

PanAmerican Seed.

ALL NEW FOR 2020!

Take a closer look at the new PanAmerican Seed® varieties.

We are pleased to offer you an exciting lineup of new flowers, vegetables and herbs for 2020 - all trialed to meet our quality, consistency and performance standards, and designed to enhance your current assortment.

We've got more exciting selling opportunities in our **Plug & Play®** combo program, including selections that blend premium perennials and annuals, as well as ornamental peppers, to boost Summer and Autumn sales. You'll find new colours and a new seed form in **Kabloom®** calibrachoa. The powerhouse Rockin' dianthus rocks out with bold new colours. Three stellar new series of pot plants will capture first-time gardeners. Plus, blockbuster **Orange Marmalade** sweet bell peppers are sure to please fresh market shoppers.

In 2020, PanAmerican Seed is also celebrating the 25th anniversary of the introduction of **Wave®** petunias! The Authentic Trailing Petunia series continues to improve...with garden performance that's better than ever, along with that magnificent spread that consumers love.

And with our **reliable, consistent supply,** you can be assured all your favorite varieties will be available when and where you need them. We are continually investing in our farms to provide even better quality and availability. We offer the highest standard in customer service to provide you with the answers you need. With a diverse and wide assortment for you to choose from, we are your number one choice for seed!

So, let's get growing!



XXL Plug & Play Combos	5
Plug & Play Combos with Premium Annuals	8



Angelonia	
Serena® Rose	11
Serenita® Rose	11
Bacopa Pinktopia	16
Begonia (Tuberous) AmeriHybrid® Picotee Calypso	12 12 12 12 12
AmeriHybrid® Roseform Peach AmeriHybrid Roseform Pink AmeriHybrid Roseform Red AmeriHybrid Roseform Rose AmeriHybrid Roseform Salmon AmeriHybrid Roseform Scarlet Orange AmeriHybrid Roseform White AmeriHybrid Roseform Yellow	13 13 13 13 13
AmeriHybrid® Ruffled Apricot AmeriHybrid Ruffled Coral Salmon AmeriHybrid Ruffled Mandarin Orange AmeriHybrid Ruffled Pink AmeriHybrid Ruffled Rose AmeriHybrid Ruffled Scarlet Red AmeriHybrid Ruffled White AmeriHybrid Ruffled Yellow	14 14 14 14 14
On Top® Fandango On Top Melon Lace On Top Pink Halo On Top Sun Glow On Top Sunset Shades	15 15 15
Sun Dancer Apricot Sun Dancer Pink Sun Dancer Red Sun Dancer Salmon Sun Dancer Scarlet Orange Sun Dancer White Sun Dancer White Pink Picotee Sun Dancer Yellow Sun Dancer Yellow Red Picotee	15 15 15 15 15 15

Calibrachoa
Kabloom® Blue
Kabloom Cherry 17 Kabloom Coral 17
Kabloom Light Pink Blast
Kabloom Orange
Kabloom Pink17
Kabloom Pink
Celosia
Ice Cream Yellow Improved
Ice Cream Mixture Improved16
Cosmos
Mandarin18
Sonata Red Shades18
Sonata Mixture Improved18
C. de .
Cuphea Pink Shimmer18
rink Snimmer10
Dianthus
Corona Mixture
Floral Lace Red19
Euphorbia Glamour Improved20
Glamour Improved20
Gazania
New Day® Yellow Improved20
Trew Bay Tellow Improved20
Marigold (French)
Flamenco
_
Osteospermum
Akila® Šunset Shades21
Spreading Pansy
Cool Wave® Raspberry Swirl23
Cool Wave Strawberry Swirl23
, .
Extra-Large Flowered Pansy
Matrix® Blue Blotch Improved22
Matrix® Blue Blotch Improved
Matrix® Blue Blotch Improved22
Matrix® Blue Blotch Improved 22 Matrix Midnight Glow 22 Matrix Yellow Purple Wing 22
Matrix® Blue Blotch Improved 22 Matrix Midnight Glow 22 Matrix Yellow Purple Wing 22 Large-Flowered Pansy
Matrix® Blue Blotch Improved 22 Matrix Midnight Glow 22 Matrix Yellow Purple Wing 22
Matrix® Blue Blotch Improved 22 Matrix Midnight Glow 22 Matrix Yellow Purple Wing 22 Large-Flowered Pansy Promise® Blue Blotch Improved 22 Ruffled Pansy
Matrix® Blue Blotch Improved 22 Matrix Midnight Glow 22 Matrix Yellow Purple Wing 22 Large-Flowered Pansy Promise® Blue Blotch Improved 22
Matrix® Blue Blotch Improved 22 Matrix Midnight Glow 22 Matrix Yellow Purple Wing 22 Large-Flowered Pansy Promise® Blue Blotch Improved 22 Ruffled Pansy Frizzle Sizzle Lemonberry 21
Matrix® Blue Blotch Improved
Matrix® Blue Blotch Improved 22 Matrix Midnight Glow 22 Matrix Yellow Purple Wing 22 Large-Flowered Pansy 22 Promise® Blue Blotch Improved 22 Ruffled Pansy 21 Frizzle Sizzle Lemonberry 21 Pentas 24 Lucky Star® Lipstick 24
Matrix® Blue Blotch Improved
Matrix® Blue Blotch Improved 22 Matrix Midnight Glow 22 Matrix Yellow Purple Wing 22 Large-Flowered Pansy 22 Promise® Blue Blotch Improved 22 Ruffled Pansy 21 Frizzle Sizzle Lemonberry 21 Pentas 24 Lucky Star® Lipstick 24 Lucky Star White Improved 24 Spreading Petunia 25 Wave® Carmine Velour 25 Grandiflora Double Petunia
Matrix® Blue Blotch Improved
Matrix® Blue Blotch Improved 22 Matrix Midnight Glow 22 Matrix Yellow Purple Wing 22 Large-Flowered Pansy 22 Promise® Blue Blotch Improved 22 Ruffled Pansy 25 Frizzle Sizzle Lemonberry 21 Pentas 24 Lucky Star® Lipstick 24 Lucky Star White Improved 24 Spreading Petunia 25 Wave® Carmine Velour 25 Grandiflora Double Petunia 20 Double Cascade Valentine 24 Primula 26 Optic Gold 26 Optic Scarlet Flame 26
Matrix® Blue Blotch Improved 22 Matrix Midnight Glow 22 Matrix Yellow Purple Wing 22 Large-Flowered Pansy 22 Promise® Blue Blotch Improved 22 Ruffled Pansy 21 Pentas 24 Lucky Star® Lipstick 24 Lucky Star White Improved 24 Spreading Petunia 25 Easy Wave® Lavender Sky Blue 25 Wave® Carmine Velour 25 Grandiflora Double Petunia 24 Primula 24 Optic Gold 26 Optic Scarlet Flame 26 Verbena 26
Matrix® Blue Blotch Improved 22 Matrix Midnight Glow 22 Matrix Yellow Purple Wing 22 Large-Flowered Pansy 22 Promise® Blue Blotch Improved 22 Ruffled Pansy 25 Frizzle Sizzle Lemonberry 21 Pentas 24 Lucky Star® Lipstick 24 Lucky Star White Improved 24 Spreading Petunia 25 Wave® Carmine Velour 25 Grandiflora Double Petunia 20 Double Cascade Valentine 24 Primula 26 Optic Gold 26 Optic Scarlet Flame 26
Matrix® Blue Blotch Improved 22 Matrix Midnight Glow 22 Matrix Yellow Purple Wing 22 Large-Flowered Pansy 22 Promise® Blue Blotch Improved 22 Ruffled Pansy 21 Pentas 24 Lucky Star® Lipstick 24 Lucky Star White Improved 24 Spreading Petunia 25 Easy Wave® Lavender Sky Blue 25 Wave® Carmine Velour 25 Grandiflora Double Petunia 24 Primula 24 Optic Gold 26 Optic Scarlet Flame 26 Verbena 26
Matrix® Blue Blotch Improved 22 Matrix Midnight Glow 22 Matrix Yellow Purple Wing 22 Large-Flowered Pansy 22 Promise® Blue Blotch Improved 22 Ruffled Pansy 21 Frizzle Sizzle Lemonberry 21 Pentas 24 Lucky Star® Lipstick 24 Lucky Star White Improved 24 Spreading Petunia 25 Easy Wave® Lavender Sky Blue 25 Grandiflora Double Petunia 20 Double Cascade Valentine 24 Primula 26 Optic Gold 26 Optic Scarlet Flame 26 Verbena 20 Quartz XP Bordeaux 26 Viola Frizzle Sizzle Mini Purple Shades 28
Matrix® Blue Blotch Improved 22 Matrix Midnight Glow 22 Matrix Yellow Purple Wing 22 Large-Flowered Pansy 22 Promise® Blue Blotch Improved 22 Ruffled Pansy 21 Frizzle Sizzle Lemonberry 21 Pentas 24 Lucky Star® Lipstick 24 Lucky Star White Improved 24 Spreading Petunia 25 Easy Wave® Lavender Sky Blue 25 Grandiflora Double Petunia 20 Double Cascade Valentine 24 Primula 26 Optic Gold 26 Optic Scarlet Flame 26 Verbena 20 Quartz XP Bordeaux 26 Viola Frizzle Sizzle Mini Purple Shades 28
Matrix® Blue Blotch Improved 22 Matrix Midnight Glow 22 Matrix Yellow Purple Wing 22 Large-Flowered Pansy 22 Promise® Blue Blotch Improved 22 Ruffled Pansy 21 Frizzle Sizzle Lemonberry 21 Pentas 24 Lucky Star® Lipstick 24 Lucky Star White Improved 24 Spreading Petunia 25 Wave® Carmine Velour 25 Grandiflora Double Petunia 20 Double Cascade Valentine 24 Primula 26 Optic Gold 26 Optic Scarlet Flame 26 Verbena 26 Quartz XP Bordeaux 26 Viola 28 Frizzle Sizzle Mini Purple Shades 28 Frizzle Sizzle Mini Tapestry 28 Frizzle Sizzle Mini Yellow 28
Matrix® Blue Blotch Improved 22 Matrix Midnight Glow 22 Matrix Yellow Purple Wing 22 Large-Flowered Pansy 22 Promise® Blue Blotch Improved 22 Ruffled Pansy 21 Frizzle Sizzle Lemonberry 21 Pentas 24 Lucky Star® Lipstick 24 Lucky Star White Improved 24 Spreading Petunia 25 Easy Wave® Lavender Sky Blue 25 Grandiflora Double Petunia 20 Double Cascade Valentine 24 Primula 26 Optic Gold 26 Optic Scarlet Flame 26 Verbena 20 Quartz XP Bordeaux 26 Viola Frizzle Sizzle Mini Purple Shades 28
Matrix® Blue Blotch Improved 22 Matrix Midnight Glow 22 Matrix Yellow Purple Wing 22 Large-Flowered Pansy 22 Promise® Blue Blotch Improved 22 Ruffled Pansy 21 Frizzle Sizzle Lemonberry 21 Pentas 24 Lucky Star® Lipstick 24 Lucky Star White Improved 24 Spreading Petunia 25 Easy Wave® Lavender Sky Blue 25 Grandiflora Double Petunia 20 Double Cascade Valentine 24 Primula 26 Optic Gold 26 Optic Scarlet Flame 26 Verbena 2 Quartz XP Bordeaux 26 Viola 2 Frizzle Sizzle Mini Purple Shades 28 Frizzle Sizzle Mini Yellow 28 Frizzle Sizzle Mini Mixture 28 Frizzle Sizzle Mini Mixture 28
Matrix® Blue Blotch Improved 22 Matrix Midnight Glow 22 Matrix Yellow Purple Wing 22 Large-Flowered Pansy 22 Promise® Blue Blotch Improved 22 Ruffled Pansy 21 Frizzle Sizzle Lemonberry 21 Pentas 24 Lucky Star® Lipstick 24 Lucky Star White Improved 24 Spreading Petunia 25 Wave® Carmine Velour 25 Grandiflora Double Petunia 20 Double Cascade Valentine 24 Primula 26 Optic Gold 26 Optic Scarlet Flame 26 Verbena 2 Quartz XP Bordeaux 26 Viola 2 Frizzle Sizzle Mini Purple Shades 28 Frizzle Sizzle Mini Tapestry 28 Frizzle Sizzle Mini Mixture 28 Quicktime Blue Purple Jump Up 27
Matrix® Blue Blotch Improved 22 Matrix Midnight Glow 22 Matrix Yellow Purple Wing 22 Large-Flowered Pansy 22 Promise® Blue Blotch Improved 22 Ruffled Pansy 21 Frizzle Sizzle Lemonberry 21 Pentas 24 Lucky Star® Lipstick 24 Lucky Star White Improved 24 Spreading Petunia 25 Wave® Carmine Velour 25 Grandiflora Double Petunia 20 Double Cascade Valentine 24 Primula 26 Optic Gold 26 Optic Scarlet Flame 26 Verbena 2 Quartz XP Bordeaux 26 Viola 28 Frizzle Sizzle Mini Purple Shades 28 Frizzle Sizzle Mini Tapestry 28 Frizzle Sizzle Mini Mixture 28 Quicktime Blue Purple Jump Up 27 Quicktime Lemon Jump Up 27
Matrix® Blue Blotch Improved
Matrix® Blue Blotch Improved 22 Matrix Midnight Glow 22 Matrix Yellow Purple Wing 22 Large-Flowered Pansy 22 Promise® Blue Blotch Improved 22 Ruffled Pansy 21 Frizzle Sizzle Lemonberry 21 Pentas 24 Lucky Star® Lipstick 24 Lucky Star White Improved 24 Spreading Petunia 25 Wave® Carmine Velour 25 Grandiflora Double Petunia 20 Double Cascade Valentine 24 Primula 26 Optic Gold 26 Optic Scarlet Flame 26 Verbena 2 Quartz XP Bordeaux 26 Viola 28 Frizzle Sizzle Mini Purple Shades 28 Frizzle Sizzle Mini Tapestry 28 Frizzle Sizzle Mini Mixture 28 Quicktime Blue Purple Jump Up 27 Quicktime Lemon Jump Up 27

