 ppp I 8 weeks		
70096349	Light Bright™ Mix NEW	Dekko™ White *70071612* Lanai® Neon Rose *70060805* Techno® Light Blue *70053408*	Medium	Mid		3 qt. I 8 ppp I 8 weeks 1.5 gal. HB I 2 ppp I 2 weeks 2.5 gal. HB I 3 ppp I 8 weeks		
70096346	Little Piece of My Heart™ Mix NEW	Callie® Strawberry *70073025* Lanai® Strawberry *70071226* Lanai® Twister™ Red *70075888*	Medium	Early		3 qt. I 1 ppp I 7 weeks 1.5 gal. HB I 2 ppp I 8 weeks 2.5 gal. HB I 3 ppp I 8 weeks		
70082469	Love Bird™ Mix	Sanguna® Lipstick *70066655* Lanai® Magenta *70021349* Techno® Upright Purple *70051508*	Vigorous	Mid		3 qt. I 1 ppp I 6 weeks 1.5 gal. HB I 2 ppp I 7 weeks 2.5 gal. HB I 3 ppp I 7 weeks		
70096351	Love Potion™ Mix NEW	Callie® Pink with Eye *70073038* Lanai® Neon Rose *70060805* Sanguna® Rose *70071602*	Medium	Early		3 qt. I 1 ppp I 7 weeks 1.5 gal. HB I 2 ppp I 8 weeks 2.5 gal. HB I 3 ppp I 8 weeks		
70089715	Mai Tai™ Mix	Dekko™ Deep Lavender Vein *70076420* Lanai® Peach *70021288* Lanai® Compact Lime Green *70021307*	Medium	Early		3 qt. I 1 ppp I 8 weeks 1.5 gal. HB I 3 ppp I 8 weeks 2.5 gal. HB I 4 ppp I 8 weeks		
70096343	Makin' Me Blush™ Mix NEW	Calypso® Jumbo Lilac *70071572* Darla® Rose *70003547* Techno® White *70019818*	Medium	Early		3 qt. I 1 ppp I 7 weeks 1.5 gal. HB I 2 ppp I 8 weeks 2.5 gal. HB I 3 ppp I 8 weeks		
70096350	Mermaid Tails™ Mix NEW	Callie® Burgundy *70035959* Lanai® Neon Rose *70060805* Sanguna® Deep Lavender Vein *70071592*	Medium	Early		3 qt. I 1 ppp I 7 weeks 2.5 gal. HB I 3 ppp I 8 weeks		
70066217	Mom's Chosen One™ Mix	Sanguna® Patio Purple *70051199* Mexican Gold™ Jumbo *70003253* Lanai® Bright Eye *70008025*	Medium	Mid		3 qt. I 1 ppp I 7 weeks 1.5 gal. HB I 2 ppp I 7 weeks 2.5 gal. HB I 3 ppp I 7 weeks	•	
70089716	Night in Pompeii™ Mix	Sanguna® Purple *70076459* Techno® Cobalt Blue *70069939* Lanai® Bright Eye *70008025*	Vigorous	Mid		3 qt. I 1 ppp I 6 weeks 1.5 gal. HB I 2 ppp I 7 weeks 2.5 gal. HB I 3 ppp I 7 weeks	•	
70089736	Paloma™ Mix	Callie® White *70052153* Dekko™ White *70071612* Lanai® Compact White *70065900*	Medium	Early		3 qt. I 1 ppp I 7 weeks 1.5 gal. HB I 2 ppp I 8 weeks 2.5 gal. HB I 3 ppp I 8 weeks		
70089744	Picotee Passion™ Mix	Lanai® Cyclops Purple *70065873* Sanguna® Picotee Punch *70071949* Sanguna® White *70076487*	Vigorous	Mid		1.5 gal. HB I 2 ppp I 6 weeks 2.5 gal. HB I 3 ppp I 6 weeks		
70082477	Pink Flamingo™ Mix	Bandana® Rose *70019838* Bombay® Pink *70050923* Carita™ Cascade Raspberry *70018119*	Medium	Late	•	1.5 gal. HB I I 8 weeks 2.5 gal. HB I 3 ppp I 8 weeks		
70049884	Pink Lemonade™ Mix	Dekko™ Star Rose *70020321* Techno® Light Blue *70053408* Callie® Yellow *70035954*	Medium	Early		3 qt. I 1 ppp I 7 weeks 1.5 gal. HB I 2 ppp I 7 weeks 2.5 gal. HB I 3 ppp I 7 weeks	•	
70082471	Pink Limeaide™ Mix	Sanguna® Yellow *70061525* Lanai® Compact Lime Green *70021307* Dekko™ Star Rose *70020321*	Medium	Early		3 qt. I 1 ppp I 7 weeks 1.5 gal. HB I 2 ppp I 8 weeks 2.5 gal. HB I 3 ppp I 8 weeks		
70075147	Pink Patio™ Mix	Sanguna® Patio Pink Morn *70055259* Lanai® Bright Eye *70008025*	Medium	Early		3 qt. I 1 ppp I 7 weeks 1.5 gal. HB I 2 ppp I 8 weeks 2.5 gal. HB I 3 ppp I 8 weeks	•	
70082476	Pink Prism™ Mix	Sanguna® Lipstick *70066655* Lanai® Twister™ Pink *70008020* Callie® White *70052153*	Vigorous	Mid		3 qt. I 1 ppp I 6 weeks 1.5 gal. HB I 2 ppp I 7 weeks 2.5 gal. HB I 3 ppp I 7 weeks		
70089717	Plum-Tastic™ Mix	Techno® Violet *70052763* Dekko™ Lavender Eye *70008029* Lanai® Deep Purple *70004387*	Vigorous	Early		3 qt. I 1 ppp I 6 weeks 1.5 gal. HB I 2 ppp I 7 weeks 2.5 gal. HB I 3 ppp I 7 weeks	•	
70082465	Powder Puff™ Mix	Dekko™ Salmon *70061518* Lanai® Compact Lime Green *70021307* Techno® Upright Light Blue *70052754*	Medium	Early		3 qt. I 1 ppp I 7 weeks 1.5 gal. HB I 2 ppp I 7 weeks 2.5 gal. HB I 3 ppp I 8 weeks		

BACK TO CONTENTS

At-a-Glance *(cont.)*

ID NUMBER	COMBO NAME	COMPONENTS	VIGOR	TIMING	HEAT LOVER	FINISHING PROGRAM	TOP SELLER	SINGLE SPECIES
70089718	**Primary Perfection™ Mix**	Callie® Yellow *70035954* Techno® Cobalt Blue *70069939* Lanai® Scarlet with Eye *70021317*	Vigorous	Mid		3 qt. I 1 ppp I 6 weeks 1.5 gal. HB I 2 ppp I 7 weeks 2.5 gal. HB I 3 ppp I 7 weeks	•	
70089740	**Rainy Days™ Mix**	Sanguna® Patio Radiant Dark Blue *70071614* Techno® Upright Dark Blue *70076404* Lanai® Compact White *70065900*	Medium	Early		3 qt. I 1 ppp I 7 weeks 1.5 gal. HB I 2 ppp I 8 weeks 2.5 gal. HB I 3 ppp I 8 weeks		
70089719	**Rock N' Roll™ Mix**	Sanguna® White *70076487* Techno® Cobalt Blue *70069939* Lanai® Bright Eye *70008025*	Vigorous	Mid		1.5 gal. HB I 2 ppp I 7 weeks 2.5 gal. HB I 3 ppp I 7 weeks		
70089720	**Rockets' Red Glare™ Mix**	Bombay® Dark Blue *70020772* Landscape Bandana® Red *70054204* Carita™ Cascade White *70003173*	Vigorous	Late	•	1.5 gal. HB I 2 ppp I 7 weeks 2.5 gal. HB I 3 ppp I 7 weeks		
70082464	**Rosewater™ Mix**	Sanguna® Patio Purple *70051199* Lanai® Bright Eye *70008025* Techno® Upright Purple *70051508*	Medium	Early		3 qt. I 1 ppp I 7 weeks 1.5 gal. HB I 2 ppp I 7 weeks 2.5 gal. HB I 3 ppp I 7 weeks		
70096563	**Royal Duchess™ Mix Imp.** NEW	Sanguna® Mega Purple *70089745* Lanai® White Imp. *70083036* Sanguna® Rose Vein *70089745*	Vigorous	Mid		3 qt. I 1 ppp I 6 weeks 1.5 gal. HB I 2 ppp I 7 weeks 2.5 gal. HB I 3 ppp I 7 weeks		
70040794	**Royal Gold™ Mix**	Sanguna® Burgundy *70004047* Mexican Gold™ Jumbo *70003253* Bombay® White *70020780*	Vigorous	Mid		1.5 gal. HB I 2 ppp I 7 weeks 2.5 gal. HB I 3 ppp I 7 weeks		
70089750	**Salsa™ Mix**	Mexican Gold™ Jumbo *70003253* Callie® Star Orange *70073033* Dekko™ Red *70008026*	Medium	Mid		3 qt. I 1 ppp I 7 weeks 1.5 gal. HB I 2 ppp I 8 weeks 2.5 gal. HB I 3 ppp I 8 weeks		
70089722	**Sanguna® Moody Blues™ Mix**	Sanguna® Deep Lavender Vein *70071592* Sanguna® White *70076487* Sanguna® Blue Vein *70004034*	Vigorous	Mid		1.5 gal. HB I 2 ppp I 6 weeks 2.5 gal. HB I 3 ppp I 6 weeks	•	•
70090747	**Sanguna® Punk Rock™ Mix**	Sanguna® Blue *70004044* Sanguna® Lipstick *70066655* Sanguna® White *70076487*	Vigorous	Mid		1.5 gal. HB I 2 ppp I 6 weeks 2.5 gal. HB I 3 ppp I 6 weeks		•
70091006	**Sanguna® Salute™ Mix**	Sanguna® Red *70055241* Sanguna® White *70076487* Sanguna® Blue *70004044*	Vigorous	Mid		1.5 gal. HB I 2 ppp I 6 weeks 2.5 gal. HB I 3 ppp I 6 weeks		•
70089723	**Sanguna® Summer Cooler™ Mix**	Sanguna® Light Blue *70055233* Sanguna® Lipstick *70066655* Sanguna® White *70076487*	Vigorous	Mid		1.5 gal. HB I 2 ppp I 6 weeks 2.5 gal. HB I 3 ppp I 6 weeks		•
70082462	**Sea Monkey™ Mix**	Dekko™ Red *70008026* Lanai® Compact Lime Green *70021307* Techno® Upright Light Blue *70052754*	Medium	Early		3 qt. I 1 ppp I 7 weeks 1.5 gal. HB I 2 ppp I 7 weeks 2.5 gal. HB I 3 ppp I 8 weeks		
70082466	**Sedona™ Mix**	Dekko™ Red *70008026* Lanai® Peach *70021288* Callie® Apricot *70035958*	Medium	Mid		3 qt. I 1 ppp I 7 weeks 1.5 gal. HB I 2 ppp I 7 weeks 2.5 gal. HB I 3 ppp I 8 weeks		
70062644	**Southwestern Summer™ Mix**	Dekko™ Red *70008026* Callie® Orange *70003288* Lanai® Blue *70004382*	Vigorous	Mid		1.5 gal. HB I 2 ppp I 7 weeks 2.5 gal. HB I 3 ppp I 7 weeks		
70096565	**Spring Breeze™ Mix Imp.** NEW	Lanai® White Imp. *70083036* Sanguna® Patio Pink Morn *70055259* Techno® Cobalt Blue *70069939*	Medium	Early		3 qt. I 1 ppp I 7 weeks 1.5 gal. HB I 1 ppp I 7 weeks 2.5 gal. HB I 3 ppp I 8 weeks		
70089749	**Spring Pop™ Mix**	Darla® Orange *70060774* Techno® Cobalt Blue *70069939* Mexican Gold™ Jumbo *70003253*	Medium	Early		3 qt. I 1 ppp I 7 weeks 1.5 gal. HB I 2 ppp I 8 weeks 2.5 gal. HB I 3 ppp I 8 weeks		
70089748	**Spring Showers™ Mix**	Sanguna® Patio Radiant Dark Blue *70071614* Callie® White *70052153* Lanai® Compact Twister™ Purple *70060849*	Compact	Early		3 qt. I 1 ppp I 7 weeks 1.5 gal. HB I I 8 weeks 2.5 gal. HB I 4 ppp I 8 weeks		
70089743	**Spring Sunset™ Mix**	Darla® Red *70066232* Calypso™ Jumbo White *70060751* Cabrio™ Yellow *70074727*	Medium	Early		3 qt. I 1 ppp I 7 weeks 1.5 gal. HB I 2 ppp I 8 weeks 2.5 gal. HB I 3 ppp I 8 weeks		

BACK TO CONTENTS

At-a-Glance *(cont.)*

ID NUMBER	COMBO NAME	COMPONENTS	VIGOR	TIMING	HEAT LOVER	FINISHING PROGRAM	TOP SELLER	SINGLE SPECIES
70089726	**Summer Fun™ Mix**	Landscape Bandana® Yellow *70036136* Carita™ Raspberry *70003177* Bombay® Dark Blue *70020772*	Vigorous	Late	•	1.5 gal. HB I 2 ppp I 8 weeks 2.5 gal. HB I 3 ppp I 8 weeks		
70066219	**Summer to Remember™ Mix**	Landscape Bandana® Red *70054204* Carita™ Purple *70003174* Bombay® White *70020780*	Vigorous	Late	•	1.5 gal. HB I 2 ppp I 7 weeks 2.5 gal. HB I 3 ppp I 7 weeks		
70082474	**Surfer Chick™ Mix**	Sanguna® Lipstick *70066655* Mexican Gold™ *70018300* Callie® Pink Morn *70054735*	Medium	Mid		3 qt. I 1 ppp I 7 weeks 1.5 gal. HB I 2 ppp I 8 weeks 2.5 gal. HB I 3 ppp I 8 weeks		
70082475	**Sweet Sixteen™ Mix**	Sanguna® Sweet Pink *70051190* Callie® Yellow *70035954* Callie® Pink Morn *70054735*	Medium	Mid		3 qt. I 1 ppp I 7 weeks 1.5 gal. HB I 2 ppp I 8 weeks 2.5 gal. HB I 3 ppp I 8 weeks		
70096348	**That's the Spirit™ Mix** NEW	Lanai® White Imp. *70083036* Sanguna® Merlot *70076445* Techno® Cobalt Blue *70069939*	Medium	Mid		3 qt. I 1 ppp I 7 weeks 1.5 gal. HB I 2 ppp I 8 weeks 2.5 gal. HB I 3 ppp I 8 weeks		
70082849	**The Red Carpet™ Mix**	Lanai® Candy Cane *70060812* Lanai® Red *70004390* Sanguna® Red *70055241*	Vigorous	Mid		1.5 gal. HB I 2 ppp I 6 weeks 2.5 gal. HB I 3 ppp I 6 weeks		
70089741	**Walk of Stars™ Mix**	Dekko™ Red *70008026* Lanai® Compact Red Star *70060847* Callie® White *70052153*	Medium	Early		3 qt. I 1 ppp I 7 weeks 1.5 gal. HB I 2 ppp I 8 weeks 2.5 gal. HB I 3 ppp I 8 weeks		
70089728	**Water Lily™ Mix**	Sanguna® Hot Rose *70061526* Techno® Cobalt Blue *70069939* Lanai® Compact Lime Green *70021307*	Medium	Mid		3 qt. I 1 ppp I 7 weeks 1.5 gal. HB I 2 ppp I 8 weeks 2.5 gal. HB I 3 ppp I 8 weeks		
70089742	**Wine Down™ Mix**	Lanai® Compact Twister™ Purple *70060849* Cabrio™ Grape *70074736* Dekko™ Deep Lavender Vein *70076420*	Medium	Early		3 qt. I 1 ppp I 7 weeks 1.5 gal. HB I 2 ppp I 8 weeks 2.5 gal. HB I 3 ppp I 8 weeks		
70096566	**World's Fair™ Mix Imp.** NEW	Lanai® White Imp. *70083036* Sanguna® Patio Radiant Rose *70055263* Techno® Cobalt Blue *70069939*	Compact	Early		3 qt. I 1 ppp I 7 weeks 1.5 gal. HB I 2-3 ppp I 8 weeks 2.5 gal. HB I 4 ppp I 8 weeks		

Primary Perfection™ Mix

BACK TO CONTENTS

Vegetative Annuals

VEGETATIVE ANNUALS
BACK TO CONTENTS

Carita™ Purple

ANGELONIA *Angelonia angustifolia*

Carita™

Color that thrills and beats the heat.

- The perfect choice for big and bold color that thrives through the heat of the summer.
- Big blooms and upright habits make Carita the perfect thriller for summer combos.
- Carita love of heat and tolerance to drought makes it an ideal choice for warm season landscape plantings.

DIMENSIONS 12–16" W x 14–18" H | **HABIT** Upright | **FORMS** URC, AutoStix®

Carita™ Purple
70003174

Carita™ Raspberry
70003177

Carita™ White
70003175

Carita™ Cascade Deep Purple

ANGELONIA *Angelonia angustifolia*

Carita™ Cascade

A cascade of heat-loving color.

- The ultimate summer basket filler and spiller.
- A magnet for pollinators with bright and bold colors.
- Perfect for baskets and bold mixed combinations.

DIMENSIONS 18–24" W x 8–10" H | **HABIT** Spreading | **FORMS** URC, AutoStix®

Carita™ Cascade Deep Purple
70003172

Carita™ Cascade Raspberry
70018119

Carita™ Cascade White
70003173

VEGETATIVE ANNUALS
BACK TO CONTENTS

Sassy® Double Yellow

ARGYRANTHEMUM *Argyranthemum frutescens*

Sassy®

Easy, early, and bright cheery blooms all spring long.

- Bright, cheery daisy-like blooms are a consumer favorite and perfect for early season sales.
- Controlled upright habits are ideal for small and large pots alike.

DIMENSIONS 12–14" W x 10–14" H | **HABIT** Upright | **FORMS** URC, AutoStix®

Sassy® Double Deep Rose
70036131

Sassy® Double Yellow
70051319

Sassy® Red
70006552

Sassy® Rose
70003326

Sassy® White
70066240

Calypso™ Jumbo Lilac

BACOPA *Sutera cordata*

Calypso™

The biggest blooms all season long.

- Exceptionally large blooms from early spring to summer set Calypso apart from the crowd.
- Calypso's right-sized vigor makes it ideal for a range of container sizes small to large.
- Excels in the garden when temperatures are cool and continues to hold up into the heat of summer.

DIMENSIONS 14–16" W x 4–6" H | **HABIT** Trailing | **FORMS** URC, Pre-Pinched, AutoStix®

Calypso™ Jumbo Deep Lavender
70060753

Calypso™ Jumbo Lilac
70071572

Calypso™ Jumbo Pink Eye
70060755

Calypso™ Jumbo Rose
70071583

Calypso™ Jumbo White
70060751

VEGETATIVE ANNUALS
BACK TO CONTENTS

Florencio™ White

NEW SERIES BEGONIA *Begonia hybrida*

Florencio™

Standout with striking color and bold foliage.

- A striking range of vibrant colors paired with upright grower-friendly habits makes Florencio the go-to *Begonia hybrida*.
- Medium vigor, well-branched habits are grower friendly and ideal for mid-to-large sized containers.
- Bred for outstanding outdoor performance, Florencio holds up to the rigors of the season and provides season long value for the end consumer.

DIMENSIONS 16–18" W x 16–18" H | **HABIT** Upright | **FORMS** URC

Florencio™ Orange NEW
70091480

Florencio™ Pink NEW
70091479

Florencio™ Red NEW
70091476

Florencio™ White NEW
70091478

Florencio™ Yellow NEW
70091477

VEGETATIVE ANNUALS
BACK TO CONTENTS

NEW SERIES

BEGONIA *Begonia hybrida*

Grace™

A stunning array of double flowers.

- Unique pendulous double flowers give a high-end look to containers and baskets.
- Versatile habits are densely branched and work across a range of container sizes.
- A strong garden performer that flowers all season long.

DIMENSIONS 16–20” W x 10–12” H

HABIT Trailing

FORMS URC

Grace™ Dark Red

Grace™ Dark Red NEW
70086288

Grace™ Orange NEW
70086283

Grace™ Pink NEW
70086285

VEGETATIVE ANNUALS
BACK TO CONTENTS

BIDENS *Bidens ferulifolia*

Mexican Gold™

Makes combos shine.

- Bright yellow blooms are perfect in mixes and are the ideal pairing with Petunias and Verbenas.
- Strong habits and continuous flowering ensure Mexican Gold blooms early and continues through the heat of the summer.
- Take advantage of Mexican Gold's various flower forms for impressive combos and uniform, high-density small pot production.

DIMENSIONS 10–12" W x 8–10" H

HABIT Semi-Trailing

FORMS URC, Pre-Pinched, AutoStix®

Mexican Gold™ Semi-Double

Mexican Gold™
70018300

Mexican Gold™ Compact
70003254

Mexican Gold™ Jumbo
70003253

Mexican Gold™ Semi-Double
70018302

Caleo™ Orange

CALENDULA *Calendula hybrida*

Caleo™

Kick-start your spring with Caleo.

- Perfect for early season left shoulder sales.
- Extremely durable color that flowers during cold weather and continues through the heat of summer.
- Excellent resistance to powdery mildew.

DIMENSIONS 12–14" W x 8–10" H

HABIT Mounded

FORMS URC, AutoStix®

Caleo™ Orange
70054975

Caleo™ Yellow
70060726

VEGETATIVE ANNUALS
BACK TO CONTENTS

Callie® Purple Imp.

CALIBRACHOA *Calibrachoa hybrida*

Callie®

Color uncompromised.

- Big vigor, bold colors, and continuous blooms from spring to fall.
- The perfect mixer and the primary foundation for best-selling Kwik Kombos™.
- An excellent choice for premium hanging baskets and mixed combinations.

DIMENSIONS 12–16” W x 4–8” H

HABIT Trailing

FORMS URC, AutoStix®

Callie® Apricot
70035958

Callie® Blue
70075991

Callie® Burgundy
70035959

Callie® Coral
70073020

Callie® Dark Red
70068741

Callie® Eclipse Lavender
70075987

Callie® Eclipse Lilac
70074754

Callie® Eclipse Raspberry
70074732

VEGETATIVE ANNUALS
BACK TO CONTENTS

Callie® Eclipse Strawberry
70073034

Callie® Gold with Red Eye
70003287

Callie® Light Blue
70008012

Callie® Mango
70003301

Callie® Orange
70003288

Callie® Pink Morn
70054735

Callie® Pink with Eye
70073038

Callie® Purple Imp.
70080987 NEW

Callie® Rose
70007858

Callie® Star Orange
70073033

Callie® Star Pink
70018437

Callie® Strawberry
70073025

Callie® White
70052153

Callie® White with Rose Vein
70003293

Callie® Yellow
70035954

VEGETATIVE ANNUALS
BACK TO CONTENTS

Cabrio™ Sweet Peach

CALIBRACHOA *Calibrachoa hybrida*

Cabrio™

Convert to consistency.

- Controlled, mounded habits work well in both small pots and baskets.
- All colors flower consistently at 10.5 hours of day length.
- Hyper-uniform habits play well together for impactful multi-color combinations.

DIMENSIONS 12–16” W x 4 - 8” H

HABIT Mounded

FORMS URC, AutoStix®

Cabrio™ Amethyst
70074743

Cabrio™ Burgundy
70075993

Cabrio™ Eclipse Lilac
70074753

Cabrio™ Eclipse Strawberry
70074722

Cabrio™ Grape
70074736

Cabrio™ Pink with Eye
70074739

Cabrio™ Sweet Peach
70073041

Cabrio™ Yellow
70074727

VEGETATIVE ANNUALS
BACK TO CONTENTS

Whimsy™ Silver
70060862

CALOCEPHALUS *Calocephalus brownii*

Whimsy™

Adding a little Whimsy to the garden.

- The whimsical, silver foliage is a perfect accent plant for upscale combinations or small focal containers.
- Exceptionally easy to grow, once established, Whimsy has low water and fertilization requirements.
- While bright yellow flowers may appear in spring and summer, the key feature is the truly unique foliage.

DIMENSIONS 8–12” W x 8–12” H

HABIT Mounded

FORMS URC, AutoStix®

Cabrio™ Amethyst

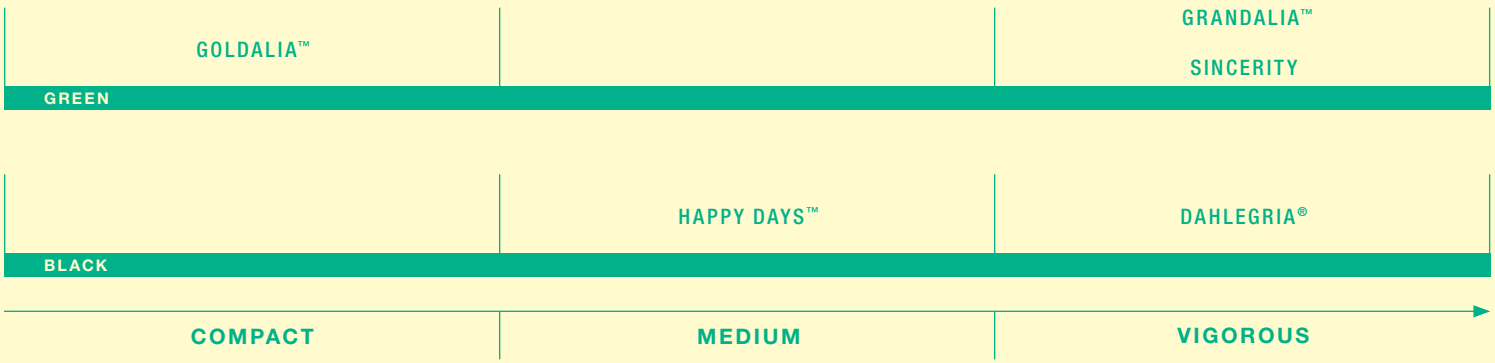
VEGETATIVE ANNUALS
BACK TO CONTENTS

Dahlia

A full spectrum of color and habits in a comprehensive package.

With increased genetic diversity, Syngenta Flowers is excited to have a Dahlia portfolio with a wide range of flower colors, plant forms, and uses. From compact to vigorous, handsome green to eye-catching black foliage, Syngenta has a Dahlia variety for any application.

Growers can now fully rely on Syngenta Flowers for their Dahlia needs. With new color additions to the Happy Days™ and Dahlegria® series, as well as the stand-alone, award-winning Sincerity, the assortment is truly inspiring.



VEGETATIVE ANNUALS
BACK TO CONTENTS

Dahlegria® Sunrise

DAHLIA *Dahlia hybrida*

Dahlegria®

Tall, dark and handsome.

- With a more upright habit, the Dahlegria Dahlias are great in landscape and container applications.
- Large, colorful, single-flowers stand out on the almost-black foliage.
- Great mildew tolerance.

DIMENSIONS 10–16" W x 18–24" H

HABIT Upright

FORMS URC, AutoStix®

Dahlegria® Apricot Tricolor
70082922

Dahlegria® Magenta Bicolor NEW
70089162

Dahlegria® Orange
70082927

Dahlegria® Orange Bicolor
70082923

Dahlegria® Pink Flame
70082925

Dahlegria® Red Imp. NEW
70089151

Dahlegria® Scarlet Fire
70082926

Dahlegria® Sunrise NEW
70089160

Dahlegria® White
70082924

VEGETATIVE ANNUALS
BACK TO CONTENTS

Grandalia™ Orange

Goldalia™ Scarlet

DAHLIA *Dahlia hybrida*

Goldalia™

Semi-double stunners.

- Dynamic semi-double, bicolor flowers increase visual impact at retail.
- Short flower stems provide a well-balanced plant with loads of color.
- Compact habits are ideal for space efficient productions.

DIMENSIONS 8–10” W x 8–10” H

HABIT Upright

FORMS URC, AutoStix®

Goldalia™ Rose
70035934

Goldalia™ Scarlet
70035935

VEGETATIVE ANNUALS
BACK TO CONTENTS

Grandalia™ Fire

DAHLIA *Dahlia hybrida*

Grandalia™

Color on the grandest scale.

- Bold and bright double blooms are perfect for retail wow.
- Highly uniform habits make production a breeze.
- Medium vigor habits are ideal for 3 qt. and larger containers.

DIMENSIONS 18–22" W x 14–16" H | **HABIT** Upright | **FORMS** URC, AutoStix®

Grandalia™ Burgundy
70076369

Grandalia™ Dark Red
70052845

Grandalia™ Dark Rose
70076370

Grandalia™ Fire
70069965

Grandalia™ Lavender Ice
70076379

Grandalia™ Magenta
70076371

Grandalia™ Orange
70019193

Grandalia™ Pink
70019196

Grandalia™ Pink Ice
70069967

Grandalia™ Red
70051544

Grandalia™ Sunny Flame
70059454

Grandalia™ Sunrise
70035980

Grandalia™ White
70076384

Grandalia™ Yellow
70019190

VEGETATIVE ANNUALS
BACK TO CONTENTS

Happy Days™ Fuchsia Halo

DAHLIA *Dahlia hybrida*

Happy Days™

Happy Days for happy gardens.

- Nearly black, dissected foliage makes the bright flowers really pop!
- With a well-branched habit, Happy Days is ideal for containers and landscape applications.
- A complete range of bright flower colors are a favorite among consumers and bees.

DIMENSIONS 10–14" W x 10–14" H

HABIT Mounded

FORMS URC, AutoStix®

Happy Days™ Cherry Red
70053908

Happy Days™ Fuchsia Halo NEW
70089149

Happy Days™ Lemon
70053907

Happy Days™ Neon
70082942

Happy Days™ Orange Red Bicolor
70053909

Happy Days™ Pink
70037236

Happy Days™ Purple Imp. NEW
70089150

Happy Days™ Scarlet
70082941

Happy Days™ White
70037235

Happy Days™ Yellow
70082954

VEGETATIVE ANNUALS
BACK TO CONTENTS

Sincerity

DAHLIA *Dahlia hybrida*

Sincerity

Big. Bold. Beautiful.

- Noted for its 3 to 4–inch pink and white bicolor flowers, this variety is truly eye-catching.
- Well-branched plants make a shapely backdrop for the showy blooms.
- A perfect choice for the landscape and high-end patio containers.

DIMENSIONS 15–18" W x 18–24" H

HABIT Mounded

FORMS URC, AutoStix®

Sincerity
70082930

GREENHOUSE GROWER MEDAL OF EXCELLENCE

Sincerity

VEGETATIVE ANNUALS
BACK TO CONTENTS

Darla® Red

DIASCIA *Diascia barberae*

Darla®

Cool season clouds of color.

- Endless blooms for the coolest part of the year.
- Uniform and well-matched habits ensure ease of production.
- The ideal choice for premium cool season containers and baskets.

DIMENSIONS 12–14” W x 12–14” H

HABIT Mounded

FORMS URC, AutoStix®

Darla® Deep Salmon
70006747

Darla® Light Pink
70003545

Darla® Orange
70060774

Darla® Red
70066232

Darla® Rose
70003547

Darla® White
70071557

VEGETATIVE ANNUALS
BACK TO CONTENTS

Madinia® Deep Red

DIPLADENIA *Mandevilla hybrida*

Madinia®

Red hot color that wows.

- Limited vining allows growers to produce both small and large pots with less labor, ensuring more plants per square foot and less time pinching and spacing.
- Class-leading disease resistance ensures limited leaf drop and superior sell-through at retail.
- The most established and reliable unrooted program offering both URC and CC options in a full color range.

DIMENSIONS 12–14" W x 12–14" H | **HABIT** Mounded | **FORMS** URC, CC

Madinia®

Madinia® Coral Pink
70050968

Madinia® Deep Red
70003886

Madinia® Pink
70003888

Madinia® White
70003889

Madinia® White and Madinia® Pink

BACK TO CONTENTS

DIPLADENIA *Mandevilla hybrida*

Madinia® Maximo

Vining plants for sky-high sales.

- Selected for their vining habit, these varieties are perfect for trellised container programs with high-end retail impact.
- Class-leading disease resistance ensures limited leaf drop and superior sell-through at retail.
- The most established and reliable unrooted program offering both URC and CC options.

DIMENSIONS 18–36" W x 12–14" H | **HABIT** Vining | **FORMS** URC, CC

Madinia® Maximo Light Pink
70051011

Madinia® Maximo Red
70051010

VEGETATIVE ANNUALS
BACK TO CONTENTS

Mezoo™ Trailing Red

DOROTHEANTHUS *Dorotheanthus bellidiformis*

Mezoo™

The perfect summer mixer.

- The ultimate heat lover for mixed combinations.
- Bold variegated foliage adds color and texture to summer programs.
- Thrives in a wide range of conditions including cold, heat, and drought.

DIMENSIONS 18–20" W x 6–8" H

HABIT Trailing

FORMS URC, AutoStix®

Mezoo™ Trailing Red
70003864

EUPHORBIA *Euphorbia hypericifolia*

Euphoric™

The ultimate combo filler.

- Small white flowers are produced in mass making Euphoric ideal for mixed combinations.
- Strong vigor fills fast and matches well with other annuals.
- Loves the heat and thrives all summer long.

DIMENSIONS 14–20" W x 14–20" H

HABIT Mounded

FORMS URC

Euphoric™ White Imp.

Euphoric™ Double White NEW
70087275

Euphoric™ White Imp. NEW
70087276

VEGETATIVE ANNUALS
BACK TO CONTENTS

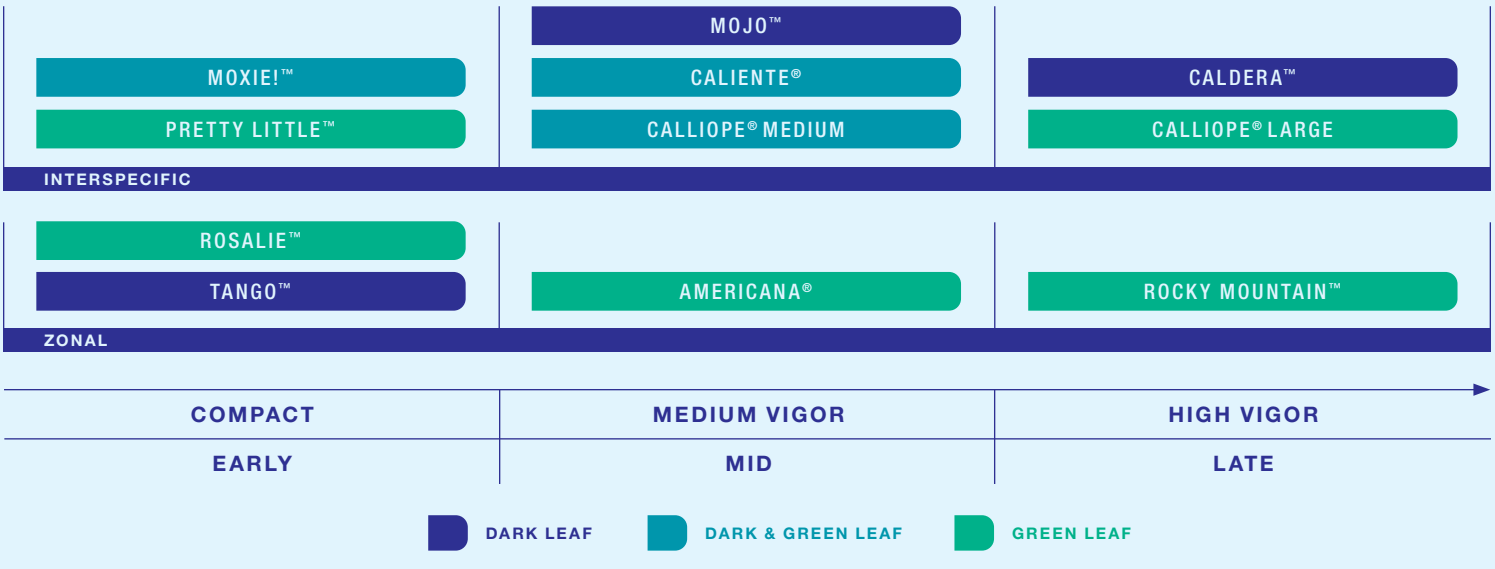
Mojo™ Cranberry Splash

Interspecific and Zonal Geraniums

Best-in-class breeding that keeps getting better.

Our **interspecific geraniums** include award-winning varieties that cover all container sizes with outstanding color and performance. Within the interspecific class, growers can continue to rely on market leaders like the original Calliope® Large series including the best-selling Large Dark Red, as well as the versatile Calliope® Medium series, the first and only interspecific geranium bred for small pots—Moxie!™, and the newest dark foliage series with vibrant flowers—Mojo™.

Our **zonal geraniums** have a long, proven history of garden performance and grower success and continue to be the go-to choice for core geranium programs. Within the zonal class, Tango™ geraniums offer industry-leading varieties bred for high-efficiency growing, Americana® is North America's No. 1 geranium series bred for medium-sized containers with a wide range of color options, and the Rocky Mountain™ series is big on vigor and impact.



VEGETATIVE ANNUALS
BACK TO CONTENTS

Caldera™ Salmon

NEW SERIES

GERANIUM INTERSPECIFIC *Pelargonium interspecific*

Caldera™

An eruption of color that beats the heat.

- Flower intensity and exceptional heat tolerance like Caliente® geraniums, but with a spreading habit.
- Caldera stands out all summer long with a striking combination of dark foliage paired with vibrant blooms.
- A spreading habit makes Caldera™ a perfect choice for bold in-ground plantings, baskets, and heat tolerant mixed containers.

DIMENSIONS 20–24" W x 10–14" H | **HABIT** Spreading | **FORMS** URC, CC, AutoStix®

Caldera™ Pink NEW
70065942

Caldera™ Red NEW
70065936

Caldera™ Salmon NEW
70065939

Behind the Breeding

While selecting Pelargoniums in the field, I am always impressed by the heat performance and flower power of interspecific Pelargoniums. Being from Europe myself, I am used to seeing traditional trailing Pelargoniums being planted everywhere. Caldera™ is the product of an idea to make available the traditional feel of a cascade Pelargonium for the heat. Caldera™ is a true interspecific semi-trailing Pelargonium, which combines the heat performance of Caliente™ with the traditional feel of an ivy-leaf cascading trailing Pelargonium. The uniquely strong steel blue-green foliage provides a contrasting backdrop to rich colored self-cleaning umbels. I am delighted to see that this idea worked out.

> **"Caldera is a true interspecific semi-trailing Pelargonium..."**

Ronald Snijder

CO-LEAD BREEDING
Andijk, the Netherlands

VEGETATIVE ANNUALS
BACK TO CONTENTS

Caliente® Coral Salmon

GERANIUM INTERSPECIFIC

Pelargonium interspecific

Caliente®

Performance in-ground, performance all around.

- Top performer every year in summer trials for excellent garden performance and heat tolerance.
- Exceptional range of bright and bold colors flower continuously all season long.
- Excels in-ground as well as containers, making Caliente the preferred choice where garden performance is a must.

DIMENSIONS 20–24" W x 10–14" H

HABIT Mounded

FORMS URC, CC, AutoStix®

GREENHOUSE GROWER MEDAL OF EXCELLENCE

Caliente® Coral Salmon
70028724

Caliente® Deep Red
70004105

Caliente® Fire
70070069

Caliente® Hot Coral
70008715

Caliente® Lavender
70051129

Caliente® Magenta
70066644

Caliente® Orange
70008714

Caliente® Pink
70008713

Caliente® Rose
70004106

Caliente® White
70059611

VEGETATIVE ANNUALS
BACK TO CONTENTS

Caliente® Mix

VEGETATIVE ANNUALS
BACK TO CONTENTS

Calliope® GERANIUMS

Point of Purchase Materials

Pots available from East Jordan Plastics.

To order all other POP materials,
call (866) 448–8300 or visit
brands.syngentaflowers-us.com

BACK TO CONTENTS

Cart Banner

Stake Tag

Hanging Tag

Poster

Locking Hang Tag

Bench Tape

Calliope® Large Burgundy

GERANIUM INTERSPECIFIC *Pelargonium interspecific*

Calliope® Large

Intense Color That Lasts™.

- An industry-first innovation and still the No. 1 geranium for color and performance.
- Vigorous habits and maximum flower power make Calliope Large the perfect choice for high-impact baskets and large pots.
- A wide range of color options, large habits, and all-season performance translates directly into consumer success.

DIMENSIONS 20–24" W x 16–20" H

HABIT Mounded

FORMS URC, CC, AutoStix®

Calliope® GERANIUMS

GREENHOUSE GROWER® MEDAL OF EXCELLENCE

Calliope® Large Burgundy
70020360

Calliope® Large Coral
70054697

Calliope® Large Dark Red
70004166

Calliope® Large Hot Pink
70070046

Calliope® Large Hot Rose
70070047

Calliope® Large Lavender
70069761

Calliope® Large Lavender Mega Splash
70059873

Calliope® Large Magenta
70059912

VEGETATIVE ANNUALS
BACK TO CONTENTS

Calliope® Large Dark Red

Calliope® Large Orange Splash
70074574

Calliope® Large Pink
70040840

Calliope® Large Red
70054691

Calliope® Large Rose Mega Splash
70070020

Calliope® Large Salmon
70054695

Calliope® Large Scarlet Fire
70007852

Greenhouse Vigor Classes

VIGOR	VARIETY
MEDIUM	Calliope® Large Rose Mega Splash
MEDIUM – VIGOROUS	Calliope® Large Hot Pink Calliope® Large Hot Rose Calliope® Large Orange Splash Calliope® Large Scarlet Fire
VIGOROUS	Calliope® Large Burgundy Calliope® Large Coral Calliope® Large Dark Red Calliope® Large Magenta Calliope® Large Lavender Calliope® Large Lavender Mega Splash Calliope® Large Red
VERY VIGOROUS	Calliope® Large Pink Calliope® Large Salmon

VEGETATIVE ANNUALS
BACK TO CONTENTS

Calliope® Medium Cherry

GERANIUM INTERSPECIFIC *Pelargonium interspecific*

Calliope® Medium

Intense Color That Lasts™.

- All the benefits of Calliope® Large in a more space efficient package.
- Ideal for 1.25 qt. to 2.5 qt. pots, Calliope Medium targets the core volume of the market and is the go-to interspecific geranium series for premium programs.
- Calliope Medium's wide range of colors including unique novelties makes it a one-stop option for building the ideal geranium program.

DIMENSIONS 16–20" W x 14–18" H

HABIT Mounded

FORMS URC, CC, AutoStix®

Calliope® Medium Bright Scarlet
70074799

Calliope® Medium Burgundy
70066631

Calliope® Medium Cherry NEW
70074773

Calliope® Medium Crimson Flame
70048339

Calliope® Medium Dark Pink
70074774

Calliope® Medium Dark Red
70059883

Calliope® Medium Deep Rose
70059896

Calliope® Medium Hot Pink
70020318

VEGETATIVE ANNUALS
BACK TO CONTENTS

Calliope® Medium Rose Mega Splash

Calliope® Medium Hot Rose
70070045

Calliope® Medium Light Lavender
70069763

Calliope® Medium Pink Flame
70054721

Calliope® Medium Red
70059612

Calliope® Medium Rose Mega Splash
70059870

Calliope® Medium Scarlet
70051139

Calliope® Medium Violet
70066648

Calliope® Medium White
70059858

Greenhouse Vigor Classes

VIGOR	VARIETY
COMPACT – MEDIUM	Calliope® Medium Bright Scarlet Calliope® Medium Rose Mega Splash
MEDIUM	Calliope® Medium Burgundy Calliope® Medium Cherry Calliope® Medium Dark Pink Calliope® Medium Dark Red Calliope® Medium Deep Rose Calliope® Medium Hot Pink Calliope® Medium Hot Rose Calliope® Medium Light Lavender Calliope® Medium Pink Flame Calliope® Medium Red Calliope® Medium Scarlet Calliope® Medium Violet
MEDIUM – VIGOROUS	Calliope® Medium Crimson Flame Calliope® Medium White

VEGETATIVE ANNUALS
BACK TO CONTENTS

Mojo™ Cranberry Splash

GERANIUM INTERSPECIFIC *Pelargonium interspecific*

Mojo™

A bold combination of dark foliage and brilliant color.

- Brilliant colors and large flower heads set against dark green foliage deliver a striking combination.
- Medium vigor and a mounded, very well-branched habit make Mojo the ideal choice for 1.25 qt. to 2.5 qt. pots.
- A must-have series that works across a range of container sizes and is ideal for bold combination containers.

DIMENSIONS 12–16" W x 12–16" H

HABIT Mounded

FORMS URC, CC, AutoStix®

Mojo™ Cranberry Splash NEW
70080207

Mojo™ Dark Red
70074802

Mojo™ Orange NEW
70080227

Mojo™ Salmon NEW
70080233

Mojo™ White NEW
70080211

VEGETATIVE ANNUALS
BACK TO CONTENTS

Moxie!™ Orange

GERANIUM INTERSPECIFIC *Pelargonium interspecific*

Moxie!™

Innovation just got efficient.

- The first interspecific geranium series bred specifically for brilliant flowers, unique bicolors colors, and space-efficient production in small pots.
- Excellent branching, heat tolerance, and a compact to medium vigor, make Moxie! the ideal series for small—medium size containers with superior flowering all season long.
- Moxie! blends the best benefits of grower efficiency with class-leading genetics, giving growers superior colors and maximum pots per square foot.

DIMENSIONS 14–16" W x 12 -14" H

HABIT Mounded

FORMS URC, CC, AutoStix®

Moxie!™ Dark Red
70069760

Moxie!™ Deep Rose Mega Splash
70020544

Moxie!™ Hot Pink
70074767

Moxie!™ Orange NEW
70080228

Moxie!™ Pink
70065930

Moxie!™ Scarlet
70054702

Moxie!™ Violet NEW
70080213

Moxie!™ White Imp. NEW
70080236

VEGETATIVE ANNUALS
BACK TO CONTENTS

Pretty Little™ Pink Splash

GERANIUM INTERSPECIFIC *Pelargonium interspecific*

Pretty Little™

Pretty little pop of color!

- Loaded with flower buds and tons of irresistible bicolor flowers creates incredible color that pops.
- Interspecific geranium benefits include increased branching, color-saturated flowers, and A+ garden performance.
- Compact habit and perfect for premium branded jumbo packs and quart programs as a stand-alone product.

DIMENSIONS 14–16” W x 12–14” H | **HABIT** Mounded | **FORMS** URC, CC, AutoStix®

Pretty Little™ Pink Splash
70070033

VEGETATIVE ANNUALS
BACK TO CONTENTS

GERANIUM IVY *Pelargonium peltatum*

Blizzard™

A top ivy choice for hot and humid climates.

- Exceptional color performance all summer long with strong plant vigor and unbeatable branching.
- The single-flowered Blizzard series displays an outstanding amount of color.

DIMENSIONS 20–24" W x 12–16" H | **HABIT** Trailing | **FORMS** URC, CC, AutoStix®

Blizzard™ Series

Blizzard™ Blue
70004099

Blizzard™ Dark Red
70004100

Blizzard™ Pink
70020624

Blizzard™ Red
70008013

Blizzard™ White
70004103

VEGETATIVE ANNUALS
BACK TO CONTENTS

GERANIUM IVY *Pelargonium peltatum*

Cascade

The No. 1 trailing ivy for color top to bottom.

- Extremely floriferous with large single flowers.
- Vigorous trailing habits makes Cascade ideal for big baskets and window boxes.
- Pair with Calliope® for the ultimate heat-loving geranium combination.

DIMENSIONS 20–24" W x 12–16" H

HABIT Trailing

FORMS URC, CC, AutoStix®

Cascade White

Cascade Acapulco Compact
70004124

Cascade Appleblossom
70074831

Cascade Bright
70004171

Cascade Dark Red
70059624

Cascade Lila Compact
70004173

Cascade Sofie
70004176

Cascade White
70004202

VEGETATIVE ANNUALS
BACK TO CONTENTS

Ivy League™ Orchid

GERANIUM IVY *Pelargonium peltatum*

Ivy League™

Color ahead of its class.

- Exceptional heat tolerance, raises the bar for the ivy geranium class.
- Strong branching and pot fill builds better baskets.
- A broad range of core and novelty colors makes Ivy League the go-to ivy geranium series for growers.

DIMENSIONS 20–24” W x 12–16” H

HABIT Trailing

FORMS URC, CC, AutoStix®

Ivy League™ Arctic Red
70004182

Ivy League™ Burgundy
70069770

Ivy League™ Burgundy Bicolor
70004181

Ivy League™ Cherry Blossom NEW
70074821

Ivy League™ Deep Pink
70074807

Ivy League™ Hot Coral
70053309

Ivy League™ Light Lavender
70074808

Ivy League™ Orchid
70074805

Ivy League™ Red
70074811

Ivy League™ Salmon
70028703

Ivy League™ White
70069781

VEGETATIVE ANNUALS
BACK TO CONTENTS

GERANIUM ZONAL *Pelargonium zonale*

Americana®

North America's No. 1 zonal geranium series.

- The go-to zonal geranium series for core volume focused programs in medium-sized pots, mixed combos, and baskets.
- Americana's right balance of medium vigor and series uniformity makes it a great choice for 2.5 qt. geranium programs where growers need versatility and a wide range of color options.
- Pair Americana's versatility with class-leading garden performance and you have an all-around geranium that works great for the grower and consumer.

DIMENSIONS 14–18" W x 12–16" H

HABIT Mounded

FORMS URC, CC, AutoStix®

Americana® Scarlet Fire

Greenhouse Vigor Classes

VIGOR	VARIETY
MEDIUM	Americana® Light Pink Splash Americana® Rose Ice Americana® Rose Mega Splash Americana® White Splash
MEDIUM – VIGOROUS	Americana® Bright Red Americana® Cherry Rose Americana® Coral Americana® Dark Salmon Americana® Hot Pink Americana® Lavender Splash Americana® Orchid Americana® Pink Americana® Red Americana® Salmon Americana® Scarlet Fire
VIGOROUS	Americana® Dark Red Americana® Violet Ice Americana® White

Americana® Bright Red
70020478

Americana® Cherry Rose
70020479

VEGETATIVE ANNUALS
BACK TO CONTENTS

Americana® Coral
70020480

Americana® Dark Red
70020527

Americana® Dark Salmon
70004135

Americana® Hot Pink
70028742

Americana® Lavender Splash
70020550

Americana® Light Pink Splash
70004127

Americana® Orchid
70020482

Americana® Pink
70004093

Americana® Red
70007854

Americana® Rose Ice
70064619

Americana® Rose Mega Splash
70004155

Americana® Salmon
70020528

Americana® Scarlet Fire NEW
70074607

Americana® Violet Ice
70070037

Americana® White
70020529

Americana® White Splash
70020558

VEGETATIVE ANNUALS
BACK TO CONTENTS

GERANIUM ZONAL *Pelargonium zonale*

Rocky Mountain™

Big on vigor and impact.

- Vigorous zonal geranium series ideal for 2.5 qt. and larger containers.
- Excellent heat tolerance and bred to thrive all summer in North American climates and landscape plantings.
- Large round flowers and a wide color assortment provide high-impact retail sales.

DIMENSIONS 16–20" W x 14–18" H

HABIT Mounded

FORMS URC, CC, AutoStix®

Rocky Mountain™ Magenta

Rocky Mountain™ Dark Red
70006932

Rocky Mountain™ Deep Rose
70020534

Rocky Mountain™ Lavender
70020490

Rocky Mountain™ Light Pink
70020491

Rocky Mountain™ Magenta
70020492

Rocky Mountain™ Orange
70004111

Rocky Mountain™ Pink
70006941

Rocky Mountain™ Red
70004112

Rocky Mountain™ Salmon
70004113

Rocky Mountain™ Violet
70006935

Rocky Mountain™ White
70004115

VEGETATIVE ANNUALS
BACK TO CONTENTS

Rosalie™ Antique Salmon

NEW SERIES

GERANIUM ZONAL *Pelargonium zonale*

Rosalie™

A double flower that is irresistible!

- Soft pink rosebud-like flowers make Rosalie a unique variety that stands out at retail and in the garden.
- Controlled habits work well across a range of small-to-medium sized containers.
- A novel variety that adds a new twist to geranium programs, big and small.

DIMENSIONS 12–16” W x 12–16” H

HABIT Mounded

FORMS URC, CC, AutoStix®

Rosalie™ Antique Salmon NEW
70080206

Behind the Breeding

I like the look and feel of classic roses. So I was delighted to find amongst our seedlings a Pelargonium with florets that actually resemble a classic rose. The plant was a classically zoned straight up Pelargonium, but its florets remind me of soft pink English roses. It seems to connect roses with Pelargoniums and it brings me this heirloom feel of tea, herbs, and a cottage garden.

> **“A pelargonium with florets that actually resemble a classic rose.”**

Ronald Snijder

CO-LEAD BREEDING
Andijk, the Netherlands

VEGETATIVE ANNUALS
BACK TO CONTENTS

Tango™ Deep Rose with Eye

GERANIUM ZONAL *Pelargonium zonale*

Tango™

The most space-efficient zonal for high density production.

- Bred for high efficiency, Tango is the preferred compact zonal series for high-density, quick-turn programs.
- Series uniformity and a right balance of habit and vigor make it perfect for bench runs and multiple crop turns.
- Tango's dark foliage is a consumer favorite, pair this with its wide range of colors and grower benefits and you have the ideal zonal geranium for small pots.

DIMENSIONS 10–12" W x 10–12" H

HABIT Mounded

FORMS URC, CC, AutoStix®

Tango™ Bicolor Cherry
70065956

Tango™ Dark Red
70004116

Tango™ Deep Pink
70020483

Tango™ Deep Red
70004107

Tango™ Deep Rose with Eye
70020578

Tango™ Hot Pink
70004117

Tango™ Lavender
70004118

Tango™ Light Pink
70004149

VEGETATIVE ANNUALS
BACK TO CONTENTS

Tango™ Neon Purple
70004119

Tango™ Orange
70004120

Tango™ Orange Ice
70074794

Tango™ Pink Ice
70065955

Tango™ Rose Splash
70004108

Tango™ Salmon
70004150

Tango™ Strawberry Ice
70074797

Tango™ Tango
70006942

Tango™ Velvet Red
70007861

Tango™ Violet
70020484

Tango™ White
70008003

Tango™ White Splash
70069791

Greenhouse Vigor Classes

VIGOR	VARIETY
COMPACT	Tango™ Dark Red Tango™ Deep Pink Tango™ Deep Red Tango™ Deep Rose with Eye Tango™ Hot Pink Tango™ Light Pink Tango™ Neon Purple Tango™ Orange Tango™ Salmon Tango™ Strawberry Ice Tango™ Velvet Red Tango™ White Splash
COMPACT – MEDIUM	Tango™ Rose Splash Tango™ Tango Tango™ Violet
MEDIUM	Tango™ Bicolor Cherry Tango™ Orange Ice Tango™ Pink Ice Tango™ Lavender Tango™ White

VEGETATIVE ANNUALS
BACK TO CONTENTS

Scentropia™ Dark Blue

HELIOTROPE *Heliotropium arborescens*

Scentropia™

Sweet summer color.

- Intensely fragrant heat-loving color.
- Densely branched and big blooms make for bold containers and combos.
- The ultimate attractor for butterflies and hummingbirds.

DIMENSIONS 10–14" W x 12–16" H

HABIT Upright

FORMS URC, CC

Scentropia™ Dark Blue
70003693

Silhouette® Appleblossom

VEGETATIVE ANNUALS
BACK TO CONTENTS

Silhouette® White

IMPATIENS *Impatiens walleriana*

Silhouette®

Nonstop color for the shade.

- Continuous flowering with unique double blooms from spring to frost.
- Ideal for both shade containers and in-ground plantings.
- Available in a broad range of bright and bold colors.

DIMENSIONS 10–12" W x 10–12" H

HABIT Mounded

FORMS URC, AutoStix®

Silhouette® Appleblossom
70003776

Silhouette® Cherry
70003801

Silhouette® Purple
70003779

Silhouette® Red
70003778

Silhouette® Red Star
70003780

Silhouette® Rose
70003766

Silhouette® Rose Star
70003777

Silhouette® Salmon
70003802

Silhouette® White
70003803

VEGETATIVE ANNUALS
BACK TO CONTENTS

Sonic® Deep Purple

IMPATIENS NEW GUINEA *Impatiens hawkeri*

Sonic®

Compact and covered in color.

- Large flowers and outdoor garden performance make Sonic the industry's best New Guinea impatiens for the shade.
- Compact to medium habit is ideal for pot-tight production.
- Available in a wide-range of core and novelty colors, including the eye-catching Magic Pink.

DIMENSIONS 10–14" W x 10–14" H

HABIT Mounded

FORMS URC, CC, AutoStix®

Sonic® Amethyst
70003738

Sonic® Bright Pink
70019677

Sonic® Deep Purple
70066412

Sonic® Deep Red
70003800

Sonic® Deep Salmon
70066413

Sonic® Light Lavender
70003739

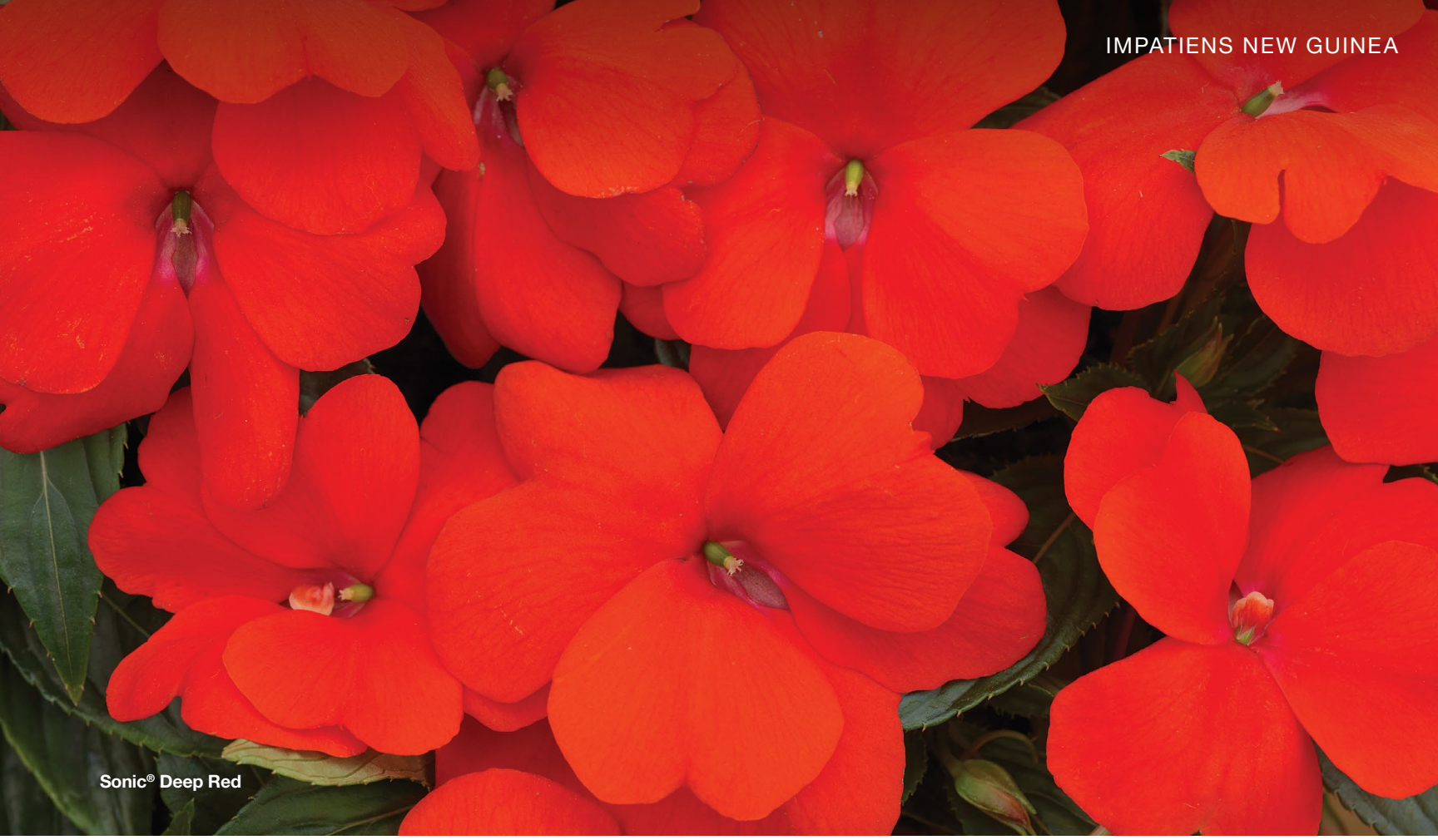
Sonic® Light Pink
70003740

Sonic® Lilac
70003741

Sonic® Magic Pink
70003785

Sonic® Orange
70003742

VEGETATIVE ANNUALS
BACK TO CONTENTS



Sonic® Deep Red

Sonic® Pink
70003743

Sonic® Red
70008405

Sonic® Salmon
70003744

Sonic® Sweet Orange
70003805

Sonic® Sweet Purple
70003806

Sonic® Sweet Red
70061277

Sonic® White
70066410

VEGETATIVE ANNUALS
BACK TO CONTENTS

Super Sonic® Orange Ice

IMPATIENS NEW GUINEA *Impatiens hawkeri*

Super Sonic®

The biggest blooms of any New Guinea series available.

- Big on vigor and flower size, Super Sonic sets the standard for large premium New Guinea Impatiens.
- Ideal for 2.5 qt. and larger containers and premium mixed combinations.
- Excellent garden performance in the shade even under high heat.

DIMENSIONS 14–18" W x 14–18" H

HABIT Mounded

FORMS URC, CC, AutoStix®

VEGETATIVE ANNUALS
BACK TO CONTENTS

Super Sonic® Dark Red
70066415

Super Sonic® Dark Salmon
70003793

Super Sonic® Deep Salmon
70066414

Super Sonic® Deep Scarlet
70066416

Super Sonic® Flame
70003747

Super Sonic® Hot Pink
70003748

Super Sonic® Lavender
70003749

Super Sonic® Lilac
70003750

Super Sonic® Magenta
70019687

Super Sonic® Orange Ice
70019711

Super Sonic® Pastel Pink
70003751

Super Sonic® Pink
70019680

Super Sonic® Purple
70008383

Super Sonic® Red
70003752

Super Sonic® Sweet Cherry
70003753

Super Sonic® White
70003754

VEGETATIVE ANNUALS
BACK TO CONTENTS

Sidekick™ Lacey Lime

IPOMOEA *Ipomoea batatas*

Sidekick™

Kick-start summer combos.

- Bright foliage and bold textures are ideal for summer mixed combinations.
- Versatile habits work well in both containers and in-ground plantings.
- Superior colors hold up even through intense summer heat.

DIMENSIONS 30–36” W x 12–14” H

HABIT Semi-Trailing

FORMS URC

Sidekick™ Black
70069218

Sidekick™ Heart Black
70069219

Sidekick™ Heart Bronze
70038353

Sidekick™ Heart Lime
70051340

Sidekick™ Lacey Lime
70051339

Sidekick™ Lime
70028150

VEGETATIVE ANNUALS
BACK TO CONTENTS

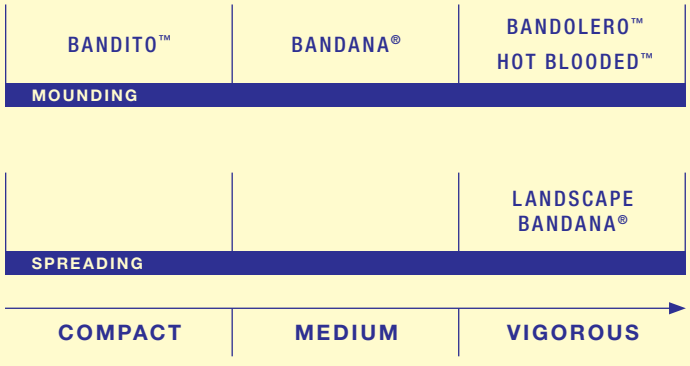
Hot Blooded™ Red

Lantana

North America's No. 1 choice for Lantana year after year.

With the largest flowers and widest color range across all series, Syngenta Flowers' Lantana consistently outshines the competition in genetic performance, color selection and habit types.

Syngenta continues to innovate with a focus on breeding the best and brightest colors, addressing the need for sterility, and constant improvement of shipping and post-harvest performance.



Growers can depend on the Syngenta Flowers portfolio of Lantana when they need the best-of-the-best genetics that perform across a range of container sizes.

Sterility

STERILE

The need for sterility in Lantana continues to become increasingly important for growers and the industry as a whole. Whether it's a need for non-invasive varieties to avoid pressure on local ecosystems or the desire to maximize flowering to improve the end consumer experience, Syngenta Flowers is addressing the need for sterility through its innovative breeding program. For 2020–2021, Syngenta Flowers is noting all sterile varieties with a symbol in the catalog. This makes choosing Lantana for your program based on sterility that much easier.

VEGETATIVE ANNUALS
BACK TO CONTENTS

Bandana® Mango

LANTANA *Lantana camara*

Bandana®

The biggest blooms and brightest colors all summer long.

- The biggest flowers in the widest range of colors available.
- Mounded upright habits ensure constant coverage of color and the best show at retail.
- Unparalleled heat and drought tolerance is the perfect choice for summer landscapes.

DIMENSIONS 14–16” W x 14–16” H

HABIT Mounded

FORMS URC, CC, AutoStix®

BANDANA®

Bandana® Cherry
70019858

Bandana® Cherry Sunrise
70003837

Bandana® Lemon Zest
70007850

Bandana® Mango
70071396

Bandana® Orange
70051046

Bandana® Peach
70019840

Bandana® Pink
70066193

Bandana® Red
70054196

Bandana® Rose
70019838

Bandana® White
70007849

Bandana® Yellow
70070695

VEGETATIVE ANNUALS
BACK TO CONTENTS

Bandito™ Orange Sunrise

LANTANA *Lantana camara*

Bandito™

Small on size, big on impact.

