2020 NEW VARIETIES
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!

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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

Find product & growing info at panamseed.com / INDEX
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.

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

<table>
<thead>
<tr>
<th>Variety</th>
<th>Seeds per Cell</th>
<th>Plug Size</th>
<th>Plants per Pot</th>
</tr>
</thead>
<tbody>
<tr>
<td>PowWow Wild Berry Echinacea</td>
<td>1</td>
<td>72</td>
<td>2</td>
</tr>
<tr>
<td>Mesa Peach Gaillardia</td>
<td>1</td>
<td>128</td>
<td>1</td>
</tr>
<tr>
<td>Blue Spear Lavandula</td>
<td>2</td>
<td>105</td>
<td>1</td>
</tr>
</tbody>
</table>

NEW SUMMER LOVIN'

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

12 in./30cm

Transplant to finish: 9-10 weeks in season

<table>
<thead>
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<th>Plug Size</th>
<th>Plants per Pot</th>
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<td>1</td>
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<td>2</td>
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<tr>
<td>Jolt Cherry Interspecific Dianthus</td>
<td>1</td>
<td>105</td>
<td>2</td>
</tr>
<tr>
<td>Starship Deep Rose Lobelia</td>
<td>2</td>
<td>72</td>
<td>2</td>
</tr>
</tbody>
</table>

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.
NEW DATE KNIGHT  
PowWow® White Echinacea, Starship Scarlet Lobelia, Blue Spear Lavandula & ColorGrass® Festina Festuca

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.

Transplant to finish: 9-10 weeks in season.

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<tr>
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<td>Starship Scarlet Lobelia</td>
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<td>72</td>
<td>2</td>
</tr>
<tr>
<td>Blue Spear Lavandula</td>
<td>2</td>
<td>105</td>
<td>1</td>
</tr>
<tr>
<td>ColorGrass Festina Festuca</td>
<td>1</td>
<td>105</td>
<td>2</td>
</tr>
</tbody>
</table>

NEW FEELING FRISKY  
NEW Madonna F1 Leucanthemum, Jealousy Leycesteria & Mesa Red Gaillardia

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.

Transplant to finish: 8 weeks in season.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Seeds per Cell</th>
<th>Plug Size</th>
<th>Plants per Pot 12 in./30cm</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEW Madonna F1 Leucanthemum</td>
<td>2</td>
<td>72</td>
<td>2</td>
</tr>
<tr>
<td>Jealousy Leycesteria</td>
<td>1</td>
<td>105</td>
<td>1</td>
</tr>
<tr>
<td>Mesa Red Gaillardia</td>
<td>1</td>
<td>105</td>
<td>1</td>
</tr>
</tbody>
</table>
NEW GOLDEN ERA
Double the Sun Coreopsis & Blue Spear Lavandula

12 in./30cm

Transplant to finish: 7-8 weeks in season

<table>
<thead>
<tr>
<th>Variety</th>
<th>Seeds per Cell</th>
<th>Plug Size</th>
<th>Plants per Pot 12 in./30cm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Double the Sun Coreopsis</td>
<td>1</td>
<td>288</td>
<td>2</td>
</tr>
<tr>
<td>Blue Spear Lavandula</td>
<td>2</td>
<td>105</td>
<td>2</td>
</tr>
</tbody>
</table>

NEW PINK PURSUIT
PowWow White Echinacea, Jolt Pink Magic Interspecific Dianthus, Blue Spear Lavandula & ColorGrass Festina Festuca

12 in./30cm

Transplant to finish: 9-10 weeks in season

<table>
<thead>
<tr>
<th>Variety</th>
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<th>Plug Size</th>
<th>Plants per Pot 12 in./30cm</th>
</tr>
</thead>
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<td>2</td>
</tr>
<tr>
<td>Jolt Pink Magic Interspecific Dianthus</td>
<td>1</td>
<td>105</td>
<td>2</td>
</tr>
<tr>
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</tr>
<tr>
<td>ColorGrass Festina Festuca</td>
<td>1</td>
<td>105</td>
<td>2</td>
</tr>
</tbody>
</table>
NEW HOCUS POCUS

Santos Orange Ornamental Pepper & Hot Pops Purple Ornamental Pepper

Transplant to finish: 9 weeks in season; requires heat and light for best finish.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Seeds per Cell</th>
<th>Plug Size</th>
<th>Plants per Pot</th>
</tr>
</thead>
<tbody>
<tr>
<td>Santos Orange Ornamental Pepper</td>
<td>1</td>
<td>10 in./25cm</td>
<td>2 3</td>
</tr>
<tr>
<td>Hot Pops Purple Ornamental Pepper</td>
<td>1</td>
<td>12 in./30cm</td>
<td>2 3</td>
</tr>
</tbody>
</table>

AMAZING COLOR AT ALL STAGES

These multicolour ornamental pepper plants can be sold when their fruit first starts to show – you don’t have to wait for them to change from green to a sellable colour! This means they'll spend less time on the bench, and get to the store faster.