Sorbet® XP Neptune28 Zinnia Zesty Fuchsia29 Zesty Pink29	
Zesty Fuchsia	3
Zesty Purple29Zesty Scarlet29Zesty White29Zesty Mixture29	999
PERENNIALS P. 30-33 Dianthus Rockin' Pink Magic	
Rockin' Purple31 Rockin' Rose31	1
Lavandula Bandera Deep Purple32 Bandera Deep Rose32	2
Leucanthemum Madonna32	2
Myosotis Mon Amie Pink	
Salvia New Dimension Rose Improved33	3
Salvatore Blue33	3
JC. 12:310 Dide	
POT PLANTS P. 34-39	
	5
POT PLANTS P. 34-39 Campanula Campanella Blue	5555
POT PLANTS P. 34-39 Campanula Campanella Blue 36 Campanella Lavender 36 Campanella Pink 36 Celosia 35 Concertina Pink 35 Concertina Red 35 Concertina Red 35 Concertina Red 35 Concertina Yellow 35	55 55 55 55 55 55 55 55 55 55 55 55 55
POT PLANTS P. 34-39 Campanula Campanella Blue 36 Campanella Lavender 36 Campanella Pink 36 Celosia 35 Concertina Purple 35 Concertina Red 35 Concertina Red 35 Concertina Red Mitture 35 Concertina Mixture 35 Concertina Wixture 35 Gerbera Colorbloom Bicolor Orange Yellow 36 Colorbloom Cherry with Light Eye 36 Colorbloom Red with Light Eye 36 Colorbloom Red with Light Eye 36 Colorbloom Yellow with Dark Eye 36	555555
POT PLANTS P. 34-39 Campanula Campanella Blue	555555

CUT FLOWER	S P. 40-45	

Anemone Mona Lisa® Deep Blue Improved4	‡ 1
Campanula Campana Deep Blue Improved4	11
Celosia Sunday® Mixture Improved4	12
Extra-Early Flowering Tunnel or Field-Grown	
Matthiola (Stock) Katz Hi Double White4	14
Northern Greenhouse Selectable Matthiola Stock)	
Mathilda Lavender4	12
Fosca Blue Sea	13 13
Snapdragon Monaco Orange4	15
Potomac Royal Improved Potomac White Improved	15 15



Newton	49
Cherry Tomato Artemis	48
Helix	48
Patty Pan Squash Lemon Sun	49
Sweet Bell Pepper Orange Marmalade	47

Everleaf Emerald Towers.....

MEET OUR COVER STARS!



Front:
Kabloom Coral Calibrachoa
Colorbloom Yellow with Dark
Eye Gerbera
Campana Series Campanula
Orange Marmalade Sweet
Bell Pepper
Everleaf Emerald Towers Basil

Back: Plug & Play Sun Sea and Rosé



PLUG & PLAY® COMBOS

Nine all-new Plug & Play selections enhance the lineup of easy, fresh and fun combos that deliver by combining premium perennials, annuals and ornamental peppers for great **Summer and Autumn sales.**

After extensive trialing in our research greenhouses and outdoor Summer containers, as well as in commercial greenhouses and real-life gardens, our combos only move into the lineup when they get two thumbs up from our customers. This is how we fulfill the promise of **easy, economical production**; big retail shows and gardener-satisfying results.

Find all the program details at panamseed.com/PlugandPlay

NEW FOR 2020! PREMIUM XXL PLUG & PLAY® COMBOS

Dramatic good looks and dependable performance meet or beat their vegetative counterparts. Six new premium standouts combine first-year-flowering, mid-season perennials with premium annuals to make a big statement on home patios from Summer through Autumn.

PREMIUM

NEW SUN SEA AND ROSÉ

PowWow Wild Berry Echinacea, Mesa Peach Gaillardia & Blue Spear Lavandula



12 in./30cm

Transplant to finish: 9-10 weeks in season

	Variety	Seeds	Plug	Plants per Pot
		per Cell	Size	12 in./ 30cm
A	PowWow Wild Berry Echinacea	1	72	2
B	Mesa Peach Gaillardia	1	128	1
Θ	Blue Spear Lavandula	2	105	1

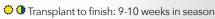


NEW SUMMER LOVIN'

PowWow White Echinacea, Jolt Cherry Interspecific Dianthus & Starship Deep Rose Lobelia



12 in./30cm



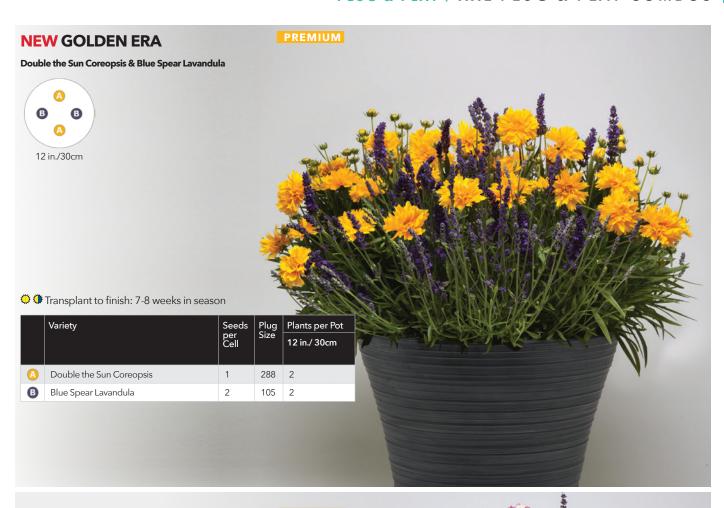
	Variety	Seeds per Cell	Plug Size	Plants per Pot 12 in./ 30cm
)	PowWow White Echinacea	1	72	2
3	Jolt Cherry Interspecific Dianthus	1	105	2
9	Starship Deep Rose Lobelia	2	72	2

Timing assumes correct daylength in plug and finish, and active growing conditions. Please check individual component variety information in our Product Information Guide. All varieties in each Plug & Play combo must be transplanted at the same time to finish at the same time. Sow times will vary. NOTE: Individual varieties sold separately





Timing assumes correct daylength in plug and finish, and active growing conditions. Please check individual component variety information in our Product Information Guide. All varieties in each Plug & Play combo must be transplanted at the same time to finish at the same time. Sow times will vary. NOTE: Individual varieties sold separately



PowWow White Echinacea, Joht Pink Magic Interspecific Dianthus, Blue Spear Lavandula & ColorGrass Festina Festuca Powwow White Echinacea, Joht Pink Magic Interspecific Dianthus, Blue Spear Lavandula & ColorGrass Festina Festuca Transplant to finish: 9-10 weeks in season Variety Seeds Plug Plants per Pot Izl in/30cm

72

105 2

105

105 2

1

2

B

PowWow White Echinacea

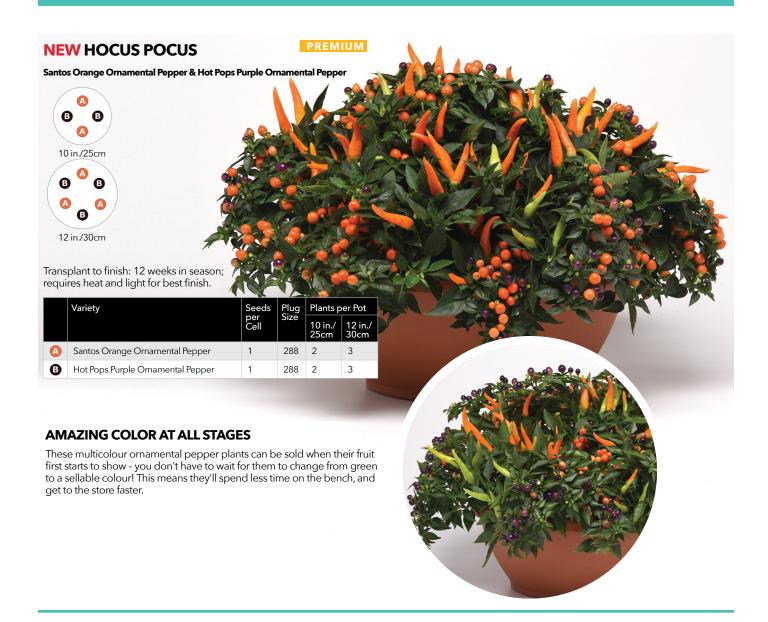
ColorGrass Festina Festuca

Blue Spear Lavandula

Jolt Pink Magic Interspecific Dianthus

PLUG & PLAY COMBOS WITH PREMIUM ANNUALS

NEW FOR 2020! Three bright, new ornamental pepper combos promise huge Summer through Autumn sales. These premium container combos love the heat and sun, and they deliver colour and interest from their early growing stage through the Summer and into Autumn!



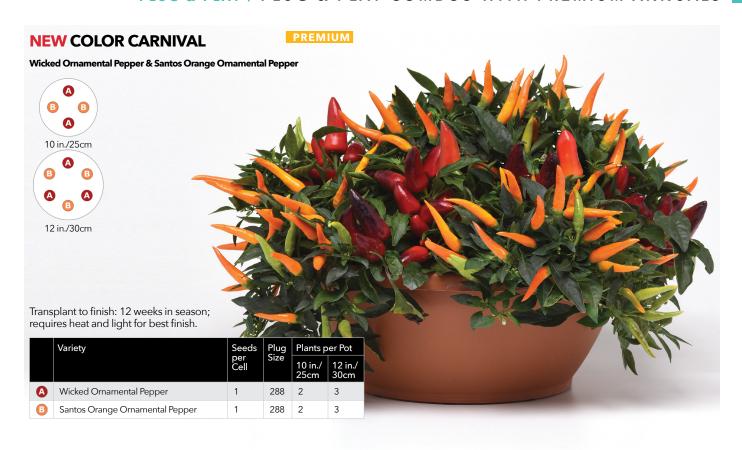
START OUT RIGHT!

The first step in defining the Plug & Play combination pot starts on the planting line. Follow the recipes and planting diagrams for best success. Plug size, number and planting position are key.

PLUG SIZE: Every Plug & Play recipe takes each ingredient's growth rate and flower timing into consideration. Larger inputs are used when necessary to obtain the best balance of growth and flowering.