- Intense colors on a tidy package are perfect for packs and 1 qt. containers.
- The perfect pop of color for mixed combinations that won't dominate other components.
- Unparalleled heat and drought tolerance excels through the hottest of weather.

DIMENSIONS 12–14" W x 12–14" H

HABIT Mounded

FORMS URC, CC, AutoStix®

Bandito™ Lemon Zest
70076115

Bandito™ Orange Sunrise STERILE
70003838

Bandito™ Red
70019835

Bandito™ Rose
70019834

Bandito™ Yellow
70060717

VEGETATIVE ANNUALS

Bandito™ Rose

BACK TO CONTENTS

Bandolero™ Pineapple

LANTANA *Lantana camara*

Bandolero™

Bigger, bolder and the best choice for larger containers.

- Large blooms are paired with vigorous habits for show-stopping performance.
- Ideal for northern regions that need more vigor and southern growers that want big and bold containers.
- Ideal for 2.5 qt. and larger containers.

DIMENSIONS 18– 24" W x 18 -24" H

HABIT Mounded

FORMS URC, CC, AutoStix®

Bandolero™ Cherry Sunrise
70071399

Bandolero™ Guava
70071403

Bandolero™ Pineapple
70071402
STERILE

Bandolero™ Pink
70019831

Bandolero™ Red
70070698

Bandolero™ White
70076114

VEGETATIVE ANNUALS
BACK TO CONTENTS

Hot Blooded™ Red

LANTANA *Lantana camara*

Hot Blooded™

If you pick just one, pick this one!

- Naturally well-branched with more vigor than Bandana®, making it a great choice for gardens across the country.
- Medium-sized flowers with amazing color coverage.
- A sterile selection that has been a top-pick in development trials.

DIMENSIONS 24–30" W x 15–18" H | **HABIT** Mounded | **FORMS** URC, CC, AutoStix®

Hot Blooded™ Red
70077412

STERILE

VEGETATIVE ANNUALS
BACK TO CONTENTS

Landscape Bandana® Red

LANTANA *Lantana camara*

Landscape Bandana®

Maximum color, maximum coverage.

- Spreads up to 3 feet maximizing landscape coverage and color.
- Big and bright blooms put on a non-stop show all summer long.
- Unparalleled heat and drought tolerance excels in summer landscapes.

DIMENSIONS 32–36" W x 16–20" H

HABIT Spreading

FORMS URC, CC, AutoStix®

Landscape Bandana® Clementine
70076122

Landscape Bandana® Gold
70036138

Landscape Bandana® Lemon Zest STERILE
70071406

Landscape Bandana® Pink STERILE
70051062

Landscape Bandana® Red
70054204

Landscape Bandana® Yellow STERILE
70036136

VEGETATIVE ANNUALS
BACK TO CONTENTS

Javelin™ Forte Rose

LAVENDER SPANISH *Lavandula stoechas*

Javelin™ Forte

- Large brightly colored blooms are held on strong well-branched habits.
- Exceptional disease tolerance holds up through the rigors of production and into the garden.
- The perfect choice for continual color from early spring to fall.

DIMENSIONS 12–16” W x 14–20” H

HABIT Upright

FORMS URC, AutoStix®

Javelin™ Forte Deep Purple
70051469

Javelin™ Forte Rose
70075295

Javelin™ Forte White
70070489

VEGETATIVE ANNUALS
BACK TO CONTENTS

LOBELIA *Lobelia erinus*

Techno®

Fills fast and beats the heat.

- The perfect choice for the boldest blues and brightest whites.
- Strong densely branched habits are ideal for hanging baskets and mixed combinations.
- Bred for superior heat tolerance ensuring Techno stays in color all season long.

DIMENSIONS 18–22” W x 6–10” H

HABIT Spreading

FORMS URC, AutoStix®

Techno® Violet

techno®

Greenhouse Vigor Classes

VIGOR	VARIETY
MEDIUM – VIGOROUS	Techno® Blue Techno® Cobalt Blue Techno® Dark Blue Techno® Electric Blue Techno® Light Blue Techno® Lilac Techno® Violet Imp. Techno® White Imp.
VIGOROUS	Techno® Large Blue Violet

Techno® Blue
70003825

Techno® Cobalt Blue
70069939

Techno® Dark Blue
70003826

Techno® Electric Blue
70003827

Techno® Large Blue Violet
70065214

Techno® Light Blue
70053408

Techno® Lilac
70069942

Techno® Violet
70052763

Techno® White
70019818

VEGETATIVE ANNUALS
BACK TO CONTENTS

Techno® Upright Light Blue

LOBELIA *Lobelia erinus*

Techno® Upright

Cool color in a space-efficient package.

- Upright habits are ideal for high density small pot production.
- Day-neutral flowering blooms early and ensures you go to market first.
- Class-leading heat tolerance keeps Techno Upright in flower even when temperatures rise.

DIMENSIONS 16–20" W x 8–12" H

HABIT Upright

FORMS URC, AutoStix®

Techno® Upright Blue
70059431

Techno® Upright Cobalt Blue
70065203

Techno® Upright Dark Blue
70076404

Techno® Upright Light Blue
70052754

Techno® Upright Purple
70051508

Techno® Upright White
70052752

VEGETATIVE ANNUALS
BACK TO CONTENTS

Goldii

LYSIMACHIA *Lysimachia nummularia*

Goldii

- Versatile texture and color.
- Novel chartreuse foliage adds texture and bold color to combinations.
- Fast growth is great for quick-turn accents.

DIMENSIONS 10–16” W x 4–6” H

HABIT Trailing

FORMS URC, Pre-Pinched, AutoStix®

Goldii
70003845

Tradewinds® Mix

VEGETATIVE ANNUALS
BACK TO CONTENTS

Tradewinds® Rose

OSTEOSPERMUM *Osteospermum ecklonis*

Tradewinds®

The toughest color for the earliest of sales.

- Bright and bold daisy-like flowers are ideal for early shoulder impulse sales.
- Controlled upright habits work well in small and medium-sized containers.
- Tradewinds flowers without vernalization ensuring consistent success.

DIMENSIONS 10–14" W x 10–14" H

HABIT Upright

FORMS URC, CC, AutoStix®

Tradewinds® Bronze
70055274

Tradewinds® Deep Purple
70003906

Tradewinds® Lemon Zest
70071158

Tradewinds® Light Purple
70071153

Tradewinds® Rose
70071155

Tradewinds® Sunset NEW
70083260

Tradewinds® Terracotta
70055272

Tradewinds® Trailing Deep Purple
70003909

Tradewinds® Trailing White
70019994

Tradewinds® White
70020017

Tradewinds® Yellow
70061545

VEGETATIVE ANNUALS
BACK TO CONTENTS

Phoenix™ Pink

PENSTEMON *Penstemon hartwegii*

Phoenix™

Towers of flowers all summer long.

- Vibrant, tough-as-nails color that thrives through the heat of summer.
- Tubular flowers are a magnet for pollinators.
- The ideal thriller for upscale mixed combination plantings.

DIMENSIONS 12–14" W x 16–22" H | **HABIT** Upright | **FORMS** URC, AutoStix®

Phoenix™ Magenta
70020658

Phoenix™ Pink
70004267

Phoenix™ Red
70020655

Phoenix™ Violet
70004268

PENTAS *Pentas lanceolata*

Falling Star™

The first and only trailing Pentas.

- Breakthrough trailing habit makes a classic heat lover now available for baskets.
- Not only survives but thrives through the hottest months of year.
- The perfect mixer for upscale summer mixed combinations and baskets.

DIMENSIONS 24–26" W x 8–10" H | **HABIT** Trailing | **FORMS** URC, CC

Falling Star™ White

Falling Star™ Hot Pink
70054740

Falling Star™ Pink Bicolor
70051358

Falling Star™ Red
70064381

Falling Star™ Rose
70051360

Falling Star™ White
70074641

VEGETATIVE ANNUALS
BACK TO CONTENTS

Starcluster™ Violet

PENTAS *Pentas lanceolata*

Starcluster™

Big and bold and beats the heat.

- Strong habits, big flowers, and bold colors makes Starcluster the ultimate heat-loving series.
- Upright habits are ideal for impactful summer combinations.
- Vibrant blooms are a magnet for pollinators.

DIMENSIONS 22–24" W x 18–22" H

HABIT Upright

FORMS URC, CC

GREENHOUSE GROWER MEDAL OF EXCELLENCE

Starcluster™ Appleblossom
70020709

Starcluster™ Lavender
70020684

Starcluster™ Pink
70051347

Starcluster™ Red
70051350

Starcluster™ Rose
70075003

Starcluster™ Violet
70020716

Starcluster™ White
70020706

VEGETATIVE ANNUALS
BACK TO CONTENTS

Itsy™ Magenta

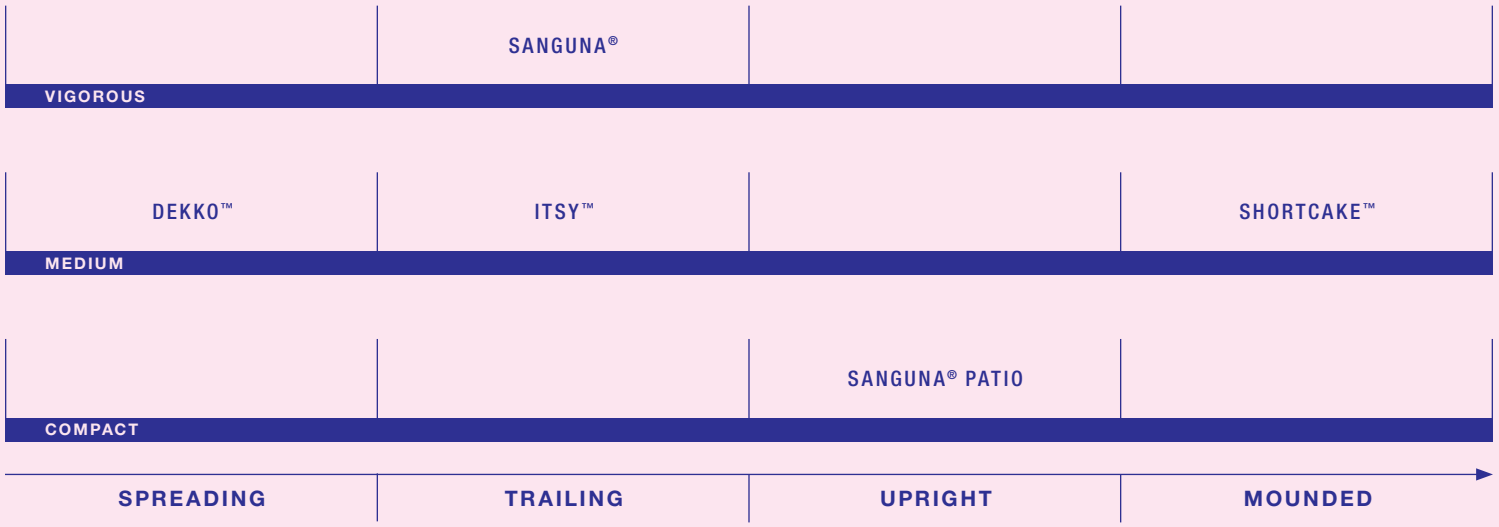
Petunia

Redefining an industry classic.

Syngenta Flowers' Petunia portfolio represents a range of habits and profiles to meet both grower's needs and consumer expectations.

With industry classics like Sanguna®, the series that builds better baskets, and Sanguna® Patio, the series that helps drive grower efficiency, Syngenta is focused on continuous improvement of the Petunia class.

Syngenta's continued focus on areas like earliness to flower and garden performance bring forward new industry innovations like the Dekko™ series of landscape Petunias. Dekko's exceptional garden performance sets a new standard for Petunias and earliness.



VEGETATIVE ANNUALS
BACK TO CONTENTS

Itsy™ Magenta

NEW SERIES **PETUNIA** *Petunia hybrida*

Itsy™

Small but mighty! Tough and tiny!

- With exceptional color coverage and good vigor, Itsy is a great option for both the landscape and containers.
- Tons of tiny magenta blooms form a blanket of color providing undeniable retail appeal.
- With exceptional branching, color coverage and a controlled habit, Itsy is sure to be a hit with growers and consumers alike.

DIMENSIONS 18–24" W x 4–6" H | **HABIT** Trailing | **FORMS** URC, AutoStix®

Itsy™ Magenta NEW
70076437

Behind the Breeding

When I found the first small flowering Petunia plants in my seedlings several years ago, it attracted me because it looked so clearly different than all other Petunias that I have. But would it make sense to develop a Petunia series that has the smallest flowers in the Petunia business?

The answer was clearly yes! Itsy™ gives numerous flowers on a dense growing, vigorous plant and is coloring the garden all summer long. Moreover, plants and flowers are very tolerant to varying weather conditions. A unique and great addition to our Petunia assortment!

"...coloring the garden all summer long."

Dick van Kleinwee
SENIOR BREEDER
Andijk, the Netherlands

VEGETATIVE ANNUALS
BACK TO CONTENTS

Dekko™ Banana

PETUNIA *Petunia hybrida*

Dekko™

DEKKO™
DARE TO BE DIFFERENT

Dare to be different.

- Exceptional garden performance sets Dekko apart from the crowd.
- A wide range of core and unique colors are perfect for adding "wow" to mixed combos and baskets.
- Versatile habits work great from small pots all the way to the landscape.

DIMENSIONS 18–22" W x 8–12" H

HABIT Spreading

FORMS URC, AutoStix®

VEGETATIVE ANNUALS
BACK TO CONTENTS

Dekko™ Banana NEW
70083317

Dekko™ Blue
70076419

Dekko™ Deep Lavender Vein
70076420

Dekko™ Lavender Eye
70008029

Dekko™ Purple
70061519

Dekko™ Red
70008026

Dekko™ Salmon
70061518

Dekko™ Sky Blue
70071607

Dekko™ Star Coral
70066651

Dekko™ Star Rose
70020321

Dekko™ White
70071612

BACK TO CONTENTS

Sanguna® Rose Vein

PETUNIA *Petunia hybrida*

Sanguna®

Bold and bright and best for baskets.

- Big flowers and bright colors are ideal for impactful hanging baskets and combos.
- Strong habits fill fast and are covered in color from top to bottom.
- The ultimate spring mixer and a foundation of many best-selling Kwik Kombos™.

DIMENSIONS 20–24" W x 10–14" H

HABIT Trailing

FORMS URC, AutoStix®

VEGETATIVE ANNUALS

BACK TO CONTENTS

Sanguna® Blue
70004044

Sanguna® Blue Vein
70004034

Sanguna® Burgundy
70004047

Sanguna® Deep Lavender Vein
70071592

Sanguna® Hot Rose
70061526

Sanguna® Light Blue
70055233

Sanguna® Lipstick
70066655

Sanguna® Mega Purple
70071605

Sanguna® Merlot
70076445

Sanguna® Picotee Punch
70071949

Sanguna® Pink Vein
70008018

Sanguna® Purple
70076459

Sanguna® Radiant Blue
70053693

Sanguna® Red
70055241

Sanguna® Rose
70071602

Sanguna® Rose Vein
70066666

Sanguna® Star Rose
70076475

Sanguna® Sweet Pink
70051190

Sanguna® White
70076487

Sanguna® White Vein
70004043

Sanguna® Yellow
70061525

Greenhouse Vigor Classes

VIGOR	VARIETY
COMPACT – MEDIUM	Sanguna® Red
MEDIUM	Sanguna® Merlot Sanguna® Picotee Punch Sanguna® Pink Vein Sanguna® White Imp.
MEDIUM – VIGOROUS	Sanguna® Blue Sanguna® Blue Vein Sanguna® Burgundy Sanguna® Deep Lavender Vein Sanguna® Hot Rose Sanguna® Light Blue Sanguna® Lipstick Sanguna® Mega Purple Sanguna® Purple Imp. Sanguna® Radiant Blue Sanguna® Rose Sanguna® Rose Vein Sanguna® Sweet Pink Sanguna® White Vein Sanguna® Yellow
VIGOROUS	Sanguna® Star Rose

VEGETATIVE ANNUALS
BACK TO CONTENTS

Sanguna® Patio Purple Vein

PETUNIA *Petunia hybrida*

Sanguna® Patio

Awesome early.

- Compact and early flowering habits go to market first, full, and in flower.
- Controlled and upright, makes Sanguna Patio the ideal choice for high density production in small containers.
- Grown cool, Sanguna Patio requires little to no PGRs or pinching and holds its shape covered in color.

DIMENSIONS 10–14" W x 10–14" H

HABIT Upright

FORMS URC, AutoStix®

Sanguna® Patio Blue
70055260

Sanguna® Patio Blue Vein
70061517

Sanguna® Patio Light Blue
70071613

Sanguna® Patio Pink Morn
70055259

Sanguna® Patio Purple
70051199

Sanguna® Patio Purple Vein
70076417

Sanguna® Patio Radiant Dark Blue
70071614

Sanguna® Patio Radiant Rose
70055263

Sanguna® Patio Red
70051200

Sanguna® Patio Salmon
70008016

Sanguna® Patio White
70071621

VEGETATIVE ANNUALS
BACK TO CONTENTS

Shortcake™ Blueberry

PETUNIA *Petunia hybrida*

Shortcake™

Something to sweeten up the garden!

- Shortcake turns the table and brings novelty color in a package that also excels in the garden.
- A versatile habit that works well in small pots and combos, but will still size up for an impressive display in the garden.
- Combining a grower-friendly habit with a unique, stable flower pattern, Shortcake is sure to be a hit at retail.

DIMENSIONS 18–22” W x 8–12” H | **HABIT** Spreading | **FORMS** URC

Shortcake™ Blueberry
70076424

VEGETATIVE ANNUALS
BACK TO CONTENTS

Velocity™ Blue

SALVIA *Salvia farinacea*

Velocity™

Finishes fast and full of color.

- Bold blue flower spikes are the perfect thriller for upscale spring combos.
- No-brainer color that's easy to finish and thrives for the end consumer.
- Vivid, tubular blooms are a magnet for pollinators all season long.

DIMENSIONS 10–12" W x 12–16" H

HABIT Upright

FORMS URC, Pre-Pinched, AutoStix®

Velocity™ Blue
70020736

SCAEVOLA *Scaevola aemula*

Bombay®

A down under wonder that thrives through extreme heat.

- Strong trailing habits are the ideal choice for summer baskets and combos.
- Dark blues and bright whites thrive even when temperatures are at their hottest.
- The ultimate summer mixer and a foundation of many best-selling heat lover Kwik Kombos™.

DIMENSIONS 18–22" W x 8–12" H | **HABIT** Trailing | **FORMS** URC, CC, AutoStix®

Bombay® Compact Dark Blue

Bombay® Compact Dark Blue NEW
70076128

Bombay® Dark Blue
70020772

Bombay® Pink
70050923

Bombay® White
70020780

Bombay® Yellow NEW
70077414

VEGETATIVE ANNUALS
BACK TO CONTENTS

Bombay® Yellow

VEGETATIVE ANNUALS
BACK TO CONTENTS

VERBENA *Verbena hybrida*

Lanai®

Performance never goes out of style.

- Class-leading disease resistance ensures Lanai looks great from grower to garden.
- Strong trailing habits are ideal for hanging baskets and mixed combinations.
- A huge assortment of bright and bold colors make combos pop and are the foundation for many best-selling Kwik Kombos™.

DIMENSIONS 20–24” W x 6–10” H

HABIT Trailing

FORMS URC, Pre-Pinched, AutoStix®

Lanai® Early Dark Red

Lanai® Blue
70004382

Lanai® Bright Eye
70008025

Lanai® Candy Cane
70060812

Lanai® Cyclops Purple
70065873

Lanai® Deep Pink
70004386

Lanai® Deep Purple
70004387

Lanai® Early Dark Red
70060817

Lanai® Lavender Star
70004388

Lanai® Magenta
70021349

Lanai® Neon Rose
70060805

VEGETATIVE ANNUALS
BACK TO CONTENTS

Lanai® Peach
70021288

Lanai® Pink
70054663

Lanai® Purple NEW
70083037

Lanai® Red
70004390

Lanai® Red Star
70060815

Lanai® Royal Purple with Eye
70004391

Lanai® Scarlet
70071255

Lanai® Scarlet with Eye
70021317

Lanai® Sky Blue
70071225

Lanai® Strawberry
70071226

Lanai® Twister™ Amethyst
70054662

Lanai® Twister™ Burgundy
70065899

Lanai® Twister™ Pink
70008020

Lanai® Twister™ Purple
70054665

Lanai® Twister™ Red
70075888

Lanai® Twister™ Star Purple
70075211

Lanai® Vintage
70054686

Lanai® White Imp. NEW
70083036

Greenhouse Vigor Classes

VIGOR	VARIETY	
COMPACT – MEDIUM	Lanai® Vintage Lanai® White	
MEDIUM	Lanai® Blue Lanai® Bright Eye Lanai® Candy Cane Lanai® Cyclops Purple Lanai® Deep Pink Lanai® Deep Purple Lanai® Early Dark Red Lanai® Lavender Star Lanai® Magenta Lanai® Peach Lanai® Red	Lanai® Red Star Lanai® Royal Purple with Eye Lanai® Scarlet Lanai® Scarlet with Eye Lanai® Sky Blue Lanai® Strawberry Lanai® Twister™ Amethyst Lanai® Twister™ Purple Lanai® Twister™ Red Lanai® Twister™ Star Purple
MEDIUM – VIGOROUS	Lanai® Neon Rose Lanai® Pink Lanai® Twister™ Burgundy Lanai® Twister™ Pink	

VEGETATIVE ANNUALS
BACK TO CONTENTS

Lanai® Compact Twister Purple

VERBENA *Verbena hybrida*

Lanai® Compact

The Lanai you know and love, now in a more controlled package.

- Controlled, mounded habits are ideal for smaller containers and baskets.
- Class-leading disease resistance ensures Lanai Compact looks great from grower to garden.
- Vibrant blooms are the perfect spring mixer and a foundation in many best-selling Kwik Kombos™.

DIMENSIONS 12–14" W x 4–6" H

HABIT Trailing

FORMS URC, Pre-Pinched, AutoStix®

Lanai® Compact Candy Pink NEW
70083028

Lanai® Compact Lime Green
70021307

Lanai® Compact Red
70051383

Lanai® Compact Red Star
70060847

Lanai® Compact Twister™ Purple
70060849

Lanai® Compact White
70065900

VEGETATIVE ANNUALS
BACK TO CONTENTS

Lanai® Upright Purple with Eye Imp.

VERBENA *Verbena hybrida*

Lanai® Upright

Color per square foot never looked so good.

- The best Verbena for high-density, pot-tight production.
- Upright mounded habits won't split and hold up from grower to garden.
- The perfect pop of color for bold combinations.

DIMENSIONS 12–14" W x 8–12" H

HABIT Upright

FORMS URC, Pre-Pinched, AutoStix®

Lanai® Upright Blue with Eye
70021299

Lanai® Upright Merlot with Eye NEW
70083025

Lanai® Upright Peach NEW
70083046

Lanai® Upright Pink with Eye
70051301

Lanai® Upright Purple
70075902

Lanai® Upright Purple Mosaic
70004401

Lanai® Upright Purple Velvet
70075898

Lanai® Upright Purple with Eye Imp. NEW
70083031

Lanai® Upright Red with Eye
70054681

Lanai® Upright Rose with Eye
70021298

Lanai® Upright Scarlet
70075889

Lanai® Upright True Blue
70065887

Lanai® Upright Twister™ Purple
70065893

Lanai® Upright Twister™ Rose
70071244

Lanai® Upright Twister™ Watercolor
70065890

Lanai® Upright White
70054676

VEGETATIVE ANNUALS
BACK TO CONTENTS

Magelana™ Lilac

VERBENA *Verbena hybrida*

Magelana™

A constant carpet of color.

- Tight, densely branched habits are perfect for small pots.
- Excels in in-ground planting, creating a carpet of bright and bold colors.
- Tough as nails landscape color that holds up from spring to fall.

DIMENSIONS 12–14" W x 4–6" H

HABIT Trailing

FORMS URC, Pre-Pinched, AutoStix®

Magelana™ Hot Rose
70004403

Magelana™ Lilac
70004404

Magelana™ Lipstick
70021336

Magelana™ Peach
70051384

Magelana™ Violet
70004394

Nirvana® Cascade Pink Splash

VINCA *Catharanthus roseus*

Nirvana® Cascade

Builds bolder and brighter baskets.

- Big blooms and trailing habits are perfect for upscale hanging baskets and combos.
- Exceptional heat tolerance keeps Nirvana Cascade blooming through the intense heat of summer.
- The perfect summer mixer that blends well with other trailing heat lovers like Angelonia Carita™ Cascade and Scaevola Bombay®.

DIMENSIONS 18–22" W x 6–8" H

HABIT Trailing

FORMS URC, CC, AutoStix®

VEGETATIVE ANNUALS
BACK TO CONTENTS

Magelana™ Hot Rose

VEGETATIVE ANNUALS
BACK TO CONTENTS

Curry Plant Icicles

CURRY PLANT *Helichrysum italicum*

Helichrysum italicum

- Delicate, gray, curry-scented foliage provides color and texture to the landscape and containers.
- While mainly utilized for its foliar attributes, clusters of golden flowers bloom during the summer months.
- With low water requirements, this is a great option for xeriscape applications.

DIMENSIONS 12–24" W x 12–18" H

HABIT Upright

FORMS URC, AutoStix®

Curry Plant Icicles
70003687

Licorice Plant Silver

LICORICE PLANT *Helichrysum petiolare*

Helichrysum petiolare

- Providing texture and color, these Helichrysum varieties are perfect fillers in mixed containers and in the landscape.
- These varieties are naturally low-maintenance, requiring little water and fertilization while still putting on a unique foliage display.

DIMENSIONS 10–18" W x 8–12" H | **HABIT** Upright | **FORMS** URC, AutoStix®

Licorice Plant Limelight
70003670

Licorice Plant Microphyllum Mini Silver
70003686

Licorice Plant Silver
70003669

Variegated Swedish Ivy

VARIEGATED SWEDISH IVY *Plectranthus coleoides*

Plectranthus coleoides

- Ideal as a textural accent, this quick grower is great for fast-turn combos.
- Perfect choice for shade plantings and containers.
- Adaptable as an indoor plant.

DIMENSIONS 12–18" W x 6–8" H

HABIT Trailing

FORMS URC, AutoStix®

Variegated Swedish Ivy
70004244

VEGETATIVE ANNUALS
BACK TO CONTENTS

Resources

BACK TO CONTENTS

Grower Success Guide

TECHNICAL KEY

STANDARDIZED POT GUIDE

NEW DESCRIPTION	ROUGHLY APPLIES TO
Pack	Pack
Large Pack	Jumbo Pack
1.0 pt. pot	4 in. pot
1.0 qt. pot	4.5 in pot
1.25 qt. pot	6 in. pot
2.50 qt. pot	Trade gallon pot
3.0 qt. pot	8 in. pot
1.5 gal. HB	10 in. hanging basket
1.5 gal. pot	10 in. pot
2.0 gal. HB	12 in. hanging basket
2.5 gal. pot	12 in. pot
3.0 gal. HB	14 in. hanging basket
3.0 gal. pot	14 in. pot
3.5 gal. pot	15 in. pot

MOISTURE LEVEL

MOISTURE LEVEL	DESCRIPTION
1 – DRY	Soil is tan to gray in color, trays are extremely light, and soil pulls away from sides of container.
2 – MEDIUM	Soil is light brown in color, no water can be extracted from soil, and soil will crumble apart.
3 – MOIST	Soil is brown in color, strongly squeezing the soil will extract a few drops of water, and trays are light with no visible bend.
4 – WET	Soil is dark brown but not shiny, no free water is seen at the surface of the soil, when pressed or squeezed water drips easily, and trays are heavy with a visible bend in the middle.
5 – SATURATED	Soil is dark brown and shiny, free water is present at the surface of the soil, water drips freely from the bottom of the tray, and trays are heavy with a visible bend in the middle.

TIMING

ABBREVIATION	DESCRIPTION
E	Early
E-M	Early-Mid
M	Mid
M-L	Mid-Late
L	Late

VIGOR

ABBREVIATION	DESCRIPTION
C	Compact
C-M	Compact-Medium
M	Medium
M-V	Medium-Vigorous
V	Vigorous

BACK TO CONTENTS

Begonia **BADA BING®/BADA BOOM®** *F1 Begonia semperflorens*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Raw, Pelleted	7–8 weeks	1–2	No	6–8 days	72–78 °F (22–26 °C)	Not required for germination	pH: 5.5–5.9 SME 0.5–0.75 mS/cm

Comments: Avoid overwatering to help prevent excess algae growth and to promote root growth into the media. If germinating on the bench it is helpful to cover trays with ReeMay® or similar to help retain humidity and reduce irrigation frequency. When irrigating use low pressure/volume nozzles/breakers to avoid moving seeds around in the cell. If the daily light integral (DLI) is less than 12 mols/day adding supplemental HID light will promote a more uniform crop. Do not use plug trays that have been used previously and had a crop treated with paclobutrazol grown in them. Most Begonia semperflorens will stop growing if exposed to any level of paclobutrazol. Do not irrigate with recycled water for this reason.

Begonia **BOSSA NOVA™** *F1 Begonia boliviensis*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Pelleted	7–9 weeks	1	No	14 days	72–78 °F (23–25 °C)	Not required for germination	pH: 5.5–5.9 SME 0.5–0.75 mS/cm

Comments: Irrigate early in the day to avoid leaf scorch when high light levels are present. Allowing the soil surface to dry between irrigations will reduce algae growth.

Begonia **EUREKA™** *F1 Begonia semperflorens*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Raw, Pelleted	7–8 weeks	1–2	No	6–8 days	72–78 °F (22–26 °C)	Not required for germination	pH: 5.5–5.9 SME 0.5–0.75 mS/cm

Comments: Avoid overwatering to help prevent excess algae growth and to promote root growth into the media. If germinating on the bench it is helpful to cover trays with ReeMay® or similar to help retain humidity and reduce irrigation frequency. When irrigating use low pressure/volume nozzles/breakers to avoid moving seeds around in the cell. If the daily light integral (DLI) is less than 12 mols/day adding supplemental HID light will promote a more uniform crop. Do not use plug trays that have been used previously and had a crop treated with paclobutrazol grown in them. Most Begonia semperflorens will stop growing if exposed to any level of paclobutrazol. Do not irrigate with recycled water for this reason.

Begonia **TOPSPIN™** *F1 Begonia semperflorens*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Raw, Pelleted	7–8 weeks	1–2	No	6–8 days	72–78 °F (22–26 °C)	Not required for germination	pH: 5.5–5.9 SME 0.5–0.75 mS/cm

Comments: Avoid overwatering to help prevent excess algae growth and to promote root growth into the media. If germinating on the bench it is helpful to cover trays with ReeMay® or similar to help retain humidity and reduce irrigation frequency. When irrigating use low pressure/volume nozzles/breakers to avoid moving seeds around in the cell. If the daily light integral (DLI) is less than 12 mols/day adding supplemental HID light will promote a more uniform crop. Do not use plug trays that have been used previously and had a crop treated with paclobutrazol grown in them. Most Begonia semperflorens will stop growing if exposed to any level of paclobutrazol. Do not irrigate with recycled water for this reason.

Begonia **VOLUMIA™** *F1 Begonia semperflorens*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Pelleted	7–8 weeks	1	No	6–8 days	72–78 °F (22–26 °C)	Not required for germination	pH: 5.5–5.9 SME 0.5–0.75 mS/cm

Comments: Avoid overwatering to help prevent excess algae growth and to promote root growth into the media. If germinating on the bench it is helpful to cover trays with ReeMay® or similar to help retain humidity and reduce irrigation frequency. When irrigating use low pressure/volume nozzles/breakers to avoid moving seeds around in the cell. If the daily light integral (DLI) is less than 12 mols/day adding supplemental HID light will promote a more uniform crop. Do not use plug trays that have been used previously and had a crop treated with paclobutrazol grown in them. Most Begonia semperflorens will stop growing if exposed to any level of paclobutrazol. Do not irrigate with recycled water for this reason.

Begonia Interspecific **BRAVEHEART®** *F1 Begonia × hybrida*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Pelleted	7–8 weeks	1	No	6–8 days	72–78 °F (22–26 °C)	Not required for germination	pH: 5.5–5.9 SME 0.5–0.75 mS/cm

Comments: Avoid overwatering to help prevent excess algae growth and to promote root growth into the media. If germinating on the bench it is helpful to cover trays with ReeMay® or similar to help retain humidity and reduce irrigation frequency. When irrigating use low pressure/volume nozzles/breakers to avoid moving seeds around in the cell. If the daily light integral (DLI) is less than 12 mols/day adding supplemental HID light will promote a more uniform crop. Do not use plug trays that have been used previously and had a crop treated with paclobutrazol grown in them. Most Begonia × hybrida will stop growing if exposed to any level of paclobutrazol. Do not irrigate with recycled water for this reason.

Begonia Interspecific **IKON™** *F1 Begonia × hybrida*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Pelleted	7–9 weeks	1	No	14 days	73–78 °F (23–25 °C)	Not required for germination	pH: 5.5–5.9 SME 0.5–0.75 mS/cm

Comments: Irrigate early in the day to avoid leaf scorch when high light levels are present. Also allowing the soil surface to dry between irrigations will reduce algae growth.

BACK TO CONTENTS

Begonia Interspecific **TOPHAT™** *F1 Begonia × hybrida*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Pelleted	6–7 weeks	1	No	6–8 days	72–78 °F (22–26 °C)	Not required for germination	pH: 5.5–5.9 SME 0.5–0.75 mS/cm

Comments: Avoid overwatering to help prevent excess algae growth and to promote root growth into the media. If germinating on the bench, it is helpful to cover trays with ReeMay® or similar to help retain humidity and reduce irrigation frequency. When irrigating, use low pressure/volume nozzles/breakers to avoid moving seeds around in the cell. If the daily light integral (DLI) is less than 12 mols/day, adding supplemental HID light will promote a more uniform crop.

Calendula **COSTA™** *OP Calendula officinalis*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Raw	3–4 weeks	1	Yes	5–10 days	70–72 °F (21–22 °C)	Not required for germination	pH: 5.5–5.9 SME 0.5–0.75 mS/cm

Comments: Grow on the cool side. Calendulas are not recommended for fall crops where cool conditions cannot be maintained.

Celosia **BRIGHT SPARKS™** *OP Celosia plumosa erecta*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Raw	4–5 weeks	1	Yes	2–4 days	70–75 °F (21–24 °C)	Required for germination	pH: 5.5–5.9 SME 0.9–1.3 mS/cm

Comments: Bright Sparks is a facultative short day variety and will flower faster under short days. If sowing under short days, it is vital to grow the plugs under a day length of at least 14 hours to promote sufficient vegetative growth before flowering.

Cleome **SPARKLER™** *F1 Cleome hassleriana*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Primed	3–4 weeks	1	Yes	4–6 days	80–85 °F (26–30 °C) days 68–70 °F (20–21 °C) nights	Required for germination	pH: 5.5–5.9 SME 0.9–1.3 mS/cm

Comments: Fluctuating day/night temps will help improve germination. Cleome is a heavy feeder; start feeding in the plug about two weeks after sowing.

Corn Ornamental **FIELD OF DREAMS™** *F1 Zea mays*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
Direct sow into pots or 128–cell tray	Raw	1–2 weeks	Varies when direct sowing; 1 per cell in a 128 tray	Yes	1–2 days	72–75 °F (22–24 °C)	Not required for germination	pH: 5.8–6.2 SME 0.5–0.75 mS/cm

Comments: It is best to direct sow into the final container for best quality and fastest crop times. If direct sowing, use 3 seeds per pot. If sowing into a plug tray, do not use a tray smaller than a 128–cell. Also, do not let plugs become root-bound or growth may stall after transplant.

Cosmos **APOLLO™** *OP Cosmos bipinnatus*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Raw	4–5 weeks	1	Yes	3–4 days	61–65 °F (16–18 °C)	Not required for germination	pH: 5.5–5.9 SME 0.25–0.5 mS/cm

Comments: Cosmos will flower early under short days, so to allow bulking of the plug provide a 14 hour day length during propagating.

Cuphea **SRIRACHA™** *F1 Cuphea llavea*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Raw	3.5–4 weeks	1	Yes	3–5 days	70–75 °F (21–24 °C)	Not required for germination	pH: 5.8–6.2 SME 0.5–0.75 mS/cm

Comments: Only the first application of plant growth regulators (PGR) is necessary for the plug. After two weeks, you can alternate moisture between 2 and 4 to help tone the plugs. Provide supplemental lighting if possible if DLI is lees than 8 mols/day.

Dahlia **FRESCO™** *OP Dahlia hybrida*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Raw, Coated	3–4 weeks	1	Yes	5 days	70 °F (21 °C)	Not required for germination	pH: 5.5–5.9 SME 0.5–0.75 mS/cm

Comments: Provide day extension lighting to 12–14 hours/day to help prevent premature flower bud set.

BACK TO CONTENTS

Dahlia **HARLEQUIN™** *OP Dahlia hybrida*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Raw, Coated	3–4 weeks	1	Yes	5 days	70 °F (21 °C)	Not required for germination	pH: 5.5–5.9 SME 0.5–0.75 mS/cm

Comments: Provide day extension lighting to 12–14 hours/day to help prevent premature flower bud set.

Dianthus **DIABUNDA®** *F1 Dianthus × barbatus*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Raw, Pelleted	5–6 weeks	1	Yes	5 days	72–74 °F (22–23 °C)	Not required for germination	pH: 5.5–5.9 SME 0.9–1.3 mS/cm

Comments: Providing high light and dropping the temperature to an ADT of 60 °F (21 °C) will reduce the need for PGRs. Day extension lighting to 14 hours will hasten flowering of the finished plant.

Dianthus **SUPER PARFAIT™** *F1 Dianthus chinensis*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Raw, Pelleted	5–6 weeks	1	Yes	5 days	72–74 °F (22–23 °C)	Not required for germination	pH: 5.5–5.9 SME 0.9–1.3 mS/cm

Comments: Providing high light and dropping the temperature to an ADT of 60 °F (21 °C) will reduce the need for PGRs. Day extension lighting to 14 hours will hasten flowering of the finished plant.

Dianthus **VENTI PARFAIT™** *F1 Dianthus chinensis*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Raw, Pelleted	5–6 weeks	1	Yes	5 days	72–74 °F (22–23 °C)	Not required for germination	pH: 5.5–5.9 SME 0.9–1.3 mS/cm

Comments: Providing high light and dropping the temperature to an ADT of 60 °F (21 °C) will reduce the need for PGRs. Day extension lighting to 14 hours will hasten flowering of the finished plant.

English Daisy / Bellis **BAM BAM™** *F1 Bellis perennis*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Pelleted	5–6 weeks	1	Yes	3–5 days	65–70 °F (18–21 °C)	Not required for germination	pH: 5.5–5.9 SME 0.5–0.75 mS/cm

Comments: As plugs mature, reduce irrigation frequency to tone plants.

Gazania **BIG KISS™** *F1 Gazania rigens*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Raw	5–6 weeks	1	Yes	4–6 days	70–75 °F (21–24 °C)	Not required for germination	pH: 5.5–5.9 SME 0.5–0.75 mS/cm

Comments: Growing Gazania plugs on the dry side and keeping them moderately cool will help prevent leaf stretch.

Gazania **FROSTY KISS™** *F1 Gazania rigens*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Raw	5–6 weeks	1	Yes	4–6 days	70–75 °F (21–24 °C)	Not required for germination	pH: 5.5–5.9 SME 0.5–0.75 mS/cm

Comments: Growing Gazania plugs on the dry side and keeping them moderately cool will help prevent leaf stretch.

Gazania **GAZOO™** *OP Gazania rigens*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Raw	5–6 weeks	1	Yes	4–6 days	70–75 °F (21–24 °C)	Not required for germination	pH: 5.5–5.9 SME 0.5–0.75 mS/cm

Comments: Growing Gazania plugs on the dry side and keeping them moderately cool will help prevent leaf stretch.

Gazania **KISS™** *F1 Gazania rigens*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Raw	5–6 weeks	1	Yes	4–6 days	70–75 °F (21–24 °C)	Not required for germination	pH: 5.5–5.9 SME 0.5–0.75 mS/cm

Comments: Growing Gazania plugs on the dry side and keeping them moderately cool will help prevent leaf stretch.

BACK TO CONTENTS

Geranium **BULLSEYE™** *F1 Pelargonium × hortorum*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Coated	4–5 weeks	1	Yes	1–3 days	73 °F (23 °C)	Not required for germination	pH: 6.1–6.5 SME 0.9–1.3 mS/cm

Comments: Geraniums are irradiance plants so the more light they receive the faster they will flower. Under short days or cloudy conditions it is beneficial to provide supplemental lighting of around 400 foot candles (4,000 lux) especially in the plug tray to speed up flowering. All geraniums are especially sensitive to bacterial diseases so be sure to start with clean plug trays, media and propagation areas. Geranium seed does not carry bacterial diseases so if you start clean you can stay clean. Do not subirrigate or use recycled water. Media pH should not drop below 6.0 or the plants may suffer from iron and/or manganese toxicity.

Geranium **LANDSCAPER™** *F1 Pelargonium × hortorum*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Coated	4–5 weeks	1	Yes	1–3 days	73 °F (23 °C)	Not required for germination	pH: 6.1–6.5 SME 0.9–1.3 mS/cm

Comments: Geraniums are irradiance plants; the more light they receive, the faster they will flower. Under short days or cloudy conditions, it is beneficial to provide supplemental lighting of around 400 foot candles (4,000 lux), especially in the plug tray to speed up flowering. All geraniums are especially sensitive to bacterial diseases, so be sure to start with clean plug trays, media and propagation areas. Geranium seed does not carry bacterial diseases, so if you start clean you can stay clean. Do not subirrigate or use recycled water. Media pH should not drop below 6.0, or the plants may suffer from iron and/or manganese toxicity.

Geranium **MAVERICK™** *F1 Pelargonium × hortorum*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Coated	4–5 weeks	1	Yes	1–3 days	73 °F (23 °C)	Not required for germination	pH: 6.1–6.5 SME 0.9–1.3 mS/cm

Comments: Geraniums are irradiance plants so the more light they receive the faster they will flower. Under short days or cloudy conditions it is beneficial to provide supplemental lighting of around 400 foot candles (4,000 lux) especially in the plug tray to speed up flowering. All geraniums are especially sensitive to bacterial diseases so be sure to start with clean plug trays, media and propagation areas. Geranium seed does not carry bacterial diseases so if you start clean you can stay clean. Do not subirrigate or use recycled water. Media pH should not drop below 6.0 or the plants may suffer from iron and/or manganese toxicity.

Geranium **MULTIBLOOM™** *F1 Pelargonium × hortorum*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Coated	4–5 weeks	1	Yes	1–3 days	73 °F (23 °C)	Not required for germination	pH: 6.1–6.5 SME 0.9–1.3 mS/cm

Comments: Geraniums are irradiance plants so the more light they receive the faster they will flower. Under short days or cloudy conditions it is beneficial to provide supplemental lighting of around 400 foot candles (4,000 lux) especially in the plug tray to speed up flowering. All geraniums are especially sensitive to bacterial diseases so be sure to start with clean plug trays, media and propagation areas. Geranium seed does not carry bacterial diseases so if you start clean you can stay clean. Do not subirrigate or use recycled water. Media pH should not drop below 6.0 or the plants may suffer from iron and/or manganese toxicity.

Geranium **PINTO™ PREMIUM** *F1 Pelargonium × hortorum*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Coated	4–5 weeks	1	Yes	1–3 days	73 °F (23 °C)	Not required for germination	pH: 6.1–6.5 SME 0.9–1.3 mS/cm

Comments: Geraniums are irradiance plants so the more light they receive the faster they will flower. Under short days or cloudy conditions it is beneficial to provide supplemental lighting of around 400 foot candles (4,000 lux) especially in the plug tray to speed up flowering. All geraniums are especially sensitive to bacterial diseases so be sure to start with clean plug trays, media and propagation areas. Geranium seed does not carry bacterial diseases so if you start clean you can stay clean. Do not subirrigate or use recycled water. Media pH should not drop below 6.0 or the plants may suffer from iron and/or manganese toxicity.

Geranium **QUANTUM™** *F1 Pelargonium × hortorum*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Coated	4–5 weeks	1	Yes	1–3 days	73 °F (23 °C)	Not required for germination	pH: 6.1–6.5 SME 0.9–1.3 mS/cm

Comments: Geraniums are irradiance plants; the more light they receive, the faster they will flower. Under short days or cloudy conditions, it is beneficial to provide supplemental lighting of around 400 foot candles (4,000 lux), especially in the plug tray to speed up flowering. All geraniums are especially sensitive to bacterial diseases, so be sure to start with clean plug trays, media and propagation areas. Geranium seed does not carry bacterial diseases, so if you start clean you can stay clean. Do not subirrigate or use recycled water. Media pH should not drop below 6.0, or the plants may suffer from iron and/or manganese toxicity.

Geranium **RINGO 2000™** *F1 Pelargonium × hortorum*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Coated	4–5 weeks	1	Yes	1–3 days	73 °F (23 °C)	Not required for germination	pH: 6.1–6.5 SME 0.9–1.3 mS/cm

Comments: Geraniums are irradiance plants so the more light they receive the faster they will flower. Under short days or cloudy conditions it is beneficial to provide supplemental lighting of around 400 foot candles (4,000 lux) especially in the plug tray to speed up flowering. All geraniums are especially sensitive to bacterial diseases so be sure to start with clean plug trays, media and propagation areas. Geranium seed does not carry bacterial diseases so if you start clean you can stay clean. Do not subirrigate or use recycled water. Media pH should not drop below 6.0 or the plants may suffer from iron and/or manganese toxicity.

BACK TO CONTENTS

Geranium Ivy **REACH OUT™** *F1 Pelargonium peltatum*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Coated	5–6 weeks	1	Yes	4 days	64–68 °F (18–20 °C)	Not required for germination	pH: 5.8–6.2 SME 0.9–1.3 mS/cm

Comments: Germination temperatures above 72 °F (22 °C) can lead to thermodormancy, which will reduce and/or slow germination) Geraniums are irradiance plants; the more light they receive, the faster they will flower. Under short days or cloudy conditions, it is beneficial to provide supplemental lighting of around 400 foot candles (4,000 lux), especially in the plug tray to speed up flowering. All geraniums are especially sensitive to bacterial diseases so be sure to start with clean plug trays, media and propagation areas. Geranium seed does not carry bacterial diseases; if you start clean, you can stay clean. Do not subirrigate or use recycled water.

Geranium Ivy **TORNADO™** *F1 Pelargonium peltatum*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Coated	5–6 weeks	1	Yes	4 days	73 °F (23 °C)	Not required for germination	pH: 5.8–6.2 SME 0.9–1.3 mS/cm

Comments: Geraniums are irradiance plants so the more light they receive the faster they will flower. Under short days or cloudy conditions it is beneficial to provide supplemental lighting of around 400 foot candles (4,000 lux) especially in the plug tray to speed up flowering. All geraniums are especially sensitive to bacterial diseases so be sure to start with clean plug trays, media and propagation areas. Geranium seed does not carry bacterial diseases so if you start clean you can stay clean. Do not subirrigate or use recycled water. Media pH should not drop below 6.0 or the plants may suffer from iron and/or manganese toxicity.

Gerbera **BENGAL™** *F1 Gerbera jamesonii*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
128–cell tray	SatinCoat™	5–6 weeks	1	No	4 days	74–76 °F (23–24 °C)	Required for germination	pH: 5.5–5.9 SME 0.5–0.75 mS/cm

Comments: Under low light conditions provide supplemental HID light if possible; do not extend daylength as this will extend the time to flower. It is critical to allow adequate dry back between irrigations to prevent stunted and distorted growth. Because of this do not mist at night. If germinating on a bench it is best to use a tent system to increase humidity and reduce the frequency of irrigations/misting.

Gerbera **CARTWHEEL®** *F1 Gerbera jamesonii*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
128–cell tray	Raw, SatinCoat™	5–6 weeks	1	No	4 days	74–76 °F (23–24 °C)	Required for germination	pH: 5.5–5.9 SME 0.5–0.75 mS/cm

Comments: Under low light conditions provide supplemental HID light if possible; do not extend daylength as this will extend the time to flower. It is critical to allow adequate dry back between irrigations to prevent stunted and distorted growth. Because of this do not mist at night. If germinating on a bench it is best to use a tent system to increase humidity and reduce the frequency of irrigations/misting.

Gerbera **ELEPHANT™** *F1 Gerbera jamesonii*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
128–cell tray	SatinCoat™	5–6 weeks	1	No	4 days	74–76 °F (23–24 °C)	Required for germination	pH: 5.5–5.9 SME 0.5–0.75 mS/cm

Comments: Under low light conditions provide supplemental HID light if possible; do not extend daylength as this will extend the time to flower. It is critical to allow adequate dry back between irrigations to prevent stunted and distorted growth. Because of this do not mist at night. If germinating on a bench it is best to use a tent system to increase humidity and reduce the frequency of irrigations/misting.

Gerbera **JAGUAR™** *F1 Gerbera jamesonii*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
128–cell tray	SatinCoat™	5–6 weeks	1	No	4 days	74–76 °F (23–24 °C)	Required for germination	pH: 5.5–5.9 SME 0.5–0.75 mS/cm

Comments: Under low light conditions provide supplemental HID light if possible; do not extend daylength as this will extend the time to flower. It is critical to allow adequate dry back between irrigations to prevent stunted and distorted growth. Because of this do not mist at night. If germinating on a bench it is best to use a tent system to increase humidity and reduce the frequency of irrigations/misting.

Hibiscus **HONEYMOON™** *F1 Hibiscus moscheutos*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
200–cell tray	Coated	3–4 weeks	1	Yes	3–5 days	75–81 °F (24–27 °C)	Not required for germination	pH: 5.5–5.9 SME 0.5–0.75 mS/cm

Comments: If Cycocel® is applied, seedlings may temporarily yellow. Begin feeding at 75 ppm N at radical emergence.

Impatiens **ACCENT™** *F1 Impatiens walleriana*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Raw	4–5 weeks	1	Yes	3–5 days	72–75 °F (22–24 °C)	Required for germination	pH: 5.8–6.2 SME 0.5–0.75 mS/cm

Comments: Use a calcium based fertilizer and feed once a week at most to avoid soft growth and stretching of plugs. Do not let plants go into the night with wet foliage or tip abortion may occur. Downward cupping or twisting of immature leaves may be caused by overuse of PGRs. Subdue Maxx® and/or Segway® drenches are recommended plug stage fungicides for disease management.

BACK TO CONTENTS

Impatiens **ACCENT™ PREMIUM** *F1 Impatiens walleriana*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Raw	4–5 weeks	1	Yes	3–5 days	72–75 °F (22–24 °C)	Required for germination	pH: 5.8–6.2 SME 0.5–0.75 mS/cm

Comments: Use a calcium based fertilizer and feed once a week at most to avoid soft growth and stretching of plugs. Do not let plants go into the night with wet foliage or tip abortion may occur. Downward cupping or twisting of immature leaves may be caused by overuse of PGRs. Subdue Maxx® and/or Segway® drenches are recommended plug stage fungicides for disease management.

Impatiens **ATHENA™** *F1 Impatiens walleriana*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Raw	4–5 weeks	1	Yes	3–5 days	72–75 °F (22–24 °C)	Required for germination	pH: 5.8–6.2 SME 0.5–0.75 mS/cm

Comments: Use a calcium-based fertilizer and feed once a week at most to avoid soft growth and stretching of plugs. Do not let plants go into the night with wet foliage or tip abortion may occur. Downward cupping or twisting of immature leaves may be caused by overuse of PGRs. Subdue Maxx® and/or Segway® drenches are recommended plug stage fungicides for disease management.

Impatiens **IMARA™ XDR** *F1 Impatiens walleriana*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Raw	4–5 weeks	1	Yes	3–5 days	72–75 °F (22–24 °C)	Required for germination	pH: 5.8–6.2 SME 0.5–0.75 mS/cm

Comments: Use a calcium based fertilizer and feed once a week at most to avoid soft growth and stretching of plugs. Do not let plants go into the night with wet foliage or tip abortion may occur. Downward cupping or twisting of immature leaves may be caused by overuse of PGRs. Subdue Maxx® and/or Segway® drenches are recommended plug stage fungicides for disease management, and rotations of Mural® and Micora® sprays and Segovis® sprays or drenches are recommended for the finishing stage.

Impatiens **XTREME™** *F1 Impatiens walleriana*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Raw	4–5 weeks	1	Yes	3–5 days	72–75 °F (22–24 °C)	Required for germination	pH: 5.8–6.2 SME 0.5–0.75 mS/cm

Comments: Use a calcium based fertilizer and feed once a week at most to avoid soft growth and stretching of plugs. Do not let plants go into the night with wet foliage or tip abortion may occur. Downward cupping or twisting of immature leaves may be caused by overuse of PGRs. Subdue Maxx® and/or Segway® drenches are recommended plug stage fungicides for disease management.

Impatiens New Guinea **FLORIFIC®** *F1 Impatiens hawkeri*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Raw	4–6 weeks	1	Yes	8 days	70–75 °F (22–24 °C)	Not required for germination	pH: 5.8–6.2 SME 0.9–1.3 mS/cm

Comments: Ensure a good scouting program for Thrips is in place.

Laurentia **STARSHINE™** *F1 Laurentia axillaris*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Raw	7–10 weeks	1	No	10–14 days	65–68 °F (18–20 °C)	Not required for germination	pH: 5.5–5.9 SME 0.9–1.3 mS/cm

Comments: Cool days with high light will reduce the need to apply PGRs.

Lavatera **NOVELLA™** *F1 Lavatera trimestris*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
200–cell tray	Raw	4–5 weeks	1	Yes	5–7 days	68–72 °F (20–22 °C)	Not required for germination	pH: 5.5–5.9 SME 0.5–0.75 mS/cm

Comments: The early PGR sprench during stage 1 of plug growth is critical so that plants are not floppy at retail. Transplant plugs on time; do not let them get root bound.

Marigold African **ANTIGUA™** *F1 Tagetes erecta*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Detailed, SatinCoat™	4–5 weeks	1	Yes	3–5 days	72–75 °F (22–24 °C)	Not required for germination	pH: 6.1–6.5 SME 0.5–0.75 mS/cm

Comments: Easy to germinate on the bench. Maintain media pH above 6.2 to avoid iron/manganese toxicity. Short days will shorten time to flower.

Marigold African **BIG TOP™** *F1 Tagetes erecta*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Coated, Detailed	4–5 weeks	1	Yes	3–5 days	72–75 °F (22–24 °C)	Not required for germination	pH: 6.1–6.5 SME 0.5–0.75 mS/cm

Comments: Easy to germinate on the bench. Maintain media pH above 6.2 to avoid iron/manganese toxicity. Short days reduces time to flower.

BACK TO CONTENTS

Marigold African **INCA II™** *F1 Tagetes erecta*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Detailed, SatinCoat™	4–5 weeks	1	Yes	3–5 days	72–75 °F (22–24 °C)	Not required for germination	pH: 6.1–6.5 SME 0.5–0.75 mS/cm

Comments: Easy to germinate on the bench. Maintain media pH above 6.2 to avoid iron/manganese toxicity. Short days will shorten time to flower.

Marigold African **PERFECTION™** *F1 Tagetes erecta*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Detailed, SatinCoat™	4–5 weeks	1	Yes	3–5 days	72–75 °F (22–24 °C)	Not required for germination	pH: 6.1–6.5 SME 0.5–0.75 mS/cm

Comments: Easy to germinate on the bench. Maintain media pH above 6.2 to avoid iron/manganese toxicity. Short days will shorten time to flower.

Marigold French Anemone **ALUMIA™** *OP Tagetes patula nana*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Detailed, SatinCoat™	3–4 weeks	1	Yes	3–5 days	68–72 °F (20–22 °C)	Not required for germination	pH: 5.8–6.2 SME 0.5–0.75 mS/cm

Comments: Very easy to germinate on the bench. If seedlings get stretched, they can be planted deep at transplanting, and new roots will form along the stems. Do not hold too long in the plug tray or stress-induced flowering may occur, and plants will flower before bulking up to a satisfactory size.

Marigold French Dwarf Crested **HAPPY™** *OP Tagetes patula nana*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Detailed, SatinCoat™	3–4 weeks	1	Yes	3–5 days	68–72 °F (20–22 °C)	Not required for germination	pH: 5.8–6.2 SME 0.5–0.75 mS/cm

Comments: Very easy to germinate on the bench. If seedlings get stretched, they can be planted deep at transplanting, and new roots will form along the stems. Do not hold too long in the plug tray or stress-induced flowering may occur, and plants will flower before bulking up to a satisfactory size.

Marigold Triploid **ZENITH™** *F1 Tagetes triploid*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Coated, Detailed	3–4 weeks	1	Yes	3–5 days	68–72 °F (20–22 °C)	Not required for germination	pH: 5.8–6.2 SME 0.5–0.75 mS/cm

Comments: Very easy to germinate on the bench. If seedlings get stretched, they can be planted deep at transplanting, and new roots will form along the stems. Do not hold too long in the plug tray or stress-induced flowering may occur, and plants will flower before bulking up to a satisfactory size.

Mimulus **MAGIC™** *F1 Mimulus × hybrida*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Pelleted	4–5 weeks	1	No	5–7 days	65–68 °F (18–20 °C)	Not required for germination	pH: 5.5–5.9 SME 0.5–0.75 mS/cm

Comments: Provide day extension lighting to 14 hours under short days using mum type lights (10 foot candles). Using HID lights can promote too early of flowering.

Mimulus **MAXIMUS™** *F1 Mimulus × hybrida*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Pelleted	4–5 weeks	1	No	5–7 days	65–68 °F (18–20 °C)	Not required for germination	pH: 5.5–5.9 SME 0.5–0.75 mS/cm

Comments: Provide day extension lighting to 14 hours under short days using mum type lights (10 foot candles). Using HID lights can promote too early of flowering.

Nemesia **PRETTY PLEASE™** *F1 Nemesia foetens*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Pelleted	4 weeks	1	Yes	3–5 days	68–72 °F (20–22 °C)	Not required for germination	pH: 5.5–5.9 SME 0.5–0.75 mS/cm

Comments: High light and cool night temperatures will result in the best quality plug.

Nemesia **SEVENTH HEAVEN™** *F1 Nemesia foetens*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Pelleted	4 weeks	1	Yes	3–5 days	68–72 °F (20–22 °C)	Not required for germination	pH: 5.5–5.9 SME 0.5–0.75 mS/cm

Comments: High light and cool night temperatures will result in the best quality plug.

BACK TO CONTENTS

Nicotiana **PERFUME™** *F1 Nicotiana × sandrea*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Pelleted	4–5 weeks	1	No	3–5 days	70–75 °F (21–24 °C)	Required for germination	pH: 5.5–5.9 SME 0.9–1.3 mS/cm

Comments: Cool days with high light will reduce the need to apply PGRs.

Nicotiana **SARATOGA™** *F1 Nicotiana × alata*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Pelleted	4–5 weeks	1	No	3–5 days	70–75 °F (21–24 °C)	Required for germination	pH: 5.5–5.9 SME 0.9–1.3 mS/cm

Comments: Cool days with high light will reduce the need to apply PGRs.

Osteospermum **ASTI™** *F1 Osteospermum ecklonis*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Raw	4–5 weeks	1	Yes	8–12 days	68–70 °F (21–22 °C)	Not required for germination	pH: 5.5–5.9 SME 0.5–0.75 mS/cm

Comments: It is very important to spray the plugs with Cycocel® at 300 ppm about 10 days after sowing to help reduce hypocotyl stretch. Shorter hypocotyls will result in a stronger central stem after transplant and will reduce floppiness in the finished plant.

Pansy **COLOSSUS™** *F1 Viola × wittrockiana*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Raw, PreNova® 2.0	5–6 weeks	1	Yes	5 days	65–68 °F (18–20 °C)	Required for germination	pH: 5.5–5.9 SME 0.9–1.3 mS/cm

Comments: Keep media pH below 5.8 to help avoid Thielaviopsis infections. Under hot temperatures provide lower light levels to reduce heat stress. Do not hold Pansy plugs - transplant before plugs get root bound.

Pansy **DELTA™** *F1 Viola × wittrockiana*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Raw, PreNova® 2.0	5–6 weeks	1	Yes	5 days	65–68 °F (18–20 °C)	Required for germination	pH: 5.5–5.9 SME 0.9–1.3 mS/cm

Comments: Keep media pH below 5.8 to help avoid Thielaviopsis infections. Under hot temperatures provide lower light levels to reduce heat stress. Do not hold pansy plugs - transplant before plugs get root bound.

Pansy **DELTA™ PREMIUM** *F1 Viola × wittrockiana*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Raw, PreNova® 2.0	5–6 weeks	1	Yes	5 days	65–68 °F (18–20 °C)	Required for germination	pH: 5.5–5.9 SME 0.9–1.3 mS/cm

Comments: Keep media pH below 5.8 to help avoid Thielaviopsis infections. Under hot temperatures provide lower light levels to reduce heat stress. Do not hold Pansy plugs - transplant before plugs get root bound.

Pansy **DELTA™ SPEEDY** *F1 Viola × wittrockiana*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Raw, PreNova® 2.0	5–6 weeks	1	Yes	5 days	65–68 °F (18–20 °C)	Required for germination	pH: 5.5–5.9 SME 0.9–1.3 mS/cm

Comments: Keep media pH below 5.8 to help avoid Thielaviopsis infections. Under hot temperatures provide lower light levels to reduce heat stress. Do not hold Pansy plugs - transplant before plugs get root bound.

Pansy Spreading **FREEFALL™** *F1 Viola × wittrockiana*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Primed	4–5 weeks	1	Yes	5 days	65–68 °F (18–20 °C)	Required for germination	pH: 5.5–5.9 SME 0.9–1.3 mS/cm

Comments: Keep media pH below 5.8 to help avoid Thielaviopsis infections. Under hot temperatures provide lower light levels to reduce heat stress. Also if very frequent irrigation occurs due to high temperatures apply a supplemental feed of Solubor® to avoid Boron deficiency.

Pansy Spreading **FREEFALL™ XL** *F1 Viola × wittrockiana*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Primed	4–5 weeks	1	Yes	5 days	65–68 °F (18–20 °C)	Required for germination	pH: 5.5–5.9 SME 0.9–1.3 mS/cm

Comments: Keep media pH below 5.8 to help avoid Thielaviopsis infections. Under hot temperatures, provide lower light levels to reduce heat stress. If frequent irrigation occurs due to high temperatures, apply a supplemental feed of Solubor® to avoid Boron deficiency.

BACK TO CONTENTS

Pansy Spreading **WONDERFALL™** *F1 Viola × wittrockiana*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Raw, PreNova® 2.0	5–6 weeks	1	Yes	5 days	65–68 °F (18–20 °C)	Required for germination	pH: 5.5–5.9 SME 0.9–1.3 mS/cm

Comments: Keep media pH below 5.8 to help avoid Thielaviopsis infections. Under hot temperatures provide lower light levels to reduce heat stress. Do not hold Pansy plugs - transplant before plugs get root bound.

Penstemon **ARABESQUE®** *F1 Penstemon hartwegii*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Raw	5–6 weeks	1	Yes	7 days	68–73 °F (20–23 °C)	Not required for germination	pH: 5.8–6.2 SME 0.5–0.75 mS/cm

Comments: Warm day temperatures can promote soft growth and excessive stem elongation.

Penstemon **PARTYBELLS™** *F1 Penstemon hartwegii*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Raw	5–6 weeks	1	Yes	7 days	68–73 °F (20–23 °C)	Not required for germination	pH: 5.8–6.2 SME 0.5–0.75 mS/cm

Comments: Warm day temperatures can promote soft growth and excessive stem elongation.

Pentas **BEEBRIGHT™** *F1 Pentas lanceolata*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Pelleted	7–8 weeks	1	No	7–10 days	73–76 °F 23–24 °C)	Not required for germination	pH: 6.1–6.5 SME 0.9–1.3 mS/cm

Comments: Provide supplemental lighting when DLI is less than 12 mols/day. Monitor pH and maintain above 6.1, or growth can stall.

Pentas **HONEYCLUSTER™** *F1 Pentas lanceolata*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Pelleted	7–8 weeks	1	No	7–10 days	73–76 °F (23–24 °C)	Not required for germination	pH: 6.1–6.5 SME 0.9–1.3 mS/cm

Comments: Provide supplemental lighting when DLI is less than 12 mols/day. Monitor pH levels and maintain above 6.1, or growth can stall.

Petunia Grandiflora **DUVET™** *F1 Petunia grandiflora*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Pelleted	4–5 weeks	1	No	3–5 days	72–76 °F (22–24 °C)	Required for germination	pH: 5.5–5.9 SME 0.9–1.3 mS/cm

Comments: Covering seed is not necessary but a light vermiculite coating will help maintain moisture levels in drier climates. Keep pelleted seed at moisture level 5 the first several days to help dissolve the pellet. Providing long days in the plug stage will reduce overall time to flower. Low boron levels can induce tip abortion. Spraying an uneven plug tray with B-Nine® WSG at 1,500 ppm may help even the growth in the tray.