PLUG NUMBER: It is important to use the right ratio of inputs, just as with vegetative intermingled combos. The correct number of plugs per component leads to a well-balanced combination finish.

PLUG & PLAY / PLUG & PLAY COMBOS WITH PREMIUM ANNUALS





All varieties in each Plug & Play combo must be transplanted at the same time in order to finish at the same time. NOTE: Individual varieties sold separately

ANNUALS



Serena Rose

ANGELONIA O Angelonia angustifolia

Serena® Series F1

Height: 16 to 20 in./41 to 51 cm Spread: 12 to 14 in./30 to 36 cm Seed supplied as: Pelleted

Plug crop time: 5 to 6 weeks Transplant to finish: 8 to 9 weeks

- \bullet Serena fills gardens, landscapes and mixed containers with unique dimensional colour.
- Care-free, continuous bloomer performs well under a wide range of conditions.
- Durable series is a perfect choice for consumers looking for water-wise, heat-loving plants.
- Plants grow up to 50% larger in Florida-like conditions. Mississippi Medallion Award, Dallas Arboretum FlameProof Award, Louisiana Super Plants Award

New Rose A new colour segment for Serena! Dense spikes feature large florets with a deep rose bloom and a dark eye. Intense, deep colour is maintained in high light and high heat environments. Vigour and height fit the series well.



Serenita Rose

Serenita® Series F1

Height: 12 to 14 in./30 to 36 cm Spread: 12 to 14 in./30 to 36 cm Seed supplied as: Pelleted Plug crop time: 5 to 6 weeks

Transplant to finish: 8 to 9 weeks

• Serenita has all the good looks,

- durability and easy production of Serena - with a few additional benefits.
 • Excellent solution where shorter
- Excellent solution where shorter and more manageable material is needed.
- Peak performer in very hot/humid night temps like Florida, southeast Asia and similar southern climates.
- Great for high-density production in the North.
- Grow Serenita with less to no PGRs for cost savings.

New Rose Deep to mid-rose shades are darker than Pink. Plant height and vigour are a good match for the series.

Your no-pinch, low-hassle angelonia

Serena and companion Serenita are the only seed angelonias on the market, giving you the premium results you expect from vegetative varieties, with less labour and more efficiency. Both fit into warm bedding production...are perfect for grower choice premium containers...and excel in landscapes.

ANNUALS / AMERIHYBRID PICOTEE



AmeriHybrid Picotee Calypso



AmeriHybrid Picotee Flamenco



AmeriHybrid Picotee Lace Apricot



AmeriHybrid Picotee Lace Pink



AmeriHybrid Picotee Lace Red



AmeriHybrid Picotee White Red



AmeriHybrid Picotee Sunburst



AmeriHybrid Picotee White Pink

Big, bold begonias

Five new tuberous begonia series debut from PanAmerican Seed®, providing a wide selection of colours, including unique bicolours, along with some of the world's largest blooms! This exciting collection can be sold at a premium price point at retail, and it results in faster turnover in the market.



AmeriHybrid® Picotee Series F₁

Height: 14 to 20 in./36 to 51 cm **Spread:** 10 to 12 in./25 to 30 cm Flower size: 4 to 8 in./10 to 20 cm

Seed supplied as: Pelleted

Plug crop time: 7 to 8 weeks Transplant to finish: 11 to 15 weeks

- The AmeriHybrid Picotee varieties have large, 4 to 8-in./10 to 20-cm, bicolour blooms.
- The Picotee Lace types are an inverted variety of a normal picotee; these blooms have light edges on dark-coloured petals.

New Calypso White with a salmoncoral edge.

New Flamenco White with a thick red edge and speckles.

New Lace Apricot Apricot blooms with a white edge.

New Lace Pink Pink blooms with a white edge.

New Lace Red Red blooms with a white edge.

New Sunburst Yellow and orange/ peach/apricot blooms with a red edge.

New White Pink White with a pink

New White Red White with a red edge.



AmeriHybrid Picotee White Red



AmeriHybrid Roseform Peach



AmeriHybrid Roseform Pink



AmeriHybrid Roseform Red



AmeriHybrid Roseform Rose



AmeriHybrid Roseform Salmon



AmeriHybrid Roseform Scarlet Orange



AmeriHybrid Roseform White



AmeriHybrid Roseform Yellow

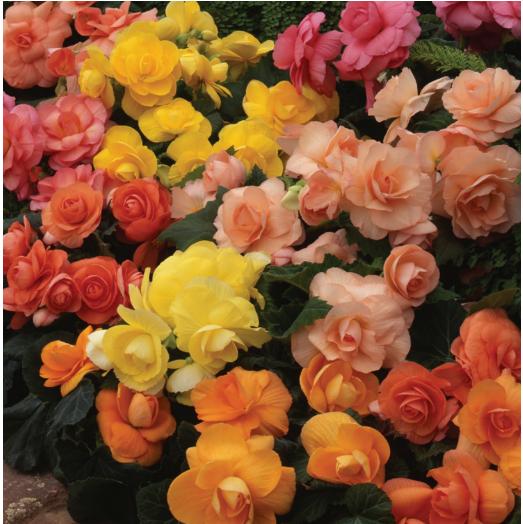
AmeriHybrid® Roseform Series F1

Height: 14 to 20 in./36 to 51 cm **Spread:** 10 to 12 in./25 to 30 cm **Flower size:** 4 to 8 in./10 to 20 cm

Seed supplied as: Pelleted

Plug crop time: 7 to 8 weeks Transplant to finish: 11 to 15 weeks

- AmeriHybrid Roseform begonias display smooth-petaled, symmetrical blooms.
- symmetrical blooms.
 Flowers measure 4 to 8 in./10 to 20 cm or larger, for a different, more elegant and refined flower shape.



AmeriHybrid Roseform Series

ANNUALS / AMERIHYBRID RUFFLED





AmeriHybrid Ruffled Coral Salmon



AmeriHybrid Ruffled White



AmeriHybrid Ruffled Scarlet Red



AmeriHybrid Ruffled Yellow



AmeriHybrid Ruffled Rose



AmeriHybrid Ruffled Mandarin Orange



AmeriHybrid Ruffled Pink



The world's largest blooms!

AmeriHybrid® Ruffled Series F1

Height: 14 to 20 in./36 to 51 cm **Spread:** 10 to 12 in./25 to 30 cm **Flower size:** 5 to 9 in./13 to 23 cm

Seed supplied as: Pelleted

Plug crop time: 7 to 8 weeks Transplant to finish: 11 to 15 weeks

- At 5 to 9 in./13 to 23 cm each, AmeriHybrid Ruffled begonias boast the largest blooms in the world! That's the result of over 100 years of patient breeding and hybridizing.
- Each flower has a highly consistent double shape.



AmeriHybrid Ruffled Coral Salmon

14



On Top Fandango



On Top Sun Glow



Sun Dancer Apricot



On Top Melon Lace



On Top Sunset Shades





Sun Dancer Scarlet Orange



On Top Pink Halo



Sun Dancer White



Sun Dancer White Pink Picotee

On Top® Series F1

Height: 10 to 12 in./25 to 30 cm **Spread:** 10 to 12 in./25 to 30 cm Flower size: 2 to 5 in./5 to 13 cm

Seed supplied as: Pelleted

Plug crop time: 7 to 8 weeks Transplant to finish: 8 to 13 weeks

- Offering a collection of novelty colours, the On Top varieties tolerate more heat and sunlight than other begonias.
- Mounded plants show off many 2 to 5-in./5 to 13-cm flowers.
- On Top begonias bloom early and flower longer than other varieties.

New Fandango White with a salmon-coral edge.

New Melon Lace Melon with a white edge.

New Pink Halo White with a deep pink edge.

New Sun Glow Golden yellow with a red edge.

New Sunset Shades Yellow with a red edge.

Sun Dancer Series F1

Height: 10 to 12 in./25 to 30 cm **Spread:** 12 to 16 in./30 to 41 cm Flower size: 3 to 6 in./8 to 15 cm

Seed supplied as: Pelleted

Plug crop time: 7 to 8 weeks Transplant to finish: 9 to 13 weeks

- Double-flowered plants produce more blooms that are larger than other varieties, with a bloom size of 3 to 6 in./8 to 15 cm.
- · Because of its excellent branching habit, Sun Dancer fills a hanging basket quickly and cascades up to 16 in./41 cm.

New White Pink Picotee White with a pink edge.

New Yellow Red Picotee Yellow with a red edge.



Sun Dancer Red



Sun Dancer Yellow



Sun Dancer Salmon



Sun Dancer Yellow Red Picotee



Ice Cream Yellow Improved Celosia



Ice Cream Mixture Improved Celosia



Kabloom Orange Calibrachoa



Pinktopia Bacopa

BACOPA 🔘 🗘 Sutera cordata

New Pinktopia F1

Height: 6 in./15 cm Spread: 18 to 24 in./46 to 61 cm **Flower size:** 0.2 to 0.4 in./1 cm

Seed supplied as: Multi-Seed Pellets

Plug crop time: 3 to 4 weeks Transplant to finish: 4 to 6 weeks

- The third colour in this seed series of F1 bacopa brings a bright pink colour with the same habit and timing as Blutopia and Snowtopia.
- The leaf size is the same as Snowtopia, but the leaf colour is more bright green than both Blutopia and Snowtopia.
- First-ever bacopas from seed let you fully mechanize production, with easy crop scheduling and quick turns with no pinch.
- For accent plant programs.
- Great colour for mixed containers and large planters.

CELOSIA O Celosia plumosa

Ice Cream Series

Height: 12 in./30 cm **Spread:** 10 in./25 cm

Seed supplied as: Coated

Plug crop time: 3 to 4 weeks Transplant to finish: Packs, 8 to 10 weeks; 4 to 5-in./10 to 13-cm pots, 9 to 12 weeks

- Heat-resistant, long-lasting series stands tough when temperatures rise - Ice Cream won't melt in the sun!
- Early, compact and wellbranched plants are stunning in patio planters and gardens.
- Produces large, tight flower heads in strong colours for striking sales appeal.
- Versatile great for bench-run pack and small pot programs.

New Yellow Improved Fits the series better for habit and timing compared to Yellow, which was taller than the other varieties.

New Mixture Improved Contains NEW Yellow Improved in place of Light Yellow. Upgraded for uniformity and brighter colours.



Kabloom Pink Calibrachoa



Kabloom Coral Calibrachoa



Kabloom Light Pink Blast Calibrachoa



PanAmerican Seed. Request your Product Information Guide for full culture details



Kabloom Cherry



Kabloom White Improved

CALIBRACHOA Calibrachoa x hybrida

Kabloom® Series F1

Height: 8 to 12 in./20 to 30 cm **Spread:** 10 to 14 in./25 to 36 cm **Flower size:** 1 to 1.75 in./3 to 4 cm

New! Now available as Precision Multi-Pellets.

Plug crop time: 5 to 8 weeks Transplant to finish: 7 to 11 weeks

- We've expanded the first-of-itskind Kabloom series to include 6 new colours and 1 improved variety, plus they are now offered in our convenient Precision Multi-Pellets.
- The ideal input for grower choice premium quarts. Also well-suited to 4 to 6-in./10 to 15-cm pots, hanging baskets and mixed combos.
- Easy-sow pelleted seed makes it easy to order and ready to ship, fits right into mechanized production and assures easy inventory management.
- Bushy, trailing plants show off abundant, bright blooms in core solid colours.

New Blue Clear, mid-blue with a small yellow throat. Darker blue than Denim. Moderate plant vigour. Replaces Deep Blue. 10.5 hours daylength required.

Ease and efficiency, at your fingertips!

Kabloom, the first seed calibrachoa, lets you schedule based on your needs, not on cutting availability dates. You can still receive product when the weather holds up vegetative shipments. Best of all...grown side by side with vegetative varieties, it's impossible to tell the difference.



New Coral Warm coral-salmon with a small yellow throat. Colour can shade to slightly lighter in warmer and higher light conditions. Moderate plant vigour. 11 hours daylength required.

New Light Pink Blast Light pink with a rose-red ring at the base of the petal and a small yellow throat. Moderate and slightly variable plant vigour. Slight shading from light pink to soft coral pink. 11.5 hours daylength required.