Petunia Grandiflora **FROST™** *F1 Petunia grandiflora*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Raw, Pelleted	4–5 weeks	1	No	3–5 days	72–76 °F (22–24 °C)	Required for germination	pH: 5.5–5.9 SME 0.9–1.3 mS/cm

Comments: Covering seed is not necessary but a light vermiculite coating will help maintain moisture levels in drier climates. Keep pelleted seed at moisture level 5 the first several days to help dissolve the pellet. Providing long days in the plug stage will reduce overall time to flower. Low boron levels can induce tip abortion. Spraying an uneven plug tray with B-Nine® WSG at 1,500 ppm may help even the growth in the tray.

Petunia Grandiflora **TRITUNIA™** *F1 Petunia grandiflora*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Raw, Pelleted	4–5 weeks	1	No	3–5 days	72–76 °F (22–24 °C)	Required for germination	pH: 5.5–5.9 SME 0.9–1.3 mS/cm

Comments: Covering seed is not necessary but a light vermiculite coating will help maintain moisture levels in drier climates. Keep pelleted seed at moisture level 5 the first several days to help dissolve the pellet. Providing long days in the plug stage will reduce overall time to flower. Low boron levels can induce tip abortion. Spraying an uneven plug tray with B-Nine® WSG at 1,500 ppm may help even the growth in the tray.

Petunia Milliflora **PICOBELLA™** *F1 Petunia milliflora*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Pelleted	4–5 weeks	1	No	3–5 days	72–76 °F (22–24 °C)	Required for germination	pH: 5.5–5.9 SME 0.9–1.3 mS/cm

Comments: Covering seed is not necessary but a light vermiculite coating will help maintain moisture levels in drier climates. Keep pelleted seed at moisture level 5 the first several days to help dissolve the pellet. Providing long days in the plug stage will reduce overall time to flower. Low boron levels can induce tip abortion.

BACK TO CONTENTS

Petunia Multiflora **DAMASK™** *F1 Petunia multiflora*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Pelleted	4–5 weeks	1	No	3–5 days	72–76 °F (22–24 °C)	Required for germination	pH: 5.5–5.9 SME 0.9–1.3 mS/cm

Comments: Covering seed is not necessary but a light vermiculite coating will help maintain moisture levels in drier climates. Keep pelleted seed at moisture level 5 the first several days to help dissolve the pellet. Providing long days in the plug stage will reduce overall time to flower. Low boron levels can induce tip abortion. Spraying an uneven plug tray with B-Nine® WSG at 1,500 ppm may help even the growth in the tray.

Petunia Multiflora **HORIZON™** *F1 Petunia multiflora*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Pelleted	4–5 weeks	1	No	3–5 days	72–76 °F (22–24 °C)	Required for germination	pH: 5.5–5.9 SME 0.9–1.3 mS/cm

Comments: Covering seed is not necessary, but a light vermiculite coating will help maintain moisture levels in drier climates. Keep pelleted seed at moisture level 5 the first several days to help dissolve the pellet. Providing long days in the plug stage will reduce overall time to flower. Low boron levels can induce tip abortion. Spraying an uneven plug tray with B-Nine® WSG at 1,500 ppm may help even the growth in the tray.

Petunia Multiflora **HURRAH™** *F1 Petunia multiflora*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Pelleted	4–5 weeks	1	No	3–5 days	72–76 °F (22–24 °C)	Required for germination	pH: 5.5–5.9 SME 0.9–1.3 mS/cm

Comments: Covering seed is not necessary but a light vermiculite coating will help maintain moisture levels in drier climates. Keep pelleted seed at moisture level 5 the first several days to help dissolve the pellet. Providing long days in the plug stage will reduce overall time to flower. Low boron levels can induce tip abortion. Spraying an uneven plug tray with B-Nine® WSG at 1,500 ppm may help even the growth in the tray.

Petunia Spreading **FOTOFINISH™** *F1 Petunia pendula*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Pelleted	4–5 weeks	1	No	3–5 days	72–76 °F (22–24 °C)	Required for germination	pH: 5.5–5.9 SME 0.9–1.3 mS/cm

Comments: Covering seed is not necessary, but a light vermiculite coating will help maintain moisture levels in drier climates. Keep pelleted seed at moisture level 5 the first several days to help dissolve the pellet. Providing long days in the plug stage will reduce overall time to flower. Low boron levels can induce tip abortion. Spraying an uneven plug tray with B-Nine® WSG at 1,500 ppm may help even the growth in the tray.

Petunia Spreading Grandiflora **SKYBOX™** *Petunia pendula*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Pelleted	4–5 weeks	1	No	3–5 days	72–76 °F (22–24 °C)	Required for germination	pH: 5.5–5.9 SME 0.9–1.3 mS/cm

Comments: Covering seed is Not necessary but a light vermiculite coating will help maintain moisture levels in drier climates. Keep pelleted seed at moisture level 5 the first several days to help dissolve the pellet. Providing long days in the plug stage will reduce overall time to flower. Low boron levels can induce tip abortion.

Petunia Spreading Milliflora **FLASHFORWARD™** *F1 Petunia pendula milliflora*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Pelleted	4–5 weeks	1	No	3–5 days	72–76 °F (22–24 °C)	Required for germination	pH: 5.5–5.9 SME 0.9–1.3 mS/cm

Comments: Covering seed is not necessary but a light vermiculite coating will help maintain moisture levels in drier climates. Keep pelleted seed at moisture level 5 the first several days to help dissolve the pellet. Providing long days in the plug stage will reduce overall time to flower. Low boron levels can induce tip abortion. Spraying an uneven plug tray with B-Nine® WSG at 1,500 ppm may help even the growth in the tray.

Phlox **POPSTARS™** *F1 Phlox drummondii*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Raw	4–5 weeks	1	Yes	3–5 days	68–72 °F 20–22 °C)	Not required for germination	pH: 5.5–5.9 SME 0.5–0.75 mS/cm

Comments: Keep EC lees than 0.75 mS/cm as Phlox drummondii are sensitive to high salts. For this reason, do not try and control growth by growing the plugs dry as well.

Primula **LIBRE™** *F1 Primula obconica*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Raw	6–7 weeks	1	Yes	7 days	72–75 °F (22–24 °C)	Not required for germination	pH: 5.5–5.9 SME 0.5–0.75 mS/cm

Comments: Control Thrips to avoid Tospovirus.

Primula **PRIMERA™** *F1 Primula acaulis*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Raw, Primed	6–7 weeks	1	Yes	7 days	64–68 °F (18–20 °C)	Not required for germination	pH: 5.5–5.9 SME 0.5–0.75 mS/cm

Comments: Grow plugs on the dry side to avoid excessive algae growth.

BACK TO CONTENTS

Ranunculus **MACHÉ™** *F1 Ranunculus asiaticus*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Raw, Pelleted	8–10 weeks	1	Yes	14–21 days	50–55 °F (10–13 °C)	Not required for germination	pH: 5.5–5.9 SME 0.5–0.75 mS/cm

Comments: Control Thrips to avoid Tospovirus.

Ranunculus **MAGIC™** *F1 Ranunculus asiaticus*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Raw, Pelleted	8–10 weeks	1	Yes	14–21 days	50–55 °F (10–13 °C)	Not required for germination	pH: 5.5–5.9 SME 0.5–0.75 mS/cm

Comments: Control Thrips to avoid Tospovirus.

Salvia **MOJAVE™** *OP Salvia splendens*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Raw	4–5 weeks	1	Yes	5–7 days	72–75 °F (22–24 °C)	Not required for germination	pH: 5.5–5.9 SME 0.5–0.75 mS/cm

Comments: Salvia is sensitive to high salts in the plug tray, so do not let the EC rise above 1.5 mS/cm. After fertilization, rinse the plants off with clear water to avoid burning the young growing tips.

Salvia **RHEA™** *OP Salvia farinacea*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Raw	6–7 weeks	1	Yes	5–7 days	72–75 °F (22–24 °C)	Not required for germination	pH: 5.5–5.9 SME 0.5–0.75 mS/cm

Comments: Salvia is sensitive to high salts in the plug tray, so do not let the EC rise above 1.5 mS/cm. After fertilization, rinse the plugs off with clear water to avoid burning the young growing tips.

Salvia **SENTRY™** *OP Salvia splendens*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Raw	4–5 weeks	1	Yes	5–7 days	72–75 °F (22–24 °C)	Not required for germination	pH: 5.5–5.9 SME 0.5–0.75 mS/cm

Comments: Salvia is sensitive to high salts in the plug tray, so do not let the EC rise above 1.5 mS/cm. After fertilization, rinse the plants off with clear water to avoid burning the young growing tips.

Salvia **SIZZLER™** *OP Salvia splendens*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Raw	4–5 weeks	1	Yes	5–7 days	72–75 °F (22–24 °C)	Not required for germination	pH: 5.5–5.9 SME 0.5–0.75 mS/cm

Comments: Salvia is sensitive to high salts in the plug tray so do not let the EC rise above 1.5 mS/cm. After fertilization, rinse the plants off with clear water to avoid burning the young growing tips.

Salvia **STRATA™** *OP Salvia farinacea*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Raw	6–7 weeks	1	Yes	5–7 days	72–75 °F (22–24 °C)	Not required for germination	pH: 5.5–5.9 SME 0.5–0.75 mS/cm

Comments: Salvia is sensitive to high salts in the plug tray, so do not let the EC rise above 1.5 mS/cm. After fertilization, rinse the plus off with clear water to avoid burning the young growing tips.

Salvia **VICTORIA™** *OP Salvia farinacea*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Raw	6–7 weeks	1	Yes	5–7 days	72–75 °F (22–24 °C)	Not required for germination	pH: 5.5–5.9 SME 0.5–0.75 mS/cm

Comments: Salvia is sensitive to high salts in the plug tray, so do not let the EC rise above 1.5 mS/cm. After fertilization, rinse the plus off with clear water to avoid burning the young growing tips.

Sanvitalia **QUEEN OF SUNLIGHT™** *F1 Sanvitalia speciosa*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Raw	5–6 weeks	3	Yes	7–10 days	70–72 °F (21–22 °C)	Not required for germindation	pH: 5.5–5.9 SME 0.25–0.5 mS/cm

Comments: Providing supplemental HID light will speed germination and improve plug quality. Sensitive to high salts; keep EC less than 0.5 mS/cm in the plug.

BACK TO CONTENTS

Schizanthus **ATLANTIS™** *F1 Schizanthus × wisetonensis*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Raw	4–7 weeks	1	Yes	7–14 days	62–65 °F (17–19 °C)	Not required for germination	pH: 5.8–6.2 SME 0.25–0.5 mS/cm

Comments: Keep plugs under short days to avoid premature flowering.

Snapdragon **LIBERTY™ CLASSIC** *F1 Antirrhinum majus*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Raw	6–7 weeks	1	Yes	5 days	72–75 °F (22–24 °C)	Not required for germination	pH: 5.5–5.9 SME 0.5–0.75 mS/cm

Comments: High pH levels (above 6.2) may promote iron deficiency causing chlorotic young leaves. Overly wet conditions or watering late in the day can cause shoot tip abortion. Keeping the media too wet can also lead to root rot diseases such as Pythium.

Snapdragon **MADAME BUTTERFLY™** *F1 Antirrhinum majus*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Raw	6–7 weeks	1	Yes	5 days	72–75 °F (22–24 °C)	Not required for germination	pH: 5.5–5.9 SME 0.5–0.75 mS/cm

Comments: High pH levels (above 6.2) may promote iron deficiency causing chlorotic young leaves. Overly wet conditions or watering late in the day can cause shoot tip abortion. Keeping the media too wet can also lead to root rot diseases such as Pythium.

Snapdragon **SNAPTASTIC™** *F1 Antirrhinum majus*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Raw, Pelleted	6–7 weeks	1	Yes	5 days	72–75 °F (22–24 °C)	Not required for germination	pH: 5.5–5.9 SME 0.5–0.75 mS/cm

Comments: High pH levels (above 6.2) may promote iron deficiency causing chlorotic young leaves. Overly wet conditions or watering late in the day can cause shoot tip abortion. Keeping the media too wet can also lead to root rot diseases such as Pythium.

Snapdragon Dwarf **SNAPTINI™** *F1 Antirrhinum majus*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Raw, Pelleted	5–6 weeks	1	Yes	5 days	72–75 °F (22–24 °C)	Not required for germination	pH: 5.5–5.9 SME 0.5–0.75 mS/cm

Comments: High pH levels (above 6.2) may promote iron deficiency causing chlorotic young leaves. Overly wet conditions or watering late in the day can cause shoot tip abortion. Keeping the media too wet can also lead to root rot diseases such as Pythium.

Sunflower **SUNFINITY®** *F1 Helianthus hybrida*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
72–cell	Raw	4 weeks	1	Yes	5–6 days	68–72 °F (20–22 °C)	Not required for germination	pH: 5.5–5.8 SME 1.0–1.5 mS/cm

Comments: Apply a Bonzi® (paclobutrazol) sprench at 2–3 ppm within 48 hours of sowing (3–5 quarts per 100 sq ft.) to control hypocotyl stretch. Plugs must be propagated under long day (+13 hour) photoperiods in order to prevent delays in flowering.

Torenia **DUCHESS™** *F1 Torenia fournieri*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Pelleted	4–5 weeks	1	No	4–6 days	75 °F (24 °C)	Required for germination	pH: 5.5–5.9 SME 0.5–0.75 mS/cm

Comments: High light levels can cause leaf scorch. Very wet conditions will promote damping-off diseases.

Verbena **OBSESSION™** *OP Verbena hybrida*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Raw, Primed	6–7 weeks	1	Yes	4–7 days	73–76 °F (23–24 °C)	Not required for germination	pH: 5.5–5.9 SME 0.5–0.75 mS/cm

Comments: Verbena need to be germinated on the dry side at moisture level 3. It is best to water in plug trays to moisture level 3 prior to sow, sow the seeds and then irrigate lightly only when needed to maintain moisture level 3.

BACK TO CONTENTS

Verbena **OBSESSION™ CASCADE** *OP Verbena hybrida*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Raw, Primed	6–7 weeks	1	Yes	4–7 days	73–76 °F (23–24 °C)	Not required for germination	pH: 5.5–5.9 SME 0.5–0.75 mS/cm

Comments: Verbena need to be germinated on the dry side at moisture level 3. It is best to water in plug trays to moisture level 3 prior to sow, sow the seeds and then irrigate lightly only when needed to maintain moisture level 3.

Verbena **TUSCANY®** *OP Verbena hybrida*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Raw, Primed	6–7 weeks	1	Yes	4–7 days	73–76 °F (23–24 °C)	Not required for germination	pH: 5.5–5.9 SME 0.5–0.75 mS/cm

Comments: Verbena need to be germinated on the dry side at moisture level 3. It is best to water in plug trays to moisture level 3 prior to sow, sow the seeds and then irrigate lightly only when needed to maintain moisture level 3.

Vinca **BLOCKBUSTER™** *F1 Catharanthus roseus*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Raw	5 weeks	1	Yes	7–8 days	76–78 °F (24–25 °C)	Not required for germindation	pH: 5.5–5.9 SME 0.9–1.3 mS/cm

Comments: Soil temperatures lower than 75 °F (23 °C) during germination may decrease germination rates. Keeping media pH at 5.8 or lower will help reduce the likelihood of Thielaviopsis infections.

Vinca **CORA® CASCADE** *F1 Catharanthus roseus*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Raw	5 weeks	1	Yes	7–8 days	76–78 °F (24–25 °C)	Not required for germination	pH: 5.5–5.9 SME 0.9–1.3 mS/cm

Comments: Soil temperatures lower than 75 °F (23 °C) during germination may decrease germination rates. Keeping media pH at 5.8 or lower will help reduce the likelihood of Thielaviopsis infections.

Vinca **CORA® CLASSIC** *F1 Catharanthus roseus*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Raw	5 weeks	1	Yes	7–8 days	76–78 °F (24–25 °C)	Not required for germination	pH: 5.5–5.9 SME 0.9–1.3 mS/cm

Comments: Soil temperatures lower than 75 °F (23 °C) during germination may decrease germination rates. Keeping media pH at 5.8 or lower will help reduce the likelihood of Thielaviopsis infections.

Vinca **CORA® XDR** *F1 Catharanthus roseus*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Raw	5 weeks	1	Yes	7–8 days	76–78 °F (24–25 °C)	Not required for germination	pH: 5.5–5.9 SME 0.9–1.3 mS/cm

Comments: Soil temperatures lower than 75 °F (23 °C) during germination may decrease germination rates. Keeping media pH at 5.8 or lower will help reduce the likelihood of Thielaviopsis infections.

Vinca **SUNSTORM®** *OP Catharanthus roseus*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Raw	5 weeks	1	Yes	7–8 days	76–78 °F (24–25 °C)	Not required for germination	pH: 5.5–5.9 SME 0.9–1.3 mS/cm

Comments: Soil temperatures lower than 75 °F (23 °C) during germination may decrease germination rates. Keeping media pH at 5.8 or lower will help reduce the likelihood of Thielaviopsis infections.

Vinca **VITESSE™** *F1 Catharanthus roseus*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Raw	5 weeks	1	Yes	7–8 days	76–78 °F (24–25 °C)	Not required for germination	pH: 5.5–5.9 SME 0.9–1.3 mS/cm

Comments: Soil temperatures lower than 75 °F (23 °C) during germination may decrease germination rates. Keeping media pH at 5.8 or lower will help reduce the likelihood of Thielaviopsis infections.

Viola **DELTINI™** *F1 Viola cornuta*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Raw, PreNova® 2.0	4–5 weeks	1	Yes	5 days	65–68 °F (18–20 °C)	Required for germination	pH: 5.5–5.9 SME 0.9–1.3 mS/cm

Comments: Keep media pH below 5.8 to help avoid Thielaviopsis infections. Under hot temperatures provide lower light levels to reduce heat stress. Also, if very frequent irrigation occurs due to high temperatures, apply a supplemental feed of Solubor® to avoid Boron deficiency.

BACK TO CONTENTS

Viola **ENDURIO®** *F1 Viola cornuta*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Raw, PreNova® 2.0	4–5 weeks	1	Yes	5 days	65–68 °F (18–20 °C)	Required for germination	pH: 5.5–5.9 SME 0.9–1.3 mS/cm

Comments: Keep media pH below 5.8 to help avoid Thielaviopsis infections. Under hot temperatures provide lower light levels to reduce heat stress. Also, if very frequent irrigation occurs due to high temperatures, apply a supplemental feed of Solubor® to avoid Boron deficiency.

Viola **PENNY™** *F1 Viola cornuta*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Raw, PreNova® 2.0	4–5 weeks	1	Yes	5 days	65–68 °F (18–20 °C)	Required for germination	pH: 5.5–5.9 SME 0.9–1.3 mS/cm

Comments: Keep media pH below 5.8 to help avoid Thielaviopsis infections. Under hot temperatures, provide lower light levels to reduce heat stress. Also, if very frequent irrigation occurs due to high temperatures, apply a supplemental feed of Solubor® to avoid Boron deficiency.

Viola **TIGER EYE™** *F1 Viola cornuta*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Primed	4–5 weeks	1	Yes	5 days	65–68 °F (18–20 °C)	Required for germination	pH: 5.5–5.9 SME 0.9–1.3 mS/cm

Comments: Keep media pH below 5.8 to help avoid Thielaviopsis infections. Under hot temperatures, provide lower light levels to reduce heat stress. Also, if frequent irrigation occurs due to high temperatures, apply a supplemental feed of Solubor® to avoid Boron deficiency.

Wallflower **SUGAR RUSH™** *F1 Cheiranthus cheiri*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Raw	4–5 weeks	1	Yes	9–10 days	68–72 °F 20–22 °C)	Not required for germination	pH: 5.5–5.9 SME 0.5–0.75 mS/cm

Comments: It is important to treat with Bonzi® early in the plug cycle, as stated above to help create a stronger main stem.

Zinnia **MAGELLAN™** *F1 Zinnia elegans*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Detailed, SatinCoat™	2–3 weeks	1	Yes	1 day	70–75 °F (21–24 °C)	Not required for germination	pH: 5.5–5.9 SME 0.5–0.75 mS/cm

Comments: Transplant Zinnias on time. Stress in the plug can lead to premature flowering.

Zinnia **SHORT STUFF™** *F1 Zinnia elegans*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	SatinCoat™	2–3 weeks	1	Yes	1 day	70–75 °F (21–24 °C)	Not required for germination	pH: 5.5–5.9 SME 0.5–0.75 mS/cm

Comments: Transplant Zinnias on time. Stress in the plug can lead to premature flowering.

Zinnia **SWIZZLE™** *F1 Zinnia elegans*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Detailed, SatinCoat™	2–3 weeks	1	Yes	1 day	70–75 °F (21–24 °C)	Not required for germination	pH: 5.5–5.9 SME 0.5–0.75 mS/cm

Comments: Transplant Zinnias on time. Stress in the plug can lead to premature flowering.

Zinnia **UPROAR™** *F1 Zinnia elegans*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Detailed, SatinCoat™	2–3 weeks	1	Yes	1 day	70–75 °F (21–24 °C)	Not required for germination	pH: 5.5–5.9 SME 0.5–0.75 mS/cm

Comments: Transplant Zinnias on time. Stress in the plug can lead to premature flowering.

Zinnia **ZOWIE!™** *F1 Zinnia elegans*

REC TRAY	FORMS	PLUG TIME	SEEDS/CELL	SEED COVER	GERM TIME	SOIL TEMP	GERM LIGHT	MEDIA pH/EC
288–cell tray	Detailed, SatinCoat™	2–3 weeks	1	Yes	1 day	70–75 °F (21–24 °C)	Not required for germination	pH: 5.5–5.9 SME 0.5–0.75 mS/cm

Comments: Transplant Zinnias on time. Stress in the plug can lead to premature flowering.

BACK TO CONTENTS

Begonia **BADA BING®/BADA BOOM®** *F1 Begonia semperflorens*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Day Neutral	66–68 °F (19–20 °C)	64–66 °F (18–19 °C)	125–175 ppm N	Packs I 1 ppp I 4–5 weeks 1 pt. I 1 ppp I 5–6 weeks 1 qt. I 1–2 ppp I 5–6 weeks 1.25 qt. I 3 ppp I 5–7 weeks 1.5 gal. HB I 5–6 ppp I 7–8 weeks	Aphids, Thrips	Botrytis

FINISH PGRs	TECH TIPS
Usually not required. Plant growth can be controlled best through proper moisture, feed and temperature management. If needed due to environmental conditions sprays of Cycocel® at 500–1,000 ppm or B-Nine® WSG/Cycocel® tank mixes at 1,500 ppm B-Nine® WSG/300 ppm Cycocel® are effective. Avoid spraying with B-Nine® WSG during the last few weeks of crop time to avoid reducing flower size.	Avoid overwatering to help prevent excess algae growth and to promote root growth into the media. If germinating on the bench it is helpful to cover trays with ReeMay® or similar to help retain humidity and reduce irrigation frequency. When irrigating use low pressure/volume nozzles/breakers to avoid moving seeds around in the cell. If the daily light integral (DLI) is less than 12 mols/day adding supplemental HID light will promote a more uniform crop. Do not use plug trays that have been used previously and had a crop treated with paclobutrazol grown in them. Most Begonia semperflorens will stop growing if exposed to any level of paclobutrazol. Do not irrigate with recycled water for this reason.

Begonia **BOSSA NOVA™** *F1 Begonia boliviensis*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 0.9–1.3 mS/cm, PourThru EC: 1.4–2.0 mS/cm	2,000–4,000 foot candles	Obligate long day	66–68 °F (19–20 °C)	58–60 °F (14–16 °C)	200–250 ppm N	1 pt. I 1 ppp I 7–8 weeks 1 qt. I 1 ppp I 8–9 weeks 1.25 qt. I 1–2 ppp I 8–10 weeks 2.5 qt. I 1–2 ppp I 8–10 weeks 3 qt. I 3–5 ppp I 8–10 weeks 1.5 gal. HB I 3–5 ppp I 8–10 weeks	Fungus Gnats and Shoreflies (during propagation) and Thrips	Pythium and Botrytis

FINISH PGRs	TECH TIPS
Proper management of moisture, fertilizer, and light is the best way to control growth. If needed, Bossa Nova Begonia responds well to sprays of B-Nine® WSG at 1,500–2,500 ppm.	Irrigate early in the day to avoid leaf scorch when high light levels are present. Allowing the soil surface to dry between irrigations will reduce algae growth.

Begonia **EUREKA™** *F1 Begonia semperflorens*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Day Neutral	66–68 °F (19–20 °C)	64–66 °F (18–19 °C)	125–175 ppm N	Packs I 1 ppp I 5–6 weeks Large Packs I 1 ppp I 5–6 weeks 1 pt. I 1 ppp I 6–7 weeks 1 qt. I 1–2 ppp I 6–7 weeks 1.25 qt. I 3 ppp I 6–8 weeks 2.5 qt. I 3 ppp I 6–8 weeks 1.5 gal. HB I 5–6 ppp I 8–9 weeks	Aphids, Thrips	Botrytis

FINISH PGRs	TECH TIPS
Usually not required. Plant growth can be controlled best through proper moisture, feed and temperature management. If needed due to environmental conditions sprays of Cycocel® at 500–1,000 ppm or B-Nine® WSG/Cycocel® tank mixes at 1,500 ppm B-Nine® WSG/300 ppm Cycocel® are effective. Avoid spraying with B-Nine® WSG during the last few weeks of crop time to avoid reducing flower size.	Avoid overwatering to help prevent excess algae growth and to promote root growth into the media. If germinating on the bench it is helpful to cover trays with ReeMay® or similar to help retain humidity and reduce irrigation frequency. When irrigating use low pressure/volume nozzles/breakers to avoid moving seeds around in the cell. If the daily light integral (DLI) is less than 12 mols/day adding supplemental HID light will promote a more uniform crop. Do not use plug trays that have been used previously and had a crop treated with paclobutrazol grown in them. Most Begonia semperflorens will stop growing if exposed to any level of paclobutrazol. Do not irrigate with recycled water for this reason.

Begonia **TOPSPIN™** *F1 Begonia semperflorens*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Day Neutral	66–68 °F (19–20 °C)	64–66 °F (18–19 °C)	125–175 ppm N	Packs I 1 ppp I 4–5 weeks 1 pt. I 1 ppp I 5–6 weeks 1 qt. I 1–2 ppp I 5–6 weeks 1.25 qt. I 3 ppp I 5–7 weeks 2.5 qt. I 3 ppp I 5–7 weeks 1.5 gal. HB I 5–6 ppp I 7–8 weeks	Aphids, Thrips	Botrytis

FINISH PGRs	TECH TIPS
Usually not required. Plant growth can be controlled best through proper moisture, feed and temperature management. If needed due to environmental conditions sprays of Cycocel® at 500–1,000 ppm or B-Nine® WSG/Cycocel® tank mixes at 1,500 ppm B-Nine® WSG/300 ppm Cycocel® are effective. Avoid spraying with B-Nine® WSG during the last few weeks of crop time to avoid reducing flower size.	Avoid overwatering to help prevent excess algae growth and to promote root growth into the media. If germinating on the bench it is helpful to cover trays with ReeMay® or similar to help retain humidity and reduce irrigation frequency. When irrigating use low pressure/volume nozzles/breakers to avoid moving seeds around in the cell. If the daily light integral (DLI) is less than 12 mols/day adding supplemental HID light will promote a more uniform crop. Do not use plug trays that have been used previously and had a crop treated with paclobutrazol grown in them. Most Begonia semperflorens will stop growing if exposed to any level of paclobutrazol. Do not irrigate with recycled water for this reason.

BACK TO CONTENTS

Begonia **VOLUMIA™** *F1 Begonia semperflorens*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Day Neutral	66–68 °F (19–20 °C)	64–66 °F (18–19 °C)	125–175 ppm N	Packs I 1 ppp I 4–5 weeks Large Packs I 1 ppp I 4–5 weeks 1 pt. I 1 ppp I 5–6 weeks 1 qt. I 1 ppp I 5–6 weeks 1.25 qt. I 2–3 ppp I 5–7 weeks 2.5 qt. I 2–3 ppp I 5–7 weeks 1.5 gal. HB I 5–6 ppp I 7–8 weeks	Aphids, Thrips	Botrytis

FINISH PGRs	TECH TIPS
Usually not required. Plant growth can be controlled best through proper moisture, feed and temperature management. If needed due to environmental conditions sprays of Cycocel® at 500–1,000 ppm or B-Nine® WSG/Cycocel® tank mixes at 1,500 ppm B-Nine® WSG/300 ppm Cycocel® are effective. Avoid spraying with B-Nine® WSG during the last few weeks of crop time to avoid reducing flower size.	Avoid overwatering to help prevent excess algae growth and to promote root growth into the media. If germinating on the bench it is helpful to cover trays with ReeMay® or similar to help retain humidity and reduce irrigation frequency. When irrigating use low pressure/volume nozzles/breakers to avoid moving seeds around in the cell. If the daily light integral (DLI) is less than 12 mols/day adding supplemental HID light will promote a more uniform crop. Do not use plug trays that have been used previously and had a crop treated with paclobutrazol grown in them. Most Begonia semperflorens will stop growing if exposed to any level of paclobutrazol. Do not irrigate with recycled water for this reason.

Begonia Interspecific **BRAVEHEART®** *F1 Begonia × hybrida*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Day Neutral	66–68 °F (19–20 °C)	64–66 °F (18–19 °C)	125–175 ppm N	1 pt. I 1 ppp I 5–6 weeks 1 qt. I 1 ppp I 5–7 weeks 1.25 qt. I 2–3 ppp I 5–7 weeks 2.5 qt. I 2–3 ppp I 5–7 weeks 1.5 gal. HB I 3–4 ppp I 7–8 weeks 1.5 gal. pot I 3–4 ppp I 7–8 weeks 2 gal. HB I 4–5 ppp I 8–10 weeks	Aphids, Thrips	Botrytis

FINISH PGRs	TECH TIPS
Plant growth can be controlled best through proper moisture, feed and temperature management. If needed due to environmental conditions sprays of Cycocel® at 500–1,000 ppm or B-Nine® WSG/Cycocel® tank mixes at 1,500 ppm B-Nine® WSG/300 ppm Cycocel® are effective. Avoid spraying with B-Nine® WSG during the last few weeks of crop time to avoid reducing flower size.	Avoid overwatering to help prevent excess algae growth and to promote root growth into the media. If germinating on the bench it is helpful to cover trays with ReeMay® or similar to help retain humidity and reduce irrigation frequency. When irrigating use low pressure/volume nozzles/breakers to avoid moving seeds around in the cell. If the daily light integral (DLI) is less than 12 mols/day adding supplemental HID light will promote a more uniform crop. Do not use plug trays that have been used previously and had a crop treated with paclobutrazol grown in them. Most Begonia × hybrida will stop growing if exposed to any level of paclobutrazol. Do not irrigate with recycled water for this reason.

Begonia Interspecific **IKON™** *F1 Begonia × hybrida*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 0.9–1.3 mS/cm, PourThru EC: 1.4–2.0 mS/cm	2,000–4,000 foot candles	Obligate long day	66–68 °F (19–20 °C)	58–60 °F (14–16 °C)	125–175 ppm N	1 pt. I 1 ppp I 7–8 weeks 1 qt. I 1 ppp I 8–9 weeks 1.25 qt. I 1–2 ppp I 8–10 weeks 2.5 qt. I 1–2 ppp I 8–10 weeks 3 qt. I 3–5 ppp I 8–10 weeks 1.5 gal. HB I 3–5 ppp I 8–10 weeks 1.5 gal. pot I 3–5 ppp I 8–10 weeks 2 gal. HB I 5–7 ppp I 8–10 weeks	Fungus Gnats and Shoreflies (during propagation), and Thrips	Pythium and Botrytis

FINISH PGRs	TECH TIPS
Proper management of moisture, fertilizer, and light is the best way to control growth. If needed, Bossa Nova responds well to sprays of B-Nine® WSG at 1,500–2,500 ppm.	Irrigate early in the day to avoid leaf scorch when high light levels are present. Also allowing the soil surface to dry between irrigations will reduce algae growth.

Begonia Interspecific **TOPHAT™** *F1 Begonia × hybrida*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Day Neutral	66–68 °F (19–20 °C)	64–66 °F (18–19 °C)	125–175 ppm N	Large Packs I 1 ppp I 4–5 weeks 1 pt. I 1 ppp I 4–5 weeks 1 qt. I 1 ppp I 4–5 weeks 1.25 qt. I 1 ppp I 5–6 weeks 2.5 qt. I 1 ppp I 5–6 weeks 3 qt. I 2–3 ppp I 6–7 weeks 1.5 gal. HB I 3 ppp I 7–8 weeks 1.5 gal. pot I 3 ppp I 7–8 weeks 2 gal. HB I 3 ppp I 7–8 weeks	Aphids, Thrips	Botrytis

FINISH PGRs	TECH TIPS
For small containers, such as 306 packs, a Bonzi® drench at 0.25 ppm about half way through the finishing cycle will provide excellent control of leaf and plant size, but will reduce flower size about 10% temporarily. Bonzi® sprays are not recommended since flower size reduction is significant. For gallons to 10" hanging baskets, sprays of B-Nine® WSG at 2,500 ppm or B-Nine® WSG/Cycocel® tank mixes at 1,500 ppm B-Nine® WSG/300 ppm Cycocel® are effective in reducing leaf size and stem elongation and will not significantly reduce flower size. PGRs are usually not required for containers larger than 10" hanging baskets. Plant growth can be best controlled through proper moisture, feed, and temperature management.	Avoid overwatering to help prevent excess algae growth and to promote root growth into the media. If germinating on the bench, it is helpful to cover trays with ReeMay® or similar to help retain humidity and reduce irrigation frequency. When irrigating, use low pressure/volume nozzles/breakers to avoid moving seeds around in the cell. If the daily light integral (DLI) is less than 12 mols/day, adding supplemental HID light will promote a more uniform crop.

BACK TO CONTENTS

Calendula **COSTA™** *OP Calendula officinalis*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 0.9–1.3 mS/cm, PourThru EC: 1.4–2.0 mS/cm	4,000–6,000 foot candles	Facultative long day	66–68 °F (19–20 °C)	52–54 °F (11–12 °C)	125–175 ppm N	Packs I 1 ppp I 4–5 weeks Large Packs I 1 ppp I 4–5 weeks 1 pt. I 1 ppp I 5–6 weeks 1 qt. I 1 ppp I 5–6 weeks 1.25 qt. I 1 ppp I 6–8 weeks 2.5 qt. I 1 ppp I 6–8 weeks 3 qt. I 2–3 ppp I 7–8 weeks 1.5 gal. pot I 3–4 ppp I 8–10 weeks	Whiteflies and Thrips	Powdery Mildew, Botrytis and Pythium

FINISH PGRs	TECH TIPS
High light, cool temperatures, and proper water management is the best way to control growth. Under warmer conditions, B-Nine® WSG sprays at 2,500–3,500 ppm can be effective to prevent stretch.	Grow on the cool side. Calendulas are not recommended for fall crops where cool conditions cannot be maintained.

Celosia **BRIGHT SPARKS™** *OP Celosia plumosa erecta*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.8–6.2 SME 0.9–1.3 mS/cm, PourThru EC: 1.4–2.0 mS/cm	4,000–6,000 foot candles	Facultative short day	68–70 °F (20–21 °C)	60–62 °F (16–17 °C)	125–175 ppm N	1 pt. I 1 ppp I 5–6 weeks 1 qt. I 1 ppp I 6–8 weeks 1.25 qt. I 1 ppp I 7–9 weeks 2.5 qt. I 1 ppp I 7–9 weeks 3 qt. I 2–3 ppp I 6–7 weeks 1.5 gal. pot I 3–4 ppp I 6–7 weeks	Spider Mites, Thrips and Aphids	Botrytis, Pythium and Powdery Mildew

FINISH PGRs	TECH TIPS
If grown in smaller containers or under suboptimal conditions, sprays of B-Nine® WSG at 2,500 ppm are effective at reducing stem length and leaf size. Do not spray after buds have started to show color or flower size will be reduced.	Bright Sparks is a facultative short day variety and will flower faster under short days. If sowing under short days, it is vital to grow the plugs under a day length of at least 14 hours to promote sufficient vegetative growth before flowering.

Cleome **SPARKLER™** *F1 Cleome hassleriana*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 2.3–2.8 mS/cm, Pourthru EC: 3.5–4.2 mS/cm	4,000–6,000 foot candles	Facultative long day	76–78 °F (24–26 °C)	62–64 °F (17–18 °C)	200–250 ppm N	1.25 qt. I 1–2 ppp I 10–12 weeks 2.5 qt. I 1–2 ppp I 10–12 weeks	Fungus Gnats	Pythium, Powdery Mildew

FINISH PGRs	TECH TIPS
PGRs are necessary to control plant height and create a fuller plant. Recommended are three sprays of Bonzi® at 25 ppm or B-Nine® WSG at 5,000 ppm applied 7–10 days apart beginning two weeks after transplant. B-Nine® WSG may delay flowering by 4–7 days. A Bonzi® drench at 2–4 ppm when plant has reached desired height will help in preventing stretch at retail.	Fluctuating day/night temps will help improve germination. Cleome is a heavy feeder; start feeding in the plug about two weeks after sowing.

Corn Ornamental **FIELD OF DREAMS™** *F1 Zea mays*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.8–6.2 SME 0.9–1.3 mS/cm, PourThru EC: 1.4–2.0 mS/cm	6,000–8,000 foot candles	Day neutral	76–78 °F (24–26 °C)	62–64 °F (17–18 °C)	125–175 ppm N	Large Packs I 1 ppp I 5–6 weeks 1 qt. I 2–3 ppp I 6–7 weeks 1.25 qt. I 3 ppp I 6–7 weeks 2.5 qt. I 3 ppp I 6–7 weeks 3 qt. I 3 ppp I 7–8 weeks 1.5 gal. pot I 3 ppp I 8–9 weeks	Aphids	Damping off (if soil is too wet)

FINISH PGRs	TECH TIPS
Florel® and Bonzi® can be applied used if necessary. Growth can also be successfully controlled by proper water management, high light levels, and cooler temperatures.	It is best to direct sow into the final container for best quality and fastest crop times. If direct sowing, use 3 seeds per pot. If sowing into a plug tray, do not use a tray smaller than a 128–cell. Also, do not let plugs become root-bound or growth may stall after transplant.

Cosmos **APOLLO™** *OP Cosmos bipinnatus*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 0.9–1.3 mS/cm, PourThru EC: 1.4–2.0 mS/cm	4,000–6,000 foot candles	Facultative short day	66–68 °F (19–20 °C)	60–62 °F (16–17 °C)	125–175 ppm N	Packs I 1 ppp I 4–5 weeks Large Packs I 1 ppp I 4–5 weeks 1 pt. I 1 ppp I 6–7 weeks 1 qt. I 1 ppp I 6–7 weeks 1.25 qt. I 1 ppp I 7–8 weeks 2.5 qt. I 1 ppp I 7–8 weeks 3 qt. I 3–4 ppp I 6–7 weeks 1.5 gal. pot I 3–4 ppp I 7–8 weeks	Aphids and Thrips.	Powdery Mildew and Botrytis

FINISH PGRs	TECH TIPS
Containers 1 pint and larger, PGRs are usually not necessary. If needed, for pack production spray with B-Nine® WSG at 2,500 to 5,000 ppm to help control plant height.	Cosmos will flower early under short days, so to allow bulking of the plug provide a 14 hour day length during propagating.

BACK TO CONTENTS

Cuphea **SRIRACHA™** *F1 Cuphea llavea*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.8–6.2 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Facultative short day	78–80 °F (26–27 °C)	68–70 °F (20–21 °C)	125–175 ppm N	1 qt. I 1 ppp I 8–9 weeks 1.25 qt. I 1 ppp I 8–9 weeks 2.5 qt. I 2 ppp I 8–9 weeks 3 qt. I 3 ppp I 8–9 weeks	Aphids, Thrips, and Whiteflies.	Fusarium, Pythium, and Thielaviopsis.

FINISH PGRs	TECH TIPS
To control growth, apply one or two applications of Bonzi® either as a spray at 20–40 ppm or as a drench at 0.5–1.0 ppm.	Only the first application of plant growth regulators (PGR) is necessary for the plug. After two weeks, you can alternate moisture between 2 and 4 to help tone the plugs. Provide supplemental lighting if possible if DLI is lees than 8 mols/day.

Dahlia **FRESCO™** *OP Dahlia hybrida*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Facultative short day	70–72 °F (21–22 °C)	62–64 °F (17–18 °C)	125–175 ppm N	1 pt. I 1 ppp I 6–8 weeks 1 qt. I 1 ppp I 6–8 weeks	Aphids, Thrips	Powdery Mildew, Pythium, Botrytis

FINISH PGRs	TECH TIPS
If needed, spray with B-Nine® WSG at 2,500–5,000 ppm.	Provide day extension lighting to 12– 14 hours/day to help prevent premature flower bud set.

Dahlia **HARLEQUIN™** *OP Dahlia hybrida*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Facultative short day	70–72 °F (21–22 °C)	62–64 °F (17–18 °C)	125–175 ppm N	1 pt. I 1 ppp I 6–7 weeks 1 qt. I 1 ppp I 6–7 weeks	Aphids, Thrips.	Powdery Mildew, Pythium, Botrytis.

FINISH PGRs	TECH TIPS
If needed, spray with B-Nine® WSG at 2,500–5,000 ppm.	Provide day extension lighting to 12–14 hours/day to help prevent premature flower bud set.

Dianthus **DIABUNDA®** *F1 Dianthus × barbatus*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	3,500–4,500 foot candles (700–900 micro mols)	Facultative long day	62–64 °F (17–18 °C)	62–64 °F (17–18 °C)	125–175 ppm N	Packs I 1 ppp I 5–7 weeks 1 pt. I 1 ppp I 6–8 weeks 1 qt. I 1–2 ppp I 6–9 weeks 1.25 qt. I 3 ppp I 6–9 weeks 2.5 qt. I 3 ppp I 6–9 weeks	Aphids, Thrips, Spider Mites	Fusarium, Alternaria, Botrytis

FINISH PGRs	TECH TIPS
If needed, spray with Bonzi® at 5–8 ppm.	Providing high light and dropping the temperature to an ADT of 60 °F (21 °C) will reduce the need for PGRs. Day extension lighting to 14 hours will hasten flowering of the finished plant.

Dianthus **SUPER PARFAIT™** *F1 Dianthus chinensis*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	3,500–4,500 foot candles (700–900 micro mols)	Facultative long day	62–64 °F (17–18 °C)	62–64 °F (17–18 °C)	125–175 ppm N	Packs I 1 ppp I 9–11 weeks 1 pt. I 1 ppp I 9–11 weeks 1 qt. I 1–2 ppp I 10–12 weeks 1.25 qt. I 3 ppp I 10–12 weeks 2.5 qt. I 3 ppp I 10–12 weeks	Aphids, Thrips, Spider Mites	Fusarium, Alternaria, Botrytis

FINISH PGRs	TECH TIPS
If needed, spray with Bonzi® at 5–8 ppm.	Providing high light and dropping the temperature to an ADT of 60 °F (21 °C) will reduce the need for PGRs. Day extension lighting to 14 hours will hasten flowering of the finished plant.

Dianthus **VENTI PARFAIT™** *F1 Dianthus chinensis*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	3,500–4,500 foot candles (700–900 micro mols)	Facultative long day	62–64 °F (17–18 °C)	62–64 °F (17–18 °C)	125–175 ppm N	Packs I 1 ppp I 9–11 weeks Large Packs I 1 ppp I 9–11 weeks 1 pt. I 1 ppp I 9–11 weeks 1 qt. I 1–2 ppp I 10–12 weeks 1.25 qt. I 3 ppp I 10–12 weeks 2.5 qt. I 3 ppp I 10–12 weeks	Aphids, Thrips, Spider Mites	Fusarium, Alternaria, Botrytis

FINISH PGRs	TECH TIPS
If needed, spray with Bonzi® at 5–8 ppm.	Providing high light and dropping the temperature to an ADT of 60 °F (21 °C) will reduce the need for PGRs. Day extension lighting to 14 hours will hasten flowering of the finished plant.

BACK TO CONTENTS

English Daisy / Bellis **BAM BAM™** *F1 Bellis perennis*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 0.9–1.3 mS/cm, PourThru EC: 1.4–2.0 mS/cm	4,000–6,000 foot candles	Day neutral	62–64 °F (17–18 °C)	48–50 °F (9–10 °C)	125–175 ppm N	Packs I 1 ppp I 11–13 weeks Large Packs I 1 ppp I 11–13 weeks 1 pt. I 1 ppp I 13–15 weeks 1 qt. I 1 ppp I 13–15 weeks 1.25 qt. I 1–2 ppp I 13–15 weeks 2.5 qt. I 3 ppp I 13–15 weeks 3 qt. I 4–5 ppp I 14–16 weeks 1.5 gal. HB I 4–5 ppp I 14–16 weeks	Aphids, Thrips	Crown Rot, Phoma, Rust

FINISH PGRs	TECH TIPS
Bam Bam is naturally compact and should not require any PGR treatments, especially if grown cool and under high light. During fall growing conditions, when growing conditions are not optimum, sprays of B-Nine® WSG at 1,000–2,000 ppm are effective in controlling plant growth.	As plugs mature, reduce irrigation frequency to tone plants.

Gazania **BIG KISS™** *F1 Gazania rigens*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.8–6.2 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	6,000–8,000 foot candles	Facultative long day	70–72 °F (21–22 °C)	58–60 °F (14–16 °C)	125–175 ppm N	1 pt. I 1 ppp I 8–10 weeks 1 qt. I 1 ppp I 9–11 weeks 1.25 qt. I 2–3 ppp I 9–11 weeks 2.5 qt. I 2–3 ppp I 9–11 weeks 3 qt. I 3–4 ppp I 9–11 weeks	Aphids, Thrips, Spider Mites	Botrytis, Rhizoctonia, Sclerotinia

FINISH PGRs	TECH TIPS
Usually not needed.	Growing Gazania plugs on the dry side and keeping them moderately cool will help prevent leaf stretch.

Gazania **FROSTY KISS™** *F1 Gazania rigens*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.8–6.2 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	6,000–8,000 foot candles	Facultative long day	70–72 °F (21–22 °C)	58–60 °F (14–16 °C)	125–175 ppm N	Packs I 1 ppp I 8–9 weeks Large Packs I 1 ppp I 8–9 weeks 1 pt. I 1 ppp I 8–10 weeks 1 qt. I 1–2 ppp I 9–11 weeks 1.25 qt. I 3 ppp I 9–11 weeks 2.5 qt. I 3 ppp I 9–11 weeks	Aphids, Thrips, Spider Mites	Botrytis, Rhizoctonia, Sclerotinia

FINISH PGRs	TECH TIPS
Usually not needed.	Growing Gazania plugs on the dry side and keeping them moderately cool will help prevent leaf stretch.

Gazania **GAZOO™** *OP Gazania rigens*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.8–6.2 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	6,000–8,000 foot candles	Facultative long day	70–72 °F (21–22 °C)	58–60 °F (14–16 °C)	125–175 ppm N	1 pt. I 1 ppp I 8–10 weeks 1 qt. I 1–2 ppp I 9–11 weeks 1.25 qt. I 3 ppp I 9–11 weeks 2.5 qt. I 3 ppp I 9–11 weeks 3 qt. I 3–4 ppp I 9–11 weeks	Aphids, Thrips, Spider Mites	Botrytis, Rhizoctonia, Sclerotinia

FINISH PGRs	TECH TIPS
Usually not needed.	Growing Gazania plugs on the dry side and keeping them moderately cool will help prevent leaf stretch.

Gazania **KISS™** *F1 Gazania rigens*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.8–6.2 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	6,000–8,000 foot candles	Facultative long day	70–72 °F (21–22 °C)	58–60 °F (14–16 °C)	125–175 ppm N	Packs I 1 ppp I 8–9 weeks Large Packs I 1 ppp I 8–9 weeks 1 pt. I 1 ppp I 8–10 weeks 1 qt. I 1–2 ppp I 9–11 weeks 1.25 qt. I 3 ppp I 9–11 weeks 2.5 qt. I 3 ppp I 9–11 weeks	Aphids, Thrips, Spider Mites	Botrytis, Rhizoctonia, Sclerotinia

FINISH PGRs	TECH TIPS
Usually not needed.	Growing Gazania plugs on the dry side and keeping them moderately cool will help prevent leaf stretch.

BACK TO CONTENTS

Geranium **BULLSEYE™** *F1 Pelargonium × hortorum*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 6.1–6.5 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	6,000–8,000 foot candles	Day neutral	70–72 °F (21–22 °C)	60–62 °F (16–17 °C)	200–250 ppm N	1 pt. I 1 ppp I 7–10 weeks 1 qt. I 1 ppp I 8–10 weeks 1.25 qt. I 1 ppp I 8–10 weeks 2.5 qt. I 2 ppp I 10–12 weeks 3 qt. I 3 ppp I 10–12 weeks 1.5 gal. HB I 3–5 ppp I 10–12 weeks 1.5 gal. pot I 3–5 ppp I 10–12 weeks 2 gal. HB I 5 ppp I 10–12 weeks	Thrips, Aphids	Botrytis, Pythium, Alternaria, Rust, Bacterial Root and Leaf Diseases

FINISH PGRs	TECH TIPS
A total of 3–5 sprays of Cycocel® at 750 ppm will help control growth and speed flowering. Do not apply more than 750 ppm Cycocel® or leaf edge yellowing may occur. Using a spray adjuvant such as CapSil® will reduce the chance of leaf edge yellowing. Spray every ten days to two weeks depending on environmental conditions and plant growth. Stop applying Cycocel® when flower buds are plainly visible. Late Cycocel® sprays can result in small and/or malformed flowers.	Geraniums are irradiance plants so the more light they receive the faster they will flower. Under short days or cloudy conditions it is beneficial to provide supplemental lighting of around 400 foot candles (4,000 lux) especially in the plug tray to speed up flowering. All geraniums are especially sensitive to bacterial diseases so be sure to start with clean plug trays, media and propagation areas. Geranium seed does not carry bacterial diseases so if you start clean you can stay clean. Do not subirrigate or use recycled water. Media pH should not drop below 6.0 or the plants may suffer from iron and/or manganese toxicity.

Geranium **LANDSCAPER™** *F1 Pelargonium × hortorum*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 6.1–6.5 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	6,000–8,000 foot candles	Day neutral	70–72 °F (21–22 °C)	60–62 °F (16–17 °C)	200–250 ppm N	Large Packs I 1 ppp I 9–11 weeks 1 qt. I 1 ppp I 11–12 weeks 1.25 qt. I 1 ppp I 12–13 weeks 2.5 qt. I 1 ppp I 12–13 weeks 3 qt. I 3–5 ppp I 12–13 weeks 1.5 gal. pot I 3–5 ppp I 12–13 weeks	Thrips, Aphids	Botrytis, Pythium, Alternaria, Rust, Bacterial Root and Leaf Diseases

FINISH PGRs	TECH TIPS
A total of 3–5 sprays of Cycocel® at 750 ppm will help control growth and speed flowering. Do not apply more than 750 ppm Cycocel® or leaf edge yellowing may occur. Using a spray adjuvant such as CapSil® will reduce the chance of leaf edge yellowing. Spray every 10 days to two weeks, depending on environmental conditions and plant growth. Stop applying Cycocel® when flower buds are visible. Late Cycocel® sprays can result in small and/or malformed flowers.	Geraniums are irradiance plants; the more light they receive, the faster they will flower. Under short days or cloudy conditions, it is beneficial to provide supplemental lighting of around 400 foot candles (4,000 lux), especially in the plug tray to speed up flowering. All geraniums are especially sensitive to bacterial diseases, so be sure to start with clean plug trays, media and propagation areas. Geranium seed does not carry bacterial diseases, so if you start clean you can stay clean. Do not subirrigate or use recycled water. Media pH should not drop below 6.0, or the plants may suffer from iron and/or manganese toxicity.

Geranium **MAVERICK™** *F1 Pelargonium × hortorum*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 6.1–6.5 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	6,000–8,000 foot candles	Day neutral	70–72 °F (21–22 °C)	60–62 °F (16–17 °C)	200–250 ppm N	1 qt. I 1 ppp I 8–10 weeks 1.25 qt. I 1 ppp I 8–10 weeks 2.5 qt. I 2 ppp I 10–12 weeks 3 qt. I 3 ppp I 10–12 weeks 1.5 gal. HB I 3–5 ppp I 10–12 weeks 1.5 gal. pot I 3–5 ppp I 10–12 weeks 2 gal. HB I 5 ppp I 10–12 weeks	Thrips, Aphids	Botrytis, Pythium, Alternaria, Rust, Bacterial Root and Leaf Diseases

FINISH PGRs	TECH TIPS
A total of 3–5 sprays of Cycocel® at 750 ppm will help control growth and speed flowering. Do not apply more than 750 ppm Cycocel® or leaf edge yellowing may occur. Using a spray adjuvant such as CapSil® will reduce the chance of leaf edge yellowing. Spray every ten days to two weeks depending on environmental conditions and plant growth. Stop applying Cycocel® when flower buds are plainly visible. Late Cycocel® sprays can result in small and/or malformed flowers.	Geraniums are irradiance plants so the more light they receive the faster they will flower. Under short days or cloudy conditions it is beneficial to provide supplemental lighting of around 400 foot candles (4,000 lux) especially in the plug tray to speed up flowering. All geraniums are especially sensitive to bacterial diseases so be sure to start with clean plug trays, media and propagation areas. Geranium seed does not carry bacterial diseases so if you start clean you can stay clean. Do not subirrigate or use recycled water. Media pH should not drop below 6.0 or the plants may suffer from iron and/or manganese toxicity.

Geranium **MULTIBLOOM™** *F1 Pelargonium × hortorum*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 6.1–6.5 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	6,000–8,000 foot candles	Day neutral	70–72 °F (21–22 °C)	60–62 °F (16–17 °C)	200–250 ppm N	Packs I 1 ppp I 6–7 weeks 1 pt. I 1 ppp I 6–8 weeks 1 qt. I 1 ppp I 7–9 weeks 1.25 qt. I 1 ppp I 8–10 weeks	Thrips, Aphids	Botrytis, Pythium, Alternaria, Rust, Bacterial Root and Leaf Diseases

FINISH PGRs	TECH TIPS
A total of 2–3 sprays of Cycocel® at 750 ppm will help control growth and speed flowering, and is recommended for pack production. Depending on environmental conditions pints may not need any PGR applications except in the plug stage. Do not apply more than 750 ppm Cycocel® or leaf edge yellowing may occur. Using a spray adjuvant such as CapSil® will reduce the chance of leaf edge yellowing. Spray every ten days to two weeks depending on environmental conditions and plant growth. Stop applying Cycocel® when flower buds are plainly visible. Late Cycocel® sprays can result in small and/or malformed flowers.	Geraniums are irradiance plants so the more light they receive the faster they will flower. Under short days or cloudy conditions it is beneficial to provide supplemental lighting of around 400 foot candles (4,000 lux) especially in the plug tray to speed up flowering. All geraniums are especially sensitive to bacterial diseases so be sure to start with clean plug trays, media and propagation areas. Geranium seed does not carry bacterial diseases so if you start clean you can stay clean. Do not subirrigate or use recycled water. Media pH should not drop below 6.0 or the plants may suffer from iron and/or manganese toxicity.

BACK TO CONTENTS

Geranium **PINTO™ PREMIUM** *F1 Pelargonium × hortorum*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 6.1–6.5 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	6,000–8,000 foot candles	Day neutral	70–72 °F (21–22 °C)	60–62 °F (16–17 °C)	200–250 ppm N	1 pt. I 1 ppp I 7–10 weeks 1 qt. I 1 ppp I 8–10 weeks 1.25 qt. I 1 ppp I 8–10 weeks 2.5 qt. I 2 ppp I 10–12 weeks 3 qt. I 3 ppp I 10–12 weeks 1.5 gal. HB I 3–5 ppp I 10–12 weeks 1.5 gal. pot I 3–5 ppp I 10–12 weeks 2 gal. HB I 5 ppp I 10–12 weeks	Thrips, Aphids	Botrytis, Pythium, Alternaria, Rust, Bacterial Root and Leaf Diseases

FINISH PGRs	TECH TIPS
A total of 3–5 sprays of Cycocel® at 750 ppm will help control growth and speed flowering. Do not apply more than 750 ppm Cycocel® or leaf edge yellowing may occur. Using a spray adjuvant such as CapSil® will reduce the chance of leaf edge yellowing. Spray every ten days to two weeks depending on environmental conditions and plant growth. Stop applying Cycocel® when flower buds are plainly visible. Late Cycocel® sprays can result in small and/or malformed flowers.	Geraniums are irradiance plants so the more light they receive the faster they will flower. Under short days or cloudy conditions it is beneficial to provide supplemental lighting of around 400 foot candles (4,000 lux) especially in the plug tray to speed up flowering. All geraniums are especially sensitive to bacterial diseases so be sure to start with clean plug trays, media and propagation areas. Geranium seed does not carry bacterial diseases so if you start clean you can stay clean. Do not subirrigate or use recycled water. Media pH should not drop below 6.0 or the plants may suffer from iron and/or manganese toxicity.

Geranium **QUANTUM™** *F1 Pelargonium × hortorum*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 6.1–6.5 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	6,000–8,000 foot candles	Day neutral	70–72 °F (21–22 °C)	60–62 °F (16–17 °C)	200–250 ppm N	Large Packs I 1 ppp I 9–11 weeks 1 pt. I 1 ppp I 11–12 weeks 1 qt. I 1 ppp I 11–12 weeks 1.25 qt. I 1 ppp I 12–13 weeks 2.5 qt. I 1 ppp I 12–13 weeks 3 qt. I 3–5 ppp I 12–13 weeks 1.5 gal. pot I 3–5 ppp I 12–13 weeks	Thrips, Aphids	Botrytis, Pythium, Alternaria, Rust, Bacterial Root and Leaf Diseases

FINISH PGRs	TECH TIPS
A total of 3–5 sprays of Cycocel® at 750 ppm will help control growth and speed flowering. Do not apply more than 750 ppm Cycocel® or leaf edge yellowing may occur. Using a spray adjuvant such as CapSil® will reduce the chance of leaf edge yellowing. Spray every 10 days to two weeks, depending on environmental conditions and plant growth. Stop applying Cycocel® when flower buds are visible. Late Cycocel® sprays can result in small and/or malformed flowers.	Geraniums are irradiance plants; the more light they receive, the faster they will flower. Under short days or cloudy conditions, it is beneficial to provide supplemental lighting of around 400 foot candles (4,000 lux), especially in the plug tray to speed up flowering. All geraniums are especially sensitive to bacterial diseases, so be sure to start with clean plug trays, media and propagation areas. Geranium seed does not carry bacterial diseases, so if you start clean you can stay clean. Do not subirrigate or use recycled water. Media pH should not drop below 6.0, or the plants may suffer from iron and/or manganese toxicity.

Geranium **RINGO 2000™** *F1 Pelargonium × hortorum*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 6.1–6.5 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	6,000–8,000 foot candles	Day neutral	70–72 °F (21–22 °C)	60–62 °F (16–17 °C)	200–250 ppm N	Packs I 1 ppp I 7–8 weeks Large Packs I 1 ppp I 7–8 weeks 1 pt. I 1 ppp I 6–8 weeks 1 qt. I 1 ppp I 8–10 weeks 1.25 qt. I 1 ppp I 8–10 weeks 1.5 gal. HB I 4–5 ppp I 10–12 weeks	Thrips, Aphids	Botrytis, Pythium, Alternaria, Rust, Bacterial Root and Leaf Diseases

FINISH PGRs	TECH TIPS
A total of 2–3 sprays of Cycocel® at 750 ppm will help control growth and speed flowering. Do not apply more than 750 ppm Cycocel® or leaf edge yellowing may occur. Using a spray adjuvant such as CapSil® will reduce the chance of leaf edge yellowing. Spray every ten days to two weeks depending on environmental conditions and plant growth. Stop applying Cycocel® when flower buds are plainly visible. Late Cycocel® sprays can result in small and/or malformed flowers.	Geraniums are irradiance plants so the more light they receive the faster they will flower. Under short days or cloudy conditions it is beneficial to provide supplemental lighting of around 400 foot candles (4,000 lux) especially in the plug tray to speed up flowering. All geraniums are especially sensitive to bacterial diseases so be sure to start with clean plug trays, media and propagation areas. Geranium seed does not carry bacterial diseases so if you start clean you can stay clean. Do not subirrigate or use recycled water. Media pH should not drop below 6.0 or the plants may suffer from iron and/or manganese toxicity.

Geranium Ivy **REACH OUT™** *F1 Pelargonium peltatum*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.8–6.2 SME 0.9–1.3 mS/cm, PourThru EC: 1.4–2.0 mS/cm	4,000–6,000 foot candles	Day neutral	66–68 °F (19–20 °C)	60–62 °F (16–17 °C)	125–175 ppm N	1 pt. I 1 ppp I 8–9 weeks 1 qt. I 1 ppp I 9–10 weeks 1.25 qt. I 2–3 ppp I 9–10 weeks 2.5 qt. I 2–3 ppp I 9–10 weeks 1.5 gal. HB I 3–5 ppp I 10–12 weeks 1.5 gal. pot I 4–5 ppp I 10–12 weeks 2 gal. HB I 5–6 ppp I 10–12 weeks	Fungus Gnats, Shoreflies and Thrips	Botrytis, Rhizoctonia, Pythium, Thielaviopsis and Bacterial Root and Leaf Diseases

FINISH PGRs	TECH TIPS
If necessary, sprays of Cycocel® at 300–500 ppm will help control growth. Do not apply more than 750 ppm Cycocel® or leaf edge yellowing may occur. Using a spray adjuvant such as CapSil® will reduce the chance of leaf edge yellowing. Do not apply Cycocel® when flower buds are visible. Late Cycocel® sprays can result in small and/or malformed flowers.	Germination temperatures above 72 °F (22 °C) can lead to thermodormancy, which will reduce and/or slow germination) Geraniums are irradiance plants; the more light they receive, the faster they will flower. Under short days or cloudy conditions, it is beneficial to provide supplemental lighting of around 400 foot candles (4,000 lux), especially in the plug tray to speed up flowering. All geraniums are especially sensitive to bacterial diseases so be sure to start with clean plug trays, media and propagation areas. Geranium seed does not carry bacterial diseases; if you start clean, you can stay clean. Do not subirrigate or use recycled water.

BACK TO CONTENTS

Geranium Ivy **TORNADO™** *F1 Pelargonium peltatum*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.8–6.2 SME 0.9–1.3 mS/cm, PourThru EC: 1.4–2.0 mS/cm	4,000–6,000 foot candles	Day neutral	68–70 °F (20–21 °C)	60–62 °F (16–17 °C)	125–175 ppm N	1 qt. I 1 ppp I 8–9 weeks 1.25 qt. I 2–3 ppp I 9–10 weeks 2.5 qt. I 2–3 ppp I 9–10 weeks 3 qt. I 3–4 ppp I 10–11 weeks 1.5 gal. HB I 3–5 ppp I 10–11 weeks	Fungus Gnats, Shoreflies and Thrips	Botrytis, Rhizoctonia, Pythium, Thielaviopsis and Bacterial Root and Leaf Diseases

FINISH PGRs	TECH TIPS
If necessary sprays of Cycocel® at 300–500 ppm will help control growth. Do not apply more than 750 ppm Cycocel® or leaf edge yellowing may occur. Using a spray adjuvant such as CapSil® will reduce the chance of leaf edge yellowing. Do not apply Cycocel® when flower buds are plainly visible. Late Cycocel® sprays can result in small and/or malformed flowers.	Geraniums are irradiance plants so the more light they receive the faster they will flower. Under short days or cloudy conditions it is beneficial to provide supplemental lighting of around 400 foot candles (4,000 lux) especially in the plug tray to speed up flowering. All geraniums are especially sensitive to bacterial diseases so be sure to start with clean plug trays, media and propagation areas. Geranium seed does not carry bacterial diseases so if you start clean you can stay clean. Do not subirrigate or use recycled water. Media pH should not drop below 6.0 or the plants may suffer from iron and/or manganese toxicity.

Gerbera **BENGAL™** *F1 Gerbera jamesonii*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Facultative short day	70–72 °F (21–22 °C)	66–68 °F (19–20 °C)	125–175 ppm N	1.25 qt. I 1 ppp I 10–11 weeks 2.5 qt. I 1 ppp I 10–11 weeks 3 qt. I 3 ppp I 11–12 weeks 1.5 gal. HB I 3 ppp I 11–12 weeks 1.5 gal. pot I 3 ppp I 11–12 weeks	Aphids, Fungus Gnats, Shore Flies, Broad Mites, Cyclamen Mites, Spider Mites, Thrips, Whiteflies and Leafminers.	Alternaria, Botrytis, Powdery Mildew, Phytophthora, Rhizoctonia and Pythium.

FINISH PGRs	TECH TIPS
If needed sprays of B-Nine® at 2,500–5,000 ppm or A-Rest® at 1–3 ppm are effective. Under long day conditions leaves will be larger so more frequent PGR applications may be necessary. Do not apply PGRs once the buds reach 1 cm in diameter (pea size) since this can cause smaller flower and short flower stems.	Under low light conditions provide supplemental HID light if possible; do not extend daylength as this will extend the time to flower. It is critical to allow adequate dry back between irrigations to prevent stunted and distorted growth. Because of this do not mist at night. If germinating on a bench it is best to use a tent system to increase humidity and reduce the frequency of irrigations/misting.

Gerbera **CARTWHEEL®** *F1 Gerbera jamesonii*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Facultative short day	70–72 °F (21–22 °C)	66–68 °F (19–20 °C)	125–175 ppm N	1.25 qt. I 1 ppp I 10–11 weeks 2.5 qt. I 1 ppp I 10–11 weeks 3 qt. I 3 ppp I 11–12 weeks 1.5 gal. pot I 3 ppp I 11–12 weeks	Aphids, Fungus Gnats, Shore Flies, Broad Mites, Cyclamen Mites, Spider Mites, Thrips, Whiteflies and Leafminers.	Alternaria, Botrytis, Powdery Mildew, Phytophthora, Rhizoctonia and Pythium.

FINISH PGRs	TECH TIPS
If needed sprays of B-Nine® at 2,500–5,000 ppm or A-Rest® at 1–3 ppm are effective. Under long day conditions leaves will be larger so more frequent PGR applications may be necessary. Do not apply PGRs once the buds reach 1 cm in diameter (pea size) since this can cause smaller flower and short flower stems.	Under low light conditions provide supplemental HID light if possible; do not extend daylength as this will extend the time to flower. It is critical to allow adequate dry back between irrigations to prevent stunted and distorted growth. Because of this do not mist at night. If germinating on a bench it is best to use a tent system to increase humidity and reduce the frequency of irrigations/misting.

Gerbera **ELEPHANT™** *F1 Gerbera jamesonii*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Facultative short day	70–72 °F (21–22 °C)	66–68 °F (19–20 °C)	125–175 ppm N	1.25 qt. I 1 ppp I 9–10 weeks 2.5 qt. I 1 ppp I 9–10 weeks 3 qt. I 2–3 ppp I 10–11 weeks 1.5 gal. pot I 3 ppp I 10–11 weeks	Aphids, Fungus Gnats, Shore Flies, Broad Mites, Cyclamen Mites, Spider Mites, Thrips, Whiteflies and Leafminers.	Alternaria, Botrytis, Powdery Mildew, Phytophthora, Rhizoctonia and Pythium.

FINISH PGRs	TECH TIPS
If needed sprays of B-Nine® at 2,500–5,000 ppm or A-Rest® at 1–3 ppm are effective. Under long day conditions leaves will be larger so more frequent PGR applications may be necessary. Do not apply PGRs once the buds reach 1 cm in diameter (pea size) since this can cause smaller flower and short flower stems.	Under low light conditions provide supplemental HID light if possible; do not extend daylength as this will extend the time to flower. It is critical to allow adequate dry back between irrigations to prevent stunted and distorted growth. Because of this do not mist at night. If germinating on a bench it is best to use a tent system to increase humidity and reduce the frequency of irrigations/misting.

BACK TO CONTENTS

Gerbera **JAGUAR™** *F1 Gerbera jamesonii*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Facultative short day	70–72 °F (21–22 °C)	66–68 °F (19–20 °C)	125–175 ppm N	1 pt. I 1 ppp I 9–10 weeks 1 qt. I 1 ppp I 9–11 weeks 1.25 qt. I 1–2 ppp I 9–11 weeks 2.5 qt. I 2–3 ppp I 9–11 weeks 3 qt. I 3–5 ppp I 10–12 weeks 1.5 gal. HB I 3–5 ppp I 10–12 weeks 1.5 gal. pot I 3–5 ppp I 10–12 weeks	Aphids, Fungus Gnats, Shore Flies, Broad Mites, Cyclamen Mites, Spider Mites, Thrips, Whiteflies and Leafminers.	Alternaria, Botrytis, Powdery Mildew, Phytophthora, Rhizoctonia and Pythium.

FINISH PGRs	TECH TIPS
If needed sprays of B-Nine® at 2,500–5,000 ppm or A-Rest® at 1–3 ppm are effective. Under long day conditions leaves will be larger so more frequent PGR applications may be necessary. Do not apply PGRs once the buds reach 1 cm in diameter (pea size) since this can cause smaller flower and short flower stems.	Under low light conditions provide supplemental HID light if possible; do not extend daylength as this will extend the time to flower. It is critical to allow adequate dry back between irrigations to prevent stunted and distorted growth. Because of this do not mist at night. If germinating on a bench it is best to use a tent system to increase humidity and reduce the frequency of irrigations/misting.

Hibiscus **HONEYMOON™** *F1 Hibiscus moscheutos*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 6.1–6.5 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	6,000–8,000 foot candles	Obligate long day	76–78 °F (24–26 °C)	68–70 °F (20–21 °C)	200–250 ppm N	1 pt. I 1 ppp I 7–9 weeks 1 qt. I 1 ppp I 7–9 weeks 1.25 qt. I 1 ppp I 8–10 weeks 2.5 qt. I 1 ppp I 8–10 weeks 3 qt. I 1 ppp I 9–11 weeks 1.5 gal. pot I 1 ppp I 9–11 weeks	Whiteflies, Spider Mites, Thrips and Aphids	Botrytis

FINISH PGRs	TECH TIPS
A combination spray of B-Nine® WSG at 2,500 ppm and Cycocel® at 800 ppm two weeks after transplant is highly effective for reducing height and producing a compact, well-branched plant. In warmer conditions, a second application is beneficial.	If Cycocel® is applied, seedlings may temporarily yellow. Begin feeding at 75 ppm N at radical emergence.

Impatiens **ACCENT™** *F1 Impatiens walleriana*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.8–6.2 SME 0.9–1.3 mS/cm, PourThru EC: 1.4–2.0 mS/cm	2,000–4,000 foot candles	Day neutral	72–74 °F (22–23 °C)	62–64 °F (17–18 °C)	75–125 ppm N	Packs I 1 ppp I 5–6 weeks Large Packs I 1 ppp I 5–6 weeks 1 pt. I 1 ppp I 6–7 weeks 1 qt. I 1–2 ppp I 6–7 weeks 1.25 qt. I 2–3 ppp I 7–8 weeks 2.5 qt. I 3–4 ppp I 7–8 weeks 3 qt. I 5–7 ppp I 9–10 weeks 1.5 gal. HB I 5–7 ppp I 9–10 weeks 1.5 gal. pot I 5–7 ppp I 9–10 weeks	Thrips, Fungus Gnats, Aphids and Spider Mites	Impatiens Downy Mildew, Pythium Root Rot, Botrytis Blight, INSV, TSWV, Pseudomonas, Rhizoctonia and Alternaria Leaf Spot

FINISH PGRs	TECH TIPS
Impatiens are responsive to B-Nine® WSG, Bonzi® and Sumagic®.	Use a calcium based fertilizer and feed once a week at most to avoid soft growth and stretching of plugs. Do not let plants go into the night with wet foliage or tip abortion may occur. Downward cupping or twisting of immature leaves may be caused by overuse of PGRs. Subdue Maxx® and/or Segway® drenches are recommended plug stage fungicides for disease management..

Impatiens **ACCENT™ PREMIUM** *F1 Impatiens walleriana*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.8–6.2 SME 0.9–1.3 mS/cm, PourThru EC: 1.4–2.0 mS/cm	2,000–4,000 foot candles	Day neutral	72–74 °F (22–23 °C)	62–64 °F (17–18 °C)	75–125 ppm N	Packs I 1 ppp I 5–6 weeks Large Packs I 1 ppp I 5–6 weeks 1 pt. I 1 ppp I 6–7 weeks 1 qt. I 1–2 ppp I 6–7 weeks 1.25 qt. I 2–3 ppp I 7–8 weeks 2.5 qt. I 3–4 ppp I 7–8 weeks 3 qt. I 5–7 ppp I 9–10 weeks 1.5 gal. HB I 5–7 ppp I 9–10 weeks 1.5 gal. pot I 5–7 ppp I 9–10 weeks	Thrips, Fungus Gnats, Aphids and Spider Mites	Impatiens Downy Mildew, Pythium Root Rot, Botrytis Blight, INSV, TSWV, Pseudomonas, Rhizoctonia and Alternaria Leaf Spot

FINISH PGRs	TECH TIPS
Impatiens are responsive to B-Nine® WSG, Bonzi® and Sumagic®.	Use a calcium based fertilizer and feed once a week at most to avoid soft growth and stretching of plugs. Do not let plants go into the night with wet foliage or tip abortion may occur. Downward cupping or twisting of immature leaves may be caused by overuse of PGRs. Subdue Maxx® and/or Segway® drenches are recommended plug stage fungicides for disease management.

BACK TO CONTENTS

Impatiens **ATHENA™** *F1 Impatiens walleriana*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.8–6.2 SME 0.9–1.3 mS/cm, PourThru EC: 1.4–2.0 mS/cm	2,000–4,000 foot candles	Day Neutral	72–74 °F (22–23 °C)	62–64 °F (17–18 °C)	75–125 ppm N	Large Packs I 1 ppp I 5–6 weeks 1 pt. I 1 ppp I 5–6 weeks 1 qt. I 1 ppp I 6–7 weeks 1.25 qt. I 1–3 ppp I 7–8 weeks 2.5 qt. I 1–3 ppp I 7–8 weeks 3 qt. I 5–7 ppp I 8–10 weeks 1.5 gal. HB I 5–7 ppp I 8–10 weeks 1.5 gal. pot I 5–7 ppp I 8–10 weeks 2 gal. HB I 5–7 ppp I 8–10 weeks	Thrips, Fungus Gnats, Aphids and Spider Mites	Impatiens Downy Mildew, Pythium Root Rot, Botrytis Blight, INSV, TSWV, Pseudomonas, Rhizoctonia and Alternaria Leaf Spot

FINISH PGRs	TECH TIPS
Impatiens are responsive to B-Nine® WSG, Bonzi® and Sumagic®.	Use a calcium-based fertilizer and feed once a week at most to avoid soft growth and stretching of plugs. Do not let plants go into the night with wet foliage or tip abortion may occur. Downward cupping or twisting of immature leaves may be caused by overuse of PGRs. Subdue Maxx® and/or Segway® drenches are recommended plug stage fungicides for disease management.

Impatiens **IMARA™ XDR** *F1 Impatiens walleriana*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.8–6.2 SME 0.9–1.3 mS/cm, PourThru EC: 1.4–2.0 mS/cm	2,000–4,000 foot candles	Day neutral	72–74 °F (22–23 °C)	62–64 °F (17–18 °C)	75–125 ppm N	Packs I 1 ppp I 4–5 weeks Large Packs I 1 ppp I 4–5 weeks 1 pt. I 1 ppp I 6–7 weeks 1 qt. I 1–2 ppp I 6–7 weeks 1.25 qt. I 1–3 ppp I 7–8 weeks 1.5 gal. HB I 5–7 ppp I 9–10 weeks 1.5 gal. pot I 5–7 ppp I 9–10 weeks	Thrips, Fungus Gnats, Aphids and Spider Mites	Pythium Root Rot, Botrytis Blight, INSV, TSWV, Pseudomonas, Rhizoctonia and Alternaria Leaf Spot

FINISH PGRs	TECH TIPS
Impatiens are responsive to B-Nine® WSG, Bonzi® and Sumagic®.	Use a calcium based fertilizer and feed once a week at most to avoid soft growth and stretching of plugs. Do not let plants go into the night with wet foliage or tip abortion may occur. Downward cupping or twisting of immature leaves may be caused by overuse of PGRs. Subdue Maxx® and/or Segway® drenches are recommended plug stage fungicides for disease management, and rotations of Mural® and Micora® sprays and Segovis® sprays or drenches are recommended for the finishing stage.

Impatiens **XTREME™** *F1 Impatiens walleriana*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.8–6.2 SME 0.9–1.3 mS/cm, PourThru EC: 1.4–2.0 mS/cm	2,000–4,000 foot candles	Day neutral	72–74 °F (22–23 °C)	62–64 °F (17–18 °C)	75–125 ppm N	Packs I 1 ppp I 5–6 weeks Large Packs I 1 ppp I 5–6 weeks 1 pt. I 1 ppp I 6–7 weeks 1 qt. I 1–2 ppp I 6–7 weeks 1.25 qt. I 2–3 ppp I 7–8 weeks 1.5 gal. HB I 5–7 ppp I 9–10 weeks 1.5 gal. pot I 5–7 ppp I 9–10 weeks	Thrips, Fungus Gnats, Aphids and Spider Mites	Impatiens Downy Mildew, Pythium Root Rot, Botrytis Blight, INSV, TSWV, Pseudomonas, Rhizoctonia and Alternaria Leaf Spot

FINISH PGRs	TECH TIPS
Responsive to B-Nine® WSG, Bonzi® and Sumagic®. Xtreme Impatiens are bred to be more compact than standard Impatiens so may require less PGRs.	Use a calcium based fertilizer and feed once a week at most to avoid soft growth and stretching of plugs. Do not let plants go into the night with wet foliage or tip abortion may occur. Downward cupping or twisting of immature leaves may be caused by overuse of PGRs. Subdue Maxx® and/or Segway® drenches are recommended plug stage fungicides for disease management.

Impatiens New Guinea **FLORIFIC®** *F1 Impatiens hawkeri*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.8–6.2 SME 0.9–1.3 mS/cm, PourThru EC: 1.4–2.0 mS/cm	2,000–4,000 foot candles	Day neutral	76–78 °F (24–26 °C)	66–68 °F (19–20 °C)	75–125 ppm N	Large Packs I 1 ppp I 7–9 weeks 1 pt. I 1 ppp I 7–9 weeks 1 qt. I 1 ppp I 7–9 weeks 1.25 qt. I 1–2 ppp I 7–9 weeks 2.5 qt. I 2–3 ppp I 8–10 weeks 1.5 gal. HB I 3–5 ppp I 8–10 weeks	Fungus Gnats, Spider Mites, Thrips	Botrytis, Pythium, Rhizoctonia, Tomato Spotted Wilt Virus, Impatiens Necrotic Spot Virus. Florific New Guinea Impatiens are highly resistant to Impatiens Downy Mildew.

FINISH PGRs	TECH TIPS
Usually not required in larger containers. In small pots/packs or under low light conditions spray with Bonzi® at 1–3 ppm as needed.	Ensure a good scouting program for Thrips is in place.

BACK TO CONTENTS

Laurentia **STARSHINE™** *F1 Laurentia axillaris*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	2,000–4,000 foot candles	Facultative long day	62–64 °F (17–18 °C)	62–64 °F (17–18 °C)	125–175 ppm N	1 qt. I 1 ppp I 10–11 weeks 1.5 gal. HB I 3–5 ppp I 10–11 weeks 1.5 gal. pot I 3–5 ppp I 10–11 weeks	Aphids, Fungus Gnats, Shore Flies, Thrips	Botrytis, Rhizoctonia, Pythium

FINISH PGRs	TECH TIPS
If needed spray with B-Nine® WSG at 2,500 ppm.	Cool days with high light will reduce the need to apply PGRs.

Lavatera **NOVELLA™** *F1 Lavatera trimestris*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Obligate long day	68–70 °F (20–21 °C)	60–62 °F (16–17 °C)	125–175 ppm N	1 pt. I 1 ppp I 9–10 weeks 1 qt. I 1 ppp I 9–10 weeks 1.25 qt. I 1 ppp I 10–12 weeks 2.5 qt. I 1 ppp I 10–12 weeks 3 qt. I 2–3 ppp I 10–12 weeks 1.5 gal. pot I 3 ppp I 10–12 weeks	Aphids and Whiteflies	Anthracnose and Sclerotinia

FINISH PGRs	TECH TIPS
Growing cool at night helps keep growth under control. If more growth control is needed, spray up to three times with Cycocel® at 1,500 ppm.	The early PGR sprench during stage 1 of plug growth is critical so that plants are not floppy at retail. Transplant plugs on time; do not let them get root bound.

Marigold African **ANTIGUA™** *F1 Tagetes erecta*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 0 SME 0.9–1.3 mS/cm, PourThru EC: 1.4–2.0 mS/cm	4,000–6,000 foot candles	Facultative short day	68–70 °F (20–21 °C)	58–60 °F (14–16 °C)	125–175 ppm N	Packs I 1 ppp I 6–7 weeks 1 qt. I 1 ppp I 7–8 weeks	Spider Mites, Thrips, Leafminer, Aphids and Whiteflies.	Alternaria Leaf Spot, Botrytis and Pythium.

FINISH PGRs	TECH TIPS
Usually not required, especially when finished during short days. If necessary under low light or high temperature/humidity conditions spray with B-Nine® at 5,000 ppm before buds are wider than 1 cm (pea size). Later PGR sprays may reduce flower size or cause flowering in the foliage.	Easy to germinate on the bench. Maintain media pH above 6.2 to avoid iron/manganese toxicity. Short days will shorten time to flower.

Marigold African **BIG TOP™** *F1 Tagetes erecta*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 6.1–6.5 SME 0.9–1.3 mS/cm, PourThru EC: 1.4–2.0 mS/cm	4,000–6,000 foot candles	Facultative short day	68–70 °F (20–21 °C)	58–60 °F (14–16 °C)	125–175 ppm N	1 pt. I 1 ppp I 7–8 weeks 1 qt. I 1 ppp I 7–8 weeks 1.25 qt. I 1 ppp I 8–9 weeks 2.5 qt. I 1 ppp I 8–9 weeks 3 qt. I 3 ppp I 8–9 weeks 1.5 gal. pot I 3–4 ppp I 8–10 weeks	Spider Mites, Thrips, Leafminer, Aphids and Whiteflies	Alternaria Leaf Spot, Botrytis and Pythium

FINISH PGRs	TECH TIPS
Usually not required, especially when finished during short days. If necessary, under low light or high temperature/humidity conditions spray with B-Nine® WSG at 5,000 ppm before buds are wider than 1 cm (pea size). Later PGR sprays may reduce flower size or cause flowering in the foliage.	Easy to germinate on the bench. Maintain media pH above 6.2 to avoid iron/manganese toxicity. Short days reduces time to flower.

Marigold African **INCA II™** *F1 Tagetes erecta*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 0 SME 0.9–1.3 mS/cm, PourThru EC: 1.4–2.0 mS/cm	4,000–6,000 foot candles	Facultative short day	68–70 °F (20–21 °C)	58–60 °F (14–16 °C)	125–175 ppm N	Large Packs I 1 ppp I 7–8 weeks 1 qt. I 1 ppp I 8–9 weeks 1.25 qt. I 1 ppp I 9–10 weeks	Spider Mites, Thrips, Leafminer, Aphids and Whiteflies.	Alternaria Leaf Spot, Botrytis and Pythium.

FINISH PGRs	TECH TIPS
Usually not required, especially when finished during short days. If necessary under low light or high temperature/humidity conditions spray with B-Nine® at 5,000 ppm before buds are wider than 1 cm (pea size). Later PGR sprays may reduce flower size or cause flowering in the foliage.	Easy to germinate on the bench. Maintain media pH above 6.2 to avoid iron/manganese toxicity. Short days will shorten time to flower.

Marigold African **PERFECTION™** *F1 Tagetes erecta*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 0 SME 0.9–1.3 mS/cm, PourThru EC: 1.4–2.0 mS/cm	4,000–6,000 foot candles	Facultative short day	68–70 °F (20–21 °C)	58–60 °F (14–16 °C)	125–175 ppm N	1 qt. I 1 ppp I 9–10 weeks 1.25 qt. I 1 ppp I 9–10 weeks 2.5 qt. I 1–2 ppp I 9–10 weeks	Spider Mites, Thrips, Leafminer, Aphids and Whiteflies.	Alternaria Leaf Spot, Botrytis and Pythium.

FINISH PGRs	TECH TIPS
Usually not required, especially when finished during short days. If necessary under low light or high temperature/humidity conditions spray with B-Nine® at 5,000 ppm before buds are wider than 1 cm (pea size). Later PGR sprays may reduce flower size or cause flowering in the foliage.	Easy to germinate on the bench. Maintain media pH above 6.2 to avoid iron/manganese toxicity. Short days will shorten time to flower.

BACK TO CONTENTS

Marigold French Anemone **ALUMIA™** *OP Tagetes patula nana*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 6.1–6.5 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Day neutral	66–68 °F (19–20 °C)	62–64 °F (17–18 °C)	125–175 ppm N	Packs I 1 ppp I 3–4 weeks Large Packs I 1 ppp I 3–4 weeks 1 pt. I 1 ppp I 3–4 weeks 1 qt. I 1–2 ppp I 5–6 weeks 1.25 qt. I 2–3 ppp I 5–6 weeks 2.5 qt. I 2–3 ppp I 5–6 weeks	Aphids, Whiteflies, Thrips, Spider Mites, Leafminers	Pythium, Botrytis, Bacterial Leafspot, Alternaria Leafspot

FINISH PGRs	TECH TIPS
Since Alumia is naturally compact, PGRs are not usually necessary. If needed, spray with B-Nine® WSG at 2,500–5,000 ppm.	Very easy to germinate on the bench. If seedlings get stretched, they can be planted deep at transplanting, and new roots will form along the stems. Do not hold too long in the plug tray or stress-induced flowering may occur, and plants will flower before bulking up to a satisfactory size.

Marigold French Dwarf Crested **HAPPY™** *OP Tagetes patula nana*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 6.1–6.5 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Day neutral	66–68 °F (19–20 °C)	62–64 °F (17–18 °C)	125–175 ppm N	Packs I 1 ppp I 3–4 weeks Large Packs I 1 ppp I 3–4 weeks 1 pt. I 1 ppp I 3–4 weeks 1 qt. I 1–2 ppp I 4–5 weeks 1.25 qt. I 2–3 ppp I 4–5 weeks	Aphids, Whiteflies, Thrips, Spider Mites, Leafminers	Pythium, Botrytis, Bacterial Leafspot, Alternaria Leafspot

FINISH PGRs	TECH TIPS
Since Happy is a genetic dwarf, plant growth regulators (PGRs) are not usually necessary. If needed, spray with B-Nine® WSG at 2,500–5,000 ppm.	Very easy to germinate on the bench. If seedlings get stretched, they can be planted deep at transplanting, and new roots will form along the stems. Do not hold too long in the plug tray or stress-induced flowering may occur, and plants will flower before bulking up to a satisfactory size.

Marigold Triploid **ZENITH™** *F1 Tagetes triploid*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 6.1–6.5 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Day neutral	66–68 °F (19–20 °C)	62–64 °F (17–18 °C)	125–175 ppm N	Packs I 1 ppp I 4–5 weeks Large Packs I 1 ppp I 4–5 weeks 1 pt. I 1 ppp I 5–6 weeks 1 qt. I 1 ppp I 5–6 weeks 1.25 qt. I 2–3 ppp I 6–7 weeks 2.5 qt. I 2–3 ppp I 6–7 weeks 3 qt. I 3 ppp I 6–7 weeks 1.5 gal. pot I 3–4 ppp I 6–7 weeks	Aphids, Whiteflies, Thrips, Spider Mites, Leafminers	Pythium, Botrytis, Bacterial Leaf Spot, Alternaria Leaf Spot

FINISH PGRs	TECH TIPS
Growth can be controlled naturally through proper moisture management. If needed to control height, spray with B-Nine® WSG at 2,500–5,000 ppm, Bonzi® at 15–30 ppm, or Sumagic® at 5–10 ppm. To help control growth in the retail environment® drench with Bonzi® at 2–5 ppm or Sumagic® at 1–2 ppm when plants are up to size and flowering.	Very easy to germinate on the bench. If seedlings get stretched, they can be planted deep at transplanting, and new roots will form along the stems. Do not hold too long in the plug tray or stress-induced flowering may occur, and plants will flower before bulking up to a satisfactory size.

Mimulus **MAGIC™** *F1 Mimulus × hybrida*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 0.9–1.3 mS/cm, PourThru EC: 1.4–2.0 mS/cm	2,000–4,000 foot candles	Obligate long day	58–60 °F (14–16 °C)	52–54 °F (11–12 °C)	125–175 ppm N	Packs I 1 ppp I 4–5 weeks Large Packs I 1 ppp I 4–5 weeks 1 pt. I 1 ppp I 5–6 weeks 1 qt. I 1 ppp I 5–6 weeks 1.25 qt. I 1–3 ppp I 5–6 weeks 2.5 qt. I 1–3 ppp I 5–6 weeks 3 qt. I 3 ppp I 6–7 weeks 1.5 gal. HB I 4–5 ppp I 6–7 weeks 1.5 gal. pot I 3–4 ppp I 7–8 weeks 2 gal. HB I 4–5 ppp I 7–8 weeks	Thrips and Whiteflies	Pythium, Rhizoctonia, INSV and Botrytis

FINISH PGRs	TECH TIPS
Under proper growing conditions, PGRs are usually not needed. If warm and/or dark conditions exist, sprays of B-Nine® WSG at 2,500 ppm are effective.	Provide day extension lighting to 14 hours under short days using mum type lights (10 foot candles). Using HID lights can promote too early of flowering.

BACK TO CONTENTS

Mimulus **MAXIMUS™** *F1 Mimulus × hybrida*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 0.9–1.3 mS/cm, PourThru EC: 1.4–2.0 mS/cm	2,000–4,000 foot candles	Obligate long day	58–60 °F (14–16 °C)	52–54 °F (11–12 °C)	125–175 ppm N	Packs I 1 ppp I 4–5 weeks Large Packs I 1 ppp I 4–5 weeks 1 pt. I 1 ppp I 5–6 weeks 1 qt. I 1 ppp I 5–6 weeks 1.25 qt. I 1–3 ppp I 5–7 weeks 2.5 qt. I 1–3 ppp I 5–7 weeks 3 qt. I 3 ppp I 6–7 weeks 1.5 gal. HB I 4–5 ppp I 6–7 weeks 1.5 gal. pot I 4–5 ppp I 6–7 weeks 2 gal. HB I 4–5 ppp I 7–8 weeks	Thrips and Whiteflies	Pythium, Rhizoctonia, INSV and Botrytis

FINISH PGRs	TECH TIPS
Under proper growing conditions, PGRs are usually not needed. If warm and/or dark conditions exist, sprays of B-Nine® WSG at 2,500 ppm are effective.	Provide day extension lighting to 14 hours under short days using mum type lights (10 foot candles). Using HID lights can promote too early of flowering.

Nemesia **PRETTY PLEASE™** *F1 Nemesia foetens*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.8–6.2 SME 0.9–1.3 mS/cm, PourThru EC: 1.4–2.0 mS/cm	4,000–6,000 foot candles	Day neutral	66–68 °F (19–20 °C)	56–58 °F (13–14 °C)	125–175 ppm N	Packs I 1 ppp I 4–5 weeks Large Packs I 1 ppp I 4–5 weeks 1 pt. I 1 ppp I 4–6 weeks 1 qt. I 1 ppp I 4–6 weeks 1.25 qt. I 3 ppp I 4–6 weeks 2.5 qt. I 3 ppp I 4–6 weeks 3 qt. I 3 ppp I 6–7 weeks 1.5 gal. pot I 3–4 ppp I 7–8 weeks	Aphids, Thrips	Botrytis, INSV

FINISH PGRs	TECH TIPS
If grown under cool temperatures with high light, PGRs are not necessary. If ideal conditions cannot be metm sprays of B-Nine® WSG at 5,000 ppm are effective in controlling growth.	High light and cool night temperatures will result in the best quality plug.

Nemesia **SEVENTH HEAVEN™** *F1 Nemesia foetens*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.8–6.2 SME 0.9–1.3 mS/cm, PourThru EC: 1.4–2.0 mS/cm	4,000–6,000 foot candles	Day neutral	66–68 °F (19–20 °C)	56–58 °F (13–14 °C)	125–175 ppm N	Packs I 1 ppp I 5–6 weeks Large Packs I 1 ppp I 5–6 weeks 1 pt. I 1 ppp I 6–7 weeks 1 qt. I 1 ppp I 6–7 weeks 1.25 qt. I 3 ppp I 6–7 weeks 2.5 qt. I 3 ppp I 6–7 weeks 3 qt. I 3 ppp I 7–8 weeks 1.5 gal. pot I 3–4 ppp I 8–9 weeks	Aphids, Thrips	Botrytis, INSV

FINISH PGRs	TECH TIPS
If grown under cool temperatures with high light, PGRs are not necessary. If ideal conditions cannot be met, sprays of B-Nine® WSG at 5,000 ppm can be effective in controlling growth.	High light and cool night temperatures will result in the best quality plug.

Nicotiana **PERFUME™** *F1 Nicotiana × sandrea*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Day neutral	66–68 °F (19–20 °C)	66–68 °F (19–20 °C)	125–175 ppm N	Packs I 1 ppp I 4–5 weeks* Large Packs I 1 ppp I 4–5 weeks* 1 pt. I 1 ppp I 5–6 weeks* 1 qt. I 1 ppp I 5–6 weeks* 1.25 qt. I 1 ppp I 9–11 weeks** 2.5 qt. I 1 ppp I 9–11 weeks** 3 qt. I 1–3 ppp I 9–11 weeks 1.5 gal. pot I 3 ppp I 10–12 weeks * Green Plant ** Flowering Plant	Aphids, Whiteflies, Thrips, Cutworms	Downy Mildew

FINISH PGRs	TECH TIPS
If needed to control height, spray with B-Nine® WSG at 2,500–5,000 ppm, A-Rest® at 3–7 ppm, Bonzi® at 10–30 ppm, or Sumagic® at 5–10 ppm.	Cool days with high light will reduce the need to apply PGRs.

BACK TO CONTENTS

Nicotiana **SARATOGA™** *F1 Nicotiana × alata*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Day neutral	66–68 °F (19–20 °C)	66–68 °F (19–20 °C)	125–175 ppm N	Packs I 1 ppp I 5–6 weeks 1 qt. I 1 ppp I 6–7 weeks 1.25 qt. I 1–2 ppp I 7–8 weeks 2.5 qt. I 2–3 ppp I 7–8 weeks	Aphids, Whiteflies, Thrips, Cutworms	Downy Mildew

FINISH PGRs	TECH TIPS
If needed to control height, spray with B-Nine® WSG at 2,500–5,000 ppm, A-Rest® at 3–7 ppm, Bonzi® at 10–30 ppm or Sumagic® at 5–10 ppm.	Cool days with high light will reduce the need to apply PGRs.

Osteospermum **ASTI™** *F1 Osteospermum ecklonis*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.8–6.2 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Day neutral	60–62 °F (16–17 °C)	52–54 °F (11–12 °C)	125–175 ppm N	1 qt. I 1 ppp I 10–14 weeks 1.25 qt. I 2–3 ppp I 12–15 weeks 2.5 qt. I 2–3 ppp I 12–15 weeks	Fungus Gnats, Shore Flies, Thrips, Aphids	Pythium, Rhizoctonia, Botrytis

FINISH PGRs	TECH TIPS
If grown cool and under high light, PGRs will not be necessary. Under suboptimal conditions spray with B-Nine® WSG at 2,500–5,000 ppm or Cycocel® at 750–1,000 ppm as needed.	It is very important to spray the plugs with Cycocel® at 300 ppm about 10 days after sowing to help reduce hypocotyl stretch. Shorter hypocotyls will result in a stronger central stem after transplant and will reduce floppiness in the finished plant.

Pansy **COLOSSUS™** *F1 Viola × wittrockiana*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 0.9–1.3 mS/cm, PourThru EC: 1.4–2.0 mS/cm	4,000–6,000 foot candles	Facultative long day	64–66 °F (18–19 °C)	64–66 °F (18–19 °C)	75–125 ppm N	Packs I 1 ppp I 4–7 weeks Large Packs I 1 ppp I 5–7 weeks 1 pt. I 1 ppp I 5–7 weeks 1 qt. I 1 ppp I 5–7 weeks 1.25 qt. I 2–3 ppp I 6–8 weeks 1.5 gal. HB I 5–6 ppp I 6–8 weeks	Aphids, Thrips	Alternaria, Downy Mildew, Thielaviopsis, Cercospora, Botrytis

FINISH PGRs	TECH TIPS
Usually not required if growing cool. If conditions are warmer or darker than ideal spray with B-Nine® at 2,500–5,000 ppm.	Keep media pH below 5.8 to help avoid Thielaviopsis infections. Under hot temperatures provide lower light levels to reduce heat stress. Do not hold Pansy plugs - transplant before plugs get root bound.

Pansy **DELTA™** *F1 Viola × wittrockiana*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 0.9–1.3 mS/cm, PourThru EC: 1.4–2.0 mS/cm	4,000–6,000 foot candles	Facultative long day	64–66 °F (18–19 °C)	64–66 °F (18–19 °C)	75–125 ppm N	Packs I 1 ppp I 4–5 weeks Large Packs I 1 ppp I 5–6 weeks 1 pt. I 1 ppp I 5–6 weeks 1 qt. I 1 ppp I 5–6 weeks 1.25 qt. I 2–3 ppp I 5–6 weeks 1.5 gal. HB I 5–6 ppp I 5–7 weeks	Aphids, Thrips	Alternaria, Downy Mildew, Thielaviopsis, Cercospora, Botrytis

FINISH PGRs	TECH TIPS
Usually not required if growing cool. If conditions are warmer or darker than ideal spray with B-Nine® at 2,500–5,000 ppm.	Keep media pH below 5.8 to help avoid Thielaviopsis infections. Under hot temperatures provide lower light levels to reduce heat stress. Do not hold Pansy plugs - transplant before plugs get root bound.

Pansy **DELTA™ PREMIUM** *F1 Viola × wittrockiana*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 0.9–1.3 mS/cm, PourThru EC: 1.4–2.0 mS/cm	4,000–6,000 foot candles	Facultative long day	64–66 °F (18–19 °C)	64–66 °F (18–19 °C)	75–125 ppm N	Packs I 1 ppp I 4–5 weeks Large Packs I 1 ppp I 5–6 weeks 1 pt. I 1 ppp I 5–6 weeks 1 qt. I 1 ppp I 5–6 weeks 1.25 qt. I 2–3 ppp I 5–6 weeks 1.5 gal. HB I 5–6 ppp I 5–7 weeks	Aphids, Thrips	Alternaria, Downy Mildew, Thielaviopsis, Cercospora, Botrytis

FINISH PGRs	TECH TIPS
Usually not required if growing cool. If conditions are warmer or darker than ideal spray with B-Nine® at 2,500–5,000 ppm.	Keep media pH below 5.8 to help avoid Thielaviopsis infections. Under hot temperatures provide lower light levels to reduce heat stress. Do not hold Pansy plugs - transplant before plugs get root bound.

BACK TO CONTENTS

Pansy **DELTA™ SPEEDY** *F1 Viola × wittrockiana*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 0.9–1.3 mS/cm, PourThru EC: 1.4–2.0 mS/cm	4,000–6,000 foot candles	Facultative long day	64–66 °F (18–19 °C)	64–66 °F (18–19 °C)	75–125 ppm N	Packs I 1 ppp I 4–5 weeks Large Packs I 1 ppp I 5–6 weeks 1 pt. I 1 ppp I 5–6 weeks 1 qt. I 1 ppp I 5–6 weeks	Aphids, Thrips	Alternaria, Downy Mildew, Thielaviopsis, Cercospora, Botrytis

FINISH PGRs	TECH TIPS
Usually not required if growing cool. If conditions are warmer or darker than ideal spray with B-Nine® at 2,500–5,000 ppm.	Keep media pH below 5.8 to help avoid Thielaviopsis infections. Under hot temperatures provide lower light levels to reduce heat stress. Do not hold Pansy plugs - transplant before plugs get root bound.

Pansy Spreading **FREEFALL™** *F1 Viola × wittrockiana*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 0.9–1.3 mS/cm, PourThru EC: 1.4–2.0 mS/cm	4,000–6,000 foot candles	Facultative long day	64–66 °F (18–19 °C)	64–66 °F (18–19 °C)	75–125 ppm N	Large Packs I 1 ppp I 4–5 weeks 1 pt. I 1 ppp I 5–6 weeks 1 qt. I 1 ppp I 5–6 weeks 1.25 qt. I 2–3 ppp I 6–7 weeks 2.5 qt. I 2–3 ppp I 6–7 weeks 1.5 gal. HB I 6–7 ppp I 7–9 weeks	Aphids, Thrips	Alternaria, Downy Mildew, Thielaviopsis, Cercospora, Botrytis

FINISH PGRs	TECH TIPS
Usually not required if growing cool. If conditions are warmer or darker than ideal spray with B-Nine® WSG at 2,500–5,000 ppm.	Keep media pH below 5.8 to help avoid Thielaviopsis infections. Under hot temperatures provide lower light levels to reduce heat stress. Also if very frequent irrigation occurs due to high temperatures apply a supplemental feed of Solubor® to avoid Boron deficiency.

Pansy Spreading **FREEFALL™ XL** *F1 Viola × wittrockiana*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 0.9–1.3 mS/cm, PourThru EC: 1.4–2.0 mS/cm	4,000–6,000 foot candles	Facultative long day	64–66 °F (18–19 °C)	64–66 °F (18–19 °C)	75–125 ppm N	Large Packs I 1 ppp I 4–5 weeks 1 pt. I 1 ppp I 5–6 weeks 1 qt. I 1 ppp I 5–6 weeks 1.25 qt. I 2–3 ppp I 6–7 weeks 2.5 qt. I 2–3 ppp I 6–7 weeks 1.5 gal. HB I 6–7 ppp I 7–9 weeks	Aphids, Thrips	Alternaria, Downy Mildew, Thielaviopsis, Cercospora, Botrytis

FINISH PGRs	TECH TIPS
Usually not required if growing cool. If conditions are warmer or darker than ideal spray with B-Nine® WSG at 2,500–5,000 ppm.	Keep media pH below 5.8 to help avoid Thielaviopsis infections. Under hot temperatures, provide lower light levels to reduce heat stress. If frequent irrigation occurs due to high temperatures, apply a supplemental feed of Solubor® to avoid Boron deficiency.

Pansy Spreading **WONDERFALL™** *F1 Viola × wittrockiana*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 0.9–1.3 mS/cm, PourThru EC: 1.4–2.0 mS/cm	4,000–6,000 foot candles	Facultative long day	64–66 °F (18–19 °C)	64–66 °F (18–19 °C)	75–125 ppm N	1 qt. I 1 ppp I 5–7 weeks 1.25 qt. I 1 ppp I 5–7 weeks 2.5 qt. I 1 ppp I 5–7 weeks 1.5 gal. HB I 3 ppp I 6–8 weeks	Aphids, Thrips	Alternaria, Downy Mildew, Thielaviopsis, Cercospora, Botrytis

FINISH PGRs	TECH TIPS
Usually not required if growing cool. If conditions are warmer or darker than ideal spray with B-Nine® at 2,500–5,000 ppm. Drenching with Bonzi® at 0.25–0.5 ppm is effective at holding plants prior to shipping.	Keep media pH below 5.8 to help avoid Thielaviopsis infections. Under hot temperatures provide lower light levels to reduce heat stress. Do not hold Pansy plugs - transplant before plugs get root bound.

Penstemon **ARABESQUE®** *F1 Penstemon hartwegii*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.8–6.2 SME 2.3–2.8 mS/cm, Pourthru EC: 3.5–4.2 mS/cm	6,000–8,000 foot candles	Facultative long day	68–70 °F (20–21 °C)	60–62 °F (16–17 °C)	200–250 ppm N	1 qt. I 1 ppp I 11–13 weeks 1.25 qt. I 2 ppp I 11–13 weeks 2.5 qt. I 2 ppp I 11–13 weeks 3 qt. I 3 ppp I 11–13 weeks 1.5 gal. pot I 3–5 ppp I 11–13 weeks	Aphids, Fungus Gnats, Thrips	Botrytis, Pythium, Rhizoctonia, Thielaviopsis, INSV (Impatiens Necrotic Spot Virus)

FINISH PGRs	TECH TIPS
Under most growing environments, chemical growth regulation is required to control stem elongation of Arabesque Penstemon. For growth control, use sprays of Sumagic® at 5–10 ppm or a tank mix of B-Nine® WSG at 1,500 ppm plus Cycocel® at 750 ppm. Alternatively, drench with Bonzi® at 0.5–2.0 ppm. One to two applications are generally needed.	Warm day temperatures can promote soft growth and excessive stem elongation.

BACK TO CONTENTS

Penstemon **PARTYBELLS™** *F1 Penstemon hartwegii*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.8–6.2 SME 2.3–2.8 mS/cm, Pourthru EC: 3.5–4.2 mS/cm	6,000–8,000 foot candles	Facultative long day	68–70 °F (20–21 °C)	60–62 °F (16–17 °C)	125–175 ppm N	1 qt. I 1 ppp I 11–12 weeks 1.25 qt. I 1–2 ppp I 11–12 weeks 2.5 qt. I 1–2 ppp I 11–12 weeks 3 qt. I 3–4 ppp I 11–12 weeks 1.5 gal. pot I 3–4 ppp I 11–12 weeks	Aphids, Fungus Gnats, Thrips	Botrytis, Pythium, Rhizoctonia, Thielaviopsis, INSV (Impatiens Necrotic Spot Virus)

FINISH PGRs	TECH TIPS
Partybells Penstemon, if grown cool will likely not require PGR applications. However, if needed, spray applications of Bonzi® at 10–15 ppm or Sumagic® at 5 ppm are effective in controlling stem elongation.	Warm day temperatures can promote soft growth and excessive stem elongation.

Pentas **BEEBRIGHT™** *F1 Pentas lanceolata*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 6.1–6.5 SME 0.9–1.3 mS/cm, PourThru EC: 1.4–2.0 mS/cm	4,000–6,000 foot candles	Facultative long day	70–72 °F (21–22 °C)	66–68 °F (19–20 °C)	75–125 ppm N	Packs I 1 ppp I 7–8 weeks Large Packs I 1 ppp I 7–8 weeks 1 pt. I 1 ppp I 7–8 weeks 1 qt. I 1 ppp I 7–8 weeks 1.25 qt. I 2 ppp I 7–8 weeks 2.5 qt. I 2 ppp I 7–8 weeks	Thrips, Whiteflies, Aphids, Spider Mites	Pythium, Botrytis, Rhizoctonia

FINISH PGRs	TECH TIPS
BeeBrigh Pentas are genetically compact, and typically do not require PGR applications. If needed, the following PGRs are effective as sprays: B-Nine® WSG at 2,500–5,000 ppm, Cycocel® at 750–1,000 ppm, Bonzi® at 5–10 ppm, or A-Rest® at 3–5 ppm.	Provide supplemental lighting when DLI is less than 12 mols/day. Monitor pH and maintain above 6.1, or growth can stall.

Pentas **HONEYCLUSTER™** *F1 Pentas lanceolata*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 6.1–6.5 SME 0.9–1.3 mS/cm, PourThru EC: 1.4–2.0 mS/cm	4,000–6,000 foot candles	Facultative long day	70–72 °F (21–22 °C)	66–68 °F (19–20 °C)	75–125 ppm N	1 qt. I 1 ppp I 7–8 weeks 1.25 qt. I 1 ppp I 7–8 weeks 2.5 qt. I 1 ppp I 7–8 weeks 3 qt. I 2–3 ppp I 8–9 weeks	Thrips, Whiteflies, Aphids, Spider Mites	Pythium, Botrytis, Rhizoctonia

FINISH PGRs	TECH TIPS
If needed the following PGRs are effective as sprays: B-Nine® WSG at 2,500–5,000 ppm, Cycocel® at 750–1,000 ppm, Bonzi® at 5–10 ppm or A-Rest® at 3–5 ppm.	Provide supplemental lighting when DLI is less than 12 mols/day. Monitor pH levels and maintain above 6.1, or growth can stall

Petunia Grandiflora **DUVET™** *F1 Petunia grandiflora*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Facultative Long Day	68–70 °F (20–21 °C)	58–60 °F (14–16 °C)	125–175 ppm N	Packs I 1 ppp I 4–5 weeks Large Packs I 1 ppp I 5–6 weeks 1 pt. I 1 ppp I 5–6 weeks 1 qt. I 1 ppp I 5–6 weeks 1.25 qt. I 2–3 ppp I 6–7 weeks 2.5 qt. I 3 ppp I 6–7 weeks 1.5 gal. HB I 3–4 ppp I 7–8 weeks	Thrips, Aphids	Botrytis, Rhizoctonia

FINISH PGRs	TECH TIPS
Duvet is a genetically compact Petunia so requires significantly less PGRs than standard Petunias. It is best to control growth by providing optimal growing conditions. Suboptimal growing conditons (too warm, too humid, overwatering, low light) can promote soft, stretchy growth. If growth control is necessary, Duvet responds well to sprays of B-Nine® WSG at 2,500–3,500 ppm or Bonzi® at 5–15 ppm.Bonzi® drenches are not recommended.	Covering seed is not necessary but a light vermiculite coating will help maintain moisture levels in drier climates. Keep pelleted seed at moisture level 5 the first several days to help dissolve the pellet. Providing long days in the plug stage will reduce overall time to flower. Low boron levels can induce tip abortion. Spraying an uneven plug tray with B-Nine® WSG at 1,500 ppm may help even the growth in the tray.

BACK TO CONTENTS

Petunia Grandiflora **FROST™** *F1 Petunia grandiflora*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Facultative Long Day	68–70 °F (20–21 °C)	58–60 °F (14–16 °C)	125–175 ppm N	Packs I 1 ppp I 4–5 weeks Large Packs I 1 ppp I 5–6 weeks 1 pt. I 1 ppp I 5–6 weeks 1 qt. I 1 ppp I 5–6 weeks 1.25 qt. I 2–3 ppp I 6–7 weeks 2.5 qt. I 3 ppp I 6–7 weeks 3 qt. I 3–4 ppp I 7–8 weeks 1.5 gal. HB I 3–4 ppp I 7–8 weeks 1.5 gal. pot I 3–4 ppp I 7–8 weeks	Thrips, Aphids	Botrytis, Rhizoctonia

FINISH PGRs	TECH TIPS
It is best to be proactive in applying PGRs on Petunias. Anticipate changes in weather or other conditions that can cause plant stretch and apply PGRs before plant stretch begins. Petunias respond well to B-Nine® WSG sprays at 2,500–3,500 ppm. Do not apply B-Nine® WSG after bud formation or flowers may reduce in size and/or become distorted. Bonzi® drenches at 1–2 ppm during later stages in the crop will reduce stretch and will not affect flowering as much as B-Nine® WSG.	Covering seed is not necessary but a light vermiculite coating will help maintain moisture levels in drier climates. Keep pelleted seed at moisture level 5 the first several days to help dissolve the pellet. Providing long days in the plug stage will reduce overall time to flower. Low boron levels can induce tip abortion. Spraying an uneven plug tray with B-Nine® WSG at 1,500 ppm may help even the growth in the tray.

Petunia Grandiflora **TRITUNIA™** *F1 Petunia grandiflora*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Facultative Long Day	68–70 °F (20–21 °C)	58–60 °F (14–16 °C)	125–175 ppm N	Packs I 1 ppp I 4–5 weeks Large Packs I 1 ppp I 4–5 weeks 1 pt. I 1 ppp I 5–6 weeks 1 qt. I 1 ppp I 5–6 weeks 1.25 qt. I 2–3 ppp I 6–7 weeks 2.5 qt. I 3 ppp I 6–7 weeks 3 qt. I 3–4 ppp I 7–8 weeks 1.5 gal. HB I 3–4 ppp I 7–8 weeks 1.5 gal. pot I 3–4 ppp I 7–8 weeks	Thrips, Aphids	Botrytis, Rhizoctonia

FINISH PGRs	TECH TIPS
It is best to be proactive in applying PGRs on Petunias. Anticipate changes in weather or other conditions that can cause plant stretch and apply PGRs before plant stretch begins. Petunias respond well to B-Nine® WSG sprays at 2,500–3,500 ppm. Do not apply B-Nine® WSG after bud formation or flowers may reduce in size and/or become distorted. Bonzi® drenches at 1–2 ppm during later stages in the crop will reduce stretch and will not affect flowering as much as B-Nine® WSG.	Covering seed is not necessary but a light vermiculite coating will help maintain moisture levels in drier climates. Keep pelleted seed at moisture level 5 the first several days to help dissolve the pellet. Providing long days in the plug stage will reduce overall time to flower. Low boron levels can induce tip abortion. Spraying an uneven plug tray with B-Nine® WSG at 1,500 ppm may help even the growth in the tray.

Petunia Milliflora **PICOBELLA™** *F1 Petunia milliflora*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Facultative Long Day	68–70 °F (20–21 °C)	58–60 °F (14–16 °C)	125–175 ppm N	Packs I 1 ppp I 4–5 weeks Large Packs I 1 ppp I 5–6 weeks 1 qt. I 1 ppp I 5–6 weeks	Thrips, Aphids	Botrytis, Rhizoctonia

FINISH PGRs	TECH TIPS
Picobella is a genetically compact Petunia so usually does not need any PGR applications. If grown too warm or under low light conditions a spray of B-Nine® WSG at 1,500–2,500 ppm will help keep the growth more compact. Do not spray with B-Nine® WSG after bud formation; Picobellas is a milliflora Petunia so has many small flowers and late PGR applications may reduce flower size unacceptably.	Covering seed is not necessary but a light vermiculite coating will help maintain moisture levels in drier climates. Keep pelleted seed at moisture level 5 the first several days to help dissolve the pellet. Providing long days in the plug stage will reduce overall time to flower. Low boron levels can induce tip abortion.

Petunia Multiflora **DAMASK™** *F1 Petunia multiflora*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Facultative Long Day	68–70 °F (20–21 °C)	58–60 °F (14–16 °C)	125–175 ppm N	Packs I 1 ppp I 4–5 weeks Large Packs I 1 ppp I 5–6 weeks 1 pt. I 1 ppp I 5–6 weeks 1 qt. I 1 ppp I 5–6 weeks 1.25 qt. I 2–3 ppp I 6–7 weeks 2.5 qt. I 3 ppp I 6–7 weeks 1.5 gal. HB I 3–4 ppp I 7–8 weeks	Thrips, Aphids	Botrytis, Rhizoctonia

FINISH PGRs	TECH TIPS
Damask is a genetically compact Petunia so requires significantly less PGRs than standard Petunias. It is best to control growth by providing optimal growing conditions. Suboptimal growing conditons (too warm, too humid, overwatering, low light) can promote soft, stretchy growth. If growth control is necessary, Damask responds well to sprays of B-Nine® WSG at 2,500–3,500 ppm or Bonzi® at 5–15 ppm.Bonzi® drenches are not recommended.	Covering seed is not necessary but a light vermiculite coating will help maintain moisture levels in drier climates. Keep pelleted seed at moisture level 5 the first several days to help dissolve the pellet. Providing long days in the plug stage will reduce overall time to flower. Low boron levels can induce tip abortion. Spraying an uneven plug tray with B-Nine® WSG at 1,500 ppm may help even the growth in the tray.

BACK TO CONTENTS

Petunia Multiflora **HORIZON™** *F1 Petunia multiflora*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Facultative Long Day	68–70 °F (20–21 °C)	58–60 °F (14–16 °C)	125–175 ppm N	Packs I 1 ppp I 4–5 weeks Large Packs I 1 ppp I 5–6 weeks 1 pt. I 1 ppp I 5–6 weeks 1 qt. I 1 ppp I 5–6 weeks 1.25 qt. I 2–3 ppp I 6–7 weeks 2.5 qt. I 2–3 ppp I 6–7 weeks 3 qt. I 3–4 ppp I 7–8 weeks 1.5 gal. HB I 3–4 ppp I 7–8 weeks 1.5 gal. pot I 3–4 ppp I 7–8 weeks	Thrips, Aphids	Botrytis, Rhizoctonia

FINISH PGRs	TECH TIPS
It is best to be proactive in applying PGRs on Petunias. Anticipate changes in weather and other conditions that can cause plant stretch and apply PGRs before plant stretch begins. Petunias respond well to B-Nine® WSG sprays at 2,500–3,500 ppm. Do not apply B-Nine® WSG after bud formation or flowers may reduce in size and/or become distorted. Bonzi® drenches at 1–2 ppm during later stages in the crop reduces stretch and will not affect flowering as much as B-Nine® WSG.	Covering seed is not necessary, but a light vermiculite coating will help maintain moisture levels in drier climates. Keep pelleted seed at moisture level 5 the first several days to help dissolve the pellet. Providing long days in the plug stage will reduce overall time to flower. Low boron levels can induce tip abortion. Spraying an uneven plug tray with B-Nine® WSG at 1,500 ppm may help even the growth in the tray.

Petunia Multiflora **HURRAH™** *F1 Petunia multiflora*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Facultative Long Day	68–70 °F (20–21 °C)	58–60 °F (14–16 °C)	125–175 ppm N	Packs I 1 ppp I 4–5 weeks Large Packs I 1 ppp I 5–6 weeks 1 pt. I 1 ppp I 5–6 weeks 1 qt. I 1 ppp I 5–6 weeks 1.25 qt. I 2–3 ppp I 6–7 weeks 2.5 qt. I 3 ppp I 6–7 weeks 3 qt. I 3–4 ppp I 7–8 weeks 1.5 gal. HB I 3–4 ppp I 7–8 weeks 1.5 gal. pot I 3–4 ppp I 7–8 weeks	Thrips, Aphids	Botrytis, Rhizoctonia

FINISH PGRs	TECH TIPS
It is best to be proactive in applying PGRs on Petunias. Anticipate changes in weather or other conditions that can cause plant stretch and apply PGRs before plant stretch begins. Petunias respond well to B-Nine® WSG sprays at 2,500–3,500 ppm. Do not apply B-Nine® WSG after bud formation or flowers may reduce in size and/or become distorted. Bonzi® drenches at 1–2 ppm during later stages in the crop will reduce stretch and will not affect flowering as much as B-Nine® WSG.	Covering seed is not necessary but a light vermiculite coating will help maintain moisture levels in drier climates. Keep pelleted seed at moisture level 5 the first several days to help dissolve the pellet. Providing long days in the plug stage will reduce overall time to flower. Low boron levels can induce tip abortion. Spraying an uneven plug tray with B-Nine® WSG at 1,500 ppm may help even the growth in the tray.

Petunia Spreading **FOTOFINISH™** *F1 Petunia pendula*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Facultative Long Day	68–70 °F (20–21 °C)	58–60 °F (14–16 °C)	125–175 ppm N	Large Packs I 1 ppp I 4–5 weeks 1 qt. I 1 ppp I 4–5 weeks 1.25 qt. I 1–2 ppp I 5–7 weeks 2.5 qt. I 1–2 ppp I 5–7 weeks 1.5 gal. HB I 3 ppp I 7–8 weeks 1.5 gal. pot I 3 ppp I 7–8 weeks 2 gal. HB I 5 ppp I 7–8 weeks	Thrips, Aphids	Botrytis, Rhizoctonia

FINISH PGRs	TECH TIPS
It is best to be proactive in applying plant growth regulators (PGRs) on Petunias. Anticipate changes in weather or other conditions that can cause plant stretch and apply PGRs before plant stretch begins. Petunias respond well to B-Nine® WSG sprays at 2,500–3,500 ppm. Do not apply B-Nine® WSG after bud formation or flowers may reduce in size and/or become distorted. Bonzi® drenches at 1–2 ppm during later stages in the crop will reduce stretch and will not affect flowering as much as B-Nine® WSG.	Covering seed is not necessary, but a light vermiculite coating will help maintain moisture levels in drier climates. Keep pelleted seed at moisture level 5 the first several days to help dissolve the pellet. Providing long days in the plug stage will reduce overall time to flower. Low boron levels can induce tip abortion. Spraying an uneven plug tray with B-Nine® WSG at 1,500 ppm may help even the growth in the tray.

Petunia Spreading Grandiflora **SKYBOX™** *Petunia pendula*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Facultative long day	68–70 °F (20–21 °C)	58–60 °F (14–16 °C)	125–175 ppm N	1 qt. I 1 ppp I 5–8 weeks 1.25 qt. I 1 ppp I 6–7 weeks 2.5 qt. I 1 ppp I 7–8 weeks 1.5 gal. HB I 3–4 ppp I 8–9 weeks	Thrips, Aphids	Botrytis, Rhizoctonia

FINISH PGRs	TECH TIPS
It is best to be proactive in applying PGRs on Petunias. Anticipate changes in weather or other conditions that can cause plant stretch and apply PGRs before plant stretch begins. Petunias respond well to B-Nine® WSG sprays at 2,500–3,500 ppm. Do not apply B-Nine® WSG after bud formation or flowers may reduce in size and/or become distorted. Bonzi® drenches at 1–2 ppm during later stages in the crop will reduce stretch and will not affect flowering as much as B-Nine® WSG.	Covering seed is Not necessary but a light vermiculite coating will help maintain moisture levels in drier climates. Keep pelleted seed at moisture level 5 the first several days to help dissolve the pellet. Providing long days in the plug stage will reduce overall time to flower. Low boron levels can induce tip abortion.

BACK TO CONTENTS

Petunia Spreading Milliflora **FLASHFORWARD™** *F1 Petunia pendula milliflora*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Facultative Long Day	68–70 °F (20–21 °C)	58–60 °F (14–16 °C)	125–175 ppm N	Large Packs I 1 ppp I 5–6 weeks 1 qt. I 1 ppp I 5–6 weeks 1.25 qt. I 1–2 ppp I 6–7 weeks 2.5 qt. I 2–3 ppp I 6–7 weeks 1.5 gal. HB I 3–5 ppp I 7–8 weeks	Thrips, Aphids	Botrytis, Rhizoctonia

FINISH PGRs	TECH TIPS
FlashForward is a genetically compact Petunia so will need less PGRs than other Petunias. It is best to be proactive in applying PGRs on Petunias. Anticipate changes in weather or other conditions that can cause plant stretch and apply PGRs before plant stretch begins. FlashForward Petunias respond well to B-Nine® WSG sprays at 1,500–2,500 ppm. Do not apply B-Nine® WSG after bud formation or flowers may reduce in size and/or become distorted. Bonzi® drenches at 0.5–1.0 ppm during later stages in the crop will reduce stretch and will not affect flowering as much as B-Nine® WSG.	Covering seed is not necessary but a light vermiculite coating will help maintain moisture levels in drier climates. Keep pelleted seed at moisture level 5 the first several days to help dissolve the pellet. Providing long days in the plug stage will reduce overall time to flower. Low boron levels can induce tip abortion. Spraying an uneven plug tray with B-Nine® WSG at 1,500 ppm may help even the growth in the tray.

Phlox **POPSTARS™** *F1 Phlox drummondii*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 0.9–1.3 mS/cm, PourThru EC: 1.4–2.0 mS/cm	4,000–6,000 foot candles	Day neutral	60–62 °F (16–17 °C)	56–58 °F (13–14 °C)	125–175 ppm N	Packs I 1 ppp I 5–6 weeks Large Packs I 1 ppp I 5–6 weeks 1 pt. I 1 ppp I 5–6 weeks 1 qt. I 1 ppp I 5–6 weeks 1.25 qt. I 3 ppp I 5–6 weeks 2.5 qt. I 3 ppp I 5–6 weeks 3 qt. I 3–4 ppp I 5–6 weeks 1.5 gal. HB I 5 ppp I 6–7 weeks	Thrips	Powdery Mildew, Rhizoctonia, Pythium

FINISH PGRs	TECH TIPS
PGRs are usually not necessary under proper (cool with high light) growing conditions. If needed due to low light and/or high temperatures, sprays of Bonzi® at 15–20 ppm or B-Nine® WSG at 5,000 ppm are effective. The best time to apply PGRs is about two weeks after transplant; later treatments will give more height control but will delay flowering. Popstars also respond well to a negative DIF.	Keep EC lees than 0.75 mS/cm as Phlox drummondii are sensitive to high salts. For this reason, do not try and control growth by growing the plugs dry as well.

Primula **LIBRE™** *F1 Primula obconica*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 0.9–1.3 mS/cm, PourThru EC: 1.4–2.0 mS/cm	2,000–4,000 foot candles	Facultative short day	62–64 °F (17–18 °C)	60–62 °F (16–17 °C)	75–125 ppm N	1 qt. I 1 ppp I 8–9 weeks 1.25 qt. I 1 ppp I 10–12 weeks 2.5 qt. I 1 ppp I 10–12 weeks 3 qt. I 2–3 ppp I 10–12 weeks	Whiteflies, Leaf Miners, Aphids, Thrips	Pythium, Tospovirus

FINISH PGRs	TECH TIPS
If needed, sprays of B-Nine® WSG at 2,500–5,000 can be effective.	Control Thrips to avoid Tospovirus.

Primula **PRIMERA™** *F1 Primula acaulis*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 0.9–1.3 mS/cm, PourThru EC: 1.4–2.0 mS/cm	2,000–4,000 foot candles	Facultative long day	50–52 °F (10–11 °C)	54–56 °F (12–13 °C)	75–125 ppm N	1 pt. I 1 ppp I 13–14 weeks 1 qt. I 1 ppp I 13–14 weeks	Whiteflies, Fungus Gnats, Leaf Miners, Aphids, Thrips	Ramularia, Botrytis

FINISH PGRs	TECH TIPS
If grown at the recommended temperatures, PGR applications should not be necessary. If needed, sprays of B-Nine® WSG at 2,500–5,000 ppm are effective in helping control leaf size.	Grow plugs on the dry side to avoid excessive algae growth.

Ranunculus **MACHÉ™** *F1 Ranunculus asiaticus*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Facultative long day	52–54 °F (11–12 °C)	50–52 °F (10–11 °C)	125–175 ppm N	1 qt. I 1 ppp I 12–15 weeks 1.25 qt. I 1 ppp I 13–16 weeks 2.5 qt. I 1–2 ppp I 13–16 weeks	Aphids, Whiteflies, Leafminer, Thrips, Fungus Gnats	Cercospora, Pythium, Botrytis, Tospovirus, Xanthomonas

FINISH PGRs	TECH TIPS
Ranunculus responds well to sprays of B-Nine® WSG at 2,500–5,000 ppm. If grown cool, PGR applications are usually not necessary. Under warm conditions, 1–3 sprays of B-Nine® WSG may be beneficial to control leaf size.	Control Thrips to avoid Tospovirus.

BACK TO CONTENTS

Ranunculus **MAGIC™** *F1 Ranunculus asiaticus*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Facultative long day	52–54 °F (11–12 °C)	50–52 °F (10–11 °C)	125–175 ppm N	1 pt.	1 ppp	14–16 weeks 1 qt.	1 ppp	14–16 weeks	Aphids, Whiteflies, Leaf Miners, Thrips, Fungus Gnats	Cercospora, Pythium, Botrytis, Tospovirus, Xanthomonas

FINISH PGRs	TECH TIPS
Since Ranunculus Magic is a genetically compact plant PGRs are not needed.	Control Thrips to avoid Tospovirus.

Salvia **MOJAVE™** *OP Salvia splendens*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 0.9–1.3 mS/cm, PourThru EC: 1.4–2.0 mS/cm	4,000–6,000 foot candles	Facultative long day	66–68 °F (19–20 °C)	62–64 °F (17–18 °C)	125–175 ppm N	Large Packs	1 ppp	5–6 weeks 1 pt.	1 ppp	5–7 weeks 1 qt.	1–2 ppp	6–7 weeks 1.25 qt.	2–3 ppp	6–7 weeks 2.5 qt.	2–3 ppp	6–7 weeks 3 qt.	3–4 ppp	5–6 weeks 1.5 gal. pot	4 ppp	6–7 weeks	Aphids, Thrips, Spider Mites, Leaf Miners and Whiteflies	Botrytis, Alternaria Leaf Spot, Corynospora Leaf Spot and Rust

FINISH PGRs	TECH TIPS
If needed to control height, spray with B-Nine® WSG at 2,500 ppm, Bonzi® at 10–30 ppm, or A-Rest® at 5–10 ppm.	Salvia is sensitive to high salts in the plug tray, so do not let the EC rise above 1.5 mS/cm. After fertilization, rinse the plants off with clear water to avoid burning the young growing tips.

Salvia **RHEA™** *OP Salvia farinacea*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 0.9–1.3 mS/cm, PourThru EC: 1.4–2.0 mS/cm	4,000–6,000 foot candles	Facultative long day	66–68 °F (19–20 °C)	62–64 °F (17–18 °C)	125–175 ppm N	Packs	1 ppp	8–9 weeks Large Packs	1 ppp	8–9 weeks 1 pt.	1 ppp	9–10 weeks 1 qt.	1 ppp	9–10 weeks 1.25 qt.	1–3 ppp	10–11 weeks 2.5 qt.	1–3 ppp	10–11 weeks 3 qt.	3 ppp	11–12 weeks 1.5 gal. pot	3–4 ppp	11–12 weeks	Aphids, Thrips and Whiteflies	Pythium and Botrytis

FINISH PGRs	TECH TIPS
If needed to control height, spray with B-Nine® WSG at 2,500 ppm, Bonzi® at 5–15 ppm, or A-Rest® at 3–10 ppm. Rhea was bred to be genetically compact, therefore it does not require as much PGRs as some other Salvia farinacea varieties.	Salvia is sensitive to high salts in the plug tray, so do not let the EC rise above 1.5 mS/cm. After fertilization, rinse the plugs off with clear water to avoid burning the young growing tips.

Salvia **SENTRY™** *OP Salvia splendens*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 0.9–1.3 mS/cm, PourThru EC: 1.4–2.0 mS/cm	4,000–6,000 foot candles	Facultative long day	66–68 °F (19–20 °C)	62–64 °F (17–18 °C)	125–175 ppm N	Packs	1 ppp	3–4 weeks Large Packs	1 ppp	4–5 weeks 1 pt.	1 ppp	4–5 weeks 1 qt.	1–2 ppp	5–6 weeks 1.25 qt.	2–3 ppp	5–6 weeks 2.5 qt.	2–3 ppp	5–6 weeks 1.5 gal. pot	4–5 ppp	6–7 weeks	Aphids, Thrips, Spider Mites, Leaf Miners and Whiteflies	Botrytis, Alternaria Leaf Spot, Corynospora Leaf Spot and Rust

FINISH PGRs	TECH TIPS
If needed to control height, spray with B-Nine® WSG at 2,500 ppm, Bonzi® at 10–30 ppm, or A-Rest® at 5–10 ppm.	Salvia is sensitive to high salts in the plug tray, so do not let the EC rise above 1.5 mS/cm. After fertilization, rinse the plants off with clear water to avoid burning the young growing tips.