New Orange Clear, bright orange with a darker orange ring at the base of the petal and a small yellow throat. Moderate plant vigour. 10.5 hours daylength required.

New Pink Vibrant, clear pink with a rose ring and a medium-sized yellow throat. Moderate vigour with a more upright and mounded plant structure. Replaces Deep Pink. 11 hours daylength required.

New White Improved Clear, bright white with a small yellow throat. Moderate plant vigour better matches the series. Replaces White. 10.5 hours daylength required.



Kabloom Light Pink Blast



Kabloom Orange







Mandarin Cosmos



Sonata Mixture Improved Cosmos

COSMOS O Cosmos bipinnatus

Sonata Series

Height: 24 in./61 cm

Spread: 12 to 14 in./30 to 36 cm

Seed supplied as: Raw Plug crop time: 4 to 5 weeks Transplant to finish: 6 to 7 weeks

- The best-performing garden cosmos.
- Extremely easy to grow; professional growers choose Sonata because of its capabilities for blooming in the pack and pot.
- Recommended for 5 to 6-in./13 to 15-cm pots.

New Red Shades Bright red colour expands the series! It features the excellent seed quality the Sonata Series is known for, with a flower that is more closed compared to the competition's red.

New Mixture Improved This mix now offers the most complete colour range in Cosmos bipinnatus, adding the unique Purple Shades and bright NEW Red Shades.



COSMOS • Cosmos sulphureus

New Mandarin

Height: 10 to 12 in./25 to 30 cm **Spread:** 6 to 8 in./15 to 20 cm

Seed supplied as: Raw

Plug crop time: 3 to 4 weeks **Transplant to finish:** 5 to 7 weeks

- Mandarin has a deeper orange colour, a better habit and is more uniform compared to competing
- Slightly more compact variety has a more mounded shape.

CUPHEA • Cuphea ramosissima

New Pink Shimmer

Height: 10 to 16 in./25 to 41 cm Spread: 12 to 18 in./30 to 46 cm

Seed supplied as: Precision Multi-

Plug crop time: 4 weeks Transplant to finish: 5 to 11 weeks

- Cuphea ramosissima is not easily rooted from cuttings and can have high losses.
- Pink Shimmer can easily be sown for efficient plug production.
- Offers better natural branching than its vegetative counterpart.
- Profusions of petite flowers cover the delicate leaves all Summer long.
- Great for use in combinations of all kinds.
- This reblooming gem requires no deadheading and looks great even under hot conditions.



L: Corona Strawberry R: Competing Strawberry variety



Floral Lace Red

DIANTHUSDianthus chinensis x barbatus

Floral Lace Series F₁

Height: 8 to 10 in./20 to 25 cm **Spread:** 8 in./20 cm

Seed supplied as: Raw, Pelleted

Plug crop time: 4 to 5 weeks Transplant to finish: 4 to 5 weeks

- Early flowering with the largest blooms of any *D. chinensis x barbatus* up to 1.5 in./4 cm across.
- Performs well in gardens under tough conditions as an annual or biennial.
- Good for high-density Spring and Autumn pack or small pot programs.
- Bright green leaves.

New Red This rich, red-burgundy represents a key colour that was missing from the series.

Crowned with huge flower power

Wow 'em with the biggest blooms of any dianthus of this type...exceptional flower form... and a palette of showstopping colour choices. Corona adds a regal touch to coolseason landscapes, gardens and patio planters.



Dianthus chinensis

Corona Series F1

Height: 8 to 10 in./20 to 25 cm **Spread:** 8 to 10 in./20 to 25 cm

Seed supplied as: Pelleted
Plug crop time: 4 to 6 weeks
Transplant to finish: 6 to 8 weeks

- At 2 to 3 in./5 to 8 cm, Corona's blooms are larger than the competition, plus it offers uniform flowering time and habit.
- Produces multiple flowers on a compact, mounded plant.
- Gives its best performance in cool weather, making it great planted along with other cool-season annuals such as pansies.

New Mixture Brighten colour bowls and gardens with this mix of Cherry Red, Rose, Strawberry and White. Huge flower size and uniformity make Corona the best choice in this class of dianthus.



Glamour Improved Euphorbia

EUPHORBIA Euphorbia graminea

New Glamour Improved

Height: 15 to 24 in./38 to 61 cm **Spread:** 15 to 24 in./38 to 61 cm

Seed supplied as: Raw Plug crop time: 3 to 4 weeks **Transplant to finish:** 5 to 8 weeks

- The best variety for in-ground performance.
- Early to flower, with the vigour to hold up to a variety of weather challenges.
- An exceptional choice for a 'Baby's Breath Gypsophila' like application in the landscape.
- Use with vigorous plants like Tidal Wave® Red Velour petunia for a stunning combination in-ground, or weave like a cloud-like hedge through more bold-textured annuals for great contrast.



New Day Yellow Improved Gazania



Flamenco French Marigold US PVPAF

GAZANIA O Gazania rigens

New Day® Series F1

Height: 8 to 10 in./20 to 25 cm **Spread:** 6 to 8 in./15 to 20 cm

Seed supplied as: Coated

Plug crop time: 4 to 5 weeks Transplant to finish: 8 to 9 weeks

- More uniform flowering than competing varieties, with larger flowers and better plant habits.
- · Compact, sturdy, high-quality plants are easy to produce and super-holdable at retail.
- Bred to deliver shorter peduncles and beefier-looking plants.
- Well-suited to high-density pack and small container production.
- Drought-tolerant series performs beautifully in containers and baskets, and as a garden edging or groundcover.

New Yellow Improved Features a larger flower with rounder petals, providing an increased show of colour.

FRENCH MARIGOLD O Tagetes patula

New Flamenco

Height: 10 to 12 in./25 to 30 cm Spread: 6 to 8 in./15 to 20 cm

Seed supplied as: Coated, De-tailed

Plug crop time: 3 to 4 weeks Transplant to finish: 3 to 4 weeks (cell pack); 4 to 5 weeks (quart, 4 in./10 cm)

- With its yellow centre and redtipped petals, this novelty colour will look great in patio containers and gardens alike.
- This standalone variety in the French Marigold assortment calls out it's unique pattern, similar to Fireball and Strawberry Blonde.
- For habit and flower timing, Flamenco is in line with the Bonanza series.
- Offers an 80% germination standard.



Akila Sunset Shades Osteospermum

OSTEOSPERMUM Osteospermum ecklonis

Akila® Series F1

Height: 10 to 14 in./25 to 36 cm **Spread:** 14 to 20 in./36 to 51 cm

Seed supplied as: Raw **Plug crop time:** 4 to 5 weeks

Transplant to finish: Spring 10 to 12 weeks, Autumn 7 to 9 weeks

- "Sow easy, so awesome": The most compact seed series matches or surpasses any vegetative series for easy, no-pinch production; terrific uniformity and top-selling colours.
- Delivers 5% higher germination than competitors for higher yields it's the best seed-grown osteo for both habit and seed quality.
- Excellent branching assures better pot fill and great bench-to-garden performance.
- Well-suited to mechanized production and high-density programs.
- Plants branch without pinching, all colours flower within a 7 to 10-day window across the Akila series and no vernalization is needed.
- Full, well-branched plants are drought-tolerant once established.

New Sunset Shades This new multicolour segregating mix includes popular colours like yellow, magicians and rose-reds, plus salmon, apricot and orange shades. A gorgeous mix of the colours of the setting sun.



Frizzle Sizzle Lemonberry Pansy



Akila Sunset Shades Osteospermum

RUFFLED PANSY • • Viola x wittrockiana

Frizzle Sizzle Series F1

Height: 6 to 8 in./15 to 20 cm Spread: 8 to 10 in./20 to 25 cm Flower size: 2.5 in./6 cm Seed supplied as: Raw, Primed

Plug crop time: 5 weeks

Transplant to finish: Spring 6 to 8 weeks, Autumn 4 to 6 weeks

- PanAmerican Seed is the only professional supplier of this unique frilly flower form count on reliable seed supply.
- Great for cool-season Winter and early Spring end cap displays.
- Looks great in containers and "close-up" landscapes.
- Stronger ruffling occurs in cool conditions; Spring production is recommended.

New Lemonberry Earlier with less stretch, and it replaces Fizzy Lemonberry.



Matrix Blue Blotch Improved



Matrix Midnight Glow



Matrix Yellow Purple Wing

Make your life easier

Matrix is your best option for longer days and warmer growing. Uniformity of timing and plant habit simply can't be beat by any other varieties in the marketplace. Only Matrix has a tight bloom window in Autumn production that allows every colour to ship the same week.



Promise Blue Blotch Improved

EXTRA-LARGE FLOWERED PANSY

Matrix® Series F1

Height: 8 in./20 cm **Spread:** 8 to 10 in./20 to 25 cm Flower size: 3.5 in./9 cm

Seed supplied as: Raw, Primed

Plug crop time: 5 weeks Transplant to finish: Spring 6 to 8 weeks, Autumn 4 to 6 weeks

- Matrix offers less handling, less waste and exceptional holding power for higher profitability.
- 7-day bloom window across all colours in Autumn production makes scheduling and growing
- Extra-large flowers hold up to the heat and PGR stress in Summer/ Autumn production.
- Low-maintenance series gives pro landscapers the best choice for uniform colour striping, plus the most flowers per plant of any largeflowered pansy.

New Blue Blotch Improved Flower timing has been improved to better match the series. It also offers improved flower presentation.

New Midnight Glow This new colour addition to the series offers a yellow centre with a deep violet halo around it. Great for Autumn programs.

New Yellow Purple Wing Yellow face with a purple cap is a perfect colour addition for Autumn programs.

LARGE-FLOWERED PANSY

Promise® Series F₁

Height: 8 to 12 in./20 to 30 cm **Spread:** 8 to 12 in./20 to 30 cm Flower size: 2.75 in./7 cm

Seed supplied as: Raw, Primed

Plug crop time: 5 weeks **Transplant to finish:** Spring 6 to 7 weeks, Autumn 4 to 5 weeks

- Selected for European growing conditions, Promise is ideal for high-density, pot-tight Spring programs for the European market.
- Early, compact plants with large flowers will not extend beyond the edge of the pot in production.
- Excellent landscape vigour and floriferousness over a long period of time.
- Good for in-ground and container plantings.
- Wide range of classic and contemporary colours.

New Blue Blotch Improved Offers more reliable seed quality.



Cool Wave Raspberry Swirl

SPREADING PANSY Oviola x wittrockiana

Cool Wave® Series F1

Height: 6 to 8 in./15 to 20 cm

Spread: 24 to 30 in./61 to 76 cm **Flower size:** 2 to 2.5 in./5 to 6 cm

Seed supplied as: Primed

Plug crop time: 4 to 5 weeks Transplant to finish: Spring 6 to 7 weeks, Autumn 4 to 5 weeks

- The best-performing spreading pansy series delivers *easy spreading colour* for Spring and Autumn, so you can extend your growing and selling season for the popular Wave® Brand.
- More vigorous with the most prostrate habit of any spreading pansy - great in combos and as groundcover.
- Superior overwintering hardiness - Cool Wave is the earliest pansy to return in the Spring.

New Raspberry Swirl Shows more rose cap in Winter/Spring (cool season) production.

New Strawberry Swirl Shows more pink cap in Winter/Spring (cool season production), and more yellow in the flower face in Summer/Autumn (warm season) production.

Twice the spread...double the colour!

Wow 'em with Cool Wave - hands down, it's the fastest-growing, longest-lasting, truly trailing pansy for Spring and Autumn. One trip to the garden centre for lush baskets or pots for in-ground planting is enough to convince anyone that Cool Wave is a cool-season gardener's dream.





Cool Wave Strawberry Swirl



Cool Wave Raspberry Swirl (cool season)



Cool Wave Strawberry Swirl (cool season)



Cool Wave Raspberry Swirl (warm season)



Cool Wave Strawberry Swirl (warm season)



Lucky Star White Improved Pentas



Lucky Star Lipstick Pentas

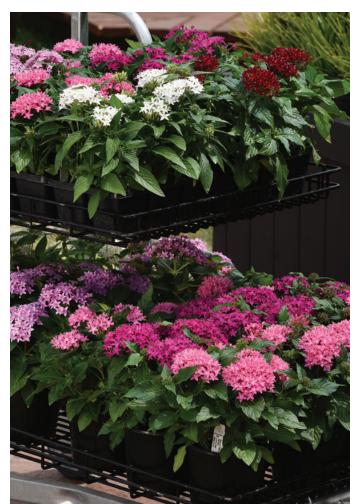
Stays in colour... Really!