Salvia **SIZZLER™** *OP Salvia splendens*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 0.9–1.3 mS/cm, PourThru EC: 1.4–2.0 mS/cm	4,000–6,000 foot candles	Facultative long day	66–68 °F (19–20 °C)	62–64 °F (17–18 °C)	125–175 ppm N	Packs	1 ppp	4–5 weeks Large Packs	1 ppp	4–5 weeks 1 pt.	1 ppp	5–6 weeks 1 qt.	1–2 ppp	5–6 weeks 1.25 qt.	2–3 ppp	5–6 weeks 2.5 qt.	2–3 ppp	5–6 weeks 1.5 gal. pot	4–5 ppp	6–7 weeks	Aphids, Thrips, Spider Mites, Leaf Miners and Whiteflies	Botrytis, Alternaria Leaf Spot, Corynospora Leaf Spot and Rust

FINISH PGRs	TECH TIPS
If needed to control height, spray with B-Nine® WSG at 2,500 ppm, Bonzi® at 10–30 ppm, or A-Rest® at 5–10 ppm.	Salvia is sensitive to high salts in the plug tray so do not let the EC rise above 1.5 mS/cm. After fertilization, rinse the plants off with clear water to avoid burning the young growing tips.

BACK TO CONTENTS

Salvia **STRATA™** *OP Salvia farinacea*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 0.9–1.3 mS/cm, PourThru EC: 1.4–2.0 mS/cm	4,000–6,000 foot candles	Facultative long day	66–68 °F (19–20 °C)	62–64 °F (17–18 °C)	125–175 ppm N	Packs I 1 ppp I 8–9 weeks Large Packs I 1 ppp I 8–9 weeks 1 pt. I 1 ppp I 9–10 weeks 1 qt. I 1 ppp I 9–10 weeks 1.25 qt. I 1–3 ppp I 10–11 weeks 2.5 qt. I 1–3 ppp I 10–11 weeks 3 qt. I 3 ppp I 11–12 weeks 1.5 gal. pot I 3–4 ppp I 11–12 weeks	Aphids, Thrips and Whiteflies	Pythium and Botrytis

FINISH PGRs	TECH TIPS
If needed to control height, spray with B-Nine® WSG at 2,500 ppm, Bonzi® at 5–15 ppm, or A-Rest® at 3–10 ppm. Strata is bred to be genetically compact; therefore, it does not require as much PGRs as some other Salvia farinacea varieties.	Salvia is sensitive to high salts in the plug tray, so do not let the EC rise above 1.5 mS/cm. After fertilization, rinse the plus off with clear water to avoid burning the young growing tips.

Salvia **VICTORIA™** *OP Salvia farinacea*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 0.9–1.3 mS/cm, PourThru EC: 1.4–2.0 mS/cm	4,000–6,000 foot candles	Facultative long day	66–68 °F (19–20 °C)	62–64 °F (17–18 °C)	125–175 ppm N	Packs I 1 ppp I 8–9 weeks Large Packs I 1 ppp I 8–9 weeks 1 pt. I 1 ppp I 9–10 weeks 1 qt. I 1 ppp I 9–10 weeks 1.25 qt. I 1–3 ppp I 10–11 weeks 2.5 qt. I 1–3 ppp I 10–11 weeks 3 qt. I 3 ppp I 11–12 weeks 1.5 gal. pot I 3–4 ppp I 11–12 weeks	Aphids, Thrips, Whiteflies	Pythium, Botrytis

FINISH PGRs	TECH TIPS
If needed to control height, spray with B-Nine® WSG at 2,500 ppm, Bonzi® at 5–15 ppm, or A-Rest® at 3–10 ppm.	Salvia is sensitive to high salts in the plug tray, so do not let the EC rise above 1.5 mS/cm. After fertilization, rinse the plus off with clear water to avoid burning the young growing tips.

Sanvitalia **QUEEN OF SUNLIGHT™** *F1 Sanvitalia speciosa*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.8–6.2 SME 0.9–1.3 mS/cm, PourThru EC: 1.4–2.0 mS/cm	4,000–6,000 foot candles	Day Neutral	66–68 °F (19–20 °C)	60–62 °F (16–17 °C)	125–175 ppm N	1 pt. I 1 ppp I 12–13 weeks 1 qt. I 1 ppp I 12–13 weeks 1.25 qt. I 1–2 ppp I 12–13 weeks 1.5 gal. HB I 3–4 ppp I 14–15 weeks	Thrips, Aphids	Botrytis, Pythium

FINISH PGRs	TECH TIPS
If needed to prevent stretch under low light conditions spray with B-Nine® at 2,500–5,000 ppm.	Providing supplemental HID light will speed germination and improve plug quality. Sensitive to high salts; keep EC less than 0.5 mS/cm in the plug.

Schizanthus **ATLANTIS™** *F1 Schizanthus × wisetonensis*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.8–6.2 SME 0.9–1.3 mS/cm, PourThru EC: 1.4–2.0 mS/cm	2,000–4,000 foot candles	Obligate long day	60–62 °F (16–17 °C)	56–58 °F (13–14 °C)	125–175 ppm N	1 qt. I 1 ppp I 7–9 weeks 1.25 qt. I 1 ppp I 8–10 weeks 2.5 qt. I 1 ppp I 8–10 weeks	Thrips, Whiteflies, Aphids, Spider Mites	Botrytis, Tospovirus

FINISH PGRs	TECH TIPS
PGRs are usually not required when grown under the recommended temperatures. If needed, spray with B-Nine® WSG at 1,500–3,000 ppm.	Keep plugs under short days to avoid premature flowering.

Snapdragon **LIBERTY™ CLASSIC** *F1 Antirrhinum majus*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 0.9–1.3 mS/cm, PourThru EC: 1.4–2.0 mS/cm	4,000–6,000 foot candles	Facultative long day	64–66 °F (18–19 °C)	56–58 °F (13–14 °C)	125–175 ppm N	Large Packs I 1 ppp I 6–8 weeks* 1 qt. I 1–2 ppp I 10–12 weeks 1.25 qt. I 2–3 ppp I 10–12 weeks 2.5 qt. I 3 ppp I 10–12 weeks 3 qt. I 3–5 ppp I 10–12 weeks * Green Plants	Thrips, Aphids, and Spider Mites	Botrytis, Downy Mildew, Powdery Mildew, Pythium, Rust, TSWV, and INSV

FINISH PGRs	TECH TIPS
Spray applications of B-Nine® WSG at 2,500–5,000 ppm, Bonzi® at 15–20 ppm or Sumagic® at 10–15 ppm are effective to control growth; 1–2 applications are usually sufficient. Do not apply Bonzi® drenches after visible buds to prevent clubby flowers.	High pH levels (above 6.2) may promote iron deficiency causing chlorotic young leaves. Overly wet conditions or watering late in the day can cause shoot tip abortion. Keeping the media too wet can also lead to root rot diseases such as Pythium.

BACK TO CONTENTS

Snapdragon **MADAME BUTTERFLY™** *F1 Antirrhinum majus*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 0.9–1.3 mS/cm, PourThru EC: 1.4–2.0 mS/cm	4,000–6,000 foot candles	Facultative long day	64–66 °F (18–19 °C)	56–58 °F (13–14 °C)	125–175 ppm N	1 qt. I 1–2 ppp I 10–12 weeks 1.25 qt. I 2–3 ppp I 10–12 weeks 2.5 qt. I 3 ppp I 10–12 weeks 3 qt. I 3–5 ppp I 10–12 weeks	Thrips, Aphids, Spider Mites	Botrytis, Downy Mildew, Powdery Mildew, Pythium, Rust, TSWV, INSV

FINISH PGRs	TECH TIPS
Spray applications of B-Nine® WSG at 2,500–5,000 ppm, Bonzi® at 15–20 ppm or Sumagic® at 10–15 ppm are effective to control growth; 1–2 applications are usually sufficient. Do not apply Bonzi® drenches after visible buds to prevent clubby flowers.	High pH levels (above 6.2) may promote iron deficiency causing chlorotic young leaves. Overly wet conditions or watering late in the day can cause shoot tip abortion. Keeping the media too wet can also lead to root rot diseases such as Pythium.

Snapdragon **SNAPTASTIC™** *F1 Antirrhinum majus*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 0.9–1.3 mS/cm, PourThru EC: 1.4–2.0 mS/cm	4,000–6,000 foot candles	Day neutral	64–66 °F (18–19 °C)	56–58 °F (13–14 °C)	125–175 ppm N	Large Packs I 1 ppp I 5–7 weeks 1 pt. I 1 ppp I 7–8 weeks 1 qt. I 1 ppp I 7–8 weeks 1.25 qt. I 1–2 ppp I 7–8 weeks 2.5 qt. I 1–2 ppp I 7–8 weeks 3 qt. I 3 ppp I 7–8 weeks 1.5 gal. pot I 3–5 ppp I 7–8 weeks	Thrips, Aphids, and Spider Mites.	Botrytis, Downy Mildew, Powdery Mildew, Pythium, Rust, TSWV, and INSV.

FINISH PGRs	TECH TIPS
Snaptastic is grown cool and under high light, and rarely needs PGRs. However, if needed spray applications of B-Nine® WSG at 2,500–5,000 ppm, Bonzi® at 15–20 ppm or Sumagic® at 10–15 ppm are effective to reduce stretch under suboptimal environmental conditions. Do not apply Bonzi® drenches after visible buds to prevent clubby flowers.	High pH levels (above 6.2) may promote iron deficiency causing chlorotic young leaves. Overly wet conditions or watering late in the day can cause shoot tip abortion. Keeping the media too wet can also lead to root rot diseases such as Pythium.

Snapdragon Dwarf **SNAPTINI™** *F1 Antirrhinum majus*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 0.9–1.3 mS/cm, PourThru EC: 1.4–2.0 mS/cm	4,000–6,000 foot candles	Day neutral	64–66 °F (18–19 °C)	64–66 °F (18–19 °C)	125–175 ppm N	Packs I 1 ppp I 4–5 weeks Large Packs I 1 ppp I 5–6 weeks 1 pt. I 1 ppp I 5–6 weeks	Thrips, Aphids and Spider Mites.	Botrytis, Downy Mildew, Powdery Mildew, Pythium, Rust, TSWV and INSV.

FINISH PGRs	TECH TIPS
Snaptini is grown cool and under high light, and rarely needs PGRs. However, if needed spray applications of B-Nine® WSG at 1,500–2,500 ppm, Bonzi® at 5–10 ppm or Sumagic® at 2.5–5 ppm are effective in reducing stretch under suboptimal environmental conditions. Bonzi® can also be drenched at 1–2 ppm. Do not apply Bonzi® after visible buds to prevent clubby flowers.	High pH levels (above 6.2) may promote iron deficiency causing chlorotic young leaves. Overly wet conditions or watering late in the day can cause shoot tip abortion. Keeping the media too wet can also lead to root rot diseases such as Pythium.

Sunflower **SUNFINITY®** *F1 Helianthus hybrida*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–6 SME 1.2–1.75 mS/cm	3,500–4,500 foot candles	Facultative long day	70–75 °F (21–24 °C)	65–68 °F (20–24 °C)	150–200 ppm N	2.5 qt. I 1 ppp I 7–8 weeks 3 qt. I 1 ppp I 7–8 weeks 1.5 gal. pot I 1–2 ppp I 7–8 weeks	Aphid, Spider Mites, Thrips, Whiteflies, Caterpillars	Botrytis, Pythium, Powdery Mildew, Downy Midel, Rust

FINISH PGRs	TECH TIPS
Apply 3–4 ppm Bonzi® (paclobutrazol) drench 1–2 weeks after pinch; 3–4 ppm drench at first sign of visible buds; 3–4 ppm drench when flowers start cracking color to hold for finish. Higher concentrations may be necessary under high temperature and long day conditions, but do not exceed 6 ppm for each drench.	Apply a Bonzi® (paclobutrazol) sprench at 2–3 ppm within 48 hours of sowing (3–5 quarts per 100 sq ft.) to control hypocotyl stretch. Plugs must be propagated under long day (+13 hour) photoperiods in order to prevent delays in flowering.

Torenia **DUCHESS™** *F1 Torenia fournieri*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 0.9–1.3 mS/cm, PourThru EC: 1.4–2.0 mS/cm	4,000–6,000 foot candles	Facultative long day	68–70 °F (20–21 °C)	60–62 °F (16–17 °C)	75–125 ppm N	Packs I 1 ppp I 7–8 weeks 1 qt. I 1 ppp I 8–9 weeks	Aphids, Thrips	Botrytis, Pythium

FINISH PGRs	TECH TIPS
Usually not needed.	High light levels can cause leaf scorch. Very wet conditions will promote damping-off diseases.

BACK TO CONTENTS

Verbena **OBSESSION™** *OP Verbena hybrida*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.8–6.2 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Facultative long day	70–72 °F (21–22 °C)	64–66 °F (18–19 °C)	125–175 ppm N	Packs I 1 ppp I 5–6 weeks 1 pt. I 1 ppp I 5–6 weeks 1 qt. I 1 ppp I 6–8 weeks	Fungus Gnats, Shore Flies, Thrips, Aphids, Spider Mites	Pythium, Rhizoctonia, Powdery Mildew, Tospovirus (Tomato Spotted Wilt Virus or Impatiens Necrotic Spot Virus)

FINISH PGRs	TECH TIPS
Spray with B-Nine® at 2,500–5,000 ppm as needed.	Verbena need to be germinated on the dry side at moisture level 3. It is best to water in plug trays to moisture level 3 prior to sow, sow the seeds and then irrigate lightly only when needed to maintain moisture level 3.

Verbena **OBSESSION™ CASCADE** *OP Verbena hybrida*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.8–6.2 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Facultative long day	70–72 °F (21–22 °C)	64–66 °F (18–19 °C)	125–175 ppm N	1 qt. I 1 ppp I 7–8 weeks 1.25 qt. I 1–2 ppp I 7–8 weeks 2.5 qt. I 1–2 ppp I 7–8 weeks 3 qt. I 2–3 ppp I 8–9 weeks 1.5 gal. HB I 3–4 ppp I 8–9 weeks 1.5 gal. pot I 3–4 ppp I 8–9 weeks	Fungus Gnats, Shore Flies, Thrips, Aphids, Spider Mites	Pythium, Rhizoctonia, Powdery Mildew, Tospovirus (Tomato Spotted Wilt Virus or Impatiens Necrotic Spot Virus)

FINISH PGRs	TECH TIPS
Drench with Bonzi® at 1–3 ppm as needed to control growth. Also responds to sprays of Bonzi® at 10–20 ppm or B-Nine® at 3,500–5,000 ppm.	Verbena need to be germinated on the dry side at moisture level 3. It is best to water in plug trays to moisture level 3 prior to sow, sow the seeds and then irrigate lightly only when needed to maintain moisture level 3.

Verbena **TUSCANY®** *OP Verbena hybrida*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.8–6.2 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Facultative long day	70–72 °F (21–22 °C)	64–66 °F (18–19 °C)	125–175 ppm N	Large Packs I 1 ppp I 6–7 weeks 1 pt. I 1 ppp I 6–8 weeks 1 qt. I 1 ppp I 7–9 weeks 2.5 qt. I 2–3 ppp I 9–10 weeks	Fungus Gnats, Shore Flies, Thrips, Aphids, Spider Mites	Pythium, Rhizoctonia, Powdery Mildew, Tospovirus (Tomato Spotted Wilt Virus or Impatiens Necrotic Spot Virus)

FINISH PGRs	TECH TIPS
Spray with B-Nine® at 2,500–5,000 ppm as needed.	Verbena need to be germinated on the dry side at moisture level 3. It is best to water in plug trays to moisture level 3 prior to sow, sow the seeds and then irrigate lightly only when needed to maintain moisture level 3.

Vinca **BLOCKBUSTER™** *F1 Catharanthus roseus*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	6,000–8,000 foot candles	Day Neutral	76–78 °F (24–26 °C)	64–66 °F (18–19 °C)	125–175 ppm N	Packs I 1 ppp I 3–4 weeks Large Packs I 1 ppp I 4–5 weeks 1 pt. I 1 ppp I 4–5 weeks 1 qt. I 1 ppp I 5–6 weeks 1.25 qt. I 1–3 ppp I 6–8 weeks 2.5 qt. I 1–3 ppp I 6–8 weeks 3 qt. I 2–3 ppp I 7–8 weeks 1.5 gal. pot I 3–4 ppp I 7–8 weeks	Thrips, Fungus Gnats and Shore Flies	Thielaviopsis, Rhizopus, Rhizoctonia, Pythium and Tospovirus (INSV and TSWV)

FINISH PGRs	TECH TIPS
If needed sprays of B-Nine® WSG at 2,500–5,000 ppm or A-Rest® at 2–4 ppm may be applied.	Soil temperatures lower than 75 °F (23 °C) during germination may decrease germination rates. Keeping media pH at 5.8 or lower will help reduce the likelihood of Thielaviopsis infections.

Vinca **CORA® CASCADE** *F1 Catharanthus roseus*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	6,000–8,000 foot candles	Day neutral	76–78 °F (24–26 °C)	64–66 °F (18–19 °C)	125–175 ppm N	1 qt. I 1–2 ppp I 8–9 weeks 1.25 qt. I 2–3 ppp I 8–9 weeks 2.5 qt. I 2–3 ppp I 8–9 weeks 3 qt. I 3 ppp I 9–10 weeks 1.5 gal. HB I 3–5 ppp I 10–11 weeks	Thrips, Fungus Gnats and Shore Flies	Thielaviopsis, Rhizopus, Rhizoctonia, Pythium and Tospovirus (INSV and TSWV)

FINISH PGRs	TECH TIPS
If needed sprays of B-Nine® WSG at 2,500–5,000 ppm or A-Rest® at 2–4 ppm may be applied.	Soil temperatures lower than 75 °F (23 °C) during germination may decrease germination rates. Keeping media pH at 5.8 or lower will help reduce the likelihood of Thielaviopsis infections.

BACK TO CONTENTS

Vinca **CORA® CLASSIC** *F1 Catharanthus roseus*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	6,000–8,000 foot candles	Day neutral	76–78 °F (24–26 °C)	64–66 °F (18–19 °C)	125–175 ppm N	Packs I 1 ppp I 5–8 weeks 1 pt. I 1 ppp I 7–8 weeks 1 qt. I 1–2 ppp I 8–9 weeks 1.25 qt. I 3 ppp I 8–9 weeks 2.5 qt. I 3 ppp I 8–9 weeks	Thrips, Fungus Gnats and Shore Flies	Thielaviopsis, Rhizopus, Rhizoctonia, Pythium and Tospovirus (INSV and TSWV)

FINISH PGRs	TECH TIPS
If needed sprays of B-Nine® WSG at 2,500–5,000 ppm or A-Rest® at 2–4 ppm may be applied.	Soil temperatures lower than 75 °F (23 °C) during germination may decrease germination rates. Keeping media pH at 5.8 or lower will help reduce the likelihood of Thielaviopsis infections.

Vinca **CORA® XDR** *F1 Catharanthus roseus*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	6,000–8,000 foot candles	Day neutral	76–78 °F (24–26 °C)	64–66 °F (18–19 °C)	125–175 ppm N	Packs I 1 ppp I 5–8 weeks Large Packs I 1 ppp I 5–8 weeks 1 pt. I 1 ppp I 5–9 weeks 1 qt. I 1–2 ppp I 5–9 weeks 1.25 qt. I 1 ppp I 5–9 weeks 2.5 qt. I 1–3 ppp I 6–10 weeks 1.5 gal. HB I 4–5 ppp I 8–9 weeks	Thrips, Fungus Gnats and Shore Flies	Thielaviopsis, Rhizopus, Rhizoctonia, Pythium and Tospovirus (INSV and TSWV)

FINISH PGRs	TECH TIPS
If needed sprays of B-Nine® WSG at 2,500–5,000 ppm or A-Rest® at 2–4 ppm may be applied.	Soil temperatures lower than 75 °F (23 °C) during germination may decrease germination rates. Keeping media pH at 5.8 or lower will help reduce the likelihood of Thielaviopsis infections.

Vinca **SUNSTORM®** *OP Catharanthus roseus*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	6,000–8,000 foot candles	Day neutral	76–78 °F (24–26 °C)	64–66 °F (18–19 °C)	125–175 ppm N	Packs I 1 ppp I 4–6 weeks 1 pt. I 1 ppp I 5–8 weeks 1 qt. I 1–2 ppp I 6–8 weeks 1.25 qt. I 3 ppp I 7–8 weeks	Thrips, Fungus Gnats aand Shore Flies	Aerial Phytophthera, Thielaviopsis, Rhizopus, Rhizoctonia, Pythium and Tospovirus (INSV and TSWV)

FINISH PGRs	TECH TIPS
If needed sprays of B-Nine® WSG at 2,500–5,000 ppm or A-Rest® at 2–4 ppm may be applied.	Soil temperatures lower than 75 °F (23 °C) during germination may decrease germination rates. Keeping media pH at 5.8 or lower will help reduce the likelihood of Thielaviopsis infections.

Vinca **VITESSE™** *F1 Catharanthus roseus*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	6,000–8,000 foot candles	Day neutral	76–78 °F (24–26 °C)	64–66 °F (18–19 °C)	125–175 ppm N	1 pt. I 1 ppp I 4–5 weeks 1 qt. I 1 ppp I 5–6 weeks 1.25 qt. I 1–3 ppp I 6–8 weeks 2.5 qt. I 1–3 ppp I 6–8 weeks 3 qt. I 2–3 ppp I 7–8 weeks 1.5 gal. pot I 3–4 ppp I 7–8 weeks	Thrips, Fungus Gnats and Shore Flies	Thielaviopsis, Rhizopus, Rhizoctonia, Pythium and Tospovirus (INSV and TSWV)

FINISH PGRs	TECH TIPS
If needed, sprays of B-Nine® WSG at 2,500–5,000 ppm or A-Rest® at 2–4 ppm may be applied.	Soil temperatures lower than 75 °F (23 °C) during germination may decrease germination rates. Keeping media pH at 5.8 or lower will help reduce the likelihood of Thielaviopsis infections.

Viola **DELTINI™** *F1 Viola cornuta*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 0.9–1.3 mS/cm, PourThru EC: 1.4–2.0 mS/cm	4,000–6,000 foot candles	Day neutral	64–66 °F (18–19 °C)	64–66 °F (18–19 °C)	75–125 ppm N	Packs I 1 ppp I 3–4 weeks Large Packs I 1 ppp I 4–5 weeks 1 pt. I 1–2 ppp I 5–6 weeks 1 qt. I 1–2 ppp I 5–6 weeks	Aphids, Thrips	Alternaria, Downy Mildew, Thielaviopsis, Cercospora, Botrytis

FINISH PGRs	TECH TIPS
Usually not required if growing cool. If conditions are warmer or darker than ideal, spray with B-Nine® WSG at 2,500–5,000 ppm.	Keep media pH below 5.8 to help avoid Thielaviopsis infections. Under hot temperatures provide lower light levels to reduce heat stress. Also, if very frequent irrigation occurs due to high temperatures, apply a supplemental feed of Solubor® to avoid Boron deficiency.

BACK TO CONTENTS

Viola **ENDURIO®** *F1 Viola cornuta*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 0.9–1.3 mS/cm, PourThru EC: 1.4–2.0 mS/cm	4,000–6,000 foot candles	Facultative long day	64–66 °F (18–19 °C)	64–66 °F (18–19 °C)	75–125 ppm N	Large Packs I 1–2 ppp I 5–6 weeks 1 qt. I 1–2 ppp I 5–6 weeks 1.25 qt. I 2–3 ppp I 6–7 weeks 2.5 qt. I 2–3 ppp I 6–7 weeks 1.5 gal. HB I 5 ppp I 7–9 weeks	Aphids, Thrips	Alternaria, Downy Mildew, Thielaviopsis, Cercospora, Botrytis

FINISH PGRs	TECH TIPS
Usually not required if growing cool. If conditions are warmer or darker than ideal spray with B-Nine® WSG at 2,500–5,000 ppm.	Keep media pH below 5.8 to help avoid Thielaviopsis infections. Under hot temperatures provide lower light levels to reduce heat stress. Also, if very frequent irrigation occurs due to high temperatures, apply a supplemental feed of Solubor® to avoid Boron deficiency.

Viola **PENNY™** *F1 Viola cornuta*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 0.9–1.3 mS/cm, PourThru EC: 1.4–2.0 mS/cm	4,000–6,000 foot candles	Facultative long day	64–66 °F (18–19 °C)	64–66 °F (18–19 °C)	75–125 ppm N	Packs I 1 ppp I 4–5 weeks Large Packs I 1–2 ppp I 5–6 weeks 1 pt. I 1–2 ppp I 5–6 weeks 1 qt. I 1–2 ppp I 5–6 weeks 1.25 qt. I 3 ppp I 6–7 weeks	Aphids, Thrips	Alternaria, Downy Mildew, Thielaviopsis, Cercospora, Botrytis

FINISH PGRs	TECH TIPS
Usually not required if growing cool. If conditions are warmer or darker than ideal spray with B-Nine® WSG at 2,500–5,000 ppm.	Keep media pH below 5.8 to help avoid Thielaviopsis infections. Under hot temperatures, provide lower light levels to reduce heat stress. Also, if very frequent irrigation occurs due to high temperatures, apply a supplemental feed of Solubor® to avoid Boron deficiency.

Viola **TIGER EYE™** *F1 Viola cornuta*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 0.9–1.3 mS/cm, PourThru EC: 1.4–2.0 mS/cm	4,000–6,000 foot candles	Facultative long day	64–66 °F (18–19 °C)	64–66 °F (18–19 °C)	75–125 ppm N	Packs I 1 ppp I 4–5 weeks Large Packs I 1–2 ppp I 5–6 weeks 1 pt. I 1–2 ppp I 5–6 weeks 1 qt. I 1–2 ppp I 5–6 weeks 1.25 qt. I 3 ppp I 5–6 weeks 1.5 gal. pot I 4–5 ppp I 7–8 weeks	Aphids, Thrips	Alternaria, Downy Mildew, Thielaviopsis, Cercospora, Botrytis

FINISH PGRs	TECH TIPS
Usually not required if growing cool. If conditions are warmer or darker than ideal, spray with B-Nine® WSG at 2,500–5,000 ppm.	Keep media pH below 5.8 to help avoid Thielaviopsis infections. Under hot temperatures, provide lower light levels to reduce heat stress. Also, if frequent irrigation occurs due to high temperatures, apply a supplemental feed of Solubor® to avoid Boron deficiency.

Wallflower **SUGAR RUSH™** *F1 Cheiranthus cheiri*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 0.9–1.3 mS/cm, PourThru EC: 1.4–2.0 mS/cm	4,000–6,000 foot candles	Facultative long day	60–62 °F (16–17 °C)	58–60 °F (14–16 °C)	125–175 ppm N	Packs I 1 ppp I 5–6 weeks Large Packs I 1 ppp I 5–6 weeks 1 pt. I 1 ppp I 6–7 weeks 1 qt. I 1 ppp I 6–7 weeks 1.25 qt. I 3 ppp I 6–7 weeks 2.5 qt. I 3 ppp I 6–7 weeks 3 qt. I 3–4 ppp I 7–8 weeks 1.5 gal. pot I 4–5 ppp I 7–8 weeks	Thrips, Spider Mites, Aphids	Botrytis, Sclerotinia, Powdery Mildew, Pythium, Rhizoctonia

FINISH PGRs	TECH TIPS
Under favorable conditions, growing on the dry side will control growth adequately. Fall crops usually require a PGR application due to the warmer temperatures. Sprays of B-Nine® WSG at 2,500 ppm plus Cycocel® at 1,000 ppm are effective as are sprays of Bonzi® at 20 ppm.	It is important to treat with Bonzi® early in the plug cycle, as stated above to help create a stronger main stem.

Zinnia **MAGELLAN™** *F1 Zinnia elegans*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 0.9–1.3 mS/cm, PourThru EC: 1.4–2.0 mS/cm	4,000–6,000 foot candles	Facultative short day	74–76 °F (23–24 °C)	62–64 °F (17–18 °C)	200–250 ppm N	1 qt. I 1 ppp I 7–8 weeks 1.25 qt. I 2–3 ppp I 7–8 weeks 2.5 qt. I 3 ppp I 7–8 weeks	Aphids, Whiteflies, Thrips	Powdery Mildew, Botrytis, Bacterial Leaf Spot, Alternaria Leaf Spot

FINISH PGRs	TECH TIPS
Spray with B-Nine® at 2,500–5,000 ppm 1–3 times depending on container size and environmental conditions. Start PGR applications early - about one week after transplant. To prevent late flower stem stretch drench with Bonzi® at 1–2 ppm when flowers start to show color.	Transplant Zinnias on time. Stress in the plug can lead to premature flowering.

BACK TO CONTENTS

Zinnia **SHORT STUFF™** *F1 Zinnia elegans*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 0.9–1.3 mS/cm, PourThru EC: 1.4–2.0 mS/cm	4,000–6,000 foot candles	Facultative short day	74–76 °F (23–24 °C)	62–64 °F (17–18 °C)	200–250 ppm N	Packs I 1 ppp I 6–7 weeks 1 qt. I 1 ppp I 7–8 weeks	Aphids, Whiteflies, Thrips	Powdery Mildew, Botrytis, Bacterial Leaf Spot, Alternaria Leaf Spot

FINISH PGRs	TECH TIPS
Short Stuff Zinnia is gentically compact so does not require as much PGR as other Zinnias. Usually only Short Stuff grown in packs requires a PGR application. If needed spray with B-Nine® at 2,500–5,000 ppm.	Transplant Zinnias on time. Stress in the plug can lead to premature flowering.

Zinnia **SWIZZLE™** *F1 Zinnia elegans*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 0.9–1.3 mS/cm, PourThru EC: 1.4–2.0 mS/cm	4,000–6,000 foot candles	Facultative short day	74–76 °F (23–24 °C)	62–64 °F (17–18 °C)	200–250 ppm N	1 qt. I 1 ppp I 7–8 weeks 1.25 qt. I 2–3 ppp I 7–8 weeks 2.5 qt. I 3 ppp I 7–8 weeks	Aphids, Whiteflies, Thrips	Powdery Mildew, Botrytis, Bacterial Leaf Spot, Alternaria Leaf Spot

FINISH PGRs	TECH TIPS
Spray with B-Nine® at 2,500–5,000 ppm 1–3 times depending on container size and environmental conditions. Start PGR applications early - about one week after transplant. To prevent late flower stem stretch drench with Bonzi® at 1–2 ppm when flowers start to show color.	Transplant Zinnias on time. Stress in the plug can lead to premature flowering.

Zinnia **UPROAR™** *F1 Zinnia elegans*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 0.9–1.3 mS/cm, PourThru EC: 1.4–2.0 mS/cm	4,000–6,000 foot candles	Facultative short day	74–76 °F (23–24 °C)	62–64 °F (17–18 °C)	200–250 ppm N	1.25 qt. I 2–3 ppp I 7–8 weeks 2.5 qt. I 3 ppp I 7–8 weeks 1.5 gal. pot I 5 ppp I 8–9 weeks	Aphids, Whiteflies, Thrips	Powdery Mildew, Botrytis, Bacterial Leaf Spot, Alternaria Leaf Spot

FINISH PGRs	TECH TIPS
Spray with B-Nine® at 2,500–5,000 ppm 1–3 times depending on container size and environmental conditions. Start PGR applications early - about one week after transplant. To prevent late flower stem stretch drench with Bonzi® at 1–2 ppm when flowers start to show color.	Transplant Zinnias on time. Stress in the plug can lead to premature flowering.

Zinnia **ZOWIE!™** *F1 Zinnia elegans*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	FINISHING PROGRAM	PESTS	DISEASES
pH: 5.5–5.9 SME 0.9–1.3 mS/cm, PourThru EC: 1.4–2.0 mS/cm	4,000–6,000 foot candles	Facultative short day	74–76 °F (23–24 °C)	62–64 °F (17–18 °C)	200–250 ppm N	1.25 qt. I 2–3 ppp I 7–8 weeks 2.5 qt. I 3 ppp I 7–8 weeks 1.5 gal. pot I 5 ppp I 8–9 weeks	Aphids, Whiteflies, Thrips	Powdery Mildew, Botrytis, Bacterial Leaf Spot, Alternaria Leaf Spot

FINISH PGRs	TECH TIPS
Spray with B-Nine® at 2,500–5,000 ppm 1–3 times depending on container size and environmental conditions. Start PGR applications early - about one week after transplant. To prevent late flower stem stretch drench with Bonzi® at 1–2 ppm when flowers start to show color.	Transplant Zinnias on time. Stress in the plug can lead to premature flowering.

BACK TO CONTENTS

Angelonia **CARITA™** *Angelonia angustifolia*

REC TRAY	PRODUCT FORM	ROOTING HORMONE	MIST TIME	PINCH	PROP TIME	BOTTOM HEAT
105–cell (30 mm) or larger.	URC, AutoStix®	Not Recommended	CapSil® (spray adjuvant) can be sprayed on the cuttings at a rate of 2–4 oz/100 gal within 1–2 days after sticking to help in rehydration of the cuttings. Misting should be significantly reduced after 2–3 days and after cuttings become fully hydrated.	Recommended	3.5–4 Weeks	72–74 °F (22–23 °C)

Comments: Carita has moderate vigor and will generally need a PGR treatment in propagation. To control growth after rooting, sprays of B-Nine®WSG (1,500 ppm), or a tank-mix spray of Cycocel® (1,000 ppm) + B-Nine® WSG (1,500 ppm) are sufficient. Do not spray Florel® on angelonias since this can burn foliage and cause significant flower delay. For all sprays listed above, the mist should be off for a minimum of one hour for the PGR to absorb into the leaf tissue.

Angelonia **CARITA™ CASCADE** *Angelonia angustifolia*

REC TRAY	PRODUCT FORM	ROOTING HORMONE	MIST TIME	PINCH	PROP TIME	BOTTOM HEAT
105–cell (30 mm) or larger	URC, AutoStix®	Not Recommended	CapSil® (spray adjuvant) can be sprayed on the cuttings at a rate of 2–4 oz/100 gal within 1–2 days after sticking to help in rehydration of the cuttings. Misting should be significantly reduced after 2–3 days and after cuttings become fully hydrated.	Recommended	3.5–4 Weeks	72–74 °F (22–23 °C)

Comments: Carita Cascade has moderate vigor and will generally need a PGR treatment in propagation. To control growth after rooting, sprays of B-Nine® WSG (1,500 ppm) or a tank-mix spray of Cycocel® (1,000 ppm) + B-Nine® (1,500 ppm) are normally sufficient. Do not spray Florel® on angelonia since this can burn foliage and cause significant flower delay. For all sprays listed above, the mist should be off for a minimum of one hour for the PGR to absorb into the leaf tissue.

Argyranthemum **SASSY®** *Argyranthemum frutescens*

REC TRAY	PRODUCT FORM	ROOTING HORMONE	MIST TIME	PINCH	PROP TIME	BOTTOM HEAT
105–cell (30 mm) or larger.	URC, AutoStix®	Not Recommended	CapSil® (spray adjuvant) can be sprayed on the cuttings at a rate of 2–4 oz/100 gal within 1–2 days after sticking to help in rehydration of the cuttings. Misting should be significantly reduced after 2–3 days and after cuttings become fully hydrated.	Not Recommended	3.5–4 Weeks	72–74 °F (22–23 °C)

Comments: Sassy has moderate vigor and will generally need a PGR treatment in propagation. To control growth after rooting, A tank-mix spray of Cycocel® (1,000 ppm) + B-Nine® WSG (2,500 ppm) is normally sufficient. It is also becoming popular for growers to combine Florel® at 350–500 ppm with the B-Nine® WSG solution listed above to increase growth control and to improve branching. These Florel® + B-Nine® WSG combo sprays should be applied to actively growing plants. Do not spray B-Nine® WSG or Florel® + B-Nine® WSG tank mixes on stressed or weak cuttings. For all sprays listed above, the mist should be off for a minimum of one hour for the PGR to absorb into the leaf tissue.

Bacopa **CALYPSO™** *Sutera cordata*

REC TRAY	PRODUCT FORM	ROOTING HORMONE	MIST TIME	PINCH	PROP TIME	BOTTOM HEAT
105–cell (30 mm) or larger	URC, Pre-Pinched, AutoStix®	Not Recommended	CapSil® (spray adjuvant) can be sprayed on the cuttings at a rate of 2–4 oz/100 gal within 1–2 days after sticking to help in rehydration of the cuttings. Misting should be significantly reduced after 2–3 days and after cuttings become fully hydrated.	Recommended	3.5–4 Weeks	72–74 °F (22–23 °C)

Comments: Calypso has moderate vigor and will generally need a PGR treatment in propagation. To control growth after rooting, a spray of B-Nine® WSG (1,500 ppm) is sufficient. It is also becoming popular for growers to combine Florel® (200 ppm) with the B-Nine® WSG (1,500 ppm) to increase growth control and to improve branching. These Florel® + B-Nine® WSG combo sprays should be applied to actively growing plants. Do not spray B-Nine® WSG or Florel® + B-Nine® WSG tank mixes on stressed or weak cuttings. For all sprays listed above, the mist should be off for a minimum of one hour for the PGR to absorb into the leaf tissue.

Begonia **FLORENCIO™** *Begonia hybrida*

REC TRAY	PRODUCT FORM	ROOTING HORMONE	MIST TIME	PINCH	PROP TIME	BOTTOM HEAT
105–cell (30 mm) or larger.	URC	Not Recommended	CapSil® (spray adjuvant) can be sprayed on the cuttings at a rate of 2–4 oz/100 gal within 1–2 days after sticking to help in rehydration of the cuttings. Misting should be significantly reduced after 3–4 days and after cuttings become fully hydrated.	Recommended	4–5 Weeks	70–72 °F (21–22 °C)

Comments: 250–500 ppm Cycocel® (s)

Begonia **GRACE™** *Begonia hybrida*

REC TRAY	PRODUCT FORM	ROOTING HORMONE	MIST TIME	PINCH	PROP TIME	BOTTOM HEAT
105–cell (30 mm) or larger.	URC	Not Recommended	CapSil® (spray adjuvant) can be sprayed on the cuttings at a rate of 2–4 oz/100 gal within 1–2 days after sticking to help in rehydration of the cuttings. Misting should be significantly reduced after 3–4 days and after cuttings become fully hydrated.	Recommended	4–5 Weeks	72–75 °F (22–24 °C)

Comments: PGRs are not usually required in propagation. However, if needed Grace Begonias respond well to sprays of B-Nine® WSG at 2,500 ppm or Cycocel® at 300 ppm.

Bidens **MEXICAN GOLD™** *Bidens ferulifolia*

REC TRAY	PRODUCT FORM	ROOTING HORMONE	MIST TIME	PINCH	PROP TIME	BOTTOM HEAT
105–cell (30 mm) or larger.	URC, Pre-Pinched, AutoStix®	Not Recommended	CapSil® (spray adjuvant) can be sprayed on the cuttings at a rate of 2–4 oz/100 gal within 1–2 days after sticking to help in rehydration of the cuttings. Misting should be significantly reduced after 2–3 days and after cuttings become fully hydrated.	Recommended	3.5–4 Weeks	70–74 °F (21–23 °C)

Comments: Mexican Gold, Mexican Gold Jumbo, and Mexican Gold Semi-Double all have moderate vigor and will generally need a PGR treatment in propagation. To control growth after rooting, a spray of B-Nine® WSG (1,500–2,500 ppm) is sufficient. It is also becoming popular for growers to combine Florel® (350 ppm) with the B-Nine® WSG (1,500 ppm) to increase growth control and to improve branching. These Florel® + B-Nine® WSG combo sprays should be applied to actively growing plants. Do not spray B-Nine® WSG or Florel® + B-Nine® WSG tank mixes on stressed or weak cuttings. For all sprays listed above, the mist should be off for a minimum of one hour for the PGR to absorb into the leaf tissue. Mexican Gold Compact has very low vigor and generally needs little PGR treatment in propagation.

BACK TO CONTENTS

Calendula **CALEO™** *Calendula hybrida*

REC TRAY	PRODUCT FORM	ROOTING HORMONE	MIST TIME	PINCH	PROP TIME	BOTTOM HEAT
105–cell (30 mm) or larger.	URC, AutoStix®	Not Recommended	CapSil® (spray adjuvant) can be sprayed on the cuttings at a rate of 2–4 oz/100 gal within 1–2 days after sticking to help in rehydration of the cuttings. Misting should be significantly reduced after 2–3 days and after cuttings become fully hydrated.	Recommended	3.5–4 Weeks	70–74 °F (21–23 °C)

Comments: To control growth after rooting, a spray of B-Nine® WSG (2,500–3,500 ppm) can be used. For all sprays listed above, the mist should be off for a minimum of one hour for the plant growth regulator (PGR) to absorb into the leaf tissue.

Calibrachoa **CABRIO™** *Calibrachoa hybrida*

REC TRAY	PRODUCT FORM	ROOTING HORMONE	MIST TIME	PINCH	PROP TIME	BOTTOM HEAT
105–cell (30 mm) or larger.	URC, AutoStix®	Recommended	CapSil® (spray adjuvant) can be sprayed on the cuttings at a rate of 2–4 oz/100 gal within 1–2 days after sticking to help in rehydration of the cuttings. Misting should be significantly reduced after 2–3 days and after cuttings become fully hydrated.	Recommended	4.5–5 Weeks	72–74 °F (22–23 °C)

Comments: Cabrio Calibrachoas are compact-medium growers and should not need the typical growth regular in propagation that other more vigorous varieties require. To keep plants under control, a spray of B-Nine® WSG at 1500–2500 ppm can be applied after cuttings are well-rooted and vegetative growth begins. It is also becoming popular for growers to combine Florel® at 350–500 ppm with the B-Nine® WSG solution listed above to increase growth control and to improve branching. These Florel® + B-Nine® WSG combo sprays should be applied to actively growing plants and done ideally before pinching. Do not spray B-Nine® or Florel® + B-Nine® tank mixes on stressed or weak cuttings. For all sprays listed above, the mist should be off for a minimum of one hour for the PGR to absorb into the leaf tissue.

Calibrachoa **CALLIE®** *Calibrachoa hybrida*

REC TRAY	PRODUCT FORM	ROOTING HORMONE	MIST TIME	PINCH	PROP TIME	BOTTOM HEAT
105–cell (30 mm) or larger.	URC, AutoStix®	Recommended	CapSil® (spray adjuvant) can be sprayed on the cuttings at a rate of 2–4 oz/100 gal within 1–2 days after sticking to help in rehydration of the cuttings. Misting should be significantly reduced after 2–3 days and after cuttings become fully hydrated.	Recommended	4.5–5 Weeks	72–74 °F (22–23 °C)

Comments: Callie calibrachoas have a range of vigor, with some being relatively compact to others having more of a medium to medium-vigorous habit. To keep plants under control, a spray of B-Nine® WSG at 1,500–2,500 ppm can be applied after cuttings are well-rooted and vegetative growth begins. It is also becoming popular for growers to combine Florel® at 350–500 ppm with the B-Nine® WSG solution listed above to increase growth control and to improve branching. These Florel® + B-Nine® WSG combo sprays should be applied to actively growing plants and done ideally before pinching. Do not spray B-Nine® WSG or Florel® + B-Nine® WSG tank mixes on stressed or weak cuttings. For all sprays listed above, the mist should be off for a minimum of one hour for the PGR to be absorbed into the leaf tissue.

Calocephalus **WHIMSY™** *Calocephalus brownii*

REC TRAY	PRODUCT FORM	ROOTING HORMONE	MIST TIME	PINCH	PROP TIME	BOTTOM HEAT
105–cell (30 mm) or larger.	URC, AutoStix®	Not Recommended	CapSil® (spray adjuvant) can be sprayed on the cuttings at a rate of 2–4 oz/100 gal within 1–2 days after sticking to help in rehydration of the cuttings. Misting should be significantly reduced after 2–3 days and after cuttings become fully hydrated.	Not Recommended		70–74 °F (21–23 °C)

Comments: Whimsy calocephalus is a compact, dense-growing plant. It should not require any chemical growth regulation.

Curry Plant **HELICHRYSUM ITALICUM** *Helichrysum italicum*

REC TRAY	PRODUCT FORM	ROOTING HORMONE	MIST TIME	PINCH	PROP TIME	BOTTOM HEAT
105–cell (30 mm) or larger.	URC, AutoStix®	Not Recommended	CapSil® (spray adjuvant) can be sprayed on the cuttings at a rate of 2–4 oz/100 gal within 1–2 days after sticking to help in rehydration of the cuttings. Misting should be significantly reduced after 2–3 days and after cuttings become fully hydrated.	Not Recommended	3.5–4 Weeks	70–74 °F (21–23 °C)

Comments: Helichrysum italicum is a bushy, dense-growing plant. It typically does not require any chemical growth regulation in propagation. Transplant on time to avoid stretched growth.

Dahlia **DAHLEGRIA®** *Dahlia hybrida*

REC TRAY	PRODUCT FORM	ROOTING HORMONE	MIST TIME	PINCH	PROP TIME	BOTTOM HEAT
105–cell (30 mm) or larger.	URC, AutoStix®	Not Recommended	CapSil® (spray adjuvant) can be sprayed on the cuttings at a rate of 2–4 oz/100 gal within 1–2 days after sticking to help in rehydration of the cuttings. Misting should be significantly reduced after 2–3 days and after cuttings become fully hydrated.	Not Recommended	3.5–4 Weeks	72–74 °F (22–23 °C)

Comments: Dahlegria is vigorous growing and will need a PGR treatment in propagation. To control growth after rooting, sprays of B-Nine® WSG (2500–3500 ppm) are usually sufficient. A tank-mix spray of Florel® (350–500 ppm) + B-Nine® WSG (2500 ppm) can also be used to control growth and improve branching. Do not spray Florel® on stressed or weak cuttings. For all sprays listed above, the mist should be off for a minimum of one hour for the PGR to absorb into the leaf tissue.

Dahlia **GOLDALIA™** *Dahlia hybrida*

REC TRAY	PRODUCT FORM	ROOTING HORMONE	MIST TIME	PINCH	PROP TIME	BOTTOM HEAT
105–cell (30 mm) or larger.	URC, AutoStix®	Not Recommended	CapSil® (spray adjuvant) can be sprayed on the cuttings at a rate of 2–4 oz/100 gal within 1–2 days after sticking to help in rehydration of the cuttings. Misting should be significantly reduced after 2–3 days and after cuttings become fully hydrated.	Not Recommended	3.5–4 Weeks	70–74 °F (21–23 °C)

Comments: Goldalia has low vigor and will generally need little PGR use in propagation. To control growth after rooting, sprays of B-Nine® WSG (1,500–2,500 ppm) are usually sufficient. A tank-mix spray of Florel® (350–500 ppm) + B-Nine® WSG (1,500 ppm) can also be used to control growth and improve branching. Do not spray Florel® on stressed or weak cuttings. For all sprays listed above, the mist should be off for a minimum of one hour for the PGR to absorb into the leaf tissue.

BACK TO CONTENTS

Dahlia **GRANDALIA™** *Dahlia hybrida*

REC TRAY	PRODUCT FORM	ROOTING HORMONE	MIST TIME	PINCH	PROP TIME	BOTTOM HEAT
105–cell (30 mm) or larger.	URC, AutoStix®	Not Recommended	CapSil® (spray adjuvant) can be sprayed on the cuttings at a rate of 2–4 oz/100 gal within 1–2 days after sticking to help in rehydration of the cuttings. Misting should be significantly reduced after 2–3 days and after cuttings become fully hydrated.	Not Recommended	3.5–4 Weeks	70–74 °F (21–23 °C)

Comments: Grandalia has moderate to high vigor and will generally need PGR use in propagation. To control growth after rooting, sprays of B-Nine® WSG (1,500–2,500 ppm) are usually sufficient. A tank-mix spray of Florel® (350–500 ppm) + B-Nine® WSG (1,500–2,500 ppm) can also be used to control growth and improve branching. Do not spray Florel® on stressed or weak cuttings. For all sprays listed above, the mist should be off for a minimum of one hour for the PGR to absorb into the leaf tissue.

Dahlia **HAPPY DAYS™** *Dahlia hybrida*

REC TRAY	PRODUCT FORM	ROOTING HORMONE	MIST TIME	PINCH	PROP TIME	BOTTOM HEAT
105–cell (30 mm) or larger.	URC, AutoStix®	Not Recommended	CapSil® (spray adjuvant) can be sprayed on the cuttings at a rate of 2–4 oz/100 gal within 1–2 days after sticking to help in rehydration of the cuttings. Misting should be significantly reduced after 2–3 days and after cuttings become fully hydrated.	Not Recommended	3.5–4 Weeks	70–74 °F (21–23 °C)

Comments: Happy Days has moderate vigor and will generally need a PGR treatment in propagation. To control growth after rooting, sprays of B-Nine® WSG (1500–2500 ppm) are usually sufficient. A tank-mix spray of Florel® (350–500 ppm) + B-Nine® WSG (1500–2500 ppm) can also be used to control growth and improve branching. Do not spray Florel® on stressed or weak cuttings. For all sprays listed above, the mist should be off for a minimum of one hour for the PGR to absorb into the leaf tissue.

Dahlia **SINCERITY** *Dahlia hybrida*

REC TRAY	PRODUCT FORM	ROOTING HORMONE	MIST TIME	PINCH	PROP TIME	BOTTOM HEAT
105–cell (30 mm) or larger.	URC, AutoStix®	Not Recommended	CapSil® (spray adjuvant) can be sprayed on the cuttings at a rate of 2–4 oz/100 gal within 1–2 days after sticking to help in rehydration of the cuttings. Misting should be significantly reduced after 2–3 days and after cuttings become fully hydrated.	Not Recommended	3.5–4 Weeks	70–74 °F (21–23 °C)

Comments: Sincerity has a moderately vigorous habit and may require a PGR treatment in propagation. If needed to control growth after rooting, sprays of B-Nine® WSG (1500 ppm) are usually sufficient. A tank-mix spray of Florel® (350–500 ppm) + B-Nine® (1500 ppm) can also be used to control growth and improve branching. Do not spray Florel® on stressed or weak cuttings. For all sprays listed above, the mist should be off for a minimum of one hour for the PGR to absorb into the leaf tissue.

Diascia **DARLA®** *Diascia barberae*

REC TRAY	PRODUCT FORM	ROOTING HORMONE	MIST TIME	PINCH	PROP TIME	BOTTOM HEAT
105–cell (30 mm) or larger.	URC, AutoStix®	Not Recommended	CapSil® (spray adjuvant) can be sprayed on the cuttings at a rate of 2–4 oz/100 gal within 1–2 days after sticking to help in rehydration of the cuttings. Misting should be significantly reduced after 2–3 days and after cuttings become fully hydrated.	Recommended	3.5–4 Weeks	70–74 °F (21–23 °C)

Comments: Darla has moderate vigor and will generally need a PGR treatment in propagation. To control growth after rooting, sprays of B-Nine® WSG (2,500 ppm) or Florel® (350 ppm) are sufficient. It is also becoming popular for growers to combine Florel® (350 ppm) with the B-Nine® WSG (1,500 ppm) to increase growth control and to improve branching. These Florel® + B-Nine® WSG combo sprays should be applied to actively growing plants. Do not spray B-Nine® WSG or Florel® + B-Nine® WSG tank mixes on stressed or weak cuttings. For all sprays listed above, the mist should be off for a minimum of one hour for the PGR to absorb into the leaf tissue.

Dipladenia **MADINIA®** *Mandevilla hybrida*

REC TRAY	PRODUCT FORM	ROOTING HORMONE	MIST TIME	PINCH	PROP TIME	BOTTOM HEAT
105–cell (30 mm) or larger.	URC, CC	Recommended	CapSil® (spray adjuvant) can be sprayed on the cuttings at a rate of 2–4 oz/100 gal within 1–2 days after sticking to help in rehydration of the cuttings. Misting should be significantly reduced after 3–4 days and after cuttings become fully hydrated.	Recommended	5–6 Weeks	72–74 °F (22–23 °C)

Comments: To control growth after rooting, a spray of B-Nine® WSG (3,500–4,000 ppm) can be used. Sprays of Configure® (150–300 ppm) or Atrimmec® (200 ppm) can also be used to improve branching on the young rooted plants. These Configure or Atrimmec® sprays should be applied to actively growing plants and done ideally before pinching. Do not spray B-Nine® WSG, Configure, or Atrimmec® on stressed or weak cuttings. For all sprays listed above, the mist should be off for a minimum of one hour for the PGR to absorb into the leaf tissue.

Dipladenia **MADINIA® MAXIMO** *Mandevilla hybrida*

REC TRAY	PRODUCT FORM	ROOTING HORMONE	MIST TIME	PINCH	PROP TIME	BOTTOM HEAT
105–cell (30 mm) or larger.	URC, CC	Recommended	CapSil® (spray adjuvant) can be sprayed on the cuttings at a rate of 2–4 oz/100 gal within 1–2 days after sticking to help in rehydration of the cuttings. Misting should be significantly reduced after 3–4 days and after cuttings become fully hydrated.	Recommended	5–6 Weeks	72–74 °F (22–23 °C)

Comments: To control growth after rooting, a spray of B-Nine® WSG (3,500–4,000 ppm) can be used. Sprays of Configure® (150–300 ppm) or Atrimmec® (200 ppm) can also be used to improve branching on the young rooted plants. These Configure or Atrimmec® sprays should be applied to actively growing plants and done ideally before pinching. Do not spray B-Nine® WSG, Configure, or Atrimmec® on stressed or weak cuttings. For all sprays listed above, the mist should be off for a minimum of one hour for the PGR to absorb into the leaf tissue.

Dorotheanthus **MEZOO™** *Dorotheanthus bellidiformis*

REC TRAY	PRODUCT FORM	ROOTING HORMONE	MIST TIME	PINCH	PROP TIME	BOTTOM HEAT
105–cell (30 mm) or larger.	URC, AutoStix®	Not Recommended	CapSil® (spray adjuvant) can be sprayed on the cuttings at a rate of 2–4 oz/100 gal within 1–2 days after sticking to help in rehydration of the cuttings. Misting should be significantly reduced after 3–4 days and after cuttings become fully hydrated.	Recommended	4.5–5 Weeks	72–74 °F (22–23 °C)

Comments: Not needed. Control by pinching if needed.

BACK TO CONTENTS

Euphorbia **EUPHORIC™** *Euphorbia hypericifolia*

REC TRAY	PRODUCT FORM	ROOTING HORMONE	MIST TIME	PINCH	PROP TIME	BOTTOM HEAT
105–cell (30 mm) or larger.	URC	Not Recommended	CapSil® (spray adjuvant) can be sprayed on the cuttings at a rate of 2–4 oz/100 gal within 1–2 days after sticking to help in rehydration of the cuttings. Misting should be significantly reduced after 3–4 days and after cuttings become fully hydrated.	Recommended	3.5–4 Weeks	72–74 °F (22–23 °C)

Comments: To control growth after rooting, a spray of B-Nine® WSG (1500–2500 ppm) can be used.

Geranium Interspecific **CALDERA™** *Pelargonium Interspecific*

REC TRAY	PRODUCT FORM	ROOTING HORMONE	MIST TIME	PINCH	PROP TIME	BOTTOM HEAT
105–cell (30 mm) or larger.	URC, CC, AutoStix®	Recommended	CapSil® (spray adjuvant) can be sprayed on the cuttings at a rate of 2–4 oz/100 gal within 1–2 days after sticking to help in rehydration of the cuttings. Misting should be significantly reduced after 3–4 days and after cuttings become fully hydrated.	Not Recommended	4.5–5 Weeks	70–74 °F (21–23 °C)

Comments: To help reduce bottom leaf yellowing during propagation (e.g., on delayed shipments or where cuttings have gotten warm during shipping), Fascination® can be sprayed on the cuttings at 2.0–2.5 ppm within 24 hours after sticking. Caldera growth can be controlled using sprays of Cycocel™ at 750–1000 ppm and under hot conditions with a tank mix spray of Cycocel® (1000 ppm) + B-Nine® WSG (2500 ppm). Bonzi® sprays are not recommended in propagation because of the chance of getting into the rooting media and stunting the plant. Florel® can also be sprayed at 300–350 ppm 2.5–3 weeks after sticking and after good root formation to improve branching, reduce premature flowering, and to control growth. Do not spray Florel® on stressed or weak cuttings. For all sprays listed above, the mist should be off for a minimum of one hour for the PGR to absorb into the leaf tissue.

Geranium Interspecific **CALIENTE®** *Pelargonium interspecific*

REC TRAY	PRODUCT FORM	ROOTING HORMONE	MIST TIME	PINCH	PROP TIME	BOTTOM HEAT
105–cell (30 mm) or larger.	URC, CC, AutoStix®	Not Recommended	CapSil® (spray adjuvant) can be sprayed on the cuttings at a rate of 2–4 oz/100 gal within 1–2 days after sticking to help in rehydration of the cuttings. Misting should be significantly reduced after 3–4 days and after cuttings become fully hydrated.	Not Recommended	3.5–4 Weeks	70–74 °F (21–23 °C)

Comments: To help reduce bottom leaf yellowing during propagation (e.g., on delayed shipments or where cuttings have gotten warm during shipping), Fascination® can be sprayed on the cuttings at 2.0–2.5 ppm within 24 hours after sticking. Caliente growth can be controlled using sprays of Cycocel® at 1,000 ppm and under hot conditions with a tank mix spray of Cycocel® (1,000 ppm) + B-Nine® WSG (2,500 ppm). Bonzi® sprays are not recommended in propagation because of the chance of getting into the rooting media and stunting the plant. Florel® can also be sprayed at 300–350 ppm 2.5–3 weeks after sticking and after good root formation to improve branching, reduce premature flowering, and to control growth. Do not spray Florel® on stressed or weak cuttings. For all sprays listed above, the mist should be off for a minimum of one hour for the PGR to absorb into the leaf tissue.

Geranium Interspecific **CALLIOPE® LARGE** *Pelargonium interspecific*

REC TRAY	PRODUCT FORM	ROOTING HORMONE	MIST TIME	PINCH	PROP TIME	BOTTOM HEAT
105–cell (30 mm) or larger.	URC, CC, AutoStix®	Not Recommended	CapSil® (spray adjuvant) can be sprayed on the cuttings at a rate of 2–4 oz/100 gal within 1–2 days after sticking to help in rehydration of the cuttings. Misting should be significantly reduced after 3–4 days and after cuttings become fully hydrated.	Not Recommended	3.5–4 Weeks	70–74 °F (21–23 °C)

Comments: To help reduce bottom leaf yellowing during propagation (e.g., on delayed shipments or where cuttings have gotten warm during shipping), Fascination® can be sprayed on the cuttings at 2.0–2.5 ppm within 24 hours after sticking. Calliope Large growth can be controlled using sprays of Cycocel® at 1,000 ppm and under hot conditions with a tank mix spray of Cycocel® (1,000 ppm) + B-Nine® WSG (2,500 ppm). Bonzi® sprays are not recommended in propagation because of the chance of getting into the rooting media and stunting the plant. Florel® can also be sprayed at 300–350 ppm 2.5–3 weeks after sticking and after good root formation to improve branching, reduce premature flowering, and to control growth. Do not spray Florel® on stressed or weak cuttings. For all sprays listed above, the mist should be off for a minimum of one hour for the PGR to absorb into the leaf tissue.

Geranium Interspecific **CALLIOPE® MEDIUM** *Pelargonium interspecific*

REC TRAY	PRODUCT FORM	ROOTING HORMONE	MIST TIME	PINCH	PROP TIME	BOTTOM HEAT
105–cell (30 mm) or larger.	URC, CC, AutoStix®	Not Recommended	CapSil® (spray adjuvant) can be sprayed on the cuttings at a rate of 2–4 oz/100 gal within 1–2 days after sticking to help in rehydration of the cuttings. Misting should be significantly reduced after 3–4 days and after cuttings become fully hydrated.	Not Recommended	3.5–4 Weeks	70–74 °F (21–23 °C)

Comments: To help reduce bottom leaf yellowing during propagation (e.g., on delayed shipments or where cuttings have gotten warm during shipping), Fascination® can be sprayed on the cuttings at 2.0–2.5 ppm within 24 hours after sticking. Calliope Medium growth can be controlled using sprays of Cycocel® at 750–1,000 ppm and under hot conditions with a tank mix spray of Cycocel® (1,000 ppm) + B-Nine® WSG (2,500 ppm). Bonzi® sprays are not recommended in propagation because of the chance of getting into the rooting media and stunting the plant. Florel® can also be sprayed at 300–350 ppm 2.5–3 weeks after sticking and after good root formation to improve branching, reduce premature flowering, and to control growth. Do not spray Florel® on stressed or weak cuttings. For all sprays listed above, the mist should be off for a minimum of one hour for the plant growth regulator (PGR) to absorb into the leaf tissue.

Geranium Interspecific **MOJO™** *Pelargonium interspecific*

REC TRAY	PRODUCT FORM	ROOTING HORMONE	MIST TIME	PINCH	PROP TIME	BOTTOM HEAT
105–cell (30 mm) or larger.	URC, CC, AutoStix®	Not Recommended	CapSil® (spray adjuvant) can be sprayed on the cuttings at a rate of 2–4 oz/100 gal within 1–2 days after sticking to help in rehydration of the cuttings. Misting should be significantly reduced after 3–4 days and after cuttings become fully hydrated.	Not Recommended	3.5–4 Weeks	70–74 °F (21–23 °C)

Comments: To help reduce bottom leaf yellowing during propagation (e.g., on delayed shipments or where cuttings have gotten warm during shipping), Fascination® can be sprayed on the cuttings at 2.0–2.5 ppm within 24 hours after sticking. Mojo growth can be controlled using sprays of Cycocel® at 750–1000 ppm and under hot conditions with a tank mix spray of Cycocel® (1000 ppm) + B-Nine® WSG (2500 ppm). Bonzi® sprays are not recommended in propagation because of the chance of getting into the rooting media and stunting the plant. Florel® can also be sprayed at 300–350 ppm 2.5–3 weeks after sticking and after good root formation to improve branching, reduce premature flowering, and to control growth. Do not spray Florel® on stressed or weak cuttings. For all sprays listed above, the mist should be off for a minimum of one hour for the PGR to absorb into the leaf tissue.

BACK TO CONTENTS

Geranium Interspecific **MOXIE!™** *Pelargonium interspecific*

REC TRAY	PRODUCT FORM	ROOTING HORMONE	MIST TIME	PINCH	PROP TIME	BOTTOM HEAT
105–cell (30 mm) or larger.	URC, CC, AutoStix®	Not Recommended	CapSil® (spray adjuvant) can be sprayed on the cuttings at a rate of 2–4 oz/100 gal within 1–2 days after sticking to help in rehydration of the cuttings. Misting should be significantly reduced after 3–4 days and after cuttings become fully hydrated.	Not Recommended	3.5–4 Weeks	70–74 °F (21–23 °C)

Comments: To help reduce bottom leaf yellowing during propagation (e.g., on delayed shipments or where cuttings have gotten warm during shipping), Fascination® can be sprayed on the cuttings at 2.0–2.5 ppm within 24 hours after sticking. Moxie! growth can be controlled using sprays of Cycocel® at 750–1,000 ppm and under hot conditions with a tank mix spray of Cycocel® (1,000 ppm) + B-Nine® WSG (2,500 ppm). Bonzi® sprays are not recommended in propagation because of the chance of getting into the rooting media and stunting the plant. Florel® can also be sprayed at 300–350 ppm 2.5–3 weeks after sticking and after good root formation to improve branching, reduce premature flowering, and to control growth. Do not spray Florel® on stressed or weak cuttings. For all sprays listed above, the mist should be off for a minimum of one hour for the PGR to absorb into the leaf tissue.

Geranium Interspecific **PRETTY LITTLE™** *Pelargonium interspecific*

REC TRAY	PRODUCT FORM	ROOTING HORMONE	MIST TIME	PINCH	PROP TIME	BOTTOM HEAT
105–cell (30 mm) or larger.	URC, CC, AutoStix®	Not Recommended	CapSil® (spray adjuvant) can be sprayed on the cuttings at a rate of 2–4 oz/100 gal within 1–2 days after sticking to help in rehydration of the cuttings. Misting should be significantly reduced after 3–4 days and after cuttings become fully hydrated.	Not Recommended	3.5–4 Weeks	70–74 °F (21–23 °C)

Comments: To help reduce bottom leaf yellowing during propagation (e.g., on delayed shipments or where cuttings have gotten warm during shipping), Fascination® can be sprayed on the cuttings at 2.0–2.5 ppm within 24 hours after sticking. Pretty Little growth can be controlled using sprays of Cycocel® at 750–1,000 ppm. Bonzi® sprays are not recommended in propagation because of the chance of getting into the rooting media and stunting the plant. Florel® can also be sprayed at 300–350 ppm 2.5–3 weeks after sticking and after good root formation to improve branching, reduce premature flowering, and to control growth. Do not spray Florel® on stressed or weak cuttings. For all sprays listed above, the mist should be off for a minimum of one hour for the PGR to absorb into the leaf tissue.

Geranium Ivy **BLIZZARD™** *Pelargonium peltatum*

REC TRAY	PRODUCT FORM	ROOTING HORMONE	MIST TIME	PINCH	PROP TIME	BOTTOM HEAT
105–cell (30 mm) or larger.	URC, CC, AutoStix®	Recommended	CapSil® (spray adjuvant) can be sprayed on the cuttings at a rate of 2–4 oz/100 gal within 1–2 days after sticking to help in rehydration of the cuttings. Misting should be significantly reduced after 3–4 days and after cuttings become fully hydrated.	Not Recommended	4.5–5 Weeks	70–74 °F (21–23 °C)

Comments: To help reduce bottom leaf yellowing during propagation (e.g., on delayed shipments or where cuttings have gotten warm during shipping), Fascination® can be sprayed on the cuttings at 2.0–2.5 ppm within 24 hours after sticking. Blizzard Ivy Geranium growth can be controlled using sprays of Cycocel® at 750–1,000 ppm and under hot conditions with a tank mix spray of Cycocel® (1,000 ppm) + B-Nine® WSG (2,500 ppm). Bonzi® sprays are not recommended in propagation because of the chance of getting into the rooting media and stunting the plant. Florel® can also be sprayed at 300–350 ppm 2.5–3 weeks after sticking and after good root formation to improve branching, reduce premature flowering, and to control growth. Do not spray Florel® on stressed or weak cuttings. For all sprays listed above, the mist should be off for a minimum of one hour for the PGR to absorb into the leaf tissue.

Geranium Ivy **CASCADE** *Pelargonium peltatum*

REC TRAY	PRODUCT FORM	ROOTING HORMONE	MIST TIME	PINCH	PROP TIME	BOTTOM HEAT
105–cell (30 mm) or larger.	URC, CC, AutoStix®	Recommended	CapSil® (spray adjuvant) can be sprayed on the cuttings at a rate of 2–4 oz/100 gal within 1–2 days after sticking to help in rehydration of the cuttings. Misting should be significantly reduced after 3–4 days and after cuttings become fully hydrated.	Not Recommended	4.5–5 Weeks	70–74 °F (21–23 °C)

Comments: To help reduce bottom leaf yellowing during propagation (e.g., on delayed shipments or where cuttings have gotten warm during shipping), Fascination® can be sprayed on the cuttings at 2.0–2.5 ppm within 24 hours after sticking. Cascade growth can be controlled using sprays of Cycocel® at 750–1,000 ppm and under hot conditions with a tank mix spray of Cycocel® (1,000 ppm) + B-Nine® WSG (2,500 ppm). Bonzi® sprays are not recommended in propagation because of the chance of getting into the rooting media and stunting the plant. Florel® can also be sprayed at 300–350 ppm 2.5–3 weeks after sticking and after good root formation to improve branching, reduce premature flowering, and to control growth. Do not spray Florel® on stressed or weak cuttings. For all sprays listed above, the mist should be off for a minimum of one hour for the PGR to absorb into the leaf tissue.

Geranium Ivy **IVY LEAGUE™** *Pelargonium peltatum*

REC TRAY	PRODUCT FORM	ROOTING HORMONE	MIST TIME	PINCH	PROP TIME	BOTTOM HEAT
105–cell (30 mm) or larger.	URC, CC, AutoStix®	Recommended	CapSil® (spray adjuvant) can be sprayed on the cuttings at a rate of 2–4 oz/100 gal within 1–2 days after sticking to help in rehydration of the cuttings. Misting should be significantly reduced after 3–4 days and after cuttings become fully hydrated.	Not Recommended	4.5–5 Weeks	70–74 °F (21–23 °C)

Comments: To help reduce bottom leaf yellowing during propagation (e.g., on delayed shipments or where cuttings have gotten warm during shipping), Fascination® can be sprayed on the cuttings at 2.0–2.5 ppm within 24 hours after sticking. Ivy League growth can be controlled using sprays of Cycocel® at 750–1000 ppm and under hot conditions with a tank mix spray of Cycocel® (1000 ppm) + B-Nine® WSG (2500 ppm). Bonzi® sprays are not recommended in propagation because of the chance of getting into the rooting media and stunting the plant. Florel® can also be sprayed at 300–350 ppm 2.5–3 weeks after sticking and after good root formation to improve branching, reduce premature flowering, and to control growth. Do not spray Florel® on stressed or weak cuttings. For all sprays listed above, the mist should be off for a minimum of one hour for the PGR to absorb into the leaf tissue.

Geranium Zonal **AMERICANA®** *Pelargonium zonale*

REC TRAY	PRODUCT FORM	ROOTING HORMONE	MIST TIME	PINCH	PROP TIME	BOTTOM HEAT
105–cell (30 mm) or larger.	URC, CC, AutoStix®	Not Recommended	CapSil® (spray adjuvant) can be sprayed on the cuttings at a rate of 2–4 oz/100 gal within 1–2 days after sticking to help in rehydration of the cuttings. Misting should be significantly reduced after 3–4 days and after cuttings become fully hydrated.	Not Recommended	3.5–4 Weeks	70–74 °F (21–23 °C)

Comments: To help reduce bottom leaf yellowing during propagation (e.g., on delayed shipments or where cuttings have gotten warm during shipping), Fascination® can be sprayed on the cuttings at 2.0–2.5 ppm within 24 hours after sticking. Americana growth can be controlled using sprays of Cycocel® at 750–1,000 ppm and under hot conditions with a tank mix spray of Cycocel® (1,000 ppm) + B-Nine® WSG (2,500 ppm). Bonzi® sprays are not recommended in propagation because of the chance of getting into the rooting media and stunting the plant. Florel® can also be sprayed at 300–350 ppm 2.5–3 weeks after sticking and after good root formation to improve branching, reduce premature flowering, and to control growth. Do not spray Florel® on stressed or weak cuttings. For all sprays listed above, the mist should be off for a minimum of one hour for the PGR to absorb into the leaf tissue.

BACK TO CONTENTS

Geranium Zonal **ROCKY MOUNTAIN™** *Pelargonium zonale*

REC TRAY	PRODUCT FORM	ROOTING HORMONE	MIST TIME	PINCH	PROP TIME	BOTTOM HEAT
105–cell (30 mm) or larger.	URC, CC, AutoStix®	Not Recommended	CapSil® (spray adjuvant) can be sprayed on the cuttings at a rate of 2–4 oz/100 gal within 1–2 days after sticking to help in rehydration of the cuttings. Misting should be significantly reduced after 3–4 days and after cuttings become fully hydrated.	Not Recommended	3.5–4 Weeks	70–74 °F (21–23 °C)

Comments: To help reduce bottom leaf yellowing during propagation (e.g., on delayed shipments or where cuttings have gotten warm during shipping), Fascination® can be sprayed on the cuttings at 2.0–2.5 ppm within 24 hours after sticking. Rocky Mountain growth can be controlled using sprays of Cycocel® at 750–1,000 ppm and under hot conditions with a tank mix spray of Cycocel® (1,000 ppm) + B-Nine® WSG(2,500 ppm). Bonzi® sprays are not recommended in propagation because of the chance of getting into the rooting media and stunting the plant. Florel® can also be sprayed at 300–350 ppm 2.5–3 weeks after sticking and after good root formation to improve branching, reduce premature flowering, and to control growth. Do not spray Florel® on stressed or weak cuttings. For all sprays listed above, the mist should be off for a minimum of one hour for the PGR to absorb into the leaf tissue.

Geranium Zonal **ROSALIE™** *Pelargonium zonale*

REC TRAY	PRODUCT FORM	ROOTING HORMONE	MIST TIME	PINCH	PROP TIME	BOTTOM HEAT
105–cell (30 mm) or larger.	URC, CC, AutoStix®	Not Recommended	CapSil® (spray adjuvant) can be sprayed on the cuttings at a rate of 2–4 oz/100 gal within 1–2 days after sticking to help in rehydration of the cuttings. Misting should be significantly reduced after 3–4 days and after cuttings become fully hydrated.	Not Recommended	3.5–4 Weeks	70–74 °F (21–23 °C)

Comments: To help reduce bottom leaf yellowing during propagation (e.g., on delayed shipments or where cuttings have gotten warm during shipping), Fascination® can be sprayed on the cuttings at 2.0–2.5 ppm within 24 hours after sticking. Rosalie growth can be controlled using sprays of Cycocel® at 750–1,000 ppm and under hot conditions with a tank mix spray of Cycocel® (1,000 ppm) + B-Nine® WSG (2,500 ppm). Bonzi® sprays are not recommended in propagation because of the chance of getting into the rooting media and stunting the plant. Florel® can also be sprayed at 300–350 ppm 2.5–3 weeks after sticking and after good root formation to improve branching, reduce premature flowering, and to control growth. Do not spray Florel® on stressed or weak cuttings. For all sprays listed above, the mist should be off for a minimum of one hour for the PGR to absorb into the leaf tissue.

Geranium Zonal **TANGO™** *Pelargonium zonale*

REC TRAY	PRODUCT FORM	ROOTING HORMONE	MIST TIME	PINCH	PROP TIME	BOTTOM HEAT
105–cell (30 mm) or larger.	URC, CC, AutoStix®	Not Recommended	CapSil® (spray adjuvant) can be sprayed on the cuttings at a rate of 2–4 oz/100 gal within 1–2 days after sticking to help in rehydration of the cuttings. Misting should be significantly reduced after 3–4 days and after cuttings become fully hydrated.	Not Recommended	3.5–4 Weeks	70–74 °F (21–23 °C)

Comments: To help reduce bottom leaf yellowing during propagation (e.g., on delayed shipments or where cuttings have gotten warm during shipping), Fascination® can be sprayed on the cuttings at 2.0–2.5 ppm within 24 hours after sticking. Tango growth can be controlled using sprays of Cycocel® at 750–1,000 ppm and under hot conditions with a tank mix spray of Cycocel® (1,000 ppm) + B-Nine® WSG (2,500 ppm). Bonzi® sprays are not recommended in propagation because of the chance of getting into the rooting media and stunting the plant. Florel® can also be sprayed at 300–350 ppm 2.5–3 weeks after sticking and after good root formation to improve branching, reduce premature flowering, and to control growth. Do not spray Florel® on stressed or weak cuttings. For all sprays listed above, the mist should be off for a minimum of one hour for the PGR to absorb into the leaf tissue.

Heliotrope **SCENTROPIA™** *Heliotropium arborescens*

REC TRAY	PRODUCT FORM	ROOTING HORMONE	MIST TIME	PINCH	PROP TIME	BOTTOM HEAT
105–cell (30 mm) or larger.	URC, CC	Recommended	CapSil® (spray adjuvant) can be sprayed on the cuttings at a rate of 2–4 oz/100 gal within 1–2 days after sticking to help in rehydration of the cuttings. Misting should be significantly reduced after 3–4 days and after cuttings become fully hydrated.	Not Recommended	4.5–5 weeks	72–74 °F (22–23 °C)

Comments: To control growth after rooting, a spray of B-Nine® WSG (1,500–2,500 ppm) can be used. A tank-mix spray of Florel® (350 ppm) + B-Nine® WSG (1,500–2,500 ppm) can also be applied to control growth and improve branching.

Impatiens **SILHOUETTE®** *Impatiens walleriana*

REC TRAY	PRODUCT FORM	ROOTING HORMONE	MIST TIME	PINCH	PROP TIME	BOTTOM HEAT
105–cell (30 mm) or larger.	URC, AutoStix®	Not Recommended	CapSil® (spray adjuvant) can be sprayed on the cuttings at a rate of 2–4 oz/100 gal within 1–2 days after sticking to help in rehydration of the cuttings. Misting should be significantly reduced after 3–4 days and after cuttings become fully hydrated.	Not Recommended	3.5–4 Weeks	70–74 °F (21–23 °C)

Comments: To control growth, sprays of Bonzi® (5 ppm) can be applied. Growers can also try a combo spray of Florel® (350 ppm) + B-Nine® WSG (1,500 ppm) to control growth and improve branching.

Impatiens New Guinea **SONIC®** *Impatiens hawkeri*

REC TRAY	PRODUCT FORM	ROOTING HORMONE	MIST TIME	PINCH	PROP TIME	BOTTOM HEAT
105–cell (30 mm) or larger.	URC, CC, AutoStix®	Not Recommended	CapSil® (spray adjuvant) can be sprayed on the cuttings at a rate of 2–4 oz/100 gal within 1–2 days after sticking to help in rehydration of the cuttings. Misting should be significantly reduced after 3–4 days and after cuttings become fully hydrated.	Not Recommended	3.5–4 Weeks	70–74 °F (21–23 °C)

Comments: To control growth, sprays of Bonzi® (1–2 ppm) are generally used. Growers can also spray Florel® (250–300 ppm) at 1–2 days after sticking unrooted cuttings to reduce premature flower bud development and help provide more uniform (but delayed) flowering during finishing. This is a good strategy for baskets or large patio pots where early flowering is not desired.

Impatiens New Guinea **SUPER SONIC®** *Impatiens hawkeri*

REC TRAY	PRODUCT FORM	ROOTING HORMONE	MIST TIME	PINCH	PROP TIME	BOTTOM HEAT
105–cell (30 mm) or larger	URC, CC, AutoStix®	Not Recommended	CapSil® (spray adjuvant) can be sprayed on the cuttings at a rate of 2–4 oz/100 gal within 1–2 days after sticking to help in rehydration of the cuttings. Misting should be significantly reduced after 3–4 days and after cuttings become fully hydrated.	Not Recommended	3.5–4 Weeks	70–74 °F (21–23 °C)

Comments: To control growth, sprays of Bonzi® (1–2 ppm) are generally used. Growers can also spray Florel® (250–300 ppm) at 1–2 days after sticking unrooted cuttings to reduce premature flower bud development and help provide more uniform (but delayed) flowering during finishing. This is a good strategy for baskets or large patio pots where early flowering is not desired.

BACK TO CONTENTS

Ipomoea **SIDEKICK™** *Ipomoea batatas*

REC TRAY	PRODUCT FORM	ROOTING HORMONE	MIST TIME	PINCH	PROP TIME	BOTTOM HEAT
105–cell (30 mm) or larger.	URC	Not Recommended	CapSil® (spray adjuvant) can be sprayed on the cuttings at a rate of 2–4 oz/100 gal within 1–2 days after sticking to help in rehydration of the cuttings. Misting should be significantly reduced after 3–4 days and after cuttings become fully hydrated.	Recommended	3.5–4 Weeks	70–74 °F (21–23 °C)

Comments: Usually not needed in propagation.

Lantana **BANDANA®** *Lantana camara*

REC TRAY	PRODUCT FORM	ROOTING HORMONE	MIST TIME	PINCH	PROP TIME	BOTTOM HEAT
105–cell (30 mm) or larger.	URC, CC, AutoStix®	Recommended	CapSil® (spray adjuvant) can be sprayed on the cuttings at a rate of 2–4 oz/100 gal within 1–2 days after sticking to help in rehydration of the cuttings. Misting should be significantly reduced after 3–4 days and after cuttings become fully hydrated.	Not Recommended	4.5–5 Weeks	72–74 °F (22–23 °C)

Comments: To control growth after rooting, a spray of B-Nine® WSG (2,500 ppm) can be used. A tank-mix spray of Florel® (350 ppm) + B-Nine® WSG (2,500 ppm) can also be used to control growth and improve branching.

Lantana **BANDITO™** *Lantana camara*

REC TRAY	PRODUCT FORM	ROOTING HORMONE	MIST TIME	PINCH	PROP TIME	BOTTOM HEAT
105–cell (30 mm) or larger.	URC, CC, AutoStix®	Recommended	CapSil® (spray adjuvant) can be sprayed on the cuttings at a rate of 2–4 oz/100 gal within 1–2 days after sticking to help in rehydration of the cuttings. Misting should be significantly reduced after 3–4 days and after cuttings become fully hydrated.	Not Recommended	4.5–5 Weeks	72–74 °F (22–23 °C)

Comments: Bandito has low vigor and should need little PGR during propagation. If growth control is needed after rooting, a spray of B-Nine® WSG (2,500 ppm) can be used. A tank-mix spray of Florel® (350 ppm) + B-Nine® WSG (2,500 ppm) can also be used to control growth and improve branching.

Lantana **BANDOLERO™** *Lantana camara*

REC TRAY	PRODUCT FORM	ROOTING HORMONE	MIST TIME	PINCH	PROP TIME	BOTTOM HEAT
105–cell (30 mm) or larger.	URC, CC, AutoStix®	Recommended	CapSil® (spray adjuvant) can be sprayed on the cuttings at a rate of 2–4 oz/100 gal within 1–2 days after sticking to help in rehydration of the cuttings. Misting should be significantly reduced after 3–4 days and after cuttings become fully hydrated.	Not Recommended	4.5–5 Weeks	72–74 °F (22–23 °C)

Comments: To control growth after rooting, a tank-mix spray of B-Nine® WSG (2500–3500 ppm) + Cycocel® (1000 ppm) can be used. A tank-mix spray of Florel® (350 ppm) + B-Nine® WSG (2500–3500 ppm) can also be used to control growth and improve branching.

Lantana **HOT BLOODED™** *Lantana camara*

REC TRAY	PRODUCT FORM	ROOTING HORMONE	MIST TIME	PINCH	PROP TIME	BOTTOM HEAT
105–cell (30 mm) or larger.	URC, CC, AutoStix®	Recommended	CapSil® (spray adjuvant) can be sprayed on the cuttings at a rate of 2–4 oz/100 gal within 1–2 days after sticking to help in rehydration of the cuttings. Misting should be significantly reduced after 3–4 days and after cuttings become fully hydrated.	Not Recommended	4.5–5 Weeks	72–74 °F (22–23 °C)

Comments: To control growth after rooting, a tank-mix spray of B-Nine® WSG (2500–3500 ppm) + Cycocel® (1000 ppm) can be used. A tank-mix spray of Florel® (350 ppm) + B-Nine® WSG (2500–3500 ppm) can also be used to control growth and improve branching.

Lantana **LANDSCAPE BANDANA®** *Lantana camara*

REC TRAY	PRODUCT FORM	ROOTING HORMONE	MIST TIME	PINCH	PROP TIME	BOTTOM HEAT
105–cell (30 mm) or larger.	URC, CC, AutoStix®	Recommended	CapSil® (spray adjuvant) can be sprayed on the cuttings at a rate of 2–4 oz/100 gal within 1–2 days after sticking to help in rehydration of the cuttings. Misting should be significantly reduced after 3–4 days and after cuttings become fully hydrated.	Not Recommended	4.5–5 Weeks	72–74 °F (22–23 °C)

Comments: To control growth after rooting, a tank-mix spray of B-Nine® WSG (2,500–3,500 ppm) + Cycocel® (1,000 ppm) can be used. A tank-mix spray of Florel® (350 ppm) + B-Nine® WSG (2,500–3,500 ppm) can also be used to control growth and improve branching. Landscape Bandana varieties can be relatively vigorous and will typically need chemical growth control.

Lavender Spanish **JAVELIN™ FORTE** *Lavandula stoechas*

REC TRAY	PRODUCT FORM	ROOTING HORMONE	MIST TIME	PINCH	PROP TIME	BOTTOM HEAT
105–cell (30 mm) or larger.	URC, AutoStix®	Recommended	CapSil® (spray adjuvant) can be sprayed on the cuttings at a rate of 2–4 oz/100 gal within 1–2 days after sticking to help in rehydration of the cuttings. Misting should be significantly reduced after 3–4 days and after cuttings become fully hydrated.	Recommended	6–7 Weeks	70–72 °F (21–22 °C)

Comments: Lavender are extremely sensitive to over-misting. Consider using a ReeMay® tent over the propagation trays to keep the humidity high thereby decreasing the chance for over-misting. Remove the tent once the cuttings are showing roots. If necessary, spray B-Nine® WSG at 1,500 – 2,000 ppm to control stretch after the cuttings are rooted.

Licorice Plant **HELICHRYSUM PETIOLARE** *Helichrysum petiolare*

REC TRAY	PRODUCT FORM	ROOTING HORMONE	MIST TIME	PINCH	PROP TIME	BOTTOM HEAT
105–cell (30 mm) or larger.	URC, AutoStix®	Not Recommended	CapSil® (spray adjuvant) can be sprayed on the cuttings at a rate of 2–4 oz/100 gal within 1–2 days after sticking to help in rehydration of the cuttings. Misting should be significantly reduced after 2–3 days and after cuttings become fully hydrated.	Not Recommended	3.5–4 Weeks	70–74 °F (21–23 °C)

Comments: Helichrysum petiolare is a relatively compact, semi-trailing plant. It typically does not require any chemical growth regulation in propagation. Transplant on time to avoid stretched growth.

BACK TO CONTENTS

Lobelia **TECHNO®** *Lobelia erinus*

REC TRAY	PRODUCT FORM	ROOTING HORMONE	MIST TIME	PINCH	PROP TIME	BOTTOM HEAT
105–cell (30 mm) or larger.	URC, AutoStix®	Not Recommended	CapSil® (spray adjuvant) can be sprayed on the cuttings at a rate of 2–4 oz/100 gal within 1–2 days after sticking to help in rehydration of the cuttings. Misting should be significantly reduced after 2–3 days and after cuttings become fully hydrated.	Recommended	3.5–4 Weeks	70–74 °F (21–23 °C)

Comments: To control growth after rooting, sprays of B-Nine® WSG (1,500–2,500 ppm) is sufficient. It is also becoming popular for growers to combine Florel® (350 ppm) with the B-Nine® WSG (1,500 ppm) to increase growth control and to improve branching. These Florel® + B-Nine® WSG combo sprays should be applied to actively growing plants. Do not spray B-Nine® WSG or Florel® + B-Nine® WSG tank mixes on stressed or weak cuttings. For all sprays listed above, the mist should be off for a minimum of one hour for the PGR to absorb into the leaf tissue.

Lobelia **TECHNO® UPRIGHT** *Lobelia erinus*

REC TRAY	PRODUCT FORM	ROOTING HORMONE	MIST TIME	PINCH	PROP TIME	BOTTOM HEAT
105–cell (30 mm) or larger.	URC, AutoStix®	Not Recommended	CapSil® (spray adjuvant) can be sprayed on the cuttings at a rate of 2–4 oz/100 gal within 1–2 days after sticking to help in rehydration of the cuttings. Misting should be significantly reduced after 2–3 days and after cuttings become fully hydrated.	Recommended	3.5–4 Weeks	70–74 °F (21–23 °C)

Comments: To control growth after rooting, sprays of B-Nine® WSG (1,500–2,500 ppm) is sufficient. It is also becoming popular for growers to combine Florel® (350 ppm) with the B-Nine® WSG (1,500 ppm) to increase growth control and to improve branching. These Florel® + B-Nine® WSG combo sprays should be applied to actively growing plants. Do not spray B-Nine® WSG or Florel® + B-Nine® WSG tank mixes on stressed or weak cuttings. For all sprays listed above, the mist should be off for a minimum of one hour for the PGR to absorb into the leaf tissue.

Lysimachia **GOLDII** *Lysimachia nummularia*

REC TRAY	PRODUCT FORM	ROOTING HORMONE	MIST TIME	PINCH	PROP TIME	BOTTOM HEAT
105–cell (30 mm) or larger.	URC, Pre-Pinched, AutoStix®	Not Recommended	CapSil® (spray adjuvant) can be sprayed on the cuttings at a rate of 2–4 oz/100 gal within 1–2 days after sticking to help in rehydration of the cuttings. Misting should be significantly reduced after 2–3 days and after cuttings become fully hydrated.	Recommended	4 Weeks	70–74 °F (21–23 °C)

Comments: Lysimachia Goldii is a trailing plant that is typically pinched once in propagation to control growth. Syngenta Flowers offers Lysimiachia Goldii as a pre-pinched cutting to decrease labor costs and provide the grower with a liner that develops roots faster and creates a denser liner. Transplant on time to avoid stretched growth and over-grown liners.

Osteospermum **TRADEWINDS®** *Osteospermum ecklonis*

REC TRAY	PRODUCT FORM	ROOTING HORMONE	MIST TIME	PINCH	PROP TIME	BOTTOM HEAT
105–cell (30 mm) or larger.	URC, CC, AutoStix®	Recommended	CapSil® (spray adjuvant) can be sprayed on the cuttings at a rate of 2–4 oz/100 gal within 1–2 days after sticking to help in rehydration of the cuttings. Misting should be significantly reduced after 2–3 days and after cuttings become fully hydrated.	Not Recommended	4.5–5 Weeks	70–74 °F (21–23 °C)

Comments: To keep plants under control, a spray of B-Nine® WSG (2,500 ppm) or B-Nine® WSG (2,500 ppm) + Cycocel® (1,000 ppm) can be applied after cuttings are well-rooted and vegetative growth begins. It is also becoming popular for growers to combine Florel® (350 ppm) with the B-Nine® WSG (1,500–2,500 ppm) to increase growth control and to improve branching. These Florel® + B-Nine® WSG combo sprays should be applied to actively growing plants and done ideally before pinching. Do not spray B-Nine® WSG or Florel® + B-Nine® WSG tank mixes on stressed or weak cuttings. For all sprays listed above, the mist should be off for a minimum of one hour for the PGR to absorb into the leaf tissue.

Penstemon **PHOENIX™** *Penstemon hartwegii*

REC TRAY	PRODUCT FORM	ROOTING HORMONE	MIST TIME	PINCH	PROP TIME	BOTTOM HEAT
105–cell (30 mm) or larger.	URC, AutoStix®	Not Recommended	CapSil® (spray adjuvant) can be sprayed on the cuttings at a rate of 2–4 oz/100 gal within 1–2 days after sticking to help in rehydration of the cuttings. Misting should be significantly reduced after 2–3 days and after cuttings become fully hydrated.	Recommended	3.5–4 Weeks	70–74 °F (21–23 °C)

Comments: Sprays of B-Nine® WSG (2,500 ppm) or a tank-mix spray of Cycocel® (1,000 ppm) + B-Nine® WSG (2,500 ppm) are generally sufficient. For all sprays listed above, the mist should be off for a minimum of one hour for the PGR to absorb into the leaf tissue.

Pentas **FALLING STAR™** *Pentas lanceolata*

REC TRAY	PRODUCT FORM	ROOTING HORMONE	MIST TIME	PINCH	PROP TIME	BOTTOM HEAT
105–cell (30 mm) or larger.	URC, CC	Recommended	CapSil® (spray adjuvant) can be sprayed on the cuttings at a rate of 2–4 oz/100 gal within 1–2 days after sticking to help in rehydration of the cuttings. Misting should be significantly reduced after 2–3 days and after cuttings become fully hydrated.	Recommended	5 Weeks	72–74 °F (22–23 °C)

Comments: Sprays of B-Nine® WSG (2,500 ppm) are generally sufficient. For all sprays listed above, the mist should be off for a minimum of one hour for the PGR to absorb into the leaf tissue.

Pentas **STARCLUSTER™** *Pentas lanceolata*

REC TRAY	PRODUCT FORM	ROOTING HORMONE	MIST TIME	PINCH	PROP TIME	BOTTOM HEAT
105–cell (30 mm) or larger.	URC, CC	Recommended	CapSil® (spray adjuvant) can be sprayed on the cuttings at a rate of 2–4 oz/100 gal within 1–2 days after sticking to help in rehydration of the cuttings. Misting should be significantly reduced after 2–3 days and after cuttings become fully hydrated.	Recommended	5 Weeks	72–74 °F (22–23 °C)

Comments: Sprays of B-Nine® WSG (2,500 ppm) are generally sufficient. For all sprays listed above, the mist should be off for a minimum of one hour for the PGR to absorb into the leaf tissue.

BACK TO CONTENTS

Petunia **DEKKO™** *Petunia hybrida*

REC TRAY	PRODUCT FORM	ROOTING HORMONE	MIST TIME	PINCH	PROP TIME	BOTTOM HEAT
105–cell (30 mm) or larger.	URC, AutoStix®	Not Recommended	CapSil® (spray adjuvant) can be sprayed on the cuttings at a rate of 2–4 oz/100 gal within 1–2 days after sticking to help in rehydration of the cuttings. Misting should be significantly reduced after 2–3 days and after cuttings become fully hydrated.	Not Recommended	3–3.5 Weeks	72–74 °F (22–23 °C)

Comments: Dekko has moderate vigor and generally is not as vigorous as many full-trailing petunia types. To control growth after rooting, sprays of B-Nine® WSG (2,500 ppm) are usually sufficient. A tank-mix spray of Florel® (350 ppm) + B-Nine® WSG (2,500 ppm) can also be used to control growth and improve branching. Do not spray Florel® on stressed or weak cuttings. For all sprays listed above, the mist should be off for a minimum of one hour for the PGR to absorb into the leaf tissue.

Petunia **ITSY™** *Petunia hybrida*

REC TRAY	PRODUCT FORM	ROOTING HORMONE	MIST TIME	PINCH	PROP TIME	BOTTOM HEAT
105–cell (30 mm) or larger.	URC, AutoStix®	Not Recommended	CapSil® (spray adjuvant) can be sprayed on the cuttings at a rate of 2–4 oz/100 gal within 1–2 days after sticking to help in rehydration of the cuttings. Misting should be significantly reduced after 2–3 days and after cuttings become fully hydrated.	Not Recommended	3–3.5 Weeks	70–74 °F (21–23 °C)

Comments: Itsy has moderate vigor and generally is not as vigorous as many full-trailing petunia types. To control growth after rooting, sprays of B-Nine® WSG (2,500 ppm) are usually sufficient. A tank-mix spray of Florel® (350 ppm) + B-Nine® WSG (2,500 ppm) can also be used to control growth and improve branching. Do not spray Florel® on stressed or weak cuttings. For all sprays listed above, the mist should be off for a minimum of one hour for the PGR to absorb into the leaf tissue.

Petunia **SANGUNA®** *Petunia hybrida*

REC TRAY	PRODUCT FORM	ROOTING HORMONE	MIST TIME	PINCH	PROP TIME	BOTTOM HEAT
105–cell (30 mm) or larger.	URC, AutoStix®	Not Recommended	CapSil® (spray adjuvant) can be sprayed on the cuttings at a rate of 2–4 oz/100 gal within 1–2 days after sticking to help in rehydration of the cuttings. Misting should be significantly reduced after 2–3 days and after cuttings become fully hydrated.	Not Recommended	3–3.5 Weeks	72–74 °F (22–23 °C)

Comments: Sanguna has good vigor and generally will need chemical growth regulation in propagation. To control growth after rooting, sprays of B-Nine® WSG(2,500–3,500 ppm) are usually sufficient. A tank-mix spray of Florel® (350 ppm) + B-Nine® WSG (2,500 ppm) can also be used to control growth and improve branching. Do not spray Florel® on stressed or weak cuttings. For all sprays listed above, the mist should be off for a minimum of one hour for the PGR to absorb into the leaf tissue.

Petunia **SANGUNA® PATIO** *Petunia hybrida*

REC TRAY	PRODUCT FORM	ROOTING HORMONE	MIST TIME	PINCH	PROP TIME	BOTTOM HEAT
105–cell (30 mm) or larger.	URC, AutoStix®	Not Recommended	CapSil® (spray adjuvant) can be sprayed on the cuttings at a rate of 2–4 oz/100 gal within 1–2 days after sticking to help in rehydration of the cuttings. Misting should be significantly reduced after 2–3 days and after cuttings become fully hydrated.	Not Recommended	3–3.5 Weeks	72–74 °F (22–23 °C)

Comments: Sanguna Patio has compact-medium vigor and generally will need only moderate amounts of chemical growth regulation in propagation. To control growth after rooting, sprays of B-Nine® WSG (2,500 ppm) are usually sufficient. A tank-mix spray of Florel® (350 ppm) + B-Nine® WSG (2,500 ppm) can also be used to control growth and improve branching. Do not spray Florel® on stressed or weak cuttings. For all sprays listed above, the mist should be off for a minimum of one hour for the PGR to absorb into the leaf tissue.

Petunia **SHORTCAKE™** *Petunia hybrida*

REC TRAY	PRODUCT FORM	ROOTING HORMONE	MIST TIME	PINCH	PROP TIME	BOTTOM HEAT
105–cell (30 mm) or larger.	URC	Not Recommended	CapSil® (spray adjuvant) can be sprayed on the cuttings at a rate of 2–4 oz/100 gal within 1–2 days after sticking to help in rehydration of the cuttings. Misting should be significantly reduced after 2–3 days and after cuttings become fully hydrated.	Not Recommended	3–3.5 Weeks	70–74 °F (21–23 °C)

Comments: Shortcake has moderate vigor and generally is not as vigorous as many full-trailing petunia types. To control growth after rooting, sprays of B-Nine® WSG (2500–3500 ppm) are usually sufficient. A tank-mix spray of Florel® (350 ppm) + B-Nine® WSG (2500–3500 ppm) can also be used to control growth and improve branching. Do not spray Florel® on stressed or weak cuttings. For all sprays listed above, the mist should be off for a minimum of one hour for the PGR to absorb into the leaf tissue.

Salvia **VELOCITY™** *Salvia farinacea*

REC TRAY	PRODUCT FORM	ROOTING HORMONE	MIST TIME	PINCH	PROP TIME	BOTTOM HEAT
105–cell (30 mm) or larger.	URC, Pre-Pinched, AutoStix®	Not Recommended	CapSil® (spray adjuvant) can be sprayed on the cuttings at a rate of 2–4 oz/100 gal within 1–2 days after sticking to help in rehydration of the cuttings. Misting should be significantly reduced after 3–4 days and after cuttings become fully hydrated.	Recommended	3.5–4 Weeks	70–74 °F (21–23 °C)

Comments: Velocity growth can be controlled in propagation using a tank mix spray of Cycocel® (1,000 ppm) + B-Nine® WSG (1,500 ppm). For all sprays listed above, the mist should be off for a minimum of one hour for the PGR to absorb into the leaf tissue.

Scaevola **BOMBAY®** *Scaevola aemula*

REC TRAY	PRODUCT FORM	ROOTING HORMONE	MIST TIME	PINCH	PROP TIME	BOTTOM HEAT
105–cell (30 mm) or larger	URC, CC, AutoStix®	Recommended	CapSil® (spray adjuvant) can be sprayed on the cuttings at a rate of 2–4 oz/100 gal within 1–2 days after sticking to help in rehydration of the cuttings. Misting should be significantly reduced after 2–3 days and after cuttings become fully hydrated.	Recommended	4.5–5 Weeks	72–74 °F (22–23 °C)

Comments: To control growth after rooting, sprays of B-Nine® WSG (1,500–2,500 ppm) are usually sufficient. A tank-mix spray of Florel® (350–500 ppm) + B-Nine® WSG (1,500 ppm) can also be used to control growth and improve branching. Do not spray Florel® on stressed or weak cuttings. For all sprays listed above, the mist should be off for a minimum of one hour for the PGR to absorb into the leaf tissue.

BACK TO CONTENTS

Variegated Swedish Ivy **PLECTRANTHUS COLEOIDES** *Plectranthus coleoides*

REC TRAY	PRODUCT FORM	ROOTING HORMONE	MIST TIME	PINCH	PROP TIME	BOTTOM HEAT
105–cell (30 mm) or larger.	URC, AutoStix®	Not Recommended	CapSil® (spray adjuvant) can be sprayed on the cuttings at a rate of 2–4 oz/100 gal within 1–2 days after sticking to help in rehydration of the cuttings. Misting should be significantly reduced after 3–4 days and after cuttings become fully hydrated.	Recommended	2–3 Weeks	68–70 °F (20–21 °C)

Comments: B-Nine® WSG at 1,500–2,500 ppm can be used to control stem stretch.

Verbena **LANAI®** *Verbena hybrida*

REC TRAY	PRODUCT FORM	ROOTING HORMONE	MIST TIME	PINCH	PROP TIME	BOTTOM HEAT
105–cell (30 mm) or larger.	URC, Pre-Pinched, AutoStix®	Not Recommended	CapSil® (spray adjuvant) can be sprayed on the cuttings at a rate of 2–4 oz/100 gal within 1–2 days after sticking to help in rehydration of the cuttings. Misting should be significantly reduced after 2–3 days and after cuttings become fully hydrated.	Recommended	3–3.5 Weeks	72–74 °F (22–23 °C)

Comments: Lanai has a range of vigor, with most varieties having medium to medium-vigorous growth habits. To control growth after rooting, sprays of B-Nine® WSG (2,500 ppm) are usually sufficient. A tank-mix spray of Florel® (350 ppm) + B-Nine® WSG (1,500–2,500 ppm) can also be used to control growth and improve branching. Do not spray Florel® on stressed or weak cuttings. For all sprays listed above, the mist should be off for a minimum of one hour for the PGR to absorb into the leaf tissue.

Verbena **LANAI® COMPACT** *Verbena hybrida*

REC TRAY	PRODUCT FORM	ROOTING HORMONE	MIST TIME	PINCH	PROP TIME	BOTTOM HEAT
105–cell (30 mm) or larger.	URC, Pre-Pinched, AutoStix®	Not Recommended	CapSil® (spray adjuvant) can be sprayed on the cuttings at a rate of 2–4 oz/100 gal within 1–2 days after sticking to help in rehydration of the cuttings. Misting should be significantly reduced after 2–3 days and after cuttings become fully hydrated.	Recommended	3–3.5 Weeks	72–74 °F (22–23 °C)

Comments: Lanai Compact has compact-medium vigor and should require only moderate amounts of chemical growth retardants in propagation. To control growth after rooting, sprays of B-Nine® WSG (1,500–2,500 ppm) are usually sufficient. A tank-mix spray of Florel® (350 ppm) + B-Nine® WSG (1,500 ppm) can also be used to control growth and improve branching. Do not spray Florel® on stressed or weak cuttings. For all sprays listed above, the mist should be off for a minimum of one hour for the PGR to absorb into the leaf tissue.

Verbena **LANAI® UPRIGHT** *Verbena hybrida*

REC TRAY	PRODUCT FORM	ROOTING HORMONE	MIST TIME	PINCH	PROP TIME	BOTTOM HEAT
105–cell (30 mm) or larger.	URC, Pre-Pinched, AutoStix®	Not Recommended	CapSil® (spray adjuvant) can be sprayed on the cuttings at a rate of 2–4 oz/100 gal within 1–2 days after sticking to help in rehydration of the cuttings. Misting should be significantly reduced after 2–3 days and after cuttings become fully hydrated.	Recommended	3–3.5 Weeks	72–74 °F (22–23 °C)

Comments: Lanai Upright has compact-medium to medium vigor and should require moderate amounts of chemical growth retardants in propagation. To control growth after rooting, sprays of B-Nine® WSG (1,500–2,500 ppm) are usually sufficient. A tank-mix spray of Florel® (350 ppm) + B-Nine® WSG (1,500–2,500 ppm) can also be used to control growth and improve branching. Do not spray Florel® on stressed or weak cuttings. For all sprays listed above, the mist should be off for a minimum of one hour for the PGR to absorb into the leaf tissue.

Verbena **MAGELANA™** *Verbena hybrida*

REC TRAY	PRODUCT FORM	ROOTING HORMONE	MIST TIME	PINCH	PROP TIME	BOTTOM HEAT
105–cell (30 mm) or larger.	URC, Pre-Pinched, AutoStix®	Not Recommended.	CapSil® (spray adjuvant) can be sprayed on the cuttings at a rate of 2–4 oz/100 gal within 1–2 days after sticking to help in rehydration of the cuttings. Misting should be significantly reduced after 2–3 days and after cuttings become fully hydrated.	Recommended	3–3.5 Weeks	70–74 °F (21–23 °C)

Comments: Magelana has compact-medium vigor and should require only moderate amounts of chemical growth retardants in propagation. To control growth after rooting, sprays of B-Nine® WSG (1,500–2,500 ppm) are usually sufficient. A tank-mix spray of Florel® (350 ppm) + B-Nine® WSG (1,500 ppm) can also be used to control growth and improve branching. Do not spray Florel® on stressed or weak cuttings. For all sprays listed above, the mist should be off for a minimum of one hour for the PGR to absorb into the leaf tissue.

Vinca **NIRVANA® CASCADE** *Catharanthus roseus*

REC TRAY	PRODUCT FORM	ROOTING HORMONE	MIST TIME	PINCH	PROP TIME	BOTTOM HEAT
105–cell (30 mm) or larger.	URC, CC, AutoStix®	Recommended	CapSil® (spray adjuvant) can be sprayed on the cuttings at a rate of 2–4 oz/100 gal within 1–2 days after sticking to help in rehydration of the cuttings. Misting should be significantly reduced after 3–4 days and after cuttings become fully hydrated.	Not Recommended	4.5–5 Weeks	72–74 °F (22–23 °C)

Comments: To control growth after rooting, sprays of Cycocel® (750 ppm), B-Nine® WSG (2,500 ppm), or Cycocel® (750 ppm) + B-Nine® WSG (2,500 ppm) can be used depending on the growth rate and vigor of the plant. The Cycocel® + B-Nine® WSG combo spray will have a more growth regulating effect than either the Cycocel® or B-Nine® WSG spray alone.

BACK TO CONTENTS

Angelonia **CARITA™** *Angelonia angustifolia*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	PINCHES	FINISHING PROGRAM
pH: 5.8–6.2 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Day Neutral	76–78 °F (24–26 °C)	70–72 °F (21–22 °C)	200–250 ppm N	1 Pinch	1 qt. I 1 ppp I 6–7 weeks 1.25 qt. I 1 ppp I 8–9 weeks 2.5 qt. I 1 ppp I 9–10 weeks 3 qt. I 2–3 ppp I 9–10 weeks 1.5 gal. pot I 4 ppp I 10–11 weeks

PESTS	DISEASES	FINISH PGRS	VARIETY	VIGOR	TIMING
Thrips, Whiteflies	Root Rot, Botrytis	B-Nine® (2500 ppm) or a tank-mix spray of Cycocel® (1000 ppm) + B-Nine® (2500 ppm). Do not spray Florel® on Angelonia since this can burn foliage and cause significant flower delay.	Carita™ Purple 70003174 Carita™ Raspberry 70003177 Carita™ White 70003175	C-M C C-M	E E E

Tech Tips: Provide warm temperatures early on in finishing to allow plants to establish after transplant. Cold temperatures lead to bottom leaf yellowing, slow growth, and basal stem and root rots. Avoid over-watering the young transplants, especially in large patio containers. Apply a preventative fungicide drench if needed to prevent fungal root diseases. Scout and treat for Thrips.

Angelonia **CARITA™ CASCADE** *Angelonia angustifolia*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	PINCHES	FINISHING PROGRAM
pH: 5.8–6.2 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Day Neutral	76–78 °F (24–26 °C)	70–72 °F (21–22 °C)	200–250 ppm N	1 Pinch	1 qt. I 1 ppp I 6–7 weeks 1.25 qt. I 1 ppp I 8–9 weeks 2.5 qt. I 1 ppp I 9–10 weeks 3 qt. I 2–3 ppp I 9–10 weeks 1.5 gal. HB I 4 ppp I 10–11 weeks

PESTS	DISEASES	FINISH PGRS	VARIETY	VIGOR	TIMING
Thrips, Whiteflies	Root Rot, Botrytis	B-Nine® (2500 ppm) or a tank-mix spray of Cycocel® (1000 ppm) + B-Nine® (2500 ppm). Do not spray Florel® on Angelonia since this can burn foliage and cause significant flower delay.	Carita™ Cascade Deep Purple 70003172 Carita™ Cascade Raspberry 70018119 Carita™ Cascade White 70003173	M C-M M	M M M

Tech Tips: Provide warm temperatures early on in finishing to allow plants to establish after transplant. Cold temperatures lead to bottom leaf yellowing, slow growth, and basal stem and root rots. Avoid over-watering the young transplants, especially in large patios and baskets. Apply a preventative fungicide drench if needed to prevent fungal root diseases. Scout and treat for Thrips.

Argyranthemum **SASSY®** *Argyranthemum frutescens*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	PINCHES	FINISHING PROGRAM
pH: 5.8–6.2 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Day Neutral	70–72 °F (21–22 °C)	62–64 °F (17–18 °C)	200–250 ppm N	1 Pinch	1 qt. I 1 ppp I 6–7 weeks 1.25 qt. I 1 ppp I 8–9 weeks 2.5 qt. I 1 ppp I 9–10 weeks 3 qt. I 2–3 ppp I 9–10 weeks 1.5 gal. HB I 4 ppp I 10–11 weeks

PESTS	DISEASES	FINISH PGRS	VARIETY	VIGOR	TIMING
Thrips, Aphids, Whiteflies, and Leafminers	Botrytis	Bonzi® (5–10 ppm), Sumagic® (4–5 ppm), and Cycocel® (1000 ppm) + B-Nine® (2500 ppm) tank-mix work to control growth. It is also becoming popular for growers to combine Florel® at 350–500 ppm with B-Nine® (2500) early on in production to control growth and improve branching. These Florel® + B-Nine® combo sprays should be applied to actively growing plants.	Sassy® Double Deep Rose 70036131 Sassy® Double Yellow 70051319 Sassy® Red 70006552 Sassy® Rose 70003326 Sassy® White 70066240	M-V C-M M M M	E E-M M-L E E

Tech Tips: Growing under relatively cool temperatures and high light levels will produce high-quality Argyranthemum. If grown cool, little chemical growth regulators are needed during production. Scout and treat for Thrips, which can cause streaking and browning of the flower petals.

Bacopa **CALYPSO™** *Sutera cordata*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	PINCHES	FINISHING PROGRAM
pH: 5.8–6.2 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Day Neutral	70–72 °F (21–22 °C)	62–64 °F (17–18 °C)	125–175 ppm N	1–2 Pinches	1 qt. I 1 ppp I 6–7 weeks 1.25 qt. I 1 ppp I 8–9 weeks 2.5 qt. I 1 ppp I 9–10 weeks 3 qt. I 2–3 ppp I 9–10 weeks 1.5 gal. HB I 4 ppp I 10–11 weeks

PESTS	DISEASES	FINISH PGRS	VARIETY	VIGOR	TIMING
Thrips, Aphids, and Whiteflies	Botrytis, Fungal Root Rot	B-Nine® (1500–2500 ppm). A Tank-mix spray of Florel® (200 ppm) + B-Nine® (1500 ppm) can also be used to control growth and improve branching early in production. Bonzi® drench (1 ppm) can be given 3–4 weeks before finishing.	Calypso™ Jumbo Deep Lavender 70060753 Calypso™ Jumbo Lilac 70071572 Calypso™ Jumbo Pink Eye 70060755 Calypso™ Jumbo Rose 70071583 Calypso™ Jumbo White 70060751	C-M M C-M M C-M	E E E E E

Tech Tips: Calypso should be pinched during propagation, which results in a well-branched, mounded plug. Avoid keeping plants too wet and cold early on after transplant, which can result in root rot and tip chlorosis (iron deficiency), especially in large baskets and containers. High DLIs and cool finishing temperatures produce high-quality bacopa. Plants can be pinched twice for baskets and large containers, which results in full, uniform plants. Monitor media pH and EC closely and avoid high EC levels to prevent damage roots. Do not let plants get extremely dry which results in necrotic foliage and root loss. Calypso has moderate vigor and will generally need a PGR treatment in propagation. To control growth after rooting, a spray of B-Nine® WSG (1,500 ppm) is sufficient. It is also becoming popular for growers to combine Florel® (200 ppm) with the B-Nine® WSG (1,500 ppm) to increase growth control and to improve branching. These Florel® + B-Nine® WSG combo sprays should be applied to actively growing plants. Do not spray B-Nine® WSG or Florel® + B-Nine® WSG tank mixes on stressed or weak cuttings. For all sprays listed above, the mist should be off for a minimum of one hour for the PGR to absorb into the leaf tissue.

BACK TO CONTENTS

Begonia **FLORENCIO™** *Begonia hybrida*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	PINCHES	FINISHING PROGRAM
pH: 5.8–6.2 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Obligate long day	68–70 °F (20–21 °C)	62–64 °F (17–18 °C)	200–250 ppm N	1 Pinch	1 qt. I 1 ppp I 6–9 weeks 2.5 qt. I 2–3 ppp I 9–12 weeks 3 qt. I 2–3 ppp I 10–12 weeks 1.5 gal. pot I 3–4 ppp I 10–14 weeks

PESTS	DISEASES	FINISH PGRS	VARIETY	VIGOR	TIMING
Thrips	Tospovirus, Botrytis	Cycocel® 250–500ppm	Florencio™ Orange 70091480	M	M
			Florencio™ Pink 70091479	M	M
			Florencio™ Red 70091476	M	M
			Florencio™ White 70091478	M	M
			Florencio™ Yellow 70091477	M	M

Begonia **GRACE™** *Begonia hybrida*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	PINCHES	FINISHING PROGRAM
pH: 5.8–6.2 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Facultative long day	68–70 °F (20–21 °C)	62–64 °F (17–18 °C)	125–175 ppm N	1 Pinch	1 qt. I 1 ppp I 7–8 weeks 1.25 qt. I 1 ppp I 8–9 weeks 2.5 qt. I 1 ppp I 8–9 weeks 3 qt. I 1 ppp I 8–9 weeks 1.5 gal. HB I 3 ppp I 10–11 weeks 1.5 gal. pot I 3 ppp I 10–11 weeks 2 gal. HB I 3 ppp I 12–13 weeks

PESTS	DISEASES	FINISH PGRS	VARIETY	VIGOR	TIMING
Thrips	Tospovirus, Botrytis	PGRs are not usually required. B-Nine® WSG at 2,500 ppm or Cycocel® at 300–500 ppm if needed.	Grace™ Dark Red 70086288	M-V	M
			Grace™ Orange 70086283	M-V	M
			Grace™ Pink 70086285	M-V	M

Tech Tips: To prevent tuber formation you must provide at least 14 hours of light and you must not let temperatures fall below 55 °F (13 °C). Short days and/or cool temperatures will drastically stunt growth.

Bidens **MEXICAN GOLD™** *Bidens ferulifolia*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	PINCHES	FINISHING PROGRAM
pH: 5.8–6.2 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Day neutral	70–72 °F (21–22 °C)	62–64 °F (17–18 °C)	125–175 ppm N	1 Pinch	1 qt. I 1 ppp I 6–7 weeks 1.25 qt. I 1 ppp I 8–9 weeks 2.5 qt. I 1 ppp I 9–10 weeks 3 qt. I 3 ppp I 9–10 weeks 1.5 gal. HB I 3–4 ppp I 10–11 weeks

PESTS	DISEASES	FINISH PGRS	VARIETY	VIGOR	TIMING
Whiteflies	Botrytis	B-Nine® (2500 ppm) can be used to control growth. A tank-mix spray of Florel® (350 ppm) + B-Nine® (1500 ppm) can also be used to control growth and improve branching early in production, especially if not given this treatment in propagation. A Bonzi® drench (0.5–1 ppm) can be given 3–4 weeks before finishing and results in toned, high quality plants.	Mexican Gold™ 70018300	M-V	E
			Mexican Gold™ Compact 70003254	C	E-M
			Mexican Gold™ Jumbo 70003253	V	E
			Mexican Gold™ Semi-Double 70018302	M	E

Tech Tips: Mexican Gold cuttings root quickly and should be transplanted on time. Plants are moderately vigorous and early flowering, and will fill out containers quickly. Mexican Gold forms a well-branched, mounding to semi-trailing plant with just one pinch. Gold Compact will take more time to fill out pots than the other varieties (Gold, Gold Jumbo, and Gold Semi-Double). These are great plants for mixed containers and the flowers mingle well with other species.

Calendula **CALEO™** *Calendula hybrida*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	PINCHES	FINISHING PROGRAM
pH: 5.8–6.2 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Day Neutral	70–72 °F (21–22 °C)	62–64 °F (17–18 °C)	200–250 ppm N	1 Pinch	1 qt. I 1 ppp I 6–7 weeks 1.25 qt. I 1 ppp I 8–9 weeks 2.5 qt. I 1 ppp I 9–10 weeks 3 qt. I 2–3 ppp I 9–10 weeks 1.5 gal. HB I 4 ppp I 10–11 weeks

PESTS	DISEASES	FINISH PGRS	VARIETY	VIGOR	TIMING
Aphids, Whiteflies	Botrytis, Powdery Mildew	B-Nine® WSG (2,500–5,000 ppm), Sumagic® (1–2 ppm), or Bonzi® (2–4 ppm) can be applied to the plants as needed.	Caleo™ Orange 70054975	M-V	M
			Caleo™ Yellow 70060726	M-V	M

Tech Tips: Varieties vary between single and semi-double type flowers. Plants are relatively fast growers and fill containers and baskets quickly. Caleo Calendulas tolerate a range of temperatures and growing conditions. However, the best plant quality occurs when plants are grown under relatively cool temperatures and high light intensities. Extremely high temperatures will result in reduced flower size and more open habits. Caleo was bred and selected for Powdery Mildew resistance, but plants should be inspected periodically under high disease pressure.

BACK TO CONTENTS

Calibrachoa **CABRIO™** *Calibrachoa hybrida*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	PINCHES	FINISHING PROGRAM
pH: 5.5–5.9 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Facultative Long Day	70–72 °F (21–22 °C)	62–64 °F (17–18 °C)	200–250 ppm N	1–2 Pinches	1 qt. I 1 ppp I 6–7 weeks 1.25 qt. I 1 ppp I 8–9 weeks 2.5 qt. I 1 ppp I 9–10 weeks 3 qt. I 2–3 ppp I 9–10 weeks 1.5 gal. HB I 4 ppp I 10–11 weeks

PESTS	DISEASES	FINISH PGRS
Aphid, Thrips, Budworms	Botrytis, Powdery Mildew, Viruses (TMV, TSWV)	Cabrio calibrachoas are compact-medium growers and will need only moderate growth regulation after transplant. To keep plants under control, sprays of either B-Nine® (2500 ppm) or Sumagic® (10–15 ppm) can be applied to the plants as needed. A spray of Florel® (350–500 ppm) or Florel® (350–500 ppm) + B-Nine® (1500–2500 ppm) can also be done early on to control growth and improve branching. For the best looking plants, a Bonzi® drench (1–2 ppm) should be applied to the media about 4 weeks before full finish and sale. Be consistent in Bonzi® drench volumes since higher drench volumes can result in more growth retarding effect.

VARIETY	VIGOR	TIMING	MPR
Cabrio™ Amethyst 70074743	C-M	M	10.5 hrs.
Cabrio™ Burgundy 70075993	C-M	M-L	10.5 hrs.
Cabrio™ Eclipse Lilac 70074753	C-M	M	10.5 hrs.
Cabrio™ Eclipse Strawberry 70074722	M	M	10.5 hrs.
Cabrio™ Grape 70074736	C-M	M	10.5 hrs.
Cabrio™ Pink with Eye 70074739	M	M	10.5 hrs.
Cabrio™ Sweet Peach 70073041	C	M-L	10.5 hrs.
Cabrio™ Yellow 70074727	C-M	E-M	10.5 hrs.

Tech Tips: Keep the pH down in the mid 5s to avoid tip yellowing—drench with iron chelate if necessary. Avoid overwatering of young plants. Plants can be pinched twice on baskets and larger containers (once in prop, once after transplant). An early Florel® or Florel® + B-Nine® WSG spray improves branching. Mid-season Bonzi® drenches are the key to beautiful mounded baskets. Watch for Aphids. High DLIs and moderate-to-cool finishing temperatures produce high-quality calibrachoas. Cabrio Calibrachoa was bred and selected to flower under day lengths of 10.5 hours. Use proper sanitation when pinching or shearing calibrachoa to prevent possible virus spread.

Calibrachoa **CALLIE®** *Calibrachoa hybrida*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	PINCHES	FINISHING PROGRAM
pH: 5.5–5.9 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Facultative Long Day	70–72 °F (21–22 °C)	62–64 °F (17–18 °C)	200–250 ppm N	1 Pinch	1 qt. I 1 ppp I 6–7 weeks 1.25 qt. I 1 ppp I 8–9 weeks 2.5 qt. I 1 ppp I 9–10 weeks 3 qt. I 2–3 ppp I 9–10 weeks 1.5 gal. HB I 4 ppp I 10–11 weeks

PESTS	DISEASES	FINISH PGRS
Aphid, Thrips, Budworms	Botrytis, Powdery Mildew, Viruses (TMV, TSWV)	B-Nine® (2500–3500 ppm) or Sumagic® (10–20 ppm) can be applied to the plants as needed. Florel® (350–500 ppm) or Florel® (350–500 ppm) + B-Nine® (2500 ppm) can also be done early on to control growth and improve branching. Bonzi® drench (2–3 ppm) should be applied to the media about 4 weeks before full finish and sale.

VARIETY	VIGOR	TIMING	MPR
Callie® Apricot 70035958	M	E-M	10.5 hrs.
Callie® Blue 70075991	M-V	E-M	10.5 hrs.
Callie® Burgundy 70035959	M	M	10.5 hrs.
Callie® Coral 70073020	M	M	10.5 hrs.
Callie® Dark Red 70068741	C-M	E	10.5 hrs.
Callie® Eclipse Lavender 70075987	C-M	M	10.5 hrs.
Callie® Eclipse Lilac 70074754	M-V	M	10.5 hrs.
Callie® Eclipse Raspberry 70074732	V	M-L	10.5 hrs.
Callie® Eclipse Strawberry 70073034	M-V	M	10.5 hrs.
Callie® Gold with Red Eye 70003287	M	M	11 hrs.
Callie® Light Blue 70008012	C-M	M	10.5 hrs.
Callie® Mango 70003301	C-M	M	11 hrs.
Callie® Orange 70003288	M	M	11.5 hrs.
Callie® Pink Morn 70054735	C-M	M	11.5 hrs.
Callie® Pink with Eye 70073038	C-M	M	10.5 hrs.
Callie® Purple Imp. 70080987	M-V	E-M	11.5 hrs.
Callie® Rose 70007858	C-M	M	12 hrs.
Callie® Star Orange 70073033	V	E	11.5 hrs.
Callie® Star Pink 70018437	M	M-L	11.5 hrs.
Callie® Strawberry 70073025	M-V	E-M	9.5 hrs.
Callie® White 70052153	C-M	M	12 hrs.
Callie® White with Rose Vein 70003293	M	M-L	12 hrs.
Callie® Yellow 70035954	M-V	M	10.5 hrs.

Tech Tips: Keep the pH down in the mid 5.0s to avoid tip yellowing—drench with iron chelate if necessary. Avoid overwatering of young plants. Plants can be pinched twice on baskets and larger containers (once in prop, once after transplant). An early Florel® or Florel® + B-Nine® WSG spray improves branching. Mid-season Bonzi® drenches are the key to beautiful mounded baskets. Watch for Aphids. High DLIs and moderate-to-cool finishing temperatures produce high-quality calibrachoas. Use proper sanitation when pinching or shearing calibrachoa to prevent possible virus spread.

BACK TO CONTENTS

Calocephalus **WHIMSY™** *Calocephalus brownii*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	PINCHES	FINISHING PROGRAM
pH: 5.8–6.2 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Day neutral	70–72 °F (21–22 °C)	62–64 °F (17–18 °C)	125–175 ppm N	1 Pinch	1 qt. I 1 ppp I 4–6 weeks 1 pt. I 1 ppp I 4–6 weeks 1.25 qt. I 1 ppp I 4–6 weeks

PESTS	DISEASES	FINISH PGRS	VARIETY	VIGOR	TIMING
No major pests	Botrytis, Fungal Root Rot	Does not require any chemical growth regulation. If plants get too large for their container, then it's best to trim the plants back to control growth.	Whimsy™ Silver 70060862	C	M

Tech Tips: Whimsy calocephalus is a compact plant that has low water and fertilizer requirements. Use plastic tenting or ReeMay® fabric during propagation if needed to keep high humidity, and to minimize excess water on the foliage. Provide moderate to warm temperatures early on after transplant to get the plants established. Avoid over-saturated media and overly cool temperatures. Whimsy may form bright yellow flowers on very mature plants, but its main value is its unique silver foliage.

Curry Plant **HELICHRYSUM ITALICUM** *Helichrysum italicum*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	PINCHES	FINISHING PROGRAM
pH: 5.8–6.2 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Day neutral	70–72 °F (21–22 °C)	62–64 °F (17–18 °C)	125–175 ppm N	1 Pinch	1 qt. I 1 ppp I 5–6 weeks 1.25 qt. I 1–2 ppp I 7–9 weeks 2.5 qt. I 1–2 ppp I 7–9 weeks 3 qt. I 2–4 ppp I 8–9 weeks 1.5 gal. pot I 2–4 ppp I 8–9 weeks

PESTS	DISEASES	FINISH PGRS	VARIETY	VIGOR	TIMING
Fungus Gnats, Whiteflies	Botrytis, Fungal Root Rot	Does not require any chemical growth regulation. If plants get too large for their container, then it's best to trim the plants back to control growth.	Icicles 70003687	M	M

Tech Tips: Helichrysum italicum (Curry Plant) is a mounding plant that has low water and fertilizer requirements. Use plastic tenting or ReeMay® fabric during propagation if needed to keep high humidity and to minimize excess water on the foliage. Provide moderate to warm temperatures early on after transplant to get the plants established. Avoid over-saturated media and overly cool temperatures. Helichrysum italicum may form golden yellow flowers on very mature plants, but its main value is its unique silver-colored foliage. Trimming plants is the best way to control growth. The cultivar 'Icicles' is the primary variety on the market and the variety which is sold by Syngenta Flowers.

Dahlia **DAHLEGRIA®** *Dahlia hybrida*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	PINCHES	FINISHING PROGRAM
pH: 5.8–6.2 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Facultative short day	72–74 °F (22–23 °C)	66–68 °F (19–20 °C)	200–250 ppm N	1 Pinch	1 qt. I 1 ppp I 7–8 weeks 1 pt. I 1 ppp I 7–8 weeks 1.25 qt. I 1 ppp I 8–9 weeks 2.5 qt. I 2 ppp I 9–10 weeks 3 qt. I 2 ppp I 9–10 weeks 1.5 gal. pot I 3 ppp I 10–11 weeks

PESTS	DISEASES	FINISH PGRS	VARIETY	VIGOR	TIMING
Aphid, Spider Mites, Thrips, Leaf Miners	Botrytis, Powdery Mildew, Basal Stem Rot	B-Nine® WSG (2500–3500 ppm) are usually sufficient to control growth. A Bonzi® drench (3–4 ppm) can also be used to control growth or to hold plants for sale.	Dahlegria® Apricot Tricolor 70082922	V	E-M
			Dahlegria® Magenta Bicolor 70089162	V	E-M
			Dahlegria® Orange 70082927	V	M
			Dahlegria® Orange Bicolor 70082923	V	E-M
			Dahlegria® Pink Flame 70082925	V	M
			Dahlegria® Red Imp. 70089151	V	E-M
			Dahlegria® Scarlet Fire 70082926	V	M
			Dahlegria® Sunrise 70089160	V	E-M
			Dahlegria® White 70082924	V	M-L

Tech Tips: Long-day lighting (daylength extension or night interruption) is needed during propagation to avoid premature flowering and tuber formation. Ideal photoperiod during finishing to provide the correct balance between vegetative growth and flower formation is between 13–14 hours. Growing under very short natural days (< 12 hours) will result in short plants, fast flowering, and root tubers. Provide warm temperatures early on in finishing to allow plants to establish after transplant. Plant the rooted cutting relatively deep to provide good support and balance in the pot for the maturing plants. Scout and treat for a range of insects and diseases, including Spider Mites, Thrips, and Powdery Mildew.

Dahlia **GOLDALIA™** *Dahlia hybrida*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	PINCHES	FINISHING PROGRAM
pH: 5.8–6.2 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Facultative Short Day	70–72 °F (21–22 °C)	66–68 °F (19–20 °C)	200–250 ppm N	1 Pinch	1 qt. I 1 ppp I 6–7 weeks 1.25 qt. I 1 ppp I 8–9 weeks 2.5 qt. I 1–2 ppp I 9–10 weeks 3 qt. I 3 ppp I 9–10 weeks 1.5 gal. HB I 4 ppp I 10–11 weeks

PESTS	DISEASES	FINISH PGRS	VARIETY	VIGOR	TIMING
Aphids, Spider Mites, Thrips, Leaf Miners	Botrytis, Powdery Mildew, Basal Stem Rot	B-Nine® WSG (1,500–2,500 ppm) are usually sufficient to control growth. A Bonzi® drench (2–3 ppm) can also be used to control growth or to hold plants for sale.	Goldalia™ Rose 70035934	C-M	E
			Goldalia™ Scarlet 70035935	C-M	E

Tech Tips: Long-day lighting (day length extension or night interruption) is needed during propagation to avoid premature flowering and tuber formation. Ideal photoperiod during finishing to provide the correct balance between vegetative growth and flower formation is between 13–14 hours. Growing under very short natural days (< 2 hours) will result in short plants, fast flowering, and root tubers. Provide warm temperatures early on in finishing to allow plants to establish after transplant. Plant the rooting cutting relatively deep to provide good support and balance in the pot for the maturing plants. Scout and treat for a range of insects and diseases, including Spider Mites, Thrips, and Powdery Mildew.

BACK TO CONTENTS

Dahlia **GRANDALIA™** *Dahlia hybrida*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	PINCHES	FINISHING PROGRAM
pH: 5.8–6.2 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Facultative Short Day	70–72 °F (21–22 °C)	66–68 °F (19–20 °C)	200–250 ppm N	1 Pinch	1 qt. I 1 ppp I 6–7 weeks 1.25 qt. I 1 ppp I 8–9 weeks 2.5 qt. I 1 ppp I 9–10 weeks 3 qt. I 2–3 ppp I 9–10 weeks 1.5 gal. HB I 3 ppp I 10–11 weeks

PESTS	DISEASES	FINISH PGRS
Aphids, Spider Mites, Thrips, Leaf Miners	Botrytis, Powdery Mildew, Basal Stem Rot	B-Nine® WSG (2,500–3,500 ppm) are usually sufficient to control growth. A Bonzi® drench (3–4 ppm) can also be applied to control growth or to hold plants for sale.

VARIETY	VIGOR	TIMING
Grandalia™ Burgundy 70076369	M-V	E-M
Grandalia™ Dark Red 70052845	C-M	M
Grandalia™ Dark Rose 70076370	M-V	M
Grandalia™ Fire 70069965	M	M
Grandalia™ Lavender Ice 70076379	M-V	L
Grandalia™ Magenta 70076371	M-V	M
Grandalia™ Orange 70019193	M	M
Grandalia™ Pink 70019196	M-V	M
Grandalia™ Pink Ice 70069967	M-V	M
Grandalia™ Red 70051544	M-V	M
Grandalia™ Sunny Flame 70059454	C-M	E-M
Grandalia™ Sunrise 70035980	M	E-M
Grandalia™ White 70076384	M-V	M
Grandalia™ Yellow 70019190	M	M

Tech Tips: Long-day lighting (day length extension or night interruption) is needed during propagation to avoid premature flowering and tuber formation. Ideal photoperiod during finishing to provide the correct balance between vegetative growth and flower formation is between 13–14 hours. Growing under very short natural days (< 2 hours) will result in short plants, fast flowering, and root tubers. Provide warm temperatures early on in finishing to allow plants to establish after transplant. Plant the rooting cutting relatively deep to provide good support and balance in the pot for the maturing plants. Scout and treat for a range of insects and diseases, including Spider Mites, Thrips, and Powdery Mildew.