Lucky Star is bred for the fastest follow-up blooming of any pentas on the market.

Nonstop colour means plants look better getting off the truck and they just keep getting better in the store! Plus, this colour-rich series has a tight, compact habit that keeps them looking tidy with virtually no effort.



Double Cascade Valentine Double Petunia





L: Competing Violet variety R: Lucky Star Violet

PENTAS O Pentas lanceolata

Lucky Star® Series F1

Height: 12 to 16 in./30 to 41 cm **Spread:** 12 to 14 in./30 to 36 cm

Seed supplied as: Pelleted

Plug crop time: 6 to 7 weeks Transplant to finish: 7 to 8 weeks

- With the fastest follow-up blooming of any pentas on the market and a 1-week bloom window, Lucky Star maintains a consistent show of colour from retail through end-of-season.
- Follow-up blooms do not eclipse the prior flush, so plants stay compact, tight and ready for sale at retail with minimal work.

New Lipstick Matches the series with fast secondary/follow-up blooming and compact habit.

New White Improved Improved for more vigour in the garden. Now the best choice on the market for compact pentas.

GRANDIFLORA DOUBLE PETUNIA 🗭

Petunia x hybrida

Double Cascade Series F1

Height: 10 to 15 in./25 to 38 cm **Spread:** 10 to 12 in./25 to 30 cm Seed supplied as: Raw, Pelleted

Plug crop time: 4 to 5 weeks Transplant to finish: 6 to 7 weeks

- Huge, 3 to 3.5-in./8 to 9-cm, double flowers resemble
- carnations • Outstanding habit and good branching.
- Excellent program for late Spring
- Well-suited to larger containers, mixed combination planters and

New Valentine Beautiful red blooms can have splashes of white appear on some of the tips. The unique double flowers feature a delicate fringe.

25 Years & still going strong!

In 2020, Wave® petunia is celebrating 25 years of premium landscape performance and excellence in genetics. The Authentic Trailing Petunia has been satisfying and thrilling consumers for 25 years, and with new colours in both the Wave and Easy Wave® series this year, it promises to continue to set the standard higher for spreading petunias around the globe.

Getting better every year

Debuting in 1995 to industry-wide praise and earning an All-America Selections award, original Wave Purple petunia set the bar for landscape performance. PanAmerican Seed is pleased that 25 years later we continue to invest in improving Wave petunias for growers and consumers alike, continually bringing something new and exciting to the market year after year!



SPREADING PETUNIA Petunia x hybrida

Easy Wave® Series F1

Height: 6 to 12 in./15 to 30 cm **Spread:** 30 to 39 in./76 to 99 cm Flower size: 2 to 3 in./5 to 8 cm

Seed supplied as: Pelleted

Plug crop time: 4 to 6 weeks Transplant to finish: Spring 6 to 7 weeks, Summer 4 to 5 weeks

- Exceptional uniformity means simplified production, maximized plug yields and the ability to meet every ship date for every colour. Lets you grow specialty mixes, too!
- More mounded with more controlled spread than Wave varieties.
- Recommended in Wave branded packaging: 6-in./15-cm pots, premium quarts and gallons, 306 premium packs with handle, hanging baskets.

New Lavender Sky Blue Shades of lavender to sky blue; colours will be darker under cooler and lower light conditions. Moderate plant vigour. 9.5 hours daylength required. Cold durable.

Wave® Series F1

Height: 5 to 7 in./13 to 18 cm **Spread:** 36 to 48 in./91 to 122 cm Flower size: 2 to 2.5 in./5 to 6 cm

Seed supplied as: Pelleted

Plug crop time: 4 to 6 weeks **Transplant to finish:** Spring 7 to 9 weeks, Summer 5 to 7 weeks

- Virtually care-free, the plants bloom like crazy all season, with masses of flowers along the entire length of each branch with no trimming back.
- Wave petunias stand up well to both heat and cooler conditions, and perform better than most petunias when Botrytis is present.
- Recommended in Wave branded packaging: 6-in./15-cm pots, premium gallons, hanging baskets.

New Carmine Velour Vivid, hot carmine-cherry colour on vigorous, flat, spreading plants. Colour is more vibrant and slightly brighter than Easy Wave Berry Velour. 13 hours daylength required. Cold durable.



Easy Wave Lavender Sky Blue



Wave Carmine Velour



Wave Carmine Velour



Easy Wave Lavender Sky Blue

25



Optic Gold Primula



Optic Gold Primula



Optic Scarlet Flame Primula



Optic Scarlet Flame Primula





Quartz XP Bordeaux Verbena

PRIMULA 🔍 🗘 Primula acaulis

Optic Series F1

Height: 4 to 6 in./10 to 15 cm **Spread:** 6 to 8 in./15 to 20 cm

Seed supplied as: Primed

Plug crop time: 5 to 6 weeks Transplant to finish: Autumn 13 to 15 weeks

- Full-flowering varieties with tidy green foliage provide bright and rich, non-fading colour in Autumn
- and Winter gardens and planters.

 Compact plants require less PGRs, and the series needs less cold to initiate flowers, making for easier programming.
- Superior seed quality results in a very uniform plant.

New Gold The most vigorous plant in the series.

New Scarlet Flame More stable scarlet flame bicolour pattern than competing varieties. Its large yellow flame brightens up any mix.

VERBENA 😃 Verbena x hybrida

Quartz XP Series

Height: 8 to 10 in./20 to 25 cm **Spread:** 10 to 12 in./25 to 30 cm

Seed supplied as: Raw, Primed

Plug crop time: 4 weeks **Transplant to finish:** Spring 6 to 8 weeks, Summer 5 to 7 weeks

- Quartz XP verbenas are more uniform with overall longer garden performance than competing
- Delivers a tight, 7-day flowering window, earlier and significantly better branching, and reduced internode length.
- Strong seed quality, high germination and great young plant vigour assure superior performance in packs and 4-in./ 10-cm pots.
- Slightly spreading, mounded plants make great beds and containers.

New XP Bordeaux Fits the series for habit and timing, and holds its colour better in high light landscapes.

26



Quicktime Yellow Blue Jump Up



L: Standard Yellow Jump Up, R: NEW Quicktime Yellow Violet Jump Up



New Quicktime Series F1

 $\begin{array}{l} \textbf{Height:} \ 6 \ to \ 8 \ in./15 \ to \ 20 \ cm \\ \textbf{Spread:} \ 6 \ to \ 8 \ in./15 \ to \ 20 \ cm \\ \textbf{Flower size:} \ 1 \ to \ 1.5 \ in./3 \ to \ 4 \ cm \\ \end{array}$

Seed supplied as: Primed

Plug crop time: 4.5 to 5 weeks **Transplant to finish:** Autumn 3 to 4 weeks, Spring 5 to 6 weeks

- Early-blooming, free-flowering plants provide bright colour in early Spring and Autumn gardens.
- Almost day neutral and freeflowering selection criteria make Quicktime Viola the best option for saving growing time in cold-grown, overwinter-produced viola crops.

Shorter production time = cost savings

Flowering two
weeks faster than
comparable series,
NEW Quicktime
allows you to sow
your viola crop two
weeks later and
still ship on time in
Spring. With reduced
labour and less
heat needed in the
greenhouse, the cost
savings are quick to
add up!



Quicktime White Blotch



Quicktime Blue Purple Jump Up



Quicktime Lemon Jump Up



Quicktime Yellow Violet Jump Up



Quicktime Mickey



Sorbet Rose Wing



Sorbet XP Neptune

Send the bestlooking violas to retail

Grow, ship, sell and plant the best-looking violas for Spring and Autumn - Sorbet XP genetics deliver a uniform plant habit and the tightest bloom window.

Sorbet® Series F1

Height: 6 to 8 in./15 to 20 cm **Spread:** 6 to 8 in./15 to 20 cm Flower size: 1 to 1.5 in./3 to 4 cm

Seed supplied as: Raw, Primed

Plug crop time: 4.5 to 5 weeks Transplant to finish: Early Spring 6 to 9 weeks, Autumn 4 to 6 weeks

- Plants cover the soil at flowering with more blooms and less stretching, and fewer PGRs are needed.
- Superior holdability and less shrink.
- Use in Autumn and Spring programs - the novelty colours have good retail and garden appeal.

New Rose Wing Deep pink-to-rose cap with a white face provides a "jump up" look. Slightly darker colour than Pink Wing. Colour will be most intense under cooler conditions.



Frizzle Sizzle Mini Purple Shades



Frizzle Sizzle Mini Yellow

Sorbet® XP Series F1

Height: 6 to 8 in./15 to 20 cm **Spread:** 6 to 8 in./15 to 20 cm Flower size: 1 to 1.5 in./3 to 4 cm

Seed supplied as: Raw, Primed

Plug crop time: 4.5 to 5 weeks Transplant to finish: Early Spring 6 to 8 weeks, Autumn 4 to 5 weeks

- Sorbet XP needs fewer PGRs, with superior holdability and less shrink.
- F1 vigour assures greater germination, earliness, and excellent plug and garden performance.
- Violas are a key pro landscaper item and Sorbet XP excels at every turn: plants cover the soil at flowering, with more blooms on every plant and less stretching; stay compact in both heat and cold; excellent overwintering; plus a wide range of clear colours allows for custom mixes.
- Well-suited to Spring and Autumn packs and 3.5-in./9-cm

New XP Neptune Beautiful cream with blue picotee colour is now available with XP performance.



Frizzle Sizzle Mini Tapestry



Frizzle Sizzle Mini Mixture

Frizzle Sizzle Mini Series F1

Height: 6 to 8 in./15 to 20 cm **Spread:** 6 to 8 in./15 to 20 cm Flower size: 1.25 in./3 cm

Seed supplied as: Raw, Primed

Plug crop time: 4.5 to 5 weeks Transplant to finish: 6 to 7 weeks

- Adds a unique frilly flower form to violas!
- Great for containers or "close-up" landscapes.
- Best for cool seasons in early Spring or Autumn; stonger ruffling occurs in cool conditions.
- Spring production is recommended.

New Purple Shades Frilled purple flower with an attractive dark eye.

New Tapestry Flowers contain shades of purple, burgundy and yellow, providing a tapestry of colour.

New Yellow Frilled yellow flower with an attractive dark eye.

New Mixture Includes Yellow, Purple Shades and Tapestry.



ZINNIA 🜼

Zinnia elegans

New Zesty Series

Height: 18 to 24 in./46 to 61 cm Spread: 18 to 24 in./46 to 61 cm Flower size: 3 to 5 in./8 to 13 cm

Seed supplied as: Coated

Plug crop time: 3 to 4 weeks Transplant to finish: 6 to 7 weeks

- Extraordinary garden appeal!
 Features fully double flowers and excellent garden vigour.
 Display huge, vibrant colours all season long.
- Impressive in containers, mixed combinations and borders.
 • Pollinators love this plant!

New Fuchsia Vivid rose-purple colour to light up the garden.

New Pink A darker pink shade with more purple/rose tones than the competition.

New Purple Stunning and unique deep purple colour.

New Scarlet The most compact variety in the series.

New White A true white colour. New Mixture Includes all the colours in the series, plus yellow (not available separately).



Zesty Purple



Zesty Fuchsia



Zesty Pink



Zesty Purple



Zesty White



Zesty Scarlet

KieftSeed

PERENNIALS



Rockin' Series

DIANTHUS 🔍 🗘

Dianthus x barbatus interspecific

Rockin' Series F1

Height: 18 to 24 in./46 to 61 cm **Spread:** 10 to 12 in./25 to 30 cm

USDA Hardiness Zones: 5a to 8b (-20 to 15°F/-29 to -9°C minimum temperatures)

A First-Year-Flowering Perennial.