Dahlia **HAPPY DAYS™** *Dahlia hybrida*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	PINCHES	FINISHING PROGRAM
pH: 5.8–6.2 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Facultative short day	70–72 °F (21–22 °C)	66–68 °F (19–20 °C)	200–250 ppm N	1 Pinch	1 qt. I 1 ppp I 7–8 weeks 1.25 qt. I 1 ppp I 8–9 weeks 2.5 qt. I 1 ppp I 9–10 weeks 3 qt. I 2–3 ppp I 9–10 weeks 1.5 gal. pot I 3 ppp I 10–11 weeks

PESTS	DISEASES	FINISH PGRS
Aphid, Spider Mites, Thrips, Leaf Miners	Botrytis, Powdery Mildew, Basal Stem Rot	B-Nine® WSG (2500–3500 ppm) are usually sufficient to control growth. A Bonzi® drench (2–4 ppm) can also be used to control growth or to hold plants for sale.

VARIETY	VIGOR	TIMING
Happy Days™ Cherry Red 70053908	M	M
Happy Days™ Fuchsia Halo 70089149	M	E-M
Happy Days™ Lemon 70053907	M	L
Happy Days™ Neon 70082942	M	E-M
Happy Days™ Orange Red Bicolor 70053909	M	M
Happy Days™ Pink 70037236	M	M
Happy Days™ Purple Imp. 70089150	M	E-M
Happy Days™ Scarlet 70082941	M	E-M
Happy Days™ White 70037235	M	E-M
Happy Days™ Yellow 70082954	M	M

Tech Tips: Long-day lighting (daylength extension or night interruption) is needed during propagation to avoid premature flowering and tuber formation. Ideal photoperiod during finishing to provide the correct balance between vegetative growth and flower formation is between 13–14 hours. Growing under very short natural days (< 12 hours) will result in short plants, fast flowering, and root tubers. Provide warm temperatures early on in finishing to allow plants to establish after transplant. Plant the rooting cutting relatively deep to provide good support and balance in the pot for the maturing plants. Scout and treat for a range of insects and diseases, including Spider Mites, Thrips, and Powdery Mildew.

BACK TO CONTENTS

Dahlia **SINCERITY** *Dahlia hybrida*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	PINCHES	FINISHING PROGRAM
pH: 5.8–6.2 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Facultative Short Day	64–66 °F (18–19 °C)	66–68 °F (19–20 °C)	200–250 ppm N	1 Pinch	1 qt. I 1 ppp I 7–8 weeks 1 pt. I 1 ppp I 7 weeks 1.25 qt. I 1 ppp I 8–9 weeks 2.5 qt. I 1 ppp I 9–10 weeks 3 qt. I 2 ppp I 9–10 weeks 1.5 gal. pot I 3 ppp I 9–10 weeks

PESTS	DISEASES	FINISH PGRS	VARIETY	VIGOR	TIMING
Aphid, Spider Mites, Thrips, Leaf Miners	Botrytis, Powdery Mildew, Basal Stem Rot	B-Nine® WSG at 2500 ppm are recommended at 4 weeks and 6 weeks after transplant to help control growth. Sprays of Florel® at 250 ppm at 4 weeks and 5.5–6 weeks after transplant will also help to control growth and can be used instead of the B-Nine® WSG sprays. The Florel® sprays will also help prevent late-season flower peduncle stretch. A Bonzi® drench at 2–4 ppm can be used to hold plants for sale.	Sincerity 70082930	V	L

Tech Tips: Long-day lighting (daylength extension or night interruption) is needed during propagation to avoid premature flowering and tuber formation. The ideal photoperiod during finishing to provide the correct balance between vegetative growth and flower formation is between 13–14 hours. Growing under very short natural days (< 12 hours) will result in short plants, fast flowering, and root tubers. Provide warm temperatures early on in finishing to allow plants to establish after transplant. Sincerity grows best under moderately warm temperatures. Avoid extreme heat stress, especially under relatively high light intensities. Plant the rooting cutting relatively deep to provide good support and balance in the pot for the maturing plants. Scout and treat for a range of insects and diseases, including Spider Mites, Thrips, and Powdery Mildew.

Diascia **DARLA®** *Diascia barberae*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	PINCHES	FINISHING PROGRAM
pH: 5.8–6.2 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Day Neutral	70–72 °F (21–22 °C)	62–64 °F (17–18 °C)	200–250 ppm N	1 Pinch	1 qt. I 1 ppp I 6–7 weeks 1.25 qt. I 1 ppp I 8–9 weeks 2.5 qt. I 1 ppp I 9–10 weeks 3 qt. I 2–3 ppp I 9–10 weeks 1.5 gal. HB I 4 ppp I 10–11 weeks

PESTS	DISEASES	FINISH PGRS	VARIETY	VIGOR	TIMING
Aphids, Whiteflies	Botrytis, Fungal Root Rot	B-Nine® WSG (2,500 ppm), Bonzi® (5 ppm), or Sumagic® (3 ppm) can be applied to control growth.	Darla® Deep Salmon 70006747	M	E
			Darla® Light Pink 70003545	M	E
			Darla® Orange 70060774	M	E
			Darla® Red 70066232	M	E
			Darla® Rose 70003547	M	E-M
			Darla® White 70071557	M	E

Tech Tips: Avoid dehydration of the cuttings before sticking in propagation. Darla is best when grown cool with high light. No PGR is typically needed when plants are grown cool. One pinch is all that is needed for this crop. Florel® can be used early but will severely delay flowering if sprayed too late in the crop cycle. Watch for Botrytis in the crown of plants when overhead watering.

Dipladenia **MADINIA®** *Mandevilla hybrida*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	PINCHES	FINISHING PROGRAM
pH: 5.8–6.2 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Day Neutral	76–78 °F (24–26 °C)	70–72 °F (21–22 °C)	200–250 ppm N	1 Pinch	1 qt. I 1 ppp I 8–9 weeks 1.25 qt. I 1 ppp I 10–11 weeks 2.5 qt. I 2 ppp I 12–13 weeks 3 qt. I 3 ppp I 12–13 weeks 1.5 gal. HB I 4 ppp I 12–13 weeks

PESTS	DISEASES	FINISH PGRS	VARIETY	VIGOR	TIMING
Aphids, Whiteflies, Thrips, Mealybugs, Spider Mites	Cercospora and Corynespora Fungal Leaf Spot, Fungal Root and Basal Stem Rot	B-Nine® WSG (3,500–5,000 ppm) can be used. Sprays of Configure® (300 ppm) or Atrimmec® (200–400) early on can be used to improve branching. Bonzi® drenches (0.5–2 ppm) can also be done to control growth and reduce leaf size, especially under very hot growing conditions. Madinia White is the most vigorous variety in the line and generally will need some PGR applied to control its growth	Madinia® Coral Pink 70050968	C-M	M
			Madinia® Deep Red 70003886	C	M
			Madinia® Pink 70003888	C-M	M
			Madinia® White 70003889	M	M-L

Tech Tips: Madinia dipladenia are very slow rooters. Provide ample heat and rooting times during propagation. Plants are also chilling sensitive so avoid storing cuttings<48 °F (9 °C). Madinia has a controlled growth habit and bred for improved branching. They make very nice quart products. An early pinch (either in propagation or shortly after transplant) will encourage branching. High light and warm temperatures will improve quality and help reduce crop times. Higher light intensities and longer photoperiods help reduce the natural vining of the plants.

BACK TO CONTENTS

Dipladenia **MADINIA® MAXIMO** *Mandevilla hybrida*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	PINCHES	FINISHING PROGRAM
pH: 5.8–6.2 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Day Neutral	76–78 °F (24–26 °C)	70–72 °F (21–22 °C)	200–250 ppm N	1 Pinch	1 qt. I 1 ppp I 8–9 weeks 1.25 qt. I 1 ppp I 10–11 weeks 2.5 qt. I 2 ppp I 12–13 weeks 3 qt. I 3 ppp I 12–13 weeks

PESTS	DISEASES	FINISH PGRS	VARIETY	VIGOR	TIMING
Aphids, Whiteflies, Thrips, Mealybugs, Spider Mites	Cercospora and Corynespora Fungal Leaf Spot, Fungal Root and Basal Stem Rot	B-Nine® WSG (3,500–5,000 ppm) can be used. Sprays of Configure® (300 ppm) or Atrimmec® (200–400) early on can be used to improve branching. Bonzi® drenches (0.5–2 ppm) can also be done to control growth and reduce leaf size, especially under very hot growing conditions.	Madinia® Maximo Light Pink 70051011 Madinia® Maximo Red 70051010	V V	E E-M

Tech Tips: Madinia Maximo dipladenia are very slow rooters. Provide ample heat and rooting times during propagation. Plants are also chilling sensitive so avoid storing cuttings<48 °F (9 °C). Madinia Maximo has a controlled growth habit and bred for improved branching. They make very nice quart products. An early pinch (either in propagation or shortly after transplant) will encourage branching. High light and warm temperatures will improve quality and help reduce crop times. Higher light intensities and longer photoperiods help reduce the natural vining of the plants.

Dorotheanthus **MEZOO™** *Dorotheanthus bellidiformis*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	PINCHES	FINISHING PROGRAM
pH: 5.8–6.2 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Day Neutral	76–78 °F (24–26 °C)	70–72 °F (21–22 °C)	200–250 ppm N	1 Pinch	1 qt. I 1 ppp I 6–7 weeks 1.25 qt. I 1 ppp I 8–9 weeks 2.5 qt. I 1–2 ppp I 9–10 weeks 3 qt. I 3 ppp I 9–10 weeks 1.5 gal. HB I 4 ppp I 10–11 weeks

PESTS	DISEASES	FINISH PGRS	VARIETY	VIGOR	TIMING
No significant issues	Phoma and Phomopsis in propagation	Not needed. Control by pinching if needed.	Mezoo™ Trailing Red 70003864	M-V	L

Tech Tips: Mezoo is a trailing succulent-type vine that makes beautiful baskets and combo plantings. It is a relatively slow starter and is best grown warm to get it established and growing. Under high light, it will develop small colorful red flowers that add character to the plant. This is a very tough plant that grows and performs under a range of environmental conditions.

Euphorbia **EUPHORIC™** *Euphorbia hypericifolia*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	PINCHES	FINISHING PROGRAM
pH: 5.8–6.2 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Day Neutral	76–78 °F (24–26 °C)	70–72 °F (21–22 °C)	200–250 ppm N	1 Pinch	1 qt. I 1 ppp I 6–7 weeks 1.25 qt. I 1 ppp I 8–9 weeks 2.5 qt. I 1 ppp I 9–10 weeks 3 qt. I 2–3 ppp I 9–10 weeks 1.5 gal. HB I 4 ppp I 10–11 weeks

PESTS	DISEASES	FINISH PGRS	VARIETY	VIGOR	TIMING
Aphids, Whiteflies	Botrytis, Fungal Root Rot	B-Nine® WSG (2,500 ppm) can be used. Drenches of Bonzi® (1–2 ppm) or Sumagic® (0.5–1 ppm) also work well to control growth or to hold plants before sale. Plant size can also be controlled by pinching.	Euphoric™ Double White 70087275 Euphoric™ White Imp. 70087276	M M	E E

Tech Tips: Stick unrooted cuttings immediately to reduce bottom leaf yellowing and drop that can occur if cuttings are held for too long. Euphorbia is very sensitive to ethylene damage during shipping. Euphoric is a slow starter both in propagation and finish, but grows quickly when established and growing under warm temperatures. High light and warm temperatures will improve plant quality and reduce root diseases. If grown too cold and wet, fungal root can develop. Plants can be trimmed to shape at any point during production. Bonzi® drenches work well to control growth mid to late in the production cycle.

Geranium Interspecific **CALDERA™** *Pelargonium Interspecific*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	PINCHES	FINISHING PROGRAM
pH: 5.5–5.9 SME 2.3–2.8 mS/cm, Pourthru EC: 3.5–4.2 mS/cm	4,000–6,000 foot candles	Day Neutral	72–74 °F (22–23 °C)	68–70 °F (20–21 °C)	200–250 ppm N	Not Recommended	2.5 qt. I 1 ppp I 10–12 weeks 3 qt. I 2–3 ppp I 11–13 weeks 1.5 gal. HB I 3–4 ppp I 12–12 weeks 1.5 gal. pot I 2–3 ppp I 11–13 weeks 2 gal. HB I 4–5 ppp I 12–13 weeks

PESTS	DISEASES	FINISH PGRS	VARIETY	VIGOR	TIMING
Aphid, Thrips, Spider Mites	Botrytis, Pythium Root Rot, Rust, and Xanthomonas Bacterial Blight and Wilt	Cycocel® at 1,000 ppm and under hot conditions with a tank mix spray of Cycocel® (1,000 ppm) + B-Nine® WSG (2,500 ppm) or Bonzi® spray (3–5 ppm). Florel® can also be sprayed at 350–400 ppm early in the crop cycle, especially for larger pots and baskets, to improve branching and control growth. A Bonzi® drench (0.1–0.25 ppm) can be used at the end of production.	Caldera™ Pink 70065942 Caldera™ Red 70065936 Caldera™ Salmon 70065939	V V V	E-M M M

Tech Tips: Caldera is relatively vigorous and requires regular PGR applications, especially under warm growing conditions. Provide relatively high light levels and warm temperatures early on to establish the plant and to allow it to respond adequately to PGRs. Early Florel® sprays are key in making well-branched, quality plants. Watch for Botrytis under tight spacing and in combination plantings, especially when overhead irrigating. Monitor the media and try to keep the pH between 5.5–6.0 to avoid iron deficiency (tip chlorosis).

BACK TO CONTENTS

Geranium Interspecific **CALIENTE®** *Pelargonium interspecific*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	PINCHES	FINISHING PROGRAM
pH: 5.8–6.2 SME 2.3–2.8 mS/cm, Pourthru EC: 3.5–4.2 mS/cm	4,000–6,000 foot candles	Day Neutral	72–74 °F (22–23 °C)	68–70 °F (20–21 °C)	200–250 ppm N	Not Recommended	1 qt. I 1 ppp I 7–8 weeks 1.25 qt. I 1 ppp I 9–10 weeks 2.5 qt. I 1 ppp I 11–12 weeks 3 qt. I 3 ppp I 11–12 weeks 1.5 gal. HB I 3–4 ppp I 11–12 weeks 1.5 gal. pot I 2 ppp I 11–12 weeks 2 gal. HB I 4–5 ppp I 11–12 weeks

PESTS	DISEASES	FINISH PGRS
Aphids and Thrips	Botrytis, Pythium Root Rot, and Xanthomonas Bacterial Blight and Wilt	Cycocel® at 1,000 ppm and under hot conditions with a tank mix spray of Cycocel® (1,000 ppm) + B-Nine® WSG (2,500 ppm), or Bonzi® spray (3–5 ppm). Florel® can also be sprayed at 350–400 ppm early in the crop cycle, especially for larger pots and baskets, to improve branching and control growth.

VARIETY	VIGOR	TIMING
Caliente® Coral Salmon 70028724	M	E
Caliente® Deep Red 70004105	M	E
Caliente® Fire 70070069	M-V	E
Caliente® Hot Coral 70008715	M-V	E-M
Caliente® Lavender 70051129	M	E-M
Caliente® Magenta 70066644	M-V	E
Caliente® Orange 70008714	M-V	E-M
Caliente® Pink 70008713	M-V	E-M
Caliente® Rose 70004106	M-V	E
Caliente® White 70059611	M-V	M

Tech Tips: Caliente geraniums are moderately vigorous and usually require regular PGR applications, especially under warm growing conditions. Know the varieties since some are more vigorous than others. Provide relatively high light levels and warm temperatures early on to establish the plant and to allow it to respond adequately to PGRs. Early Florel® sprays are key to making well-branched, quality plants. Watch for Botrytis under tight spacing and in combination plantings, especially when overhead irrigating. Monitor the media and try to keep the pH around 6.0. Too high of a pH can lead to iron chlorosis and leaf tip yellowing.

Geranium Interspecific **CALLIOPE® LARGE** *Pelargonium interspecific*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	PINCHES	FINISHING PROGRAM
pH: 5.8–6.2 SME 2.3–2.8 mS/cm, Pourthru EC: 3.5–4.2 mS/cm	4,000–6,000 foot candles	Day Neutral	72–74 °F (22–23 °C)	68–70 °F (20–21 °C)	200–250 ppm N	Not Recommended	2.5 qt. I 1 ppp I 11–12 weeks 3 qt. I 2–3 ppp I 11–12 weeks 1.5 gal. HB I 3 ppp I 11–12 weeks

PESTS	DISEASES	FINISH PGRS
Aphids and Thrips	Botrytis, Pythium Root Rot, and Xanthomonas Bacterial Blight and Wilt	Cycocel® at 1,000 ppm and under hot conditions with a tank mix spray of Cycocel® (1,000 ppm) + B-Nine® WSG (2,500 ppm), or Bonzi® spray (3–5 ppm). Florel® can also be sprayed at 350–400 ppm early in the crop cycle, especially for larger pots and baskets, to improve branching and control growth.

VARIETY	VIGOR	TIMING
Calliope® Large Burgundy 70020360	V	L
Calliope® Large Coral 70054697	V	M-L
Calliope® Large Dark Red 70004166	V	M-L
Calliope® Large Hot Pink 70070046	M-V	M
Calliope® Large Hot Rose 70070047	M-V	M
Calliope® Large Lavender 70069761	V	E-M
Calliope® Large Lavender Mega Splash 70059873	V	E
Calliope® Large Magenta 70059912	V	M-L
Calliope® Large Orange Splash 70074574	M-V	E
Calliope® Large Pink 70040840	V	L
Calliope® Large Red 70054691	V	E-M
Calliope® Large Rose Mega Splash 70070020	M	E
Calliope® Large Salmon 70054695	V	M
Calliope® Large Scarlet Fire 70007852	M-V	L

Tech Tips: Calliope Large geraniums are vigorous growers and usually require regular PGR applications, especially under warm growing conditions. Provide relatively high light levels and warm temperatures early on to establish the plant and to allow it to respond adequately to PGRs. Early Florel® sprays are key to making well-branched, quality plants. Watch for Botrytis under tight spacing and in combination plantings, especially when overhead irrigating. Monitor the media and try to keep the pH around 6.0 to avoid iron/manganese toxicity.

BACK TO CONTENTS

Geranium Interspecific **CALLIOPE® MEDIUM** *Pelargonium interspecific*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	PINCHES	FINISHING PROGRAM
pH: 5.8–6.2 SME 2.3–2.8 mS/cm, Pourthru EC: 3.5–4.2 mS/cm	4,000–6,000 foot candles	Day Neutral	72–74 °F (22–23 °C)	68–70 °F (20–21 °C)	200–250 ppm N	Not Recommended	1.25 qt. I 1 ppp I 9–10 weeks 2.5 qt. I 1 ppp I 11–12 weeks 3 qt. I 3 ppp I 11–12 weeks 1.5 gal. HB I 3–4 ppp I 11–12 weeks 1.5 gal. pot I 2 ppp I 11–12 weeks 2 gal. HB I 4–5 ppp I 11–12 weeks

PESTS	DISEASES	FINISH PGRS
Aphids and Thrips	Botrytis, Pythium Root Rot, and Xanthomonas Bacterial Blight and Wilt	Cycocel® at 1,000 ppm and under hot conditions with a tank mix spray of Cycocel® (1,000 ppm) + B-Nine® WSG (2,500 ppm) or Bonzi® spray (3–5 ppm). Florel® can also be sprayed at 350–400 ppm early in the crop cycle, especially for larger pots and baskets, to improve branching and control growth.

VARIETY	VIGOR	TIMING
Calliope® Medium Bright Scarlet 70074799	C-M	E-M
Calliope® Medium Burgundy 70066631	M	M
Calliope® Medium Cherry 70074773	M	L
Calliope® Medium Crimson Flame 70048339	M-V	E
Calliope® Medium Dark Pink 70074774	M	M-L
Calliope® Medium Dark Red 70059883	M	M
Calliope® Medium Deep Rose 70059896	M	M
Calliope® Medium Hot Pink 70020318	M	E-M
Calliope® Medium Hot Rose 70070045	M	L
Calliope® Medium Light Lavender 70069763	M	M-L
Calliope® Medium Pink Flame 70054721	M	E-M
Calliope® Medium Red 70059612	M	M
Calliope® Medium Rose Mega Splash 70059870	C-M	E-M
Calliope® Medium Scarlet 70051139	M	M
Calliope® Medium Violet 70066648	M	M
Calliope® Medium White 70059858	M-V	E

Tech Tips: Calliope Medium geraniums are moderately vigorous and may require regular PGR applications, especially under warm growing conditions. Provide relatively high light levels and warm temperatures early on to establish the plant and to allow it to respond adequately to PGRs. Early Florel® sprays are key to making well-branched, quality plants. Watch for Botrytis under tight spacing and in combination plantings, especially when overhead irrigating. Monitor the media and try to keep the pH around 6.0 to avoid iron/manganese toxicity.

Geranium Interspecific **MOJO™** *Pelargonium interspecific*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	PINCHES	FINISHING PROGRAM
pH: 5.8–6.2 SME 2.3–2.8 mS/cm, Pourthru EC: 3.5–4.2 mS/cm	4,000–6,000 foot candles	Day neutral	72–74 °F (22–23 °C)	68–70 °F (20–21 °C)	200–250 ppm N	Not Recommended	1.25 qt. I 1 ppp I 9–10 weeks 2.5 qt. I 1 ppp I 11–12 weeks 3 qt. I 3 ppp I 11–12 weeks 1.5 gal. HB I 3–4 ppp I 11–12 weeks 1.5 gal. pot I 2 ppp I 11–12 weeks 2 gal. HB I 4–5 ppp I 11–12 weeks

PESTS	DISEASES	FINISH PGRS
Aphid and Thrips	Botrytis, Pythium Root Rot, and Xanthomonas Bacterial Blight and Wilt	Cycocel® at 1000 ppm and under hot conditions with a tank mix spray of Cycocel® (1000 ppm) + B-Nine® WSG (2500 ppm) or Bonzi® spray (3–5 ppm). Florel® can also be sprayed at 350–400 ppm early in the crop cycle, especially for larger pots and baskets, to improve branching and control growth. Bonzi® drench (0.1 ppm) can be used at the end of production to hold and tone plants before sale. Do not spray Florel® on stressed plants. A Bonzi® drench (0.1 ppm) can be used at the end of production to hold and tone plants before sale.

VARIETY	VIGOR	TIMING
Mojo™ Cranberry Splash 70080207	M	E-M
Mojo™ Dark Red 70074802	M	L
Mojo™ Orange 70080227	M	M
Mojo™ Salmon 70080233	M	M-L
Mojo™ White 70080211	M	M

Tech Tips: Mojo is moderately vigorous and may require regular PGR applications, especially under warm growing conditions. Provide relatively high light levels and warm temperatures early on to establish the plant and to allow it to respond adequately to PGRs. Early Florel® sprays are key to making well-branched, quality plants. Watch for Botrytis under tight spacing and in combination plantings, especially when overhead irrigating. Monitor the media and try to keep the pH at or above 6.0 to avoid iron/manganese toxicity.

BACK TO CONTENTS

Geranium Interspecific **MOXIE!™** *Pelargonium interspecific*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	PINCHES	FINISHING PROGRAM
pH: 5.8–6.2 SME 2.3–2.8 mS/cm, Pourthru EC: 3.5–4.2 mS/cm	4,000–6,000 foot candles	Day Neutral	72–74 °F (22–23 °C)	68–70 °F (20–21 °C)	200–250 ppm N	Not Recommended	Large Packs I 1 ppp I 5–6 weeks 1 qt. I 1 ppp I 7–8 weeks 1 pt. I 1 ppp I 6–7 weeks 1.25 qt. I 1 ppp I 9–10 weeks 1.5 gal. HB I 4 ppp I 11–12 weeks

PESTS	DISEASES	FINISH PGRS
Aphid and Thrips	Botrytis, Pythium Root Rot, and Xanthomonas Bacterial Blight and Wilt	Cycocel® at 750–1,000 ppm and under hot conditions with a tank mix spray of Cycocel® (1,000 ppm) + B-Nine® WSG (2,500 ppm), or Bonzi® spray (2–3 ppm). Florel® can also be sprayed at 350–400 ppm early in the crop cycle, especially for larger pots and baskets, to improve branching and control growth. Do not spray Florel® on stressed plants. A very low rate of Bonzi® drench (0.05 ppm) can be used at the end of production to hold and tone plants before sale.

VARIETY	VIGOR	TIMING
Moxie!™ Dark Red 70069760	C	M-L
Moxie!™ Deep Rose Mega Splash 70020544	C-M	E-M
Moxie!™ Hot Pink 70074767	C-M	L
Moxie!™ Orange 70080228	C-M	E-M
Moxie!™ Pink 70065930	C-M	M-L
Moxie!™ Scarlet 70054702	C	M
Moxie!™ Violet 70080213	C-M	M
Moxie!™ White Imp. 70080236	C	E-M

Tech Tips: Moxie! interspecific geraniums are relatively compact and should not require repeated PGR applications. Provide relatively high light levels and warm temperatures early on to establish the plant and to allow it to respond adequately to PGRs. Early Florel® sprays are key to making well-branched, quality plants. Watch for Botrytis under tight spacing and in combination plantings, especially when overhead irrigating. Monitor the media and try to keep the pH at around 6.0 to avoid iron/manganese toxicity.

Geranium Interspecific **PRETTY LITTLE™** *Pelargonium interspecific*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	PINCHES	FINISHING PROGRAM
pH: 5.8–6.2 SME 2.3–2.8 mS/cm, Pourthru EC: 3.5–4.2 mS/cm	4,000–6,000 foot candles	Day Neutral	72–74 °F (22–23 °C)	68–70 °F (20–21 °C)	200–250 ppm N	Not Recommended	Large Packs I 1 ppp I 5–6 weeks 1 qt. I 1 ppp I 7–8 weeks 1 pt. I 1 ppp I 6–7 weeks 1.25 qt. I 1 ppp I 9–10 weeks 1.5 gal. HB I 4 ppp I 11–12 weeks

PESTS	DISEASES	FINISH PGRS
Aphid and Thrips	Botrytis, Pythium Root Rot, and Xanthomonas Bacterial Blight and Wilt	Cycocel® at 750–1,000 ppm. Florel® can also be sprayed at 350–400 ppm early in the crop cycle, especially for larger pots and baskets, to improve branching and control growth. Do not spray Florel® on stressed plants. A very low rate of Bonzi® drench (0.05 ppm) can be used at the end of production to hold and tone plants before sale.

VARIETY	VIGOR	TIMING
Pretty Little™ Pink Splash 70070033	C	E-M

Tech Tips: Pretty Little interspecific geranium is very compact and should require minimal, if any, PGR applications. Provide relatively high light levels and warm temperatures early on to establish the plant and to allow it to respond adequately to PGRs. Early Florel® sprays are key to making well-branched, quality plants and delaying very early flowering. Watch for Botrytis under tight spacing and in combination plantings, especially when overhead irrigating. Monitor the media and try to keep the pH at around 6.0 to avoid iron/manganese toxicity.

Geranium Ivy **BLIZZARD™** *Pelargonium peltatum*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	PINCHES	FINISHING PROGRAM
pH: 5.5–5.9 SME 2.3–2.8 mS/cm, Pourthru EC: 3.5–4.2 mS/cm	4,000–6,000 foot candles	Day Neutral	72–74 °F (22–23 °C)	68–70 °F (20–21 °C)	200–250 ppm N	Not Recommended	1 qt. I 1 ppp I 8–9 weeks 1.25 qt. I 1 ppp I 10–11 weeks 2.5 qt. I 1–2 ppp I 12–13 weeks 3 qt. I 3 ppp I 12–13 weeks 1.5 gal. HB I 3–4 ppp I 12–13 weeks

PESTS	DISEASES	FINISH PGRS
Aphid, Thrips, Spider Mites	Botrytis, Pythium Root Rot, Rust, and Xanthomonas Bacterial Blight and Wilt	Cycocel® (1000 ppm) + B-Nine® WSG (2500 ppm) or Bonzi® spray (3–5 ppm). Florel™ can also be sprayed at 350–400 ppm early in the crop cycle, especially for larger pots and baskets, to improve branching and control growth.

VARIETY	VIGOR	TIMING
Blizzard™ Blue 70004099	M	M
Blizzard™ Dark Red 70004100	M	M
Blizzard™ Pink 70020624	M	E
Blizzard™ Red 70008013	M	E
Blizzard™ White 70004103	M	M

Tech Tips: Blizzard Ivy Geranium is relatively vigorous and will require regular PGR applications, especially under warm growing conditions. Provide relatively high light levels and warm temperatures early on to establish the plant and to allow it to respond adequately to PGRs. Early Florel® sprays are key to making well-branched, quality plants. Watch for Botrytis under tight spacing and in combination plantings, especially when overhead irrigating. Monitor the media and try to keep the pH between 5.5–6.0 to avoid iron deficiency (tip chlorosis).

BACK TO CONTENTS

Geranium Ivy **CASCADE** *Pelargonium peltatum*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	PINCHES	FINISHING PROGRAM
pH: 5.5–5.9 SME 2.3–2.8 mS/cm, Pourthru EC: 3.5–4.2 mS/cm	4,000–6,000 foot candles	Day Neutral	72–74 °F (22–23 °C)	68–70 °F (20–21 °C)	200–250 ppm N	Not Recommended	1 qt. I 1 ppp I 8–9 weeks 1.25 qt. I 1 ppp I 10–11 weeks 2.5 qt. I 1–2 ppp I 12–13 weeks 3 qt. I 3 ppp I 12–13 weeks 1.5 gal. HB I 3–4 ppp I 12–13 weeks

PESTS	DISEASES	FINISH PGRS	VARIETY	VIGOR	TIMING
Aphid, Thrips, Spider Mites	Botrytis, Pythium Root Rot, Rust, and Xanthomonas Bacterial Blight and Wilt	Cycocel® at 1,000 ppm and under hot conditions with a tank mix spray of Cycocel® (1,000 ppm) + B-Nine® WSG (2,500 ppm) or Bonzi® spray (3–5 ppm). Florel® can also be sprayed at 350–400 ppm early in the crop cycle, especially for larger pots and baskets, to improve branching and control growth.	Cascade Acapulco Compact 70004124	V	E-M
			Cascade Appleblossom 70074831	V	M
			Cascade Bright 70004171	V	M
			Cascade Dark Red 70059624	V	M
			Cascade Lila-Compact 70004173	V	E-M
			Cascade Sofie 70004176	V	M
			Cascade White 70004202	V	E-M

Tech Tips: Cascade is relatively vigorous and will require regular PGR applications, especially under warm growing conditions. Provide relatively high light levels and warm temperatures early on to establish the plant and to allow it to respond adequately to PGRs. Early Florel® sprays are vital to making well-branched, quality plants. Watch for Botrytis under tight spacing and in combination plantings, especially when overhead irrigating. Monitor the media and try to keep the pH between 5.5–6.0 to avoid iron deficiency (tip chlorosis).

Geranium Ivy **IVY LEAGUE™** *Pelargonium peltatum*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	PINCHES	FINISHING PROGRAM
pH: 5.5–5.9 SME 2.3–2.8 mS/cm, Pourthru EC: 3.5–4.2 mS/cm	4,000–6,000 foot candles	Day neutral	72–74 °F (22–23 °C)	68–70 °F (20–21 °C)	200–250 ppm N	Not Recommended	1 qt. I 1 ppp I 8–9 weeks 1.25 qt. I 1 ppp I 10–11 weeks 2.5 qt. I 1–2 ppp I 12–13 weeks 3 qt. I 3 ppp I 12–13 weeks 1.5 gal. HB I 3–4 ppp I 12–13 weeks

PESTS	DISEASES	FINISH PGRS	VARIETY	VIGOR	TIMING
Aphid, Thrips, Spider Mites	Botrytis, Pythium Root Rot, Rust, and Xanthomonas Bacterial Blight and Wilt	Cycocel® at 1000 ppm and under hot conditions with a tank mix spray ofCycocel® (1000 ppm) + B-Nine® WSG (2500 ppm) or Bonzi® spray (3–5 ppm). Florel® can also be sprayed at 350–400 ppm early in the crop cycle, especially for larger pots and baskets, to improve branching and control growth. Bonzi® drench (0.1–0.25 ppm) can be used at the end of production to hold and tone plants before sale.	Ivy League™ Arctic Red 70004182	V	E-M
			Ivy League™ Burgundy 70069770	M-V	M-L
			Ivy League™ Burgundy Bicolor 70004181	C-M	M
			Ivy League™ Cherry Blossom 70074821	M	M
			Ivy League™ Deep Pink 70074807	M-V	E
			Ivy League™ Hot Coral 70053309	M	E-M
			Ivy League™ Light Lavender 70074808	M-V	M-L
			Ivy League™ Orchid 70074805	M-V	M
			Ivy League™ Red 70074811	C-M	M-L
			Ivy League™ Salmon 70028703	M	M
			Ivy League™ White 70069781	V	M

Tech Tips: Ivy League is relatively vigorous and will require regular PGR applications, especially under warm growing conditions. Provide relatively high light levels and warm temperatures early on to establish the plant and to allow it to respond adequately to PGRs. Early Florel® sprays are key to making well-branched, quality plants. Watch for Botrytis under tight spacing and in combination plantings, especially when overhead irrigating. Monitor the media and try to keep the pH between 5.5–6.0 to avoid iron deficiency (tip chlorosis).

BACK TO CONTENTS

Geranium Zonal **AMERICANA®** *Pelargonium zonale*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	PINCHES	FINISHING PROGRAM
pH: 5.8–6.2 SME 2.3–2.8 mS/cm, Pourthru EC: 3.5–4.2 mS/cm	4,000–6,000 foot candles	Day Neutral	72–74 °F (22–23 °C)	68–70 °F (20–21 °C)	200–250 ppm N	Not Recommended	1.25 qt. I 1 ppp I 9–10 weeks 2.5 qt. I 1 ppp I 11–12 weeks 3 qt. I 3 ppp I 11–12 weeks 1.5 gal. HB I 3–4 ppp I 11–12 weeks 1.5 gal. pot I 2 ppp I 11–12 weeks 2 gal. HB I 4–5 ppp I 11–12 weeks

PESTS	DISEASES	FINISH PGRS
Aphids and Thrips	Botrytis, Pythium Root Rot, and Xanthomonas Bacterial Blight and Wilt	Cycocel® at 1,000 ppm and under hot conditions with a tank mix spray of Cycocel® (1,000 ppm) + B-Nine® WSG (2,500 ppm) or Bonzi® spray (3–5 ppm). Florel® can also be sprayed at 350–400 ppm early in the crop cycle, especially for larger pots and baskets, to improve branching and control growth.

VARIETY	VIGOR	TIMING
Americana® Bright Red 70020478	M-V	M
Americana® Cherry Rose 70020479	M-V	M
Americana® Coral 70020480	M-V	M
Americana® Dark Red 70020527	V	M
Americana® Dark Salmon 70004135	M-V	M-L
Americana® Hot Pink 70028742	M-V	M
Americana® Lavender Splash 70020550	M-V	E-M
Americana® Light Pink Splash 70004127	M	E-M
Americana® Orchid 70020482	M-V	M
Americana® Pink 70004093	M-V	M-L
Americana® Red 70007854	M-V	M
Americana® Rose Ice 70064619	M	M
Americana® Rose Mega Splash 70004155	M	E
Americana® Salmon 70020528	M-V	M-L
Americana® Scarlet Fire 70074607	M-V	M-L
Americana® Violet Ice 70070037	V	E-M
Americana® White 70020529	V	E-M
Americana® White Splash 70020558	M	E-M

Tech Tips: Americana Geraniums are moderately vigorous and usually require regular plant growth regulator (PGR) applications, especially under warm growing conditions. Provide relatively high light levels and warm temperatures early on to establish the plant and to allow it to respond adequately to PGRs. Early Florel® sprays are crucial to making well-branched, quality plants. Watch for Botrytis under tight spacing and in combination plantings, especially when overhead irrigating. Monitor the media and try to keep the pH at or above 6.0 to avoid iron/manganese toxicity.

Geranium Zonal **ROCKY MOUNTAIN™** *Pelargonium zonale*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	PINCHES	FINISHING PROGRAM
pH: 5.8–6.2 SME 2.3–2.8 mS/cm, Pourthru EC: 3.5–4.2 mS/cm	4,000–6,000 foot candles	Day Neutral	72–74 °F (22–23 °C)	68–70 °F (20–21 °C)	200–250 ppm N	Not Recommended	2.5 qt. I 1 ppp I 11–12 weeks 3 qt. I 3 ppp I 11–12 weeks 1.5 gal. HB I 3–4 ppp I 11–12 weeks

PESTS	DISEASES	FINISH PGRS
Aphids and Thrips	Botrytis, Pythium Root Rot, and Xanthomonas Bacterial Blight and Wilt	Cycocel® at 1,000 ppm and under hot conditions with a tank mix spray of Cycocel® (1,000 ppm) + B-Nine® WSG (2,500 ppm) or Bonzi® spray (3–5 ppm). Florel® can also be sprayed at 350–400 ppm early in the crop cycle, especially for larger pots and baskets, to improve branching and control growth.

VARIETY	VIGOR	TIMING
Rocky Mountain™ Dark Red 70006932	V	E-M
Rocky Mountain™ Deep Rose 70020534	V	M-L
Rocky Mountain™ Lavender 70020490	V	M
Rocky Mountain™ Light Pink 70020491	V	M-L
Rocky Mountain™ Magenta 70020492	M-V	M-L
Rocky Mountain™ Orange 70004111	V	M-L
Rocky Mountain™ Pink 70006941	V	E-M
Rocky Mountain™ Red 70004112	V	M
Rocky Mountain™ Salmon 70004113	V	M
Rocky Mountain™ Violet 70006935	V	M
Rocky Mountain™ White 70004115	M-V	E

Tech Tips: Rocky Mountain geraniums are rather vigorous and usually require regular PGR applications, especially under warm growing conditions. Provide relatively high light levels and warm temperatures early on to establish the plant and to allow it to respond adequately to PGRs. Early Florel® sprays are key to making well-branched, quality plants. Watch for Botrytis under tight spacing and in combination plantings, especially when overhead irrigating. Monitor the media and try to keep the pH at or above 6.0 to avoid iron/manganese toxicity.

BACK TO CONTENTS

Geranium Zonal **ROSALIE™** *Pelargonium zonale*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	PINCHES	FINISHING PROGRAM
pH: 5.8–6.2 SME 2.3–2.8 mS/cm, Pourthru EC: 3.5–4.2 mS/cm	4,000–6,000 foot candles	Day Neutral	72–74 °F (22–23 °C)	68–70 °F (20–21 °C)	200–250 ppm N	Not Recommended	1 qt. I 1 ppp I 7–8 weeks 1.25 qt. I 1 ppp I 9–12 weeks 2.5 qt. I 1 ppp I 9–12 weeks 1.5 gal. HB I 3 ppp I 11–12 weeks

PESTS	DISEASES	FINISH PGRS	VARIETY	VIGOR	TIMING
Aphid and Thrips	Botrytis, Pythium Root Rot, and Xanthomonas Bacterial Blight and Wilt	Cycocel® at 1,000 ppm and under hot conditions with a tank mix spray of Cycocel® (1,000 ppm) + B-Nine® WSG (2,500 ppm) or Bonzi® spray (3–5 ppm). Florel® can also be sprayed at 350–400 ppm early in the crop cycle, especially for larger pots and baskets, to improve branching and control growth. A Bonzi® drench (0.1 ppm) can be used at the end of production.	Rosalie™ Antique Salmon 70080206	M	M

Tech Tips: Rosalie is moderately vigorous and may require regular PGR applications, especially under warm growing conditions. Provide relatively high light levels and warm temperatures early on to establish the plant and to allow it to respond adequately to PGRs. Early Florel® sprays are key in making well-branched, quality plants. Watch for Botrytis under tight spacing and in combination plantings, especially when overhead irrigating. Monitor the media and try to keep the pH at or above 6.0 to avoid iron/manganese toxicity.

Geranium Zonal **TANGO™** *Pelargonium zonale*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	PINCHES	FINISHING PROGRAM
pH: 5.8–6.2 SME 2.3–2.8 mS/cm, Pourthru EC: 3.5–4.2 mS/cm	4,000–6,000 foot candles	Day Neutral	72–74 °F (22–23 °C)	68–70 °F (20–21 °C)	200–250 ppm N	Not Recommended	Large Packs I 1 ppp I 5–6 weeks 1 qt. I 1 ppp I 7–8 weeks 1 pt. I 1 ppp I 6–7 weeks 1.25 qt. I 1 ppp I 9–10 weeks 1.5 gal. HB I 4 ppp I 11–12 weeks

PESTS	DISEASES	FINISH PGRS	VARIETY	VIGOR	TIMING
Aphid and Thrips	Botrytis, Pythium Root Rot, and Xanthomonas Bacterial Blight and Wilt	Cycocel® at 750–1,000 ppm and under hot conditions with a tank mix spray of Cycocel® (1,000 ppm) + B-Nine® WSG (2,500 ppm) or Bonzi® spray (2–3 ppm). Florel® can also be sprayed at 350–400 ppm early in the crop cycle, especially for larger pots and baskets, to improve branching and control growth. Do not spray Florel® on stressed plants. A very low rate Bonzi® drench (0.05 ppm) can be used at the end of production to hold and tone plants before sale.	Tango™ Bicolor Cherry 70065956	M	E-M
			Tango™ Dark Red 70004116	C	M
			Tango™ Deep Pink 70020483	C	E
			Tango™ Deep Red 70004107	C	E
			Tango™ Deep Rose with Eye 70020578	C	E
			Tango™ Hot Pink 70004117	C	M
			Tango™ Lavender 70004118	M	M
			Tango™ Light Pink 70004149	C	M
			Tango™ Neon Purple 70004119	C	L
			Tango™ Orange 70004120	C	M
			Tango™ Orange Ice 70074794	M	M
			Tango™ Pink Ice 70065955	M	M-L
			Tango™ Rose Splash 70004108	C-M	M-L
			Tango™ Salmon 70004150	C	M
			Tango™ Strawberry Ice 70074797	C	M-L
			Tango™ Tango 70006942	C-M	L
			Tango™ Velvet Red 70007861	C-M	M
			Tango™ Violet 70020484	C-M	M-L
			Tango™ White 70008003	M	E-M
			Tango™ White Splash 70069791	C	M

Tech Tips: Tango is relatively compact and should not require repeated PGR applications. Provide relatively high light levels and warm temperatures early on to establish the plant and to allow it to respond adequately to PGRs. Early Florel® sprays are key to making well-branched, quality plants. Watch for Botrytis under tight spacing and in combination plantings, especially when overhead irrigating. Monitor the media and try to keep the pH at or above 6.0 to avoid iron/manganese toxicity.

Heliotrope **SCENTROPIA™** *Heliotropium arborescens*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	PINCHES	FINISHING PROGRAM
pH: 5.8–6.2 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Day Neutral	70–72 °F (21–22 °C)	66–68 °F (19–20 °C)	200–250 ppm N	1 Pinch	1 qt. I 1 ppp I 6–7 weeks 1.25 qt. I 1 ppp I 8–9 weeks 2.5 qt. I 1 ppp I 9–10 weeks 3 qt. I 2–3 ppp I 9–10 weeks 1.5 gal. HB I 4 ppp I 10–11 weeks

PESTS	DISEASES	FINISH PGRS	VARIETY	VIGOR	TIMING
Aphids, Spider Mites, Whiteflies	Botrytis, Fungal Root Rot	B-Nine® WSG (1,500–2,500 ppm) or Bonzi® (10 ppm) can be used. A Bonzi® drench (1 ppm) also work well during mid to late in the crop cycle. Scentropia is moderately vigorous and should only require slight to moderate chemical growth control.	Scentropia™ Dark Blue 70003693	M	M

Tech Tips: Cuttings of Scentropia heliotrope are sensitive to chilling, so avoid storing cuttings<48 °F (9 °C). Stick unrooted cuttings immediately upon arrival—they don't like to be stored. Avoid over-misting during propagation. Scentropia has a medium-vigorous habit and typically requires some PGRs to keep plants compact, especially under tight spacing. Late B-Nine® WSG sprays can delay flowering. Avoid severe drying out of the media. The beautiful purple-blue flowers have a sweet scent.

BACK TO CONTENTS

Impatiens **SILHOUETTE®** *Impatiens walleriana*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	PINCHES	FINISHING PROGRAM
pH: 5.8–6.2 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Day Neutral	72–74 °F (22–23 °C)	68–70 °F (20–21 °C)	200–250 ppm N	Not Recommended	1 qt. I 1 ppp I 6–7 weeks 1.25 qt. I 1 ppp I 8–9 weeks 2.5 qt. I 1 ppp I 9–10 weeks 3 qt. I 2–3 ppp I 9–10 weeks 1.5 gal. HB I 4 ppp I 10–11 weeks

PESTS	DISEASES	FINISH PGRS
Aphids, Thrips, Leafminers	Botrytis, Basal Stem Fungal Rot, Impatiens Necrotic Spot Virus (INSV)	Growth can be controlled using sprays of Bonzi® (5–10 ppm). A Bonzi® drench (0.5–1 ppm) can be also be used to control growth mid to late in the crop cycle or to hold plants before sale.

VARIETY	VIGOR	TIMING
Silhouette® Appleblossom 70003776	C-M	E-M
Silhouette® Cherry 70003801	M	E-M
Silhouette® Purple 70003779	M	M
Silhouette® Red 70003778	M	E-M
Silhouette® Red Star 70003780	M	E-M
Silhouette® Rose 70003766	M	E-M
Silhouette® Rose Star 70003777	M	E-M
Silhouette® Salmon 70003802	M	E-M
Silhouette® White 70003803	C-M	E-M

Tech Tips: Silhouette impatiens are fast rooters and will be ready to transplant from propagation relatively quickly. Some growers have success with direct-stick cuttings into large packs. Unrooted cuttings are sensitive to chilling, so avoid storing cuttings<48 °F (9 °C). Silhouette Impatiens generally do not need any pinching if cuttings are compact and well-branched. Florel® can be used early but is usually not needed. Keys to success are to avoid water and heat stress when the plants mature. A Bonzi® drench during mid-late season to keep growth under control. Scout for Thrips regularly and Thrips-vectored tospoViruses. Check media EC periodically to avoid high salt

Impatiens New Guinea **SONIC®** *Impatiens hawkeri*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	PINCHES	FINISHING PROGRAM
pH: 5.8–6.2 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Day Neutral	72–74 °F (22–23 °C)	68–70 °F (20–21 °C)	125–175 ppm N	Not Recommended	1 qt. I 1 ppp I 6–7 weeks 1.25 qt. I 1 ppp I 8–9 weeks 2.5 qt. I 1–2 ppp I 9–10 weeks 3 qt. I 3 ppp I 9–10 weeks 1.5 gal. HB I 4 ppp I 10–11 weeks

PESTS	DISEASES	FINISH PGRS
Aphids, Thrips, Spider Mites, Broad Mites	Botrytis, Myrothecium Fungal Leaf Spot (propagation), Impatiens Necrotic Spot Virus (INSV)	Bonzi® (1–2 ppm). Avoid late Bonzi® sprays to prevent flower size reduction. Florel® (300 ppm) can be used early on after transplant to delay flowering, but this should only be done for large baskets or pots where flower delay is desired.

VARIETY	VIGOR	TIMING
Sonic® Amethyst 70003738	C-M	M
Sonic® Bright Pink 70019677	C-M	M
Sonic® Deep Purple 70066412	M	M
Sonic® Deep Red 70003800	C-M	E-M
Sonic® Deep Salmon 70066413		M-L
Sonic® Light Lavender 70003739	C-M	E-M
Sonic® Light Pink 70003740	C-M	M
Sonic® Lilac 70003741	C-M	M
Sonic® Magic Pink 70003785	C	E
Sonic® Orange 70003742	C-M	L
Sonic® Pink 70003743	C-M	M
Sonic® Red 70008405	C-M	E-M
Sonic® Salmon 70003744	C-M	M
Sonic® Sweet Orange 70003805	C-M	M-L
Sonic® Sweet Purple 70003806	C	M
Sonic® Sweet Red 70061277	C-M	M-L
Sonic® White 70066410	M	E-M

Tech Tips: Sonic New Guinea impatiens are relatively fast rooters. Some growers have success with direct-stick cuttings into large packs. Unrooted cuttings are sensitive to chilling, so avoid storing cuttings<48 °F (9 °C). Sonics generally do not need any pinching. The keys to success are to avoid water and heat stress when the plants mature. Scout for Thrips regularly and Thrips-vectored tospoViruses. Check media EC periodically to avoid high salt levels. Moderate light levels and warm temperatures provide the largest flower

BACK TO CONTENTS

Impatiens New Guinea **SUPER SONIC®** *Impatiens hawkeri*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	PINCHES	FINISHING PROGRAM
pH: 5.8–6.2 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Day Neutral	72–74 °F (22–23 °C)	68–70 °F (20–21 °C)	125–175 ppm N	Not Recommended	1.25 qt. I 1 ppp I 8–9 weeks 2.5 qt. I 1 ppp I 9–10 weeks 3 qt. I 2–3 ppp I 9–10 weeks 1.5 gal. HB I 3–4 ppp I 10–11 weeks 1.5 gal. pot I 2–3 ppp I 9–10 weeks 2 gal. HB I 4–5 ppp I 10–11 weeks

PESTS	DISEASES	FINISH PGRS
Aphids, Thrips, Spider Mites, Broad Mites	Botrytis, Myrothecium Fungal Leaf Spot (propagation), Impatiens Necrotic Spot Virus (INSV)	Super Sonic growth can be controlled using sprays of Bonzi® (1–3 ppm). Avoid late Bonzi® sprays to prevent flower size reduction. Florel® (300 ppm) can be used early on after transplant to delay flowering, but this should only be done for large baskets or pots where flower delay is desired.

VARIETY	VIGOR	TIMING
Super Sonic® Dark Red 70066415	V	M
Super Sonic® Dark Salmon 70003793	V	E
Super Sonic® Deep Salmon 70066414	V	M-L
Super Sonic® Deep Scarlet 70066416	V	M-L
Super Sonic® Flame 70003747	V	M-L
Super Sonic® Hot Pink 70003748	V	M-L
Super Sonic® Lavender 70003749	V	M
Super Sonic® Lilac 70003750	V	E-M
Super Sonic® Magenta 70019687	V	M
Super Sonic® Orange Ice 70019711	M-V	L
Super Sonic® Pastel Pink 70003751	V	M
Super Sonic® Pink 70019680	V	M
Super Sonic® Purple 70008383	V	M
Super Sonic® Red 70003752	V	E-M
Super Sonic® Sweet Cherry 70003753	M-V	E-M
Super Sonic® White 70003754	V	M

Tech Tips: Super Sonic New Guinea impatiens are relatively fast rooters. Unrooted cuttings are sensitive to chilling, so avoid storing cuttings<48 °F (9 °C). Super Sonics generally do not need any pinching. Keys to success are to avoid water and heat stress when the plants mature. Scout for Thrips regularly and Thrips-vectored tospoViruses. Check media EC periodically to avoid high salt levels. Moderate light levels and warm temperatures provide the most significant flower.

Ipomoea **SIDEKICK™** *Ipomoea batatas*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	PINCHES	FINISHING PROGRAM
pH: 5.8–6.2 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Day Neutral	72–74 °F (22–23 °C)	68–70 °F (20–21 °C)	200–250 ppm N	Not Recommended	1 qt. I 1 ppp I 5–6 weeks 1.25 qt. I 1 ppp I 7–8 weeks 2.5 qt. I 1 ppp I 8–9 weeks 3 qt. I 2–3 ppp I 8–9 weeks 1.5 gal. HB I 3 ppp I 9–10 weeks

PESTS	DISEASES	FINISH PGRS
Aphids, Whiteflies, Thrips	Edema (physiological condition)	Control growth using drenches of Bonzi® (1–2 ppm). Using higher than recommended Bonzi® drench rates can cause lime-colored varieties to have an undesirable dark tint to the foliage.

VARIETY	VIGOR	TIMING
Sidekick™ Black 70069218	M	N/A
Sidekick™ Heart Black 70069219	M	N/A
Sidekick™ Heart Bronze 70038353	M	N/A
Sidekick™ Heart Lime 70051340	M	N/A
Sidekick™ Lacey Lime 70051339	M	N/A
Sidekick™ Lime 70028150	M	N/A

Tech Tips: Stick unrooted cuttings immediately to prevent dehydration. Plants are chilling sensitive, so avoid storing cuttings<48 °F (9 °C). Sidekick is a moderately vigorous ipomoea that works in a range of pot sizes, including quarts and baskets. They are excellent in combo plantings. Watch for Aphids during finished production. Bonzi® drenches work well anytime during production to control growth.

BACK TO CONTENTS

Lantana **BANDANA®** *Lantana camara*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	PINCHES	FINISHING PROGRAM
pH: 5.8–6.2 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Day Neutral	76–78 °F (24–26 °C)	70–72 °F (21–22 °C)	200–250 ppm N	1 Pinch	1 qt. I 1 ppp I 7–8 weeks 1.25 qt. I 1 ppp I 9–10 weeks 2.5 qt. I 1 ppp I 10–11 weeks 3 qt. I 3 ppp I 10–11 weeks 1.5 gal. HB I 4 ppp I 11–12 weeks 1.5 gal. pot I 4 ppp I 11–12 weeks 2 gal. HB I 5 ppp I 11–12 weeks

PESTS	DISEASES	FINISH PGRS
Aphid, Whiteflies, Leaf Miners	No significant disease issues	B-Nine® WSG (2,500 ppm) + Cycocel® (1,000 ppm), Sumagic® (10–20 ppm), or Bonzi® (15–30 ppm) can be used. Sprays of Florel® (350–500 ppm) or a tank-mix spray of Florel® (350–500 ppm) + B-Nine® WSG (2,500 ppm) can also be used early on to control growth and improve branching.

VARIETY	VIGOR	TIMING
Bandana® Cherry 70019858	C-M	M
Bandana® Cherry Sunrise 70003837	M	M-L
Bandana® Lemon Zest 70007850	C-M	M
Bandana® Mango 70071396	M	M
Bandana® Orange 70051046	C-M	E-M
Bandana® Peach 70019840	C-M	M
Bandana® Pink 70066193	M-V	E-M
Bandana® Red 70054196	M-V	M
Bandana® Rose 70019838	C-M	M
Bandana® White 70007849	C-M	M
Bandana® Yellow 70070695	C-M	M

Tech Tips: Bandana is bred for excellent branching and a compact-medium, mounding habit. One early pinch is all that is needed. Bandana should only require a low to moderate amount of plant growth regulator (PGR) applications to control growth. Florel® sprays will delay flowering slightly. Mid-crop Bonzi® drenches work well to control height. Relatively high light levels and warm temperatures are needed to produce high-quality plants. To reduce flower cycling, keep plants well-fertilized and avoid severe drought stress.

Lantana **BANDITO™** *Lantana camara*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	PINCHES	FINISHING PROGRAM
pH: 5.8–6.2 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Day Neutral	76–78 °F (24–26 °C)	70–72 °F (21–22 °C)	200–250 ppm N	1 Pinch	Packs I 1 ppp I 5–6 weeks Large Packs I 1 ppp I 6–7 weeks 1 qt. I 1 ppp I 7–8 weeks 1.25 qt. I 1 ppp I 9–10 weeks 2.5 qt. I 1–2 ppp I 10–11 weeks 3 qt. I 3 ppp I 10–11 weeks 1.5 gal. HB I 4 ppp I 11–12 weeks

PESTS	DISEASES	FINISH PGRS
Aphid, Whiteflies, Leaf Miners	No significant disease issues	B-Nine® WSG (2,500 ppm) + Cycocel® (1,000 ppm), Sumagic® (10–20 ppm), or Bonzi® (15–30 ppm) can be used. Sprays of Florel® (350–500 ppm) or a tank-mix spray of Florel® (350–500 ppm) + B-Nine® WSG (2,500 ppm) can also be used early on to control growth and improve branching.

VARIETY	VIGOR	TIMING
Bandito™ Lemon Zest 70076115	C	M
Bandito™ Orange Sunrise 70003838	C	E-M
Bandito™ Red 70019835	C-M	M
Bandito™ Rose 70019834	C	E
Bandito™ Yellow 70060717	C-M	E-M

Tech Tips: Bandito is bred for excellent branching and a compact, mounding habit. One early pinch is all that is needed. Bandito should only require a low to moderate amount of PGR applications to control growth. Florel® sprays will delay flowering slightly. Mid-crop Bonzi® drenches work well to control height. Relatively high light levels and warm temperatures are needed to produce high-quality plants. To reduce flower cycling, keep plants well-fertilized and avoid severe drought stress. Bandito is a good choice for growers in the far south or where plants are grown under very tight spacing.

Lantana **BANDOLERO™** *Lantana camara*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	PINCHES	FINISHING PROGRAM
pH: 5.8–6.2 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Day neutral	76–78 °F (24–26 °C)	70–72 °F (21–22 °C)	200–250 ppm N	1 Pinch	1 qt. I 1 ppp I 7–8 weeks 1.25 qt. I 1 ppp I 9–10 weeks 2.5 qt. I 1 ppp I 10–11 weeks 3 qt. I 2–3 ppp I 10–11 weeks 1.5 gal. HB I 4 ppp I 11–12 weeks 1.5 gal. pot I 4 ppp I 11–12 weeks 2 gal. HB I 5 ppp I 11–12 weeks

PESTS	DISEASES	FINISH PGRS
Aphid, Whiteflies, Leaf Miners	No significant disease issues	B-Nine® WSG (2500–3500 ppm) + Cycocel® (1000 ppm), Sumagic® (15–20 ppm), or Bonzi® (20–30 ppm) can be used. Florel® (350–500 ppm) or a tank-mix spray of Florel® (350–500 ppm) + B-Nine® WSG (2500–3500 ppm) can also be used early on to control growth and improve branching. Florel® applications will delay flowering slightly. Bonzi® drenches (2–4 ppm) also work well. Bandoleros are relatively vigorous and may need regular chemical growth control.

VARIETY	VIGOR	TIMING
Bandolero™ Cherry Sunrise 70071399	V	M
Bandolero™ Guava 70071403	V	M
Bandolero™ Pineapple 70071402	V	M
Bandolero™ Pink 70019831	M-V	E-M
Bandolero™ Red 70070698	V	M
Bandolero™ White 70076114	V	M

Tech Tips: Bandolero is bred for excellent branching and a relatively vigorous, mounding habit. One early pinch is all that is needed. Bandolero has about 20–30% more vigor than typical Bandana® types and generally needs PGR applications to control growth. Florel® sprays will delay flowering slightly. Mid-crop Bonzi® drenches work well to control height. Relatively high light levels and warm temperatures are needed to produce high quality plants. To reduce flower cycling, keep plants well-fertilized and avoid severe drought stress.

BACK TO CONTENTS

Lantana **HOT BLOODED™** *Lantana camara*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	PINCHES	FINISHING PROGRAM
pH: 5.8–6.2 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Day neutral	76–78 °F (24–26 °C)	70–72 °F (21–22 °C)	200–250 ppm N	1 Pinch	1 qt. I 1 ppp I 9–10 weeks 1 pt. I 1 ppp I 7–8 weeks 2.5 qt. I 2–3 ppp I 10–11 weeks 3 qt. I 2–3 ppp I 10–11 weeks 1.5 gal. pot I 4 ppp I 11–12 weeks

PESTS	DISEASES	FINISH PGRS	VARIETY	VIGOR	TIMING
Aphid, Whiteflies, Leaf Miners	No significant disease issues	B-Nine® WSG (2500–3500 ppm) + Cycocel® (1000 ppm), Sumagic® (15–20 ppm), or Bonzi® (20–30 ppm) can be used. Sprays of Florel® (350–500 ppm) or a tank-mix spray of Florel® (350–500 ppm) + B-Nine® WSG (2500–3500 ppm) can also be used early on to control growth and improve branching. Florel® applications will delay flowering slightly. Bonzi® drenches (2–4 ppm) also work well. Hot Blooded is relatively vigorous and may need regular chemical growth control.	Hot Blooded™ Red 70077412	M	E

Tech Tips: Hot Blooded is bred for excellent branching and a relatively vigorous, mounding habit. One early pinch is all that is needed. Hot Blooded has about 20–30% more vigor than typical Bandana® types and generally needs PGR applications to control growth. Florel® sprays will delay flowering slightly. Mid-crop Bonzi® drenches work well to control height. Relatively high light levels and warm temperatures are needed to produce high quality plants. To reduce flower cycling, keep plants well-fertilized and avoid severe drought stress.

Lantana **LANDSCAPE BANDANA®** *Lantana camara*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	PINCHES	FINISHING PROGRAM
pH: 5.8–6.2 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Day Neutral	76–78 °F (24–26 °C)	70–72 °F (21–22 °C)	200–250 ppm N	1 Pinch	1 qt. I 1 ppp I 6–7 weeks 1.25 qt. I 1 ppp I 8–9 weeks 2.5 qt. I 1 ppp I 9–10 weeks 3 qt. I 2–3 ppp I 9–10 weeks 1.5 gal. HB I 3 ppp I 10–11 weeks

PESTS	DISEASES	FINISH PGRS	VARIETY	VIGOR	TIMING
Aphids, Whiteflies, Leafminers	No significant disease issues	B-Nine® WSG (2,500–3,500 ppm) + Cycocel® (1,000 ppm), Sumagic® (15–20 ppm), or Bonzi® (20–30 ppm) can be applied. Sprays of Florel® (350–500 ppm) or a tank-mix spray of Florel® (350–500 ppm) + B-Nine® WSG (2,500–3,500 ppm) can also be used early on to control growth and improve branching.	Landscape Bandana® Clementine 70076122	V	M
			Landscape Bandana® Gold 70036138	V	M
			Landscape Bandana® Lemon Zest 70071406	V	M
			Landscape Bandana® Pink 70051062	V	M-L
			Landscape Bandana® Red 70054204	V	M
			Landscape Bandana® Yellow 70036136	V	E

Tech Tips: Landscape Bandana is bred for excellent branching and a relatively vigorous, spreading growth habit. One early pinch is all that is needed. Landscape Bandana has about 20–30% more vigor than typical Bandana types, and generally needs PGR applications to control growth. Florel® sprays will delay flowering slightly. Mid-crop Bonzi® drenches work well to control height. Relatively high light levels and warm temperatures are needed to produce high-quality plants. To reduce flower cycling, keep plants well-fertilized and avoid severe drought stress.

Lavender Spanish **JAVELIN™ FORTE** *Lavandula stoechas*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	PINCHES	FINISHING PROGRAM
pH: 6.1–6.5 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	6,000–8,000 foot candles	Facultative long day	72–74 °F (22–23 °C)	64–66 °F (18–19 °C)	75–125 ppm N	1–2 Pinches	1 qt. I 1 ppp I 16–19 weeks 1.25 qt. I 1 ppp I 16–19 weeks 2.5 qt. I 1 ppp I 18–21 weeks 3 qt. I 1 ppp I 18–21 weeks 1.5 gal. pot I 2 ppp I 20–24 weeks

PESTS	DISEASES	FINISH PGRS	VARIETY	VIGOR	TIMING
Aphids, Spider Mites, Whiteflies	Phytophthora, Pythium, Botrytis, Rhizoctonia	Lavender are extremely sensitive to over-misting. Consider using a ReeMay® tent over the propagation trays to keep the humidity high thereby decreasing the chance for over-misting. Remove the tent once the cuttings are showing roots. If necessary, spray B-Nine® WSG at 1,500 – 2,000 ppm to control stretch after the cuttings are rooted.	Javelin™ Forte Deep Purple 70051469	M	E-M
			Javelin™ Forte White 70070489	M	E-M
			Javelin™ Forte Rose 70075295	M	E

Tech Tips: A short cold treatment for 3–4 weeks at 50–55 °F (10–13 °C) is recommended to increase flowering uniformity. Bulk plants after transplanting before cooling period for best plant fill and habit.

Licorice Plant **HELICHRYSUM PETIOLARE** *Helichrysum petiolare*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	PINCHES	FINISHING PROGRAM
pH: 5.8–6.2 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Day neutral	70–72 °F (21–22 °C)	62–64 °F (17–18 °C)	125–175 ppm N	1 Pinch	1 qt. I 1 ppp I 5–6 weeks 1.25 qt. I 1–2 ppp I 7–9 weeks 2.5 qt. I 1–2 ppp I 7–9 weeks 3 qt. I 2–4 ppp I 8–9 weeks

PESTS	DISEASES	FINISH PGRS	VARIETY	VIGOR	TIMING
Fungus Gnats, Whiteflies	Botrytis, Fungal Root Rot	Does not require any chemical growth regulation. If plants get too large for their container, then it's best to trim the plants back to control growth. Pinching is the best method to control growth on Helichrysum petiolare.	Limelight 70003670	M	M
			Microphyllum Mini Silver 70003686	M	M
			Silver 70003669	M	M

Tech Tips: Helichrysum petiolare (Licorice Plant) is a semi-trailing plant that has low water and fertilizer requirements. Use plastic tenting or ReeMay® fabric during propagation if needed to keep high humidity and to minimize excess water on the foliage. Provide moderate to warm temperatures early on after transplant to get the plants established. Avoid over-saturated media and overly cool temperatures. Helichrysum petiolare may form golden yellow flowers on very mature plants, but its main value is its unique silver-colored foliage. Trimming plants is the best way to control growth. Syngenta Flowers sells three different Helichrysum petiolare varieties (Limelight, Microphyllum Mini Silver, Silver) and all can be propagated and grown very similarly.