Seed supplied as: Pelleted

Plug crop time: 4 to 6 weeks **Transplant to finish:** 8 to 9 weeks

- The Rockin' Series opens the door to premium product sales in perennial quart and gallon programs for mid-Spring and the Autumn decorating season.
- Lacy, slightly scented flowers top full and long-lasting plants - this one delivers lots of plant for the money, and that's sure to satisfy shoppers.
- Reliably overwinters to USDA Zone 5 (-20°F/-29°C minimum temperatures) to assure multi-year performance.
- The best colour intensity occurs in the high light and cool temperatures of outdoor production.

New Pink Magic Blooms open white and mature to light pink, then deep pink.

New Purple Lavender-purple colour.

New Rose Deep rose colour.



Pink Magic



Purple



Rockin' the Garden!

This dynamite series will keep perennial borders rocking for years to come, thanks to vivid colour, durable performance and count-on-it overwintering!



Purple

PanAmerican Seed.



Bandera Purple, Pink, NEW Deep Purple and NEW Deep Rose Lavandula



Bandera Deep Rose Lavandula



Bandera Deep Purple Lavandula



Madonna Leucanthemum

LAVANDULA 🐡 Lavandula stoechas

Bandera Series

Height: 7 to 9 in./18 to 23 cm **Spread:** 10 to 12 in./25 to 30 cm

USDA Hardiness Zones: 7a to 10b (0 to 35°F/-18 to 2°C minimum temperatures)

A First-Year-Flowering Perennial.

Seed supplied as: Raw

Plug crop time: 6 to 7 weeks Transplant to finish: 11 to 14 weeks (28 to 35 weeks overwintered, only in high light/low humidity areas)

- A true breeding breakthrough! The first professional-quality seed L. stoechas series produces quality comparable to vegetative varieties.
- Compact to medium habit with good branching and uniformity easily fills 4-in./10-cm pots to gallons.
- Flowers heavily to almost cover the plant.
- Short harvest window fits bench run programs.
- Long-flowering and self-cleaning with good secondary flush of flowers.
- Holds dense, mounded habit in the garden without falling open.
- A "Gateway to Gardening" variety for young shoppers - great nursery and grocery store impulse item, gift plant, indoor pot plant.

New Deep Purple Brings a unique, strong, deep purple colour from seed. It complements the series, offering the same strong colours found in vegetative varieties.

New Deep Rose The strongest rose colour from seed on the market! Habit and timing are a great match for the other Bandera varieties.

LEUCANTHEMUM 🌣

Leucanthemum x superbum

New Madonna F1

Height: 8 to 10 in./20 to 25 cm **Spread:** 8 to 12 in./20 to 30 cm

USDA Hardiness Zones: 5a to 9a (-20 to 20°F/-29 to -7°C minimum temperatures)

Seed supplied as: Raw

Plug crop time: 5 to 6 weeks Transplant to finish: 10 to 14 weeks

- Madonna offers better uniformity in height and habit over the competition.
- It also offers a reduced percentage of "too small" plants compared to standard seed varieties.
- With a larger percentage of salable plants, Madonna requires less labour for harvesting and grading.



Mon Amie Pink Myosotis

MYOSOTIS • • Myosotis sylvatica

Mon Amie Series

Height: 8 to 10 in./20 to 25 cm **Spread:** 6 to 8 in./15 to 20 cm

USDA Hardiness Zones: 6a to 8b (-10 to 15°F/-23 to -9°C minimum temperatures)

A First-Year-Flowering Perennial.

Seed supplied as: Raw

Plug crop time: 4 weeks Transplant to finish: 5 to 9 weeks

- The Mon Amie series gets a second colour and a mix!
- Send your crop to market 3 to 6 months earlier than biannual myosotis varieties, as no vernalization is needed for flowering.
- Can be a good choice for annual programs and can be reliably scheduled for Autumn or Spring.
- Media/soil pH requirements are similar to Primula acaulis.

New Pink Has the same habit as Mon Amie Blue, but the foliage is a bit lighter green, and first and 100% flowering is 2 to 3 days earlier.

New Mixture Combines Blue, NEW Pink and white (not available separately).



Mon Amie Mixture Myosotis

SALVIA O

Salvia nemorosa (superba)

New Dimension Series

Height: 8 to 10 in./20 to 25 cm **Spread:** 6 to 8 in./15 to 20 cm

USDA Hardiness Zones: 4a to 8b (-30 to 15°F/-34 to -9°C minimum temperatures)

A First-Year-Flowering Perennial.

Seed supplied as: Coated

Plug crop time: 5 to 6 weeks Transplant to finish: Rose, 8 to 10 weeks; Blue, 9 to 11 weeks

- The deepest blue and rose salvia from seed!
- Economical and easy to produce.
- Large, compact and wellbranched plants feature strongcoloured flowers that last in the landscape.
- Well-matched series finishes fast with no PGRs needed.
- Fits into annual production schedules.

New Rose Improved It's a win-win! Better germination and larger spikes than the previous Rose, with the same habit to match Blue.

New Salvatore Blue

Height: 10 to 12 in./25 to 30 cm **Spread:** 6 to 8 in./15 to 20 cm

USDA Hardiness Zones: 4a to 8b (-30 to 15°F/-34 to -9°C minimum temperatures)

Seed supplied as: Coated

Plug crop time: 5 to 6 weeks Transplant to finish: 9 to 12 weeks

- Premium-look salvia features the largest spikes and the deepest coloured calyx, spikes and flower in *Salvia nemorosa* from seed.
- More vigorous than New Dimension Blue, it is better suited for gallons.
- Features black stems on well-branched plants.
- Ideal for annual and overwintering programs.
- With a critical daylength of 10 hours, it is possible to finish for early Spring, which previously was only possible with vegetative varieties.



Salvatore Blue Salvia



New Dimension Rose Improved Salvia

POTPLANTS



Red, Yellow and Purple

CELOSIA 🔾 🗘 Celosia cristata

New Concertina Series

Height: 8 to 10 in. / 20 to 25 cm**Spread:** 6 to 8 in./15 to 20 cm

Seed supplied as: Coated

Plug crop time: 3 to 4 weeks Transplant to finish: 4 to 6 weeks

- Concertina is best for use as an indoor/outdoor pot plant and as an edging plant for your borders.

 • This compact pot *cristata* has the
- widest colour range on the market.

New Pink Slightly more vigorous than the rest of the series.

New Purple Dark purple.

New Red Rich, velvety red with a traditional green leaf.

New Red Dark Leaf More vigorous compared to the rest of the series.

New Yellow Slightly later to flower compared to the rest of the series. Can be more than one week in long days.

New Mixture Pink and Red Dark Leaf in the mix are slightly more vigorous compared to the rest of the series. (not pictured)



Pink





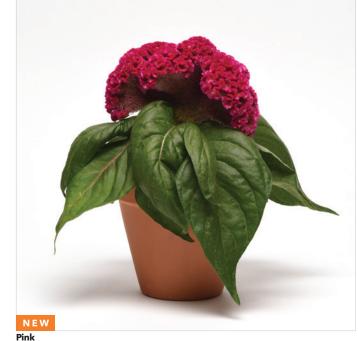
Red





Purple

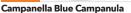




POT PLANTS / CAMPANELLA











Campanella Lavender Campanula





Campanella Pink Campanula

CAMPANULA

Campanula medium

New Campanella Series F1

Height: 8 to 10 in./20 to 25 cm **Spread:** 8 to 9 in./20 to 23 cm

Seed supplied as: Pelleted

Plug crop time: 6 to 7 weeks Transplant to finish: 7 to 10 weeks

- The new Campanella Series features larger blooms and more colours than competing varieties.
- The more vigorous plants are suitable for larger pots.
- Fills pots better with more
- flowers.
- Around one week later to flower that other campanula on the market.



Colorbloom Mixture Gerbera

GERBERA 🏶

Gerbera jamesonii

New Colorbloom Series F1

Height: 4 to 6 in./10 to 15 cm Spread: 6 to 8 in./15 to 20 cm Flower size: 3 to 4 in./8 to 10 cm

Seed supplied as: Coated

Plug crop time: 6 to 7 weeks Transplant to finish: 6 to 10 weeks

- The Colorbloom Series is specially designed for the quart/11 cm retail market.
- Colorbloom is the most uniform series on the market, with the best performance for consumers.
- The series is around 10 days faster to flower than competitors.
- More uniform with a shorter flower window.
- It has a higher amount of usable plants due to better seed quality.
- Offers a compact plant habit that requires less to no PGRs.
- Series holds its colour better and won't fade in high light.

New Bicolor Orange Yellow

Around one week later to flower compared to other varieties in the series.

New Cherry with Light Eye Can show more red under higher light conditions.

New Yellow with Dark Eye Slightly smaller flowers than the rest of the series.

New Mixture Contains all 5 varieties.



Stays tidy for smaller pots

NEW Colorbloom stays compact, so it won't get too full or leafy, allowing the colourful blooms to show through in quarts/11-cm pots. Faster to flower by around 10 days, Colorbloom beats the competition to market. And, first-time plant buyers will love the exciting, non-fading colours and easy care of this indoor/outdoor plant.







NEW



Colorbloom Red with Light Eye

Colorbloom Yellow with Dark Eye







Revolution Deep Pink with Light Eye

Hit your schedule every time

NEW **Revolution Deep Pink with Light Eye**

Series	Mega Revolution	Revolution	NEW ColorBloom
No. of Varieties	12 & 1 mix	14 & 1 mix	5 & 1 mix
Recommended Pot Size	6 in./15 cm	5 in./13 cm	quart



Mega Revolution Watermelon, Revolution Bicolor Yellow Orange and NEW Colorbloom Cherry with Light Eye Gerbera

GERBERA continued

Revolution Series F1

Height: 4 to 8 in./10 to 20 cm **Spread:** 10 to 12 in./25 to 30 cm Flower size: 3 to 4 in./8 to 10 cm

Seed supplied as: Coated

Plug crop time: 6 to 7 weeks Transplant to finish: 8 to 10 weeks

- The most uniform gerbera you can grow! When it comes to uniformity of flowering window across a complete colour range, Revolution is the leading standardsize pot gerbera.
- Industry-leading seed quality.
- Better second flush of flowers than the competition assures much longer bloom time for the consumer.
- Best for 4.5 to 5.5-in./11 to 14-cm pots, quarts.

New Deep Pink with Light Eye Replaces Pink with Light Eye with a deeper pink colour.



NEW

Mega Revolution Bright Rose with Dark Eye Gerbera

Mega Revolution Series F1

Height: 6 to 10 in./15 to 25 cm **Spread:** 12 to 14 in./30 to 36 cm Flower size: 4 to 5 in./10 to 13 cm

Seed supplied as: Coated **Plug crop time:** 6 to 7 weeks Transplant to finish: 8 to 10 weeks

- Produces manageable, larger-sized plants with very large flowers - beats competing series for colour range, bloom size and seed quality.
- Ideal for larger container programs.
- Supplied with industry-leading seed quality.

New Bright Orange with Light

Eye One of the fastest varieties in the series and one with the largest flowers.

New Bright Rose with Dark Eye Smaller flowers and slightly taller compared to the series average.

ORNAMENTAL PEPPER O

Capsicum annuum

New Salsa Purple Yellow

Height: 4 in./10 cm **Spread:** 3 to 5 in./8 to 13 cm

Seed supplied as: Raw

Plug crop time: 4 to 5 weeks Transplant to finish: 12 to 13 weeks

in Autumn

Fruit colour: Purple/Yellow **Pot size:** 2.25-4.25 in./6-11 cm Fruit size: 0.3 x 1 in./1 x 3 cm

- Unique assortment from Ex-Plant breeding offers a wide range of varieties with shorter production time.
- Compact growth means no PGRs are needed.
- Good retail shelf life.
- Excellent outdoor performance in containers.
- Produces attractive purple and yellow, 0.3 x 1-in./1 x 3-cm, fruit on compact plants.
- Potting to sale: 12 to 13 weeks



Mega Revolution Bright Orange with Light Eye Gerbera



Mega Revolution Bright Orange with Light Eye Gerbera



Salsa Purple Yellow Ornamental Pepper



Salsa Purple Yellow Ornamental Pepper

39

CUT FLOWERS



Mona Lisa Deep Blue Improved Anemone

ANEMONE Anemone coronaria

Mona Lisa® Series F1

Height: 10 to 18 in./25 to 46 cm

Seed supplied as: Raw

Planting density: 2 to 4 plants/ft.² (22 to 44 plants/m²) Best For: Greenhouse, high tunnel

Plug crop time: 8 weeks Transplant to finish: 12 weeks

- A masterpiece among anemones: Mona Lisa puts out up to 18 flowers per plant...flowers under lower Winter light levels... doesn't need staking, netting or disbudding.
- 4 to 4.5-in./10 to 12-cm blooms top sturdy 18-in./45-cm stems that are ideal for cutting and design work.
- Well-suited for young plant production from March to April sowing
- Low temperatures (46 to 54°F/8 to 12°C) promote optimum stem length for cut flower production.