BACK TO CONTENTS

Lobelia **TECHNO®** *Lobelia erinus*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	PINCHES	FINISHING PROGRAM
pH: 5.8–6.2 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Facultative Long Day	70–72 °F (21–22 °C)	62–64 °F (17–18 °C)	200–250 ppm N	1 Pinch	1 qt. I 1 ppp I 6–7 weeks 1.25 qt. I 1 ppp I 8–9 weeks 2.5 qt. I 1–2 ppp I 9–10 weeks 3 qt. I 3 ppp I 9–10 weeks 1.5 gal. HB I 4 ppp I 10–11 weeks

PESTS	DISEASES	FINISH PGRS
Thrips	Botrytis, Fungal Root Rot, Impatiens Necrotic Spot Virus, Tomato Spotted Wilt Virus (TSWV)	Techno lobelias have moderate vigor and might need chemical growth regulation, especially if grown under warmer temperatures. Sprays of B-Nine® WSG (2,500 ppm) and Sumagic® (2–4 ppm) can be applied to control growth. Drenches of Bonzi® (1–2 ppm) work well mid to late in the production cycle.

VARIETY	VIGOR	TIMING
Techno® Blue 70003825	M	E
Techno® Cobalt Blue 70069939	C-M	E
Techno® Dark Blue 70003826	M	E
Techno® Electric Blue 70003827	M	E
Techno® Large Blue Violet 70065214	M-V	E
Techno® Light Blue 70053408	M	E
Techno® Lilac 70069942	M	E
Techno® Violet 70052763	M	E
Techno® White 70019818	C-M	E

Tech Tips: Avoid dehydration of the cuttings before sticking in propagation. Techno lobelias are relatively fast growers that have a semi-trailing habit and excellent heat tolerance. They fill containers quickly. Pinch the plant as needed for 6–inch and larger containers. Use proper disinfectant should be used on all trimming tools to prevent possible virus spread. Avoid overwatering on young plants. Long days will hasten and improve flowering, especially when produced in early spring. Techno is best when grown cool with high light. Watch for Thrips and Thrips-vectored tospoViruses (tomato spotted wilt and impatiens necrotic spot).

Lobelia **TECHNO® UPRIGHT** *Lobelia erinus*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	PINCHES	FINISHING PROGRAM
pH: 5.8–6.2 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Facultative Long Day	70–72 °F (21–22 °C)	62–64 °F (17–18 °C)	200–250 ppm N	1 Pinch	1 qt. I 1 ppp I 6–7 weeks 1.25 qt. I 1 ppp I 8–9 weeks 2.5 qt. I 1–2 ppp I 9–10 weeks 3 qt. I 3 ppp I 9–10 weeks 1.5 gal. HB I 4 ppp I 10–11 weeks

PESTS	DISEASES	FINISH PGRS
Thrips	Botrytis, Fungal Root Rot, Impatiens Necrotic Spot Virus, Tomato Spotted Wilt Virus (TSWV)	Techno lobelias have moderate vigor and might need chemical growth regulation, especially if grown under warmer temperatures. Sprays of B-Nine® WSG (2,500 ppm) and Sumagic® (2–4 ppm) can be used to control growth. Drenches of Bonzi® (1–2 ppm) work well mid to late in the production cycle.

VARIETY	VIGOR	TIMING
Techno® Upright Blue 70059431	M	E
Techno® Upright Cobalt Blue 70065203	C	E
Techno® Upright Dark Blue 70076404	C	E
Techno® Upright Light Blue 70052754	C	E
Techno® Upright Purple 70051508	M	E
Techno® Upright White 70052752	M	E

Tech Tips: Avoid dehydration of the cuttings before sticking in propagation. Techno lobelias are relatively fast growers that have a semi-trailing habit and excellent heat tolerance. They fill containers quickly. Pinch the plant as needed for 6–inch and larger containers. Use proper disinfectant should be used on all trimming tools to prevent possible virus spread. Avoid overwatering on young plants. Long days will hasten and improve flowering, especially when produced in early spring. Techno is best when grown cool with high light. Watch for Thrips and Thrips-vectored tospoViruses (tomato spotted wilt and impatiens necrotic spot).

Lysimachia **GOLDII** *Lysimachia nummularia*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	PINCHES	FINISHING PROGRAM
pH: 5.8–6.2 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Day neutral	70–72 °F (21–22 °C)	64–66 °F (18–19 °C)	125–175 ppm N	1 Pinch	1 qt. I 1 ppp I 6–7 weeks 1.25 qt. I 1 ppp I 8–9 weeks 2.5 qt. I 1–2 ppp I 9–10 weeks 3 qt. I 3 ppp I 9–10 weeks 1.5 gal. HB I 4 ppp I 10–11 weeks

PESTS	DISEASES	FINISH PGRS
Aphids, Whiteflies	Fungal Root Rot, Botrytis	ysimachia Goldii is a trailing plant that has a medium growth habit. Its growth is typically controlled by pinching or shearing.

VARIETY	VIGOR	TIMING
Goldii 70003845	M-V	M

Tech Tips: Lysimachia Goldii is a trailing plant that has a medium growth habit and is grown for its attractive gold-colored foliage. Provide moderate to warm temperatures early on after transplant to get the plants established. Avoid over-saturated media and overly cool temperatures. Trimming plants is the best way to control growth.

BACK TO CONTENTS

Osteospermum **TRADEWINDS®** *Osteospermum ecklonis*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	PINCHES	FINISHING PROGRAM
pH: 5.8–6.2 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Day Neutral	70–72 °F (21–22 °C)	62–64 °F (17–18 °C)	200–250 ppm N	1 Pinch	1 qt. I 1 ppp I 6–7 weeks 1.25 qt. I 1 ppp I 8–9 weeks 2.5 qt. I 1 ppp I 9–10 weeks 3 qt. I 2–3 ppp I 9–10 weeks 1.5 gal. HB I 4 ppp I 10–11 weeks

PESTS	DISEASES	FINISH PGRS
Aphids, Whiteflies, Thrips	Fungal Root Rot	f B-Nine® WSG (2,500 ppm), B-Nine® WSG (2,500 ppm) + Cycocel® (1,000 ppm), or Sumagic® (5 ppm) can be applied to the plants as needed. A drench of Bonzi® (2 ppm) or Cycocel® (750–1,000 ppm) can be used mid to late in the crop cycle to control growth or hold plants before sale.

VARIETY	VIGOR	TIMING
Tradewinds® Bronze 70055274	M	E
Tradewinds® Deep Purple 70003906	M	E-M
Tradewinds® Lemon Zest 70071158	C-M	E-M
Tradewinds® Light Purple 70071153	M	E
Tradewinds® Rose 70071155	C-M	E
Tradewinds® Sunset 70083260	M	E
Tradewinds® Terracotta 70055272	M	E-M
Tradewinds® Trailing Deep Purple 70003909	M	E-M
Tradewinds® Trailing White 70019994	M	E-M
Tradewinds® White 70020017	M	E-M
Tradewinds® Yellow 70061545	M	E-M

Tech Tips: Do not reduce mist too soon during propagation. Continue light misting until all cuttings are rooted into the media. Reducing mist too early can result in slow and uneven rooting across the bench. Although Tradewinds are bred to flower at higher temperatures, cool temperatures and high light will help make the highest quality plants. If grown cool, no PGRs are typically needed. One pinch is recommended to make fully branched plants. The trailing types work especially well in baskets.

Penstemon **PHOENIX™** *Penstemon hartwegii*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	PINCHES	FINISHING PROGRAM
pH: 5.8–6.2 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Facultative Long Day	72–74 °F (22–23 °C)	68–70 °F (20–21 °C)	200–250 ppm N	1 Pinch	1 qt. I 1 ppp I 6–7 weeks 1.25 qt. I 1 ppp I 8–9 weeks 2.5 qt. I 1 ppp I 9–10 weeks 3 qt. I 3 ppp I 9–10 weeks 1.5 gal. pot I 4 ppp I 10–11 weeks

PESTS	DISEASES	FINISH PGRS
Aphid, Thrips	Basal Fungal Stem Rot	B-Nine® WSG (2,500 ppm), Cycocel® (1,000 ppm) + B-Nine® WSG (2,500 ppm), or Sumagic® (5–10 ppm) are normally sufficient. Drenches of Bonzi® (2–3 ppm) also work well to control growth or to hold plants before sale.

VARIETY	VIGOR	TIMING
Phoenix™ Magenta 70020658	M-V	M
Phoenix™ Pink 70004267	M-V	M
Phoenix™ Red 70020655	M-V	M
Phoenix™ Violet 70004268	M-V	M

Tech Tips: Use PGRs as necessary to keep plants under control. Avoid using Florel® since this will severely delay flowering. Plants need one early pinch, but can also be pinched again later if needed for larger containers. Keep the plants well fed to maintain dark healthy leaves.

Pentas **FALLING STAR™** *Pentas lanceolata*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	PINCHES	FINISHING PROGRAM
pH: 5.8–6.2 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Facultative Long Day	76–78 °F (24–26 °C)	70–72 °F (21–22 °C)	200–250 ppm N	1 Pinch	1 qt. I 1 ppp I 8–9 weeks 1.25 qt. I 1 ppp I 10–11 weeks 2.5 qt. I 1–2 ppp I 12–13 weeks 3 qt. I 3 ppp I 12–13 weeks 1.5 gal. HB I 3–4 ppp I 12–13 weeks

PESTS	DISEASES	FINISH PGRS
Thrips	Fungal Stem Rot	B-Nine® WSG (2,500–3,500 ppm) can be used. Drenches of Bonzi® (3–4 ppm) also work well to control growth and are the preferred method of growth control for Falling Star.

VARIETY	VIGOR	TIMING
Falling Star™ Hot Pink 70054740	M	M-L
Falling Star™ Pink Bicolor 70051358	M-V	M
Falling Star™ Red 70064381	M	M
Falling Star™ Rose 70051360	M-V	E-M
Falling Star™ White 70074641	C-M	M

Tech Tips: Falling Stars are slow rooters, so provide sufficient temperature during propagation. They start slow after transplant and need warm temperatures and high light intensities to establish and grow. Cold temperatures will lead to long crop times and poor overall quality. Plants will flower faster under relatively long days. Plants will benefit from one to two pinches to improve branching and fill on large pots and patio containers. Bonzi® drenches work well to control growth.

BACK TO CONTENTS

Pentas **STARCLUSTER™** *Pentas lanceolata*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	PINCHES	FINISHING PROGRAM
pH: 5.8–6.2 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Facultative Long Day	76–78 °F (24–26 °C)	70–72 °F (21–22 °C)	200–250 ppm N	1 Pinch	1 qt. I 1 ppp I 8–9 weeks 1.25 qt. I 1 ppp I 10–11 weeks 2.5 qt. I 1–2 ppp I 12–13 weeks 3 qt. I 3 ppp I 12–13 weeks 1.5 gal. HB I 3–4 ppp I 12–13 weeks

PESTS	DISEASES	FINISH PGRS
Thrips	Fungal Stem Rot	B-Nine® WSG (2,500–3,500 ppm) can be used. Drenches of Bonzi® (3–4 ppm) also work well to control growth and are the preferred method of growth control for Starcluster.

VARIETY	VIGOR	TIMING
Starcluster™ Appleblossom 70020709	M	M
Starcluster™ Lavender 70020684	M-V	M
Starcluster™ Pink 70051347	M	E-M
Starcluster™ Red 70051350	M	M
Starcluster™ Rose 70075003	M	M
Starcluster™ Violet 70020716	C-M	M
Starcluster™ White 70020706	M-V	M

Tech Tips: Starclusters are slow rooters, so provide sufficient temperature during propagation. They start slow after transplant and need warm temperatures and high light intensities to establish and grow. Cold temperatures will lead to long crop times and poor overall quality. Plants will flower faster under relatively long days. Plants will benefit from one to two pinches to improve branching and fill on large pots and patio containers. Bonzi® drenches work well to control growth.

Petunia **DEKKO™** *Petunia hybrida*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	PINCHES	FINISHING PROGRAM
pH: 5.5–5.9 SME 2.3–2.8 mS/cm, Pourthru EC: 3.5–4.2 mS/cm	4,000–6,000 foot candles	Facultative Long Day	70–72 °F (21–22 °C)	62–64 °F (17–18 °C)	200–250 ppm N	1–2 Pinches	Packs I 1 ppp I 4–5 weeks Large Packs I 1 ppp I 4–5 weeks 1 qt. I 1 ppp I 5–6 weeks 1.25 qt. I 1 ppp I 7–8 weeks 2.5 qt. I 1 ppp I 8–9 weeks 3 qt. I 2–3 ppp I 8–9 weeks 1.5 gal. HB I 3 ppp I 9–10 weeks

PESTS	DISEASES	FINISH PGRS
Aphid, Thrips, Budworms, Leaf Miners, Whiteflies	Botrytis, Powdery Mildew, Viruses (TMV, TSWV)	B-Nine® (2500–5000 ppm) or Sumagic® (20–30 ppm) can be used to control growth. A tank-mix spray of Florel® (350–500 ppm) + B-Nine® (2500 ppm) can also be used to control growth and improve branching early in production. A Bonzi® drench (2–3 ppm) can be given 3–4 weeks before finishing.

VARIETY	VIGOR	TIMING	MPR
Dekko™ Banana 70083317	C-M	M-L	11.5 hrs.
Dekko™ Blue 70076419	C-M	M	10.5 hrs.
Dekko™ Deep Lavender Vein 70076420	M	M	10.5 hrs.
Dekko™ Lavender Eye 70008029	M-V	M-L	11 hrs.
Dekko™ Purple 70061519	M	M-L	11.5 hrs.
Dekko™ Red 70008026	M	M	10.5 hrs.
Dekko™ Salmon 70061518	M-V	M	10.5 hrs.
Dekko™ Sky Blue 70071607	C-M	M	10.5 hrs.
Dekko™ Star Coral 70066651	M	M-L	10.5 hrs.
Dekko™ Star Rose 70020321	M	M-L	11.5 hrs.
Dekko™ White 70071612	M	L	13.5 hrs.

Tech Tips: Keep media pH down in the mid 5.0's to avoid iron deficiency and tip chlorosis. Temperatures can be lowered three weeks after planting and especially towards the end of production to tone or hold the plant. High DLIs and cool finishing temperatures produce high-quality petunias. Dekko was bred and selected to flower under day lengths of 10.5 hours; however, flower number increases under longer day lengths. Use proper sanitation when pinching or shearing petunia. Petunia and other solanaceous crops are highly susceptible to Tobacco Mosaic Virus (TMV), which can be easily transmitted by mechanical means.

Petunia **ITSY™** *Petunia hybrida*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	PINCHES	FINISHING PROGRAM
pH: 5.5–5.9 SME 2.3–2.8 mS/cm, Pourthru EC: 3.5–4.2 mS/cm	4,000–6,000 foot candles	Facultative Long Day	70–72 °F (21–22 °C)	62–64 °F (17–18 °C)	200–250 ppm N	1–2 Pinches	1 qt. I 1 ppp I 5–6 weeks 1.25 qt. I 1 ppp I 7–9 weeks 2.5 qt. I 1 ppp I 7–9 weeks 3 qt. I 2–3 ppp I 8–9 weeks 1.5 gal. HB I 3 ppp I 9–10 weeks 1.5 gal. pot I 2–3 ppp I 8–9 weeks 2 gal. HB I 4 ppp I 8–10 weeks

PESTS	DISEASES	FINISH PGRS
Aphid, Thrips, Budworms, Leaf Miners, Whiteflies	Botrytis, Powdery Mildew, Viruses (TMV, TSWV)	B-Nine® WSG(2,500–5,000 ppm) or Sumagic® (20–30 ppm) can be used to control growth. A tank-mix spray of Florel® (350–500 ppm) + B-Nine® WSG (2,500 ppm) can also be used to control growth and improve branching early in production. A Bonzi® drench (2–3 ppm) can be given 3–4 weeks before finishing.

VARIETY	VIGOR	TIMING	MPR
Itsy™ Magenta 70076437	C-M	E-M	10.5 hrs.

Tech Tips: Keep media pH down in the mid 5's to avoid iron deficiency and tip chlorosis. Temperatures can be lowered three weeks after planting and especially towards the end of production to tone or hold the plant. High DLIs and cool finishing temperatures produce high-quality petunias. Itsy petunia was bred and selected to flower under day lengths of 10.5 hours; however, flower number increases under longer day lengths. Use proper sanitation when pinching or shearing petunia. Petunia and other solanaceous crops are highly susceptible to tobacco mosaic virus (TMV), which can be easily transmitted by mechanical means.

BACK TO CONTENTS

Petunia **SANGUNA®** *Petunia hybrida*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	PINCHES	FINISHING PROGRAM
pH: 5.5–5.9 SME 2.3–2.8 mS/cm, Pourthru EC: 3.5–4.2 mS/cm	4,000–6,000 foot candles	Facultative Long Day	64–66 °F (18–19 °C)	62–64 °F (17–18 °C)	200–250 ppm N	1–2 Pinches	1 qt. I 1 ppp I 5–6 weeks 1.25 qt. I 1 ppp I 7–8 weeks 2.5 qt. I 1 ppp I 8–9 weeks 3 qt. I 2–3 ppp I 8–9 weeks 1.5 gal. HB I 3 ppp I 9–10 weeks

PESTS	DISEASES	FINISH PGRS
Aphids, Thrips, Budworms, Leaf Miners, Whiteflies	Botrytis, Powdery Mildew, Viruses (TMV, TSWV)	B-Nine® (2500–5000 ppm) or Sumagic® (20–30 ppm) can be used to control growth. A tank-mix spray of Florel® (350–500 ppm) + B-Nine® (2500 ppm) can also be used to control growth and improve branching early in production. A Bonzi® drench (2–4 ppm) can be given 3–4 weeks before finishing.

VARIETY	VIGOR	TIMING	MPR
Sanguna® Blue 70004044	M-V	E	10.5 hrs.
Sanguna® Blue Vein 70004034	M-V	M	10.5 hrs.
Sanguna® Burgundy 70004047	M-V	M	10.5 hrs.
Sanguna® Deep Lavender Vein 70071592	M-V	E-M	10.5 hrs.
Sanguna® Hot Rose 70061526	M-V	E	10.5 hrs.
Sanguna® Light Blue 70055233	M-V	E-M	10.5 hrs.
Sanguna® Lipstick 70066655	M-V	E-M	10.5 hrs.
Sanguna® Mega Purple 70071605	M-V	E-M	10.5 hrs.
Sanguna® Merlot 70076445	M-V	M-L	13.5 hrs.
Sanguna® Picotee Punch 70071949	M	E	12 hrs.
Sanguna® Pink Vein 70008018	M	E-M	11 hrs.
Sanguna® Purple 70076459	M	E-M	11.5 hrs.
Sanguna® Radiant Blue 70053693	M-V	M-L	12 hrs.
Sanguna® Red 70055241	C-M	E	11.5 hrs.
Sanguna® Rose 70071602	M-V	E-M	10.5 hrs.
Sanguna® Rose Vein 70066666	M-V	E-M	11 hrs.
Sanguna® Star Rose 70076475	V	M-L	13.5 hrs.
Sanguna® Sweet Pink 70051190	M-V	E	13.5 hrs.
Sanguna® White 70076487	M	E	10.5 hrs.
Sanguna® White Vein 70004043	M-V	E	11.5 hrs.
Sanguna® Yellow 70061525	M-V	E	11.5 hrs.

Tech Tips: Keep media pH down in the mid 5's to avoid iron deficiency and tip chlorosis. Temperatures can be lowered three weeks after planting and especially towards the end of production to tone or hold the plant. High DLIs and cool finishing temperatures produce high-quality petunias. Use proper sanitation when pinching or shearing petunia. Petunia and other solanaceous crops are highly susceptible to Tobacco Mosaic Virus (TMV), which can be easily transmitted by mechanical means.

Petunia **SANGUNA® PATIO** *Petunia hybrida*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	PINCHES	FINISHING PROGRAM
pH: 5.5–5.9 SME 2.3–2.8 mS/cm, Pourthru EC: 3.5–4.2 mS/cm	4,000–6,000 foot candles	Facultative Long Day	70–72 °F (21–22 °C)	62–64 °F (17–18 °C)	200–250 ppm N	1–2 Pinches	1 qt. I 1 ppp I 5–6 weeks 1.25 qt. I 1 ppp I 7–8 weeks 2.5 qt. I 1 ppp I 8–9 weeks 3 qt. I 2–3 ppp I 8–9 weeks 1.5 gal. HB I 3 ppp I 9–10 weeks

PESTS	DISEASES	FINISH PGRS
Aphids, Thrips, Budworms, Leaf Miners, Whiteflies	Botrytis, Powdery Mildew, Viruses (TMV, TSWV)	B-Nine® (2500–3500 ppm) or Sumagic® (20 ppm) can be used to control growth. A tank-mix spray of Florel® (350–500 ppm) + B-Nine® (2500 ppm) can also be used to control growth and improve branching early in production. A Bonzi® drench (2–3 ppm) can be given 3–4 weeks before finishing and results in toned, high quality plants.

VARIETY	VIGOR	TIMING	MPR
Sanguna® Patio Blue 70055260	C-M	E	10.5 hrs.
Sanguna® Patio Blue Vein 70061517	C-M	E	10.5 hrs.
Sanguna® Patio Light Blue 70071613	C-M	M	10.5 hrs.
Sanguna® Patio Pink Morn 70055259	C-M	E-M	10.5 hrs.
Sanguna® Patio Purple 70051199	C-M	E-M	10.5 hrs.
Sanguna® Patio Purple Vein 70076417	C	E	10.5 hrs.
Sanguna® Patio Radiant Dark Blue 70071614	C-M	M	10.5 hrs.
Sanguna® Patio Radiant Rose 70055263	C-M	M-L	10.5 hrs.
Sanguna® Patio Red 70051200	C-M	M	11.5 hrs.
Sanguna® Patio Salmon 70008016	C-M	L	10.5 hrs.
Sanguna® Patio White 70071621	C-M	M	12 hrs.

Tech Tips: Keep media pH down in the mid 5's to avoid iron deficiency and tip chlorosis. Temperatures can be lowered three weeks after planting and especially towards the end of production to tone or hold the plant. High DLIs and cool finishing temperatures produce high-quality petunias. Sanguna Patio petunia was bred and selected to flower under day lengths of 10.5 hours; however, flower number increases under longer day lengths. Use proper sanitation when pinching or shearing petunia. Petunia and other solanaceous crops are highly susceptible to Tobacco Mosaic Virus (TMV), which can be easily transmitted by mechanical means.

BACK TO CONTENTS

Petunia **SHORTCAKE™** *Petunia hybrida*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	PINCHES	FINISHING PROGRAM
pH: 5.5–5.9 SME 2.3–2.8 mS/cm, Pourthru EC: 3.5–4.2 mS/cm	4,000–6,000 foot candles	Facultative long day	70–72 °F (21–22 °C)	62–64 °F (17–18 °C)	200–250 ppm N	1–2 Pinches	Packs I 1 ppp I 4–5 weeks Large Packs I 1 ppp I 4–5 weeks 1 qt. I 1 ppp I 5–6 weeks 1.25 qt. I 1 ppp I 7–8 weeks 2.5 qt. I 1 ppp I 8–9 weeks 3 qt. I 2–3 ppp I 8–9 weeks 1.5 gal. HB I 3 ppp I 9–10 weeks 1.5 gal. pot I 3–5 ppp I 10–12 weeks 2 gal. HB I 4 ppp I 9–10 weeks

PESTS	DISEASES	FINISH PGRS	VARIETY	VIGOR	TIMING	MPR
Aphid, Thrips, Budworms, Leaf Miners, Whiteflies	Botrytis, Powdery Mildew, Viruses (TMV, TSWV)	B-Nine® WSG (2500–3500 ppm) or Sumagic® (15–20 ppm) can be used to control growth. A tank-mix spray of Florel® (350–500 ppm) + B-Nine® WSG (2500 ppm) can also be used to control growth and improve branching early in production. Bonzi® drench (2 ppm) can be given 3–4 weeks before finishing.	Shortcake™ Blueberry 70076424	C	M-L	10.5 hrs.

Tech Tips: Keep media pH down in the mid 5's to avoid iron deficiency and tip chlorosis. Temperatures can be lowered three weeks after planting and especially towards the end of production to tone or hold the plant. High light and cool finishing temperatures produce high quality petunias. Shortcake Petunia was bred and selected to flower under day lengths of 10.5 hours; however, flower number increases under longer day lengths.

Salvia **VELOCITY™** *Salvia farinacea*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	PINCHES	FINISHING PROGRAM
pH: 5.8–6.2 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Day Neutral	72–74 °F (22–23 °C)	68–70 °F (20–21 °C)	200–250 ppm N	1 Pinch	1 qt. I 1 ppp I 6–7 weeks 1.25 qt. I 1 ppp I 8–9 weeks 2.5 qt. I 1 ppp I 9–10 weeks 3 qt. I 3 ppp I 9–10 weeks 1.5 gal. pot I 4 ppp I 10–11 weeks

PESTS	DISEASES	FINISH PGRS	VARIETY	VIGOR	TIMING
Whiteflies	Botrytis, Fungal Root Rot	Cycocel® (1000 ppm) + B-Nine® WSG (2500 ppm). A drench of Bonzi® (0.5–1 ppm) can be applied to control growth and works well mid to late in the crop cycle. (1000 ppm) + B-Nine® WSG (2500 ppm). A drench of Bonzi® (0.5–1 ppm) can be applied to control growth and works well mid to late in the crop cycle.	Velocity™ Blue 70020736	M	E

Tech Tips: Velocity is a fast flowering Salvia farinacea type with beautiful dark blue flowers. One pinch in either propagation or shortly after transplant is all that is needed. Plants fill in quickly once they become established. High light intensity is vital for optimum flowering. Make sure to let media dry down to level 2 between irrigation cycles. Overly wet conditions can lead to Fungal Root Rot.

Scaevola **BOMBAY®** *Scaevola aemula*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	PINCHES	FINISHING PROGRAM
pH: 5.8–6.2 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Day Neutral	76–78 °F (24–26 °C)	70–72 °F (21–22 °C)	200–250 ppm N	1 Pinch	1 qt. I 1 ppp I 6–7 weeks 1.25 qt. I 1 ppp I 8–9 weeks 2.5 qt. I 1 ppp I 9–10 weeks 3 qt. I 2–3 ppp I 9–10 weeks 1.5 gal. HB I 4 ppp I 10–11 weeks

PESTS	DISEASES	FINISH PGRS	VARIETY	VIGOR	TIMING
Thrips, Whiteflies	Fungal Root Rot	B-Nine® WSG (1,500–2,500 ppm), Sumagic® (5–10 ppm), or Bonzi® (10–15 ppm) can be used.	Bombay® Compact Dark Blue 70076128	C	E
			Bombay® Dark Blue 70020772	M	E
			Bombay® Pink 70050923	V	E
			Bombay® White 70020780	M	E
			Bombay® Yellow 70077414	M-V	E

Tech Tips: Bombay is typically slow rooting during propagation, especially Bombay Blue. Don't reduce mist too soon and continue to provide misting until all cuttings are rooted. Bombay Scaevolas likes high light and warm temperatures during finishing. Low temperatures, especially early on, can lead to root rot and dark purple foliage. Plants can be pinched twice for baskets and larger containers. Florel® in finished production can significantly delay flowering and is not recommended. Late B-Nine® WSG sprays can significantly reduce flower size.

Variegated Swedish Ivy **PLECTRANTHUS COLEOIDES** *Plectranthus coleoides*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	PINCHES	FINISHING PROGRAM
pH: 5.8–6.2 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Facultative short day	70–72 °F (21–22 °C)	64–66 °F (18–19 °C)	125–175 ppm N	1 Pinch	1 qt. I 1 ppp I 4–6 weeks 1.25 qt. I 2 to 3 ppp I 6–8 weeks 2.5 qt. I 2–3 ppp I 6–8 weeks 1.5 gal. HB I 4–5 ppp I 10–12 weeks

PESTS	DISEASES	FINISH PGRS	VARIETY	VIGOR	TIMING
Whiteflies, Mites	Botrytis	B-Nine® (1500–2500 ppm) alone or in combination with Cycocel® (750 to 1000 ppm) are usually sufficient to control growth. A Bonzi® drench (0.25–1 ppm) can also be used to control growth or to hold plants for sale. (1500–2500 ppm) alone or in combination with Cycocel® (750 to 1000 ppm) are usually sufficient to control growth. A Bonzi® drench (0.25–1 ppm) can also be used to control growth or to hold plants for sale.	Variegated 70004244	V	M

Tech Tips: To produce a more mounded-shaped plant, a second pinch during production (2 weeks after transplant) can help. To avoid root rots, Botrytis stem blight and edema allow the media to dry to level 2 as the plant matures. This plant serves as more of an accent to other annuals in larger combinations. Time and cooler temperatures will be required to either shape the plant for more of a mounded profile, or warmer temperatures and less pinching and PGRs will create a more trailing habit.

BACK TO CONTENTS

Verbena **LANAI®** *Verbena hybrida*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	PINCHES	FINISHING PROGRAM
pH: 5.8–6.2 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Facultative Long Day	70–72 °F (21–22 °C)	62–64 °F (17–18 °C)	200–250 ppm N	1–2 Pinches	1 qt. I 1 ppp I 6–7 weeks 1.25 qt. I 1 ppp I 8–9 weeks 2.5 qt. I 1 ppp I 9–10 weeks 3 qt. I 2–3 ppp I 9–10 weeks 1.5 gal. HB I 3–4 ppp I 10–11 weeks

PESTS	DISEASES	FINISH PGRS
Aphid, Thrips, Leaf Miners, Whiteflies	Botrytis, Viruses (TSWV), Cercospora and Corynespora Leaf Spot (primarily in propagation), Powdery Mildew (although Lanai Compact has been bred for Powdery Mildew tolerance)	B-Nine® (2500 ppm) or Sumagic® (5–10 ppm) can be used to control growth. A tank-mix spray of Florel® (350–500 ppm) + B-Nine® (2500 ppm) can also be used to control growth and improve branching early in production. A Bonzi® drench (2–3 ppm) can be given 3–4 weeks before finishing.

VARIETY	VIGOR	TIMING
Lanai® Blue 70004382	M	M
Lanai® Bright Eye 70008025	M	E-M
Lanai® Candy Cane 70060812	M	E
Lanai® Cyclops Purple 70065873	M	E
Lanai® Deep Pink 70004386	M	M
Lanai® Deep Purple 70004387	M	M
Lanai® Early Dark Red 70060817	M	E
Lanai® Lavender Star 70004388	M	M
Lanai® Magenta 70021349	M	M
Lanai® Neon Rose 70060805	M-V	E
Lanai® Peach 70021288	M	M-L
Lanai® Pink 70054663	M-V	E
Lanai® Purple 70083037	M	E
Lanai® Red 70004390	M	M
Lanai® Red Star 70060815	M	E
Lanai® Royal Purple with Eye 70004391	M	M-L
Lanai® Scarlet 70071255	M	E
Lanai® Scarlet with Eye 70021317	M	M-L
Lanai® Sky Blue 70071225	M	E
Lanai® Strawberry 70071226	M	E
Lanai® Twister™ Amethyst 70054662	M	E
Lanai® Twister™ Burgundy 70065899	M-V	E
Lanai® Twister™ Pink 70008020	M-V	M
Lanai® Twister™ Purple 70054665	M	M
Lanai® Twister™ Red 70075888	M	E
Lanai® Twister™ Star Purple 70075211	M	E
Lanai® Vintage 70054686	C-M	M
Lanai® White Imp. 70083036	M	E

Tech Tips: Transplant plugs on time since they can get quickly overgrown and root into other cells when left in plug trays for too long. A Bonzi® drench applied about 4 weeks before finishing is key to producing compact, mounded baskets and containers. Scout regularly for insects, especially Thrips (which can transmit Tomato Spotted Wilt Virus - TSWV). Don't let verbenas get extremely dry since this can cause leaf chlorosis, leaf necrosis, and loss (shattering) of flowers. Verbenas can be grown on the cool side to help control growth.

Verbena **LANAI® COMPACT** *Verbena hybrida*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	PINCHES	FINISHING PROGRAM
pH: 5.8–6.2 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Facultative Long Day	70–72 °F (21–22 °C)	62–64 °F (17–18 °C)	200–250 ppm N	1–2 Pinches	1 qt. I 1 ppp I 6–7 weeks 1.25 qt. I 1 ppp I 8–9 weeks 2.5 qt. I 1–2 ppp I 9–10 weeks 3 qt. I 3 ppp I 9–10 weeks 1.5 gal. HB I 4 ppp I 10–11 weeks

PESTS	DISEASES	FINISH PGRS
Aphid, Thrips, Leaf Miners, Whiteflies	Botrytis, Viruses (TSWV), Cercospora and Corynespora Leaf Spot (primarily in propagation), Powdery Mildew (although Lanai Compact has been bred for Powdery Mildew tolerance)	B-Nine® (1500 ppm) or Sumagic® (5 ppm) can be used to control growth. A tank-mix spray of Florel® (350–500 ppm) + B-Nine® (1500 ppm) can also be used to control growth and improve branching early in production. A Bonzi® drench (1–2 ppm) can be given 3–4 weeks before finishing.

VARIETY	VIGOR	TIMING
Lanai® Compact Candy Pink 70083028	C-M	E
Lanai® Compact Lime Green 70021307	C-M	E
Lanai® Compact Red 70051383	C-M	E
Lanai® Compact Red Star 70060847	C-M	E
Lanai® Compact Twister™ Purple 70060849	C-M	E
Lanai® Compact White 70065900	C-M	E

Tech Tips: Transplant plugs on time since they can get quickly overgrown and root into other cells when left in plug trays for too long. A Bonzi® drench applied about 4 weeks before finishing is key to producing compact, mounded baskets and containers. Scout regularly for insects, especially Thrips (which can transmit Tomato Spotted Wilt Virus - TSWV). Don't let verbenas get extremely dry since this can cause leaf chlorosis, leaf necrosis, and loss (shattering) of flowers. Verbenas can be grown on the cool side to help control growth.

BACK TO CONTENTS

Verbena **LANAI® UPRIGHT** *Verbena hybrida*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	PINCHES	FINISHING PROGRAM
pH: 5.8–6.2 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Facultative Long Day	70–72 °F (21–22 °C)	62–64 °F (17–18 °C)	200–250 ppm N	1–2 Pinches	1 qt. I 1 ppp I 6–7 weeks 1.25 qt. I 1 ppp I 8–9 weeks 2.5 qt. I 1 ppp I 9–10 weeks 3 qt. I 2–3 ppp I 9–10 weeks 1.5 gal. HB I 3–4 ppp I 10–11 weeks

PESTS	DISEASES	FINISH PGRS
Aphid, Thrips, Leaf Miners, Whiteflies	Botrytis, Viruses (TSWV), Cercospora and Corynespora Leaf Spot (primarily in propagation), Powdery Mildew (although Lanai Compact has been bred for Powdery Mildew tolerance)	B-Nine® (1500–2500 ppm) or Sumagic® (5–10 ppm) can be used to control growth. A tank-mix spray of Florel® (350–500 ppm) + B-Nine® (1500–2500 ppm) can also be used to control growth and improve branching early in production. A Bonzi® drench (2–3 ppm) can be given 3–4 weeks before finishing.

VARIETY	VIGOR	TIMING
Lanai® Upright Blue with Eye 70021299	M	M
Lanai® Upright Merlot with Eye 70083025	C-M	M
Lanai® Upright Peach 70083046	C	M-L
Lanai® Upright Pink with Eye 70051301	M	M-L
Lanai® Upright Purple 70075902	M	M
Lanai® Upright Purple Mosaic 70004401	C-M	M
Lanai® Upright Purple Velvet 70075898	M	M
Lanai® Upright Purple with Eye Imp. 70083031	M	M
Lanai® Upright Red with Eye 70054681	M	M
Lanai® Upright Rose with Eye 70021298	M	M
Lanai® Upright Scarlet 70075889	M	M
Lanai® Upright True Blue 70065887	C-M	E
Lanai® Upright Twister™ Purple 70065893	C-M	E
Lanai® Upright Twister™ Rose 70071244	C-M	E
Lanai® Upright Twister™ Watercolor 70065890	C-M	E
Lanai® Upright White 70054676	M	M

Tech Tips: Transplant plugs on time since they can get quickly overgrown and root into other cells when left in plug trays for too long. A Bonzi® drench applied about 4 weeks before finishing is key to producing compact, mounded baskets and containers. Scout regularly for insects, especially Thrips (which can transmit Tomato Spotted Wilt Virus - TSWV). Don't let verbenas get extremely dry since this can cause leaf chlorosis, leaf necrosis, and loss (shattering) of flowers. Verbenas can be grown on the cool side to help control growth.

Verbena **MAGELANA™** *Verbena hybrida*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	PINCHES	FINISHING PROGRAM
pH: 5.8–6.2 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Facultative Long Day	70–72 °F (21–22 °C)	62–64 °F (17–18 °C)	200–250 ppm N	1–2 Pinches	1 qt. I 1 ppp I 6–7 weeks 1.25 qt. I 1 ppp I 8–9 weeks 2.5 qt. I 1–2 ppp I 9–10 weeks 3 qt. I 3 ppp I 9–10 weeks 1.5 gal. HB I 4 ppp I 10–11 weeks

PESTS	DISEASES	FINISH PGRS
Aphids, Thrips, Leaf Miners, Whiteflies	Botrytis, Viruses (TSWV), Cercospora and Corynespora Leaf Spot (primarily in propagation), Powdery Mildew (although Magelana has been bred for Powdery Mildew tolerance)	B-Nine® (1500 ppm) or Sumagic® (5 ppm) can be used to control growth. A tank-mix spray of Florel® (350–500 ppm) + B-Nine® (1500 ppm) can also be used to control growth and improve branching early in production. A Bonzi® drench (1–2 ppm) can be given 3–4 weeks before finishing.

VARIETY	VIGOR	TIMING
Magelana™ Hot Rose 70004403	C-M	E-M
Magelana™ Lilac 70004404	C-M	E-M
Magelana™ Lipstick 70021336	C-M	M
Magelana™ Peach 70051384	C-M	E
Magelana™ Violet 70004394	C-M	M

Tech Tips: Transplant plugs on time since they can get quickly overgrown and root into other cells when left in plug trays for too long. A Bonzi® drench applied about 4 weeks before finishing is key to producing compact, mounded baskets and containers. Scout regularly for insects, especially Thrips (which can transmit Tomato Spotted Wilt Virus-TSWV). Don't let verbenas get extremely dry since this can cause leaf chlorosis, leaf necrosis, and loss (shattering) of flowers. Verbenas can be grown on the cool side to help control growth.

BACK TO CONTENTS

Vinca **NIRVANA® CASCADE** *Catharanthus roseus*

MEDIA pH/EC	LIGHT LEVEL	DAY LENGTH	DAY TEMP	NIGHT TEMP	FERTILIZER	PINCHES	FINISHING PROGRAM
pH: 5.8–6.2 SME 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm	4,000–6,000 foot candles	Day Neutral	76–78 °F (24–26 °C)	70–72 °F (21–22 °C)	200–250 ppm N	1 Pinch	1 qt. I 1 ppp I 6–7 weeks 1.25 qt. I 1 ppp I 8–9 weeks 2.5 qt. I 1–2 ppp I 9–10 weeks 3 qt. I 2–3 ppp I 9–10 weeks 1.5 gal. HB I 4 ppp I 10–11 weeks

PESTS	DISEASES	FINISH PGRS	VARIETY	VIGOR	TIMING
Thrips, Whiteflies	Fungal root, Basal Stem Rot	Cycocel® (750 ppm), B-Nine® WSG (2,500 ppm), or Cycocel® (750 ppm) + B-Nine® WSG (1,500–2,500 ppm) can be used depending on the growth rate and vigor of the plant. The Cycocel® + B-Nine® WSG combo spray will have a more growth regulating effect than either the Cycocel® or B-Nine® WSG spray alone. Sprays of A-Rest® (2 ppm) or Sumagic® (0.5 ppm) can also be applied if more growth control is needed.	Nirvana® Cascade Pink Splash 70018378	M	E

Tech Tips: Nirvana Cascade vinca requires high light and warm temperatures for high-quality plants. Avoid over-watering and cool temperatures during production. With adequate heat and light, one early pinch is all that is needed to produce well-branched plants. Nirvana Cascades work well in baskets. Avoid excessively cold mist water during propagation, or distorted young foliage can occur. Keep young plants fertilized during propagation to prevent bottom leaf yellowing. Heritage® or Mural® sprenches or drenches help prevent fungal Basal Stem Rot after transplant.

BACK TO CONTENTS

Wholesale Brokers

KEY

- Flower Seed Broker
- Flower Vegetative Broker
- Vegetable Seed Broker
- Seed – Cyclamen Only
- Catalog and/or Seed Retailer

Ball Horticultural Company
622 Town Rd
West Chicago, IL 60185, USA
Phone: +1 (630) 231-3500
Fax: +1 (630) 231-3605
www.ballhort.com

BFG Supply Co.
14500 Kinsman Rd
P.O. Box 479
Burton, OH 44021, USA
Phone: +1 (800) 883-0234
Fax: +1 (800) 368-4759
www.bfgsupply.com

Bill Moore & Company, Inc.
P.O. Box 1587
Brandon, FL 33509, USA
Phone: +1 (800) 237-7794
Fax: +1 (813) 684-5856
www.billmooreco.com

Bob Soos Company, LLC
P.O. Box 9
Middleville, MI 49333, USA
Phone: +1 (269) 795-7890
Fax: +1 (269) 795-7891

Burrell Seed Growers Company, D.V.
405 N Main St
P.O. Box 150
Rocky Ford, CO 81067, USA
Phone: +1 (844) 254-7333
Fax: +1 (719) 254-3319
www.burrellseeds.us

Charles Hart Seed Company
304 Main St
Wethersfield, CT 06109, USA
Phone: +1 (860) 529-2537
Fax: +1 (860) 529-7221

Earl May Seed & Nursery
208 N Elm St
Shenandoah, IA 51601, USA
Phone: +1 (712) 246-1020
Fax: +1 (712) 246-1760
www.earlmay.com

Eason Horticultural Resources, Inc.
939 Helen Ruth Dr
Fort Wright, KY 41017, USA
Phone: +1 (800) 214-2221
Fax: +1 (859) 578-2266
www.ehrnet.com

Ed Hume Seeds
11504 58th Ave E
Puyallup, WA 98373, USA
Phone: +1 (253) 435-4897
Fax: +1 (253) 435-5144
www.humeseeds.com

Express Seed Company
51051 U.S. Hwy 20
Oberlin, OH 44074, USA
Phone: +1 (800) 221-3838
Seeds Fax: +1 (440) 776-2126
Main Fax: +1 (440) 774-2728
www.expressseed.com

Fred C. Gloeckner & Co., Inc.
550 Mamaroneck Ave, Ste 510
Harrison, NY 10528, USA
Phone: +1 (800) 345-3789
Fax: +1 (914) 698-0848
www.fredgloeckner.com

Gardens Alive!
P.O. Box 4028
Lawrenceburg, IN 47025, USA
Phone: +1 (513) 354-1482
www.gardensalive.com

GeoSeed
121 Gary Rd
Hodges, SC 29653, USA
Phone: +1 (864) 227-5117
Fax: +1 (864) 227-5108
www.geoseed.com

Germania Seed Company
5978 N Northwest Hwy
P.O. Box 31787
Chicago, IL 60631, USA
Phone: +1 (800) 380-4721
Seeds Fax: +1 (773) 631-4449
Main Fax: +1 (800) 410-4721
www.germaniaseed.com

Griffin
4951 Indiana Ave, Ste 100
Lisle, IL 60532, USA
Phone: +1 (800) 323-7253
Fax: +1 (630) 969-6373
www.griffins.com

Grimes Horticulture
11335 Concord-Hambden Rd
Concord, OH 44077, USA
Phone: +1 (888) 241-7333
Fax: +1 (440) 352-1800
www.grimes-hort.com

Halifax Seed – Halifax
5860 Kane St
Halifax, NS B3K 5L8, Canada
Phone: +1 (902) 454-7456
Fax: +1 (902) 455-5271
www.halifaxseed.ca

Harris Seeds / Garden Trends
355 Paul Rd
Rochester, NY 14624, USA
Phone: +1 (800) 544 7938
Fax: +1 (877) 892-9197
www.harrisseeds.com

Henry F. Michell Company
225 West Church Rd / P.O. Box 60160
King Of Prussia, PA 19406, USA
Phone: +1 (800) 422-4678
Fax: +1 (610) 265-4208
www.michells.com

Hortus Group
P.O. Box 7446
Spreckels, CA 93962, USA
Phone: +1 (831) 755-0570
Fax: +1 (831) 755-0579
www.hortusgroup.com

HPS Catalog
334 West Stroud St, Ste 1
Randolph, WI 53956, USA
Phone: +1 (800) 322-7288
Fax: +1 (888) 477-7333
www.hpsseed.com

Ivy Garth Seeds & Plants, Inc.
8422 Mayfield Rd
Chesterland, OH 44026, USA
Phone: +1 (440) 729-7690
Fax: +1 (440) 729-7692
www.ivygarth.com

J.W. Jung Seed Company
335 S High St
Randolph, WI 53956, USA
Phone: +1 (920) 326-3121
Fax: +1 (920) 326-3120
www.jungseed.com

Johnny's Selected Seeds
955 Benton Ave
Winslow, ME 04901, USA
Phone: +1 (207) 861-3900
Fax: +1 (207) 861-8381
www.johnnyseeds.com

Joseph Giannino Company
17 N Rd
East Kingston, NH 03827, USA
Phone: +1 (888) 948-2001
Fax: +1 (603) 642-9230
www.josephgiannino.com

JVK
1894 Seventh St
P.O. Box 910
St. Catharines, ON L2R 6Z4, Canada
Phone: +1 (905) 641-5599
Fax: +1 (905) 684-6260
www.jvk.net

BACK TO CONTENTS

Wholesale Brokers *(cont.)*

Lake Valley Seed
5717 Arapahoe Ave
Boulder, CO 80303, USA
Phone: +1 (303) 449-4882
Fax: +1 (303) 449-8752
www.lakevalleyseed.com

Lindenberg Seeds, Ltd.
803 Princess Ave
Brandon, MB R7A 0P5, Canada
Phone: +1 (204) 727-0575
Fax: +1 (204) 727-2832
www.lindenbergseeds.ca

McHutchison
64 Mountain View Blvd
Wayne, NJ 07470, USA
Phone: +1 (800) 943-2230
Fax: +1 (866) 234-8884
www.mchutchison.com

Messick Company, LLC
142 N Central Ave
Campbell, CA 95008, USA
Phone: +1 (408) 871-9816
Fax: +1 (408) 871-9839
www.messickco.com

New England Seed Company
122 Park Ave, Building H
East Hartford, CT 06108, USA
Phone: +1 (800) 825-1610
Fax: +1 (877) 229-8487
www.neseed.com

Norseco, Inc.
2914 Cure-Labelle Blvd
Laval, QC H7P 5R9, Canada
Phone: +1 (800) 561-9693
Fax: +1 (800) 567-4694
www.norseco.com

Ontario Seed Company
77 Wellington St S
P.O. Box 7
Kitchener, ON N2G 2E6, Canada
Phone: +1 (519) 886-0557
Fax: +1 (519) 886-0605
www.oscseeds.com

Park Seed Wholesale
2 Parkton Ave
Greenwood, SC 29647, USA
Phone: +1 (800) 845-3366
Fax: +1 (800) 209-0360
www.parkwholesale.com

Plantation Products
202 S Washington St
Norton, MA 02766, USA
Phone: +1 (508) 285-5800
Fax: +1 (513) 354-1484
www.plantationproducts.com

Pinetree Garden Seeds
616 Lewiston Rd #A
New Gloucester, ME 04260, USA
Phone: +1 (207) 926-3400
www.superseeds.com

Raymond Perri Company, Inc.
8 Winding Trails Rd
Pine Bush, NY 12566, USA
Phone: +1 (845) 744-6801
Fax: +1 (845) 744-8473
www.raymondperri.com

Renee's Garden
6060 Graham Hill Rd
Felton, CA 95018, USA
Phone: +1 (888) 880-7228
Fax: +1 (831) 335-7227
www.reneesgarden.com

Ron Iwasaki Horticultural Sales
25500 Melott Rd
Hillsboro, OR 97123, USA
Phone: +1 (503) 628-1969
Fax: +1 (503) 628-1122

Seeds 'n Such
571 Whaley Pond Road
Graniteville, SC 29829, USA
Phone: +1 (803)-663-1501
www.seedsnsuch.com

Stokes Seeds, Inc.
P.O. Box 548
Buffalo, NY 14240, USA
Phone: +1 (905) 688-3634
Fax: +1 (905) 684-6106
www.stokeseeds.com

T&T Seeds, Ltd.
7724 Robin Blvd
Winnipeg, MB R4H 1B1, Canada
Phone: +1 (204) 895-9962
Fax: +1 (204) 895-9967
www.ttseeds.com

Territorial Seed Company
P.O. Box 157
Cottage Grove, OR 97424, USA
Phone Orders: +1 (800) 626-0866
Fax Orders: +1 (888) 657-3131
www.territorial-seed.com

Tomato Growers Supply
P.O. Box 60015
Fort Myers, FL 33906, USA
Phone: +1 (888) 478-7333 or
+1 (239) 768-1119
Fax: +1 (888) 768-1119
www.tomatogrowers.com

Twilley Seed
121 Gary Rd
Hodges, SC 29653, USA
Phone: +1 (864) 227-5150
Fax: +1 (864) 227-5108
www.twilleyseed.com

Urban Farmer
120 E 161st St
Westfield, IN 46074, USA
Phone: +1 (317) 600-2807
www.ufseeds.com

Valley Horticultural Seeds
P.O. Box 952
Mission, TX 78573, USA
Phone: +1 (956) 585-2115

Vaughan's Horticulture
40 Shuman Blvd #120
Naperville, IL 60563, USA
Phone: +1 (855) 864-3300
Fax: +1 (855) 864-5790
www.vaughans.com

Veseys Seeds, Ltd.
411 York Rd
York, PE C0A 1P0, Canada
Phone: +1 (800) 363-7333
www.veseys.com

Vis Seed Company, Inc.
P.O. Box 661953
Arcadia, CA 91006, USA
Phone: +1 (626) 445-1233
Fax: +1 (626) 445-3779
www.visseed.com

W. Atlee Burpee & Co.
300 Park Ave
Warminster, PA 18974, USA
Phone: +1 (215) 674-4900
www.burpee.com

WeHoP (Western Horticulture Products, Inc.)
P.O. Box 1109
Port Hadlock, WA 98339, USA
Phone: +1 (800) 669-6480
Fax: +1 (360) 344-3555
www.wehop.com

West Coast Seeds
5300 34B Ave
Delta, BC V4L 2P1, Canada
Phone: +1 (604) 952-8820
Fax: +1 (604) 952-8828
www.westcoastseeds.com

William Dam Seeds
279 Hwy 8
Dundas, ON L9H 5E1, Canada
Phone: +1 (905) 628-6641
Fax: +1 (905) 627-1729
www.damseeds.com

Wyatt Quarles Seed Company
730 Hwy 70 West
Garner, NC 27529, USA
Phone: +1 (919) 772-4243
Fax: +1 (919) 772-4278
www.wqseeds.com

BACK TO CONTENTS

Root 'n' Sells

KEY

- Geranium
- NGI
- Annual
- Poinsettia
- Mum
- Dipladenia
- Perennial

Al's Garden Center & Greenhouse
7505 SE Hogan Rd
Gresham, OR 97080, USA
Phone: +1 (503) 491-0771
www.als-gardencenter.com

Amos Zittle and Sons
3275 Webster Rd
Eden, NY 14057, USA
Phone: +1 (716) 649-6340
Fax: +1 (716) 619-6347

Aris Horticulture (Keepsake/Green Leaf Plants)
115 Third St SE
Barberton, OH 44203, USA
Phone: +1 (330) 745-2143
Fax: +1 (330) 745-3098
www.arishort.com

Ball Tagawa Growers
819 Zenon Wy
Arroyo Grande, CA 93420, USA
Phone: +1 (805) 481-7526

Barone Gardens
6200 S Bay Rd
Cicero, NY 13039, USA
Phone: +1 (315) 699-4724
Fax: +1 (315) 699-2081
www.bgardens.com

Battlefield Farms / Heritage
23190 Clarks Mountain Rd
Rapidan, VA 22733, USA
Phone: +1 (800) 722-0744
www.battlefieldfarms.com

Burnaby Lake Greenhouses
17250 80th Ave
Surrey, BC V4N 6J6, Canada
Phone: +1 (604) 579-2088
www.burlake.com

Conroe Greenhouses, Inc.
111 Vick Spring Rd
Huntsville, TX 77340, USA
Phone: +1 (936) 436-1800

D.S. Cole Growers
251 N Village Rd
Loudon, NH 03307, USA
Phone: +1 (603) 783-9561
Fax: +1 (603) 783-9562
www.dscolegrowers.com

Deibel
6810 W Hwy 146
Crestwood, KY 40014, USA
Phone: +1 (502) 241-4459

DGI Propagators
7073 40th Ave
Hudsonville, MI 49426, USA
Phone: +1 (616) 669-0552
www.dgiprop.com

Dickman Farms
13 Archie St
Auburn, NY 13021, USA
Phone: +1 (315) 253-3030

Esbenshade
546 E 28th Division Hwy
Lititz, PA 17543, USA
Phone: +1 (717) 626-7007
www.esbenshades.com

Fessler Nursery
12666 Monitor McKee Rd NE
Woodburn, OR 97071, USA
Phone: +1 (503) 634-2448

Five Acre Farm
110 Hinsdale Rd
Northfield, MA 01360, USA
Phone: +1 (413) 498-2208

Green Circle Growers Greenhouses
15809 State Rte 511
Oberlin, OH 44074, USA
Phone: +1 (440) 775-1411
Fax: +1 (440) 774-1465
www.greencirclegrowers.com

Greenstreet
P.O. Box 410
Tracys Landing, MD 20711, USA
Phone: +1 (410) 867-9500
www.growgreenstreet.com

Gro 'n Sell, Inc.
320 Lower State Rd
Chalfont, PA 18914, USA
Phone: +1 (215) 822-1276
www.gro-n-sell.com

Gulley Greenhouse
6029 S Shields St
Fort Collins, CO 80526, USA
Phone: +1 (800) 642-8028
www.gulleygreenhouse.com

James Greenhouses
1699 Crawford Smithonia Rd
Colbert, GA 30628, USA
Phone: +1 (706) 742-7802
www.jamesgreenhouses.com

Jay W. Guild Wholesale Growers
36400 County Rd 48
Peconic, NY 11958, USA
Phone: +1 (631) 765-5299
Fax: +1 (631) 765-9479

Jolly Farmer
P.O. Box 787
Bangor, ME 04401, USA
Phone: +1 (506) 325-3850
Fax: +1 (800) 863-7814
www.jollyfarmer.com

Knox Nursery, Inc.
940 Avalon Rd
Winter Garden, FL 34787, USA
Phone: +1 (407) 654-1972
www.knoxnursery.com

Kube Pak Corp
194 Rte 526
Allentown, NJ 08501, USA
Phone: +1 (609) 259-3114
www.kubepak.com

Linwell Gardens
4760 Lincoln Ave
Beamsville, ON L0R 1B3, Canada
Phone: +1 (905) 563-6383
www.linwellgardens.com

Lucas Greenhouses
1049 Whig Ln
Monroeville, NJ 08343, USA
Phone: +1 (856) 881-0234
www.lucasgreenhouses.com

Malmborgs, Inc.
20045 County Rd 81
Rogers, MN 55374, USA
Phone: +1 (763) 428-2061
Fax: +1 (763) 428-8408
www.malmborgsinc.com

Mast Young Plants
1780 4 Mile Rd NW
Grand Rapids, MI 49544, USA
Phone: +1 (616) 784-0583
www.mastyoungplants.com

Millstadt Young Plants
6627 State Rte 158
Millstadt, IL 62260, USA
Phone: +1 (618) 476-7200
www.millstadtyoungplants.com

BACK TO CONTENTS

Root ‘n’ Sells *(cont.)*

Noel Wilson and Sons
1776 Notre Dame
St Remi, QC J0L 2L0, Canada
Phone: +1 (450) 454-9210
Fax: +1 (450) 454-6496

Pacific Growers
9131 Markworth Rd
Blaine, WA 98230, USA
Phone: +1 (360) 354-1977
Fax: +1 (360) 354-8677
www.pacificgrowersinc.com

Pacific Plug and Liner
750 Casserly Rd
Wastonville, CA 95076, USA
Phone: +1 (831) 722-5396
www.ppandl.com

Pioneer Gardens
198 Mill Village Rd
Deerfield, MA 01342, USA
Phone: +1 (413) 773-5360
www.pioneergardens.com

Plantpeddler
530 Second Ave SW
Cresco, IA 52136, USA
Phone: +1 (800) 827-1654
Fax: +1 (563) 547-5792
www.plantpeddler.com

Pleasant View Gardens
7316 Pleasant St
Pembroke, NH 03307, USA
Phone: +1 (603) 435-8361
www.pvg.com

Plug Connection
2627 Ramona Dr
Vista, CA 92084, USA
Phone: +1 (760) 631-0992
www.plugconnection.com

Rakers-Roberta’s
10371 Rainey Rd
Litchfield, MI 49252, USA
Phone: +1 (517) 542-2316
Fax: +1 (517) 542-2565
www.raker.com

Schaefer Greenhouses
120 S Lake St
Montgomery, IL 60538, USA
Phone: +1 (630) 896-1936
www.schaefergreenhouses.com

Schenck Farms & Greenhouses
1396 South Service Rd
St Catharines, ON L2R 6P9, Canada
Phone: +1 (905) 684-5478
Fax: +1 (905) 684-5478
www.schenckfarms.com

Skagit Gardens
14113 River Bend Rd
Mount Vernon, WA 98272, USA
Phone: +1 (800) 334-1719
Fax: +1 (800) 874-1456
www.skagitgardens.com

Sunbelt Greenhouses
200 Thompson Dr
Douglas, GA 31535, USA
Phone: +1 (912) 384-3806
www.sunbeltgreenhouses.com

Swift Greenhouses
2724 300th St
Gilman, IA 50106, USA
Phone: +1 (641) 478-3217
www.swiftgreenhouses.com

Tagawa Greenhouses Entp
17999 Co Rd 4
Brighton, CO 80603, USA

Timbuk
2030 Timbuk Rd
Granville, OH 43023, USA
Phone: +1 (740) 587-2178
www.timbukfarms.com

Van De Wetering Greenhouse
5784 Sound Ave
Jamesport, NY 11947, USA
Phone: +1 (631) 722-8757
Fax: +1 (631) 722-8765
www.vdwgreenhouses.com

Walter’s Gardens
1992 96th Ave
Zeeland, MI 49464, USA
Phone: +1 (616) 772-5697
www.waltersgardens.com

Welby Gardens Co., Inc.
2761 E 74th Ave
Denver, CO 80229, USA
Phone: +1 (303) 288-3398
www.hardyboyplant.com

Wenke Greenhouses
2525 North 30th St
Kalamazoo, MI 49048, USA
Phone: +1 (269) 349-7882
www.wenkewholesale.com

Wessel’s Farms, Inc.
94 Bull Rd
Otisville, NY 10963, USA
Phone: +1 (845) 386-5681
Fax: +1 (845) 386-5681
www.wesselsfarms.com

BACK TO CONTENTS

Drops & Substitutions

Vegetative

DISCARD VARIETY	SUBSTITUTE VARIETY
Aurelia™ Yellow 70036102	Caleo™ Yellow 70060726
Callie® Sky Blue 70073676	Callie® Light Blue 70008012
Callie® Orange Sunrise 70018467	Callie® Star Orange 70073033
Callie® Sunset Glow 70073040	Callie® Star Orange 70073033
Classic™ Mosaic Purple 70004097	
Classic™ Mosaic Red 70004098	
Cuphoric™ Pink 70008301	Euphoric™ White Imp. 70087276
Dahlegria® Red 70082928	Dahlegria® Red Imp. 70089151
Darla® Appleblossom 70003543	Darla® Light Pink 70003545
Euphoric™ White 70019405	Euphoric™ White Imp. 70087276
Happy Days™ Purple 70037238	Happy Days™ Purple Imp. 70089150
Lanai® Blue Eyes 70054659	Lanai® Sky Blue 70071225
Lanai® Compact Scarlet 70054688	Lanai® Compact Red 70051383
Lanai® Purple Star 70004399	Lanai® Twister™ Star Purple 70075211
Lanai® Upright Limoncello 70060836	Lanai® Upright Twister™ Watercolor 70065890
Lanai® Upright Purple with Eye 70054684	Lanai® Upright Purple with Eye Imp. 70083031
Lanai® Upright Twister™ Red 70065891	Lanai® Upright Twister™ Rose 70071244

DISCARD VARIETY	SUBSTITUTE VARIETY
Lanai® White 70051372	Lanai® White Imp. 70083036
Magelana™ Plum Frost 70007998	Magalena™ Hot Rose 70004403
Midalio™ Burgundy 70069980	Grandalia™ Burgundy 70076369
Midalio™ Dark Red 70052836	Grandalia™ Dark Red 70052845
Midalio™ Dark Rose 70076387	Grandalia™ Dark Rose 70076370
Midalio™ Orange 70065102	Grandalia™ Orange 70019193
Midalio™ Pink 70019184	Grandalia™ Pink 70019196
Midalio™ Red 70076394	Grandalia™ Red 70051544
Midalio™ White 70019176	Grandalia™ White 70076384
Midalio™ Yellow Imp. 70076396	Grandalia™ Yellow 70019190
Moxie!™ White 70065928	Moxie!™ White Imp. 70080236
Phoenix™ Appleblossom 70004264	Phoenix™ Pink 70004267
Phoenix™ Lavender 70004265	Phoenix™ Violet 70004268
Rocky Mountain™ Royal Red 70006934	Rocky Mountain™ Dark Red 70006932
Techno® Upright Delft Blue 70065206	Techno® Upright Light Blue 70052754
Tradewinds® Cinnamon 70020014	Tradewinds® Terracotta 70055272

Kwik Kombos™

DISCARD VARIETY	SUBSTITUTE VARIETY
Kwik Kombos™ Blue Breeze™ Mix 70082841	Spring Showers™ Mix 70089748
Kwik Kombos™ Callie® Pink Bliss™ Mix 70082844	Callie® Patio Selfie™ Mix 70066224
Kwik Kombos™ Curb Appeal™ Mix Imp. 70089713	Kwik Kombos™ Curb Appeal™ Mix Imp. 70096564
Kwik Kombos™ Effortless Beauty™ Mix 70071067	Walk of Stars™ Mix 70089741
Kwik Kombos™ Grand Finale™ Mix 70071074	Summer Fun™ Mix 70089726
Kwik Kombos™ Mom's Favorite™ Mix 70071388	Mom's Chosen One™ 70066217

DISCARD VARIETY	SUBSTITUTE VARIETY
Kwik Kombos™ Pops Goes The Combo™ Mix 70082480	Royal Gold™ Mix 70089745
Kwik Kombos™ Royal Duchess™ Mix 70089745	Kwik Kombos™ Royal Duchess™ Mix Imp. 70096563
Kwik Kombos™ Sangria and Sunsets™ Mix Imp. 70089721	Mai Tai™ Mix 70089721
Kwik Kombos™ Spring Breeze™ Mix Imp. 70089724	Kwik Kombos™ Spring Breeze™ Mix Imp. 70096565
Kwik Kombos™ World's Fair™ Mix Imp. 70089729	Kwik Kombos™ World's Fair™ Mix Imp. 70096566

Seed

For seeds drops and substitutions, please visit **www.syngentaflowers-us.com** or contact your preferred Syngenta broker representative.

BACK TO CONTENTS

Syngenta Flowers NA Headquarters, Gilroy, CA.
Snaptini™ Scarlet, Sunglow, and Peach

Utility Patents

US Patents

PATENT VARIETY	PATENT NUMBER
Calliope® Large Dark Red	Patent US8084674
Delta™ Speedy Rose Medley	Patent US9839184
Sparkler™ Blush Sparkler™ Lavender Sparkler™ Rose Sparkler™ White Sparkler™ Mix	Patent US6586663

US Patent Pending

PATENT VARIETY	PATENT STATUS
Falling Star™ Rose Falling Star™ White Falling Star™ Pink Bicolor Falling Star™ Hot Pink Falling Star™ Red	Patent Pending
Imara™ XDR	Patent Pending
Sunfinity® Yellow Dark Center	Patent Pending

BACK TO CONTENTS

syngenta flowers

2280 Hecker Pass Highway
Gilroy, California 95020 USA

p. (408) 847-7333
(800) 549-0158
US ONLY

f. (408) 848-5429

syngentaflowers-us.com

FRONT PHOTO:
FotoFinish™ Spreading Petunia series

BACK PHOTO:
Mojo™ Cranberry Splash Geranium Interspecific

All photos are either the property of Syngenta or are used with permission.

© 2020 Syngenta. **Some or all of the varieties may be protected under one or more of the following: Plant Variety Protection, United States Plant Patents, Utility Patents, and/or Plant Breeders' Rights and may not be propagated or reproduced without authorization.** Syngenta is licensed to sell the liner contained in Kwik Kombos™ products under Dümmen's U.S. Patent No. 7.891.134. The trademarks or service marks displayed or otherwise used herein are the property of a Syngenta Group Company. All other trademarks are the property of their respective owners.

SFL 2208A 02/2020