New Deep Blue Improved Offers improved germination for more reliable supply. More uniform hybrid than the original for improved efficiencies in cut flower production.



Campana Deep Blue Improved Campanula

CAMPANULA Campanula medium

Campana Series F1

Height: 30 to 34 in./76 to 86 cm

Seed supplied as: Pelleted

Planting density: 6 to 8 plants/ft.² (64 to 80 plants/m²) Best for: Greenhouse

Plug crop time: 7 to 8 weeks Transplant to finish: 10 to 14 weeks

- Top-quality professional cut flower series is a low-energy crop, suitable for Summer or Winter production. See the Product Information Guide at panamseed.com for daylength requirements.
- Well-matched across the series for timing and habit, Campana delivers excellent uniformity.
- 100% top-flowering with strong stems and good foliage.

New Deep Blue Improved Largeflowered, deep blue campanula fits the series for timing, and is the best-quality variety in the series, plus it features good vase life.



Campana Series Campanula



Campana Deep Blue Improved Campanula





PRODUCTION GUIDE					
Class/Variety	Greenhouse	High Tunnel	Field		
ANEMONE					
Mona Lisa Series	X	X			
CAMPANULA					
Campana Series	X	X			
CELOSIA					
Sunday Series	X	X			
MATTHIOLA					
New Katz Hi Double White		X	X		
Mathilda Series	X				
New Tosca Series	X				
SNAPDRAGON					
Monaco Series	X	X			
Potomac Series	X	X			

FLORAL SELECTION GUIDE FOR BOUQUETS					
Class/Variety	Focal	Filler	Line	Volume	
ANEMONE					
Mona Lisa Series	Χ				
CAMPANULA					
Campana Series		X		Χ	
CELOSIA					
Sunday Series		X	Χ	Х	
MATTHIOLA					
New Katz Hi Double White			Χ	X	
Mathilda Series			Χ	X	
New Tosca Series			Χ	X	
SNAPDRAGON					
Monaco Series			Χ		
Potomac Series			Χ		

See the full chart of all PanAmerican Seed cut flowers on page 179 of the 2018/2019 Catalogue.

CELOSIA O Celosia plumosa

Sunday® Series

Height: 28 to 40 in./71 to 102 cm

Seed supplied as: Coated

Planting density: 6 to 8 plants/ft.² (64 to 80 plants/m²)

Best for: Greenhouse, high tunnel

Plug crop time: 2 to 3 weeks Transplant to finish: 12 to 16 weeks

- First professional cut version of the popular plume-shaped celosia.
- Full plumes and long, strong stems enhance high-end retail mixed bouquets.
- Short programmable production time and high yield - ideal for highdensity programs.
- Excellent shipability and vase life.

New Mixture Improved Contains all new and improved colours: Dark Pink, Orange, Bright Pink, Cherry, Purple and Gold.

SUNDAY is a registered trademark of Celex B.V.

NORTHERN GREENHOUSE SELECTABLE MATTHIOLA (STOCK) O

Matthiola incana

Mathilda Series

(Spring Flowering, Group 2)

Stem length: 32 in./81 cm

Seed supplied as: Raw

Planting density: 6 plants/ft.²

(65 plants/m²) Best for: Greenhouse

Plug crop time: 5 to 6 weeks Transplant to finish: Winter, 11 to 12 weeks; Spring, 8 to 9 weeks; Summer, 6 to 8 weeks; Autumn, 4 to 7 weeks

- Mathilda delivers the most uniform series on the market for habit and timing, with the best seed quality of any selectable matthiola.
- Important upgrade assures more programmable production, higher production per sq. ft./m in the greenhouse and fewer losses.

New Lavender Intense lavender colour.









New Tosca Series

(Spring Flowering, Group 2,3)

Stem length: 24 to 32 in./ 61 to 81 cm

Seed supplied as: Raw

Planting density: 6 to 7 plants/ft² (65 to 75 plants/m²) **Best for:** Greenhouse

Plug crop time: 5 to 6 weeks Transplant to finish: Autumn: 8 to 10 weeks, Spring: 10 to 11 weeks, Summer: 6 to 8 weeks, Winter: 12 to 14 weeks

A good series to grow in Summer with higher light levels and temperatures.

N E W Tosca Blue Sea

Focal

These are the largest blooms in the arrangement... the varieties that make customers go "aah!" Be sure to check out our centre-of-attention Jua sunflowers and lisianthus.

Filler

These transitional varieties have clusters of individual flowers on a single stem or flower head, and are used to fill in spaces between the Focal and Line flowers. Examples include dianthus and trachelium.

Line

These showy flowers add height and width to the arrangements, and are used to define the shape and direction. Many – like snapdragons and flowers held close to the stem.

Volume

Secondary to the focal flowers, blooms like matthiola and dianthus provide a dense burst of colour and add mass to the

More Usable Stems

NEW Katz Hi Double White provides greater than 90% vield of usable double-flowered stems, and this topselling colour also has flower quality to match current Katz White.



Katz Hi Double White

EXTRA-EARLY FLOWERING **TUNNEL OR FIELD-GROWN** MATTHIOLA (STOCK) O

Matthiola incana

New Katz Hi Double White

Stem length: 32 in./80 cm Seed supplied as: Raw

Planting density: 12 plants/ft.² (126 plants/m²) Best for: High tunnel, field

Plug crop time: 4 weeks Transplant to finish: 8 to 13 weeks

- Delivers shorter crop time, uniform stem length and timing between colours, and better heat tolerance than European or traditional field types.
- Can be grown earlier and later in the season, and even year-round in some climates, allowing for programmable Christmas through . Valentine's Day flowering.
- NEW Katz Hi Double White provides greater than 90% yield of double-flowered stems in this top-selling colour.
- 5% of PanAmerican Seed net seed sales of Katz are donated to PanCan for Pancreatic Cancer research in honor of Philip Katz, former PanAmerican Seed Product Manager.



Katz Hi Double White



Monaco Orange

SNAPDRAGON O

Antirrhinum majus

Stem Length: 39 to 60 in./ 99 to 152 cm

Seed supplied as: Raw

Planting desity: 6 to 10 plants/ft² (64 to 106) plants/m²); high-density planting under high-light or field situation

Best for: Greenhouse, high tunnel

Plug crop time: 4 to 5 weeks Transplant to finish: 8 to 18 weeks

Monaco Series F1

(Spring Flowering, Group 2,3)

- The "go-to" snaps for difficult transition harvest periods - late Summer to early Autumn and late Winter to early Spring.
- Monaco tolerates warm Autumn conditions without flowering too quickly, and produces high-quality flower spikes when Autumn weather is unusually cool and dark.
- Performs well all year in areas with moderate temperatures and little daylength fluctuation.

New Orange Important colour addition to this transitional season series.

Snaps second to none

PanAmerican Seed is the world leading supplier of F1 forcing snaps, with an unsurpassed choice of top-producing varieties selected for stem and flower quality, photoperiodic response and earliness to flower. With selections like popular Potomac, it's a "snap" to build an all-year program of successful growing.

Potomac Series F1

(Spring Flowering, Group 3,4)

- Tops for production during periods of high light, long days and warm temperatures.
- Plants produce tall, strong stems and long spikes with good flower quality.
- Can be grown year-round with supplemental high-intensity light.

New Royal Improved Offers more vivid colour saturation and better flower spike quality.

New White Improved Offers more reliable germination and improved flower spike quality.



Potomac Royal Improved



Potomac White Improved



Potomac Royal Improved



Potomac White Improved



HANDPICKED[®] VEGETABLES & HERBS



Orange Marmalade

SWEET BELL PEPPER 🗭

Capsicum annuum

New Orange Marmalade F1

Height: 18 to 24 in./46 to 61 cm **Spread:** 12 to 18 in./30 to 46 cm

Seed supplied as: Raw

Days to maturity from transplant: 70 to 75 to full ripe, 55 to 60 to green

Fruit characteristics: Bell, green to orange Fruit length: 3.5 to 4 in./9 to 10 cm **Fruit width:** 3.5 to 4 in./9 to 10 cm

Plant habit: Mounded

Best for: Fresh Market Field; Home Garden In-ground, Container

Plug crop time: 5 to 6 weeks Transplant to finish: 4 to 7 weeks (flowers),

7 to 9 weeks (green fruit), 10 to 11 weeks (orange fruit)

- \bullet Orange Marmalade is an easy addition to any home garden, with high yields of sweet bell peppers that ripen from green to orange.
- Early-ripening, sweet and flavourful medium-sized fruit are perfect for slicing fresh in a salad.
- Blocky bell shape is also great for stuffing.
- Includes a superior disease-resistance package for Bacterial Leaf Spot Races 1-3, 7 and 8, plus Tobacco Mosaic Virus.
- Supplied as professional-quality, disease-tested seed.



Class/Variety	Fresh Market			Home Garden	
	Field	Hydroponic	Protected Culture	In-ground	Container
F1 SWEET BELL PEPPER					
New Orange Marmalade	X			X	X
F1 PATTY PAN SQUASH					
New Lemon Sun	X			X	
F1 CHERRY TOMATO					
New Artemis	X		X	X	
New Helix	X			X	
BASIL					
New Everleaf Emerald Tower	X	X		X	X
New Newton	X	X		X	X





Fresh Market



Helix



Helix

CHERRY TOMATO O Solanum lycopersicum

New Artemis F1

Height: 60 to 84 in./152 to 213 cm **Spread:** 36 to 48 in./91 to 122 cm

Seed supplied as: Raw

Days to maturity from transplant: 50 to 55

Fruit size/weight: Round cherry; 1 in./3 cm, 0.02 to 0.03 oz./ 10 to 15 grams

Plant habit: Indeterminate Best for: Fresh Market Field, Protected Culture; Home Garden In-ground

Plug crop time: 3 to 4 weeks Transplant to finish: 2 to 4 weeks (green plant), 7 to 8 weeks (ripe fruit)

- One bite of these super-sweet, rich, red cherry tomatoes will have you craving more.
- The unique, crisp, firm texture is great in a salad or for sauce.
- High disease resistance to rootzone and foliar disease will ensure excellent plant health.
- Best grown in-ground.

New Helix F1

Height: 60 to 84 in./152 to 213 cm **Spread:** 36 to 48 in./91 to 122 cm

Seed supplied as: Raw

Days to maturity from transplant: 50 to 55

Fruit size/weight: Slightly elongated cherry; 1 in./3 cm, 0.02 to 0.03 oz./10 to 15 grams Plant habit: Indeterminate Best for: Fresh Market Field; Home

Plug crop time: 3 to 4 weeks Transplant to finish: 2 to 4 weeks (green plant), 7 to 8 weeks

(ripe fruit)

Garden In-ground

- Experience the taste of Summer with a perfect blance of sweet and acid from Helix red cherry tomato
- With early-ripening fruit and high yields, Helix is perfect for fresh eating.
- High resistance to root-zone and foliar diseases, including Late Blight resistance, will help ensure excellent plant health.
- Best grown in-ground.



Everleaf Emerald Towers Basil



Lemon Sun Squash

PATTY PAN SQUASH Cucurbita pepo

New Lemon Sun F1

Height: 24 to 36 in./61 to 91 cm **Spread:** 36 to 54 in./91 to 137 cm

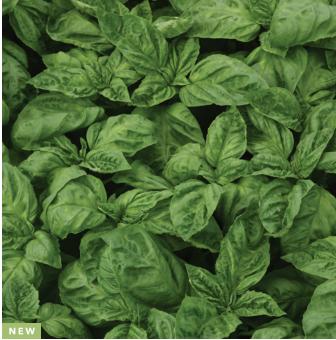
Seed supplied as: Raw

Days to maturity from direct seed: 40 to 45

Fruit size/weight: Harvest from a very small size with a flower attached, up to 4-5 in./10-12.5 cm wide Plant habit: Vigorous bush Best for: Fresh Market Field; Home Garden In-ground

Plug crop time: 2 to 3 weeks Transplant to finish: 4 to 5 weeks

- Vigorous and strong bush plant habit will produce exceptional yields of uniform, yellow, scalloped, disc-shaped fruit with no green on the blossom end.
- Fruit are sweet and tender; harvest from baby with the flower attached, to full size, 4 to 5 in./ 10 to 13 cm wide.
- Large quantities of male flowers are perfect for frying.
- Best grown in-ground.



Newton Basil

BASIL O

Ocimum basilicum

New Everleaf Emerald Towers

Height: 24 to 36 in./61 to 91 cm **Spread:** 8 to 12 in./20 to 30 cm

Seed supplied as: Raw

Days from transplant to harvest: 30 to 45

Best for: Fresh Market Field, Hydroponic; Home Garden In-ground, Container

Plug crop time: 4 to 5 weeks Transplant to finish: 3 to 5 weeks

- Flowers up to 10 to 12 weeks later than standard basil.
- Well-branched variety with short internodes makes a beautiful columnar plant with huge harvest potential that stays tidy for many uses, including in-ground, container gardens and hydroponics.
- Traditional Genovese flavour is perfect for eating fresh in caprese salad or chopped fresh in recipes.
- Dark green, glossy foliage and tidy columnar habit stand out at retail.

New Newton

Height: 12 to 20 in./30 to 51 cm **Spread:** 10 to 16 in./25 to 41 cm

Seed supplied as: Raw

Days from transplant to harvest: 21 to 30

Best for: Fresh Market Field, Hydroponic; Home Garden In-ground, Container

Plug crop time: 4 to 5 weeks Transplant to finish: 3 to 5 weeks

- A fast-growing variety with a traditional Genovese flavour, it also offers high resistance to Fusarium.
- Unlike similar varieties, Newton does not have a licorice aftertaste, appealing to a wide range of consumers.
- Large, bright green, crinkled leaves are great for vegetable wraps and fresh chopped herbs.



Everleaf Emerald Towers Basil

Large leaves and late flowering

When other basils start to flower and stretch, splitting open, NEW Everleaf Emerald Towers holds its tidy, contained shape. Plus, it is late-flowering, so consumers will enjoy more large leaves and traditional Genovese flavour throughout the season. It makes a standout ornamental plant in containers, too!

ACCEPTANCE OF TERMS

These terms and conditions shall govern orders for Goods placed with Seller. Purchaser acknowledges that these terms and conditions and Seller's proposal, if any, constitute the entire agreement between Seller and Purchaser and supersede any prior agreements and representations. Any prior or contemporaneous promises, agreements, negotiations or representations whether oral or written or created the custom, usage or course of dealing are also superseded by these terms and conditions. No modification of these terms and conditions shall be effective unless in writing signed by Seller. Placement of the order shall constitute Purchaser's acceptance of these terms and conditions. All orders are subject to acceptance by Seller at our corporate office. Any different or additional terms in any documents from Purchaser are objected to and rejected, are deemed to materially alter these terms, and will not become part of any contract between Seller and Purchaser.

PRICING

Prices and availability are subject to rices and availability are subject to change without notice. Although Seller tries to assure accuracy, it shall not be held responsible for typographical or other errors in the price list. Purchaser's price is determined by referring to the product price and deducting any discount for which Purchaser may qualify. Please contact your sales representative for more information.

TERMS

All payments must be received before Goods are shipped unless otherwise agreed to in writing by Seller. Payment terms can be seen on your Order Confirmation or at the appropriate Terms & Conditions page at panamseed. com for North American, European and International credit-approved customers. A 2% per month finance charge (24% annual rate) will be added to all past due balances at the end of each month. Seller has no obligation to ship any Goods until payment in full is received.

MINIMUM ORDERS

The minimum quantity listed in the price list for each variety is the minimum order for that variety. Seller reserves the right to fill orders using pre-packaged inventory when

FREIGHT & HANDLING CHARGES, INSPECTION, **DAMAGED GOODS**

(a) The freight and handling charge on Purchaser's invoice covers shipment of the Goods to Purchaser's destination. Seller will pay to return damaged goods, for replacement Goods or provide Purchaser with a credit for damaged Goods if the steps listed in Section (b) below are followed. PURCHASER WILL NOT REFUSE TO RETURN DAMAGED OR DEFECTIVE GOODS, OR THE RIGHT TO FILE A CLAIM IS LOST AND PURCHASER WILL STILL BE LIABLE FOR THE MATERIAL AND THE FREIGHT.

(b) When Purchaser receives shipment, it shall immediately: 1) count all cartons; 2) inspect all cartons for external damage; 3) check for open or resealed cartons; 4) note any damages, shortages, open or resealed cartons on the delivery receipt; the carrier's representative must also sign the receipt; and 5) open all boxes immediately and inspect for damage, including, but not limited to, material shortages. PURCHASER MUST NOTIFY SELLER WITHIN TWO (2) BUSINESS DAYS IF A SHIPMENT IS

DAMAGED by calling its Customer Service Representative to report the damage and receive details on what is needed to file a claim. The Goods shall be deemed accepted by the Purchaser on the earlier of (a) notice of acceptance to Seller, or (b) ten (10) days after delivery. Any claims for shortage, non-delivery, damage or defect which would reasonably be discoverable in the course of such inspection shall be waived unless Purchaser notifies Seller in writing within ten (10) days after delivery of the goods to which the claim relates.

PACKAGING FEES

All orders will be filled in bulk and/or predetermined packet sizes unless special packaging instructions are given. If special packaging is requested, a packaging fee will apply and additional time may be required to complete the order. Purchaser shall contact Customer Service if it requires additional details.

CUSTOM SEED TREATMENTS

If a custom treatment is requested, a \$25 (U.S. Dollars) fee per batch will apply and additional time may be needed to complete the order.

PHYTOSANITARY CERTIFICATES CHARGE

Depending on the Goods ordered by Purchaser, and the location of the Purchaser, Phytosanitary Certificates may be required to comply with government regulations. If the shipment requires Phytosanitary Certificates, an additional cost will be charged.

DELIVERY DATES

Please indicate the required ship date when the order is being placed. No orders can be accepted without a requested ship date. All shipping and delivery dates provided by the Seller are approximate.

DELAYS, SHORTAGES & SUBSTITUTIONS

Seller shall not be responsible for delays in delivery or for losses resulting from such delays. Seller reserves the right to make partial shipment. Seller will not be liable for any delay in performing or for partial or complete failure to perform hereunder if such delay or failure is due to fire, explosion, flood, Act of God, force majeure, accident, war, intervention of governmental authorities, strikes, labor disputes, material shortages, transportation delays, any act or omission of Purchaser, its agents or employees or any party retained by, through or under the control of Purchaser, or any other cause similar or dissimilar which is beyond Seller's reasonable control.

INSURANCE

Seller does not insure shipments via Air Mail, but insures all other shipments in transit, in commercially reasonable

SHIPPING

Any shipment outside of North America will be charged normal carrier rates.

RETURNS

No Goods may be returned without first obtaining written authorization. Authorized returns will only be considered if they are in original, unopened Seller packages. All returns are subject to a 15% service charge.

No credit or replacement will be given for Goods returned after nine (9) months from the ship date.

Upon receiving authorization, returns can be shipped to:

PanAmerican Seed Attn: Returns 622 Town Road West Chicago, Illinois USA 60185-2698

SEED COUNT

All seed counts given are approximate quantities due to variation based on a lot by lot comparison. Seed counts may also vary widely between colors and series

NOTICE REGARDING SEED-BORNE DISEASES

Seller makes no representation regarding the freedom from seed-borne diseases of the seed sold and disclaims any liability relating to such diseases, whether previously known to exist or not identified until such seed is grown.

RESERVATION OF OWNERSHIP

In the event of bankruptcy, products delivered by the Seller remain the property of Seller until the Purchaser has paid the purchase price amount. This reservation of ownership is also extended to claims that Seller may obtain towards Purchaser on account of the Purchaser's failure to meet their obligations to Sale.

LIMITATION OF WARRANTY

Seller warrants, to the extent required by law, that Goods conform to the description appearing in Seller's catalog and on container labels, within recognized tolerances. THE FOREGOING WARRANTIES ARE IN LIEU OF AND EXCLUDE ALL
OTHER WARRANTIES NOT EXPRESSLY SET FORTH HEREIN, WHETHER EXPRESSED OR IMPLIED BY OPERATION OF LAW OR OTHERWISE, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, TITLE AND NON-INFRINGEMENT.

LIMITATION OF REMEDY PURCHASER'S SOLE AND EXCLUSIVE

REMEDY SHALL BE REFUND OF THE PURCHASE PRICE. SELLER'S LIABILITY, WHETHER FOR BREACH OF CONTRACT, BREACH OF WARRANTY, NEGLIGENCE, PRODUCTS LIABILITY OR ANY OTHER THEORY OF LIABILITY, IS LIMITED TO THE AMOUNT OF THE PURCHASE PRICE. PURCHASER AGREES THAT IN NO EVENT, REGARDLESS OF THE FORM OF LEGAL ACTION OR THE THEORY OF RECOVERY, WILL SELLER BE LIABLE FOR CONSEQUENTIAL, INCIDENTAL, SPECIAL, INDIRECT OR PUNITIVE DAMAGES INCLUDING, BUT NOT LIMITED TO, LOSS OF PROFITS OR REVENUES.

USE RESTRICTION

Merchandise is not intended for sale to large-scale commercial growers of herbs or vegetables. Use, transfer and/or acquisition of seed constitutes acceptance of a limited right to use the seed solely to grow a single crop for food, feed, processing or ornamental purposes. No other use is permitted. Any transfer of seed must be accompanied by this use restriction.

MANDATORY ARBITRATION

ANY CLAIM WHICH PURCHASER MAY HAVE AGAINST SELLER ARISING OUT OF OR RELATING TO THE SALE OF THE GOODS HEREUNDER MUST BE BROUGHT, IF AT ALL, WITHIN TWELVE (12) MONTHS OF THE DELIVERY OF THE GOODS WHICH ARE THE SUBJECT OF THE CLAIM AND SHALL BE SETTLED BY BINDING ARBITRATION IN ACCORDANCE WITH THE COMMERCIAL ARBITRATION RULES OF THE AMERICAN ARBITRATION ASSOCIATION, SAID ARBITRATION TO BE VENUED IN COOK OR DUPAGE COUNTIES, ILLINOIS.

GOVERNING LAW, JURISDICTION & VENUE

The laws of the State of Illinois, including but not limited to the Uniform Commercial Code as adopted therein, shall govern all matters arising out of or relating to Seller's sale of merchandise. ANY DISPUTE NOT SUBJECT TO ARBITRATION AND ANY ACTION TO ENFORCE AN ARBITRATION AWARD ARISING OUT OF OR RELATING TO THE SALE OF MERCHANDISE HEREUNDER SHALL BE MAINTAINED IN THE STATE OR FEDERAL COURTS LOCATED IN DUPAGE OR COOK COUNTIES, ILLINOIS, AND PURCHASER SUBMITS TO THE JURISDICTION OF AND VENUE IN SAID COURTS.

INDEMNITY

By accepting the Goods, Purchaser agrees to indemnify, defend and hold harmless Seller, its affiliates, successors and assigns from and against any claim or liabilities, claims, demands, damages, losses and expense (including attorney's fees) asserted by any or all transferees of such Goods or users of the products of such Goods (i) arising from any act or omission of Customer or its employees or agents, or (ii) who were not notified by Purchaser in writing of Limitation of Warranty, Limitation of Remedy, Mandatory Arbitration, Governing Law, Jurisdiction and Venue, and Notice Regarding Seed-Borne Diseases, in language substantially equivalent to that contained in these Terms and Conditions of Sale.

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ALL SHIPMENTS MUST BE SHIPPED IN COMPLIANCE WITH THE FOREIGN CORRUPT PRACTICES ACT AND THE UK BRIBERY ACT.

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