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.
NEW COLOR CARNIVAL
Wicked Ornamental Pepper & Santos Orange Ornamental Pepper

10 in./25cm
12 in./30cm

Transplant to finish: 9 weeks in season; requires heat and light for best finish.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Seeds per Cell</th>
<th>Plug Size 10 in./25cm</th>
<th>Plants per Pot 10 in./25cm</th>
<th>Plants per Pot 12 in./30cm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wicked Ornamental Pepper</td>
<td>1</td>
<td>288</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Santos Orange Ornamental Pepper</td>
<td>1</td>
<td>288</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

NEW FIRELIGHTER
Blaze Ornamental Pepper & Hot Pops Purple Ornamental Pepper

10 in./25cm
12 in./30cm

Transplant to finish: 9 weeks in season; requires heat and light for best finish.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Seeds per Cell</th>
<th>Plug Size 10 in./25cm</th>
<th>Plants per Pot 10 in./25cm</th>
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</thead>
<tbody>
<tr>
<td>Blaze Ornamental Pepper</td>
<td>1</td>
<td>288</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Hot Pops Purple Ornamental Pepper</td>
<td>1</td>
<td>288</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

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
ANGELONIA
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

- 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® 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 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

TUBEROUS BEGONIA

Begonia x tuberhybrida

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 salmon-coral 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 edge.
New White Red White with a red edge.

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® 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. Flowers measure 4 to 8 in./10 to 20 cm or larger, for a different, more elegant and refined flower shape.
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.

Request your Product Information Guide for full culture details.
**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.
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.

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CELOSIA  
*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 well-branched 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® 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-its-kind 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.

New Cherry Warm cherry-rose with a small rose ring and a small yellow throat. Colour may become slightly lighter in high light and warm night conditions. Moderate plant vigour. 11 hours daylength required.

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. 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.
**COSMOS**

*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.

---

**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-Pellets
- 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.

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**NEW**

- Sonata Red Shades Cosmos
- Mandarin Cosmos
- Sonata Mixture Improved Cosmos
- Pink Shimmer Cuphea
**DIANTHUS  
Dianthus 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**  
**Floral Lace Red**  
This rich, red-burgundy represents a key colour that was missing from the series.

**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.
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.

GAZANIA

**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

**Tagetes patula**

**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 red-tipped 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® Series F1

**Osteospermum ecklonis**

- **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 Series F1

**Viola x wittrockiana**

- **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.
ANNUALS / MATRIX

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 easy.
• 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 large-flowered 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.

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.

NEW
Matrix Blue Blotch Improved
NEW
Matrix Midnight Glow
NEW
Matrix Yellow Purple Wing
NEW
Promise Blue Blotch Improved

Request your Product Information Guide for full culture details
**SPREADING PANSY**

*Viola 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.

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**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.
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.

NEW Lucky Star Lipstick Pentas
NEW Lucky Star White Improved Pentas
NEW Double Cascade Valentine Double Petunia

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NEW Lucky Star White Improved Pentas
NEW Double Cascade Valentine Double Petunia

L: Competing Violet variety R: Lucky Star Violet

PENTAS◆
Petunia x hybrida

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 sales.
• Well-suited to larger containers, mixed combination planters and beds.
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!

Easy Wave® Series F1
**Petunia x hybrida**
- **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.
ANNUALS / OPTIC

PRIMULA

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 bicoulour pattern than competing varieties. Its large yellow flame brightens up any mix.

NEW

Optic Gold Primula

NEW

Optic Scarlet Flame Primula

NEW

Quartz XP Bordeaux Verbena

VERBENA

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 varieties.
• 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.

NEW

Quartz XP Bordeaux Verbena

NEW

Optic Scarlet Flame Primula

NEW

Optic Gold Primula

NEW

Optic Gold Primula

NEW

Optic Scarlet Flame Primula

NEW

Quartz XP Bordeaux Verbena

PanAmerican Seed.
VIOLA • Viola cornuta

NEW Quicktime 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: 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 free-flowering 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!
Send the best-looking 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.

**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 6 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 pots.

**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; stronger ruffling occurs in cool conditions.
- Spring production is recommended.

**New Purple Shades** Frizzled purple flower with an attractive dark eye.
**New Tapestry** Flowers contain shades of purple, burgundy and yellow, providing a tapestry of colour.
**New Yellow** Frizzled 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).

Find product & growing info at panamseed.com / ZINNIA
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.

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!
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.
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).

SALVIA
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 well-branched plants feature strong-coloured 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.

New Dimension Rose Improved Salvia

Salvatore Blue Salvia
POT PLANTS
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)

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Red, Yellow and Purple
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 than other campanula on the market.

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.

CAMPALELLA
Campanula medium

POT PLANTS / CAMPANELLA

Campanella Blue Campanula
Campanella Lavender Campanula
Campanella Pink Campanula
Campanula Blue Campanula
Campanula Lavender Campanula
Campanula Pink Campanula

GERBERA
Gerbera jamesonii

New Colorbloom Mixture Gerbera
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.

Colorbloom Bicolor Orange Yellow
Colorbloom Cherry with Light Eye
Colorbloom Deep Rose with Light Eye
Colorbloom Red with Light Eye
Colorbloom Yellow with Dark Eye
Hit your schedule every time

Flower timing is synchronized across the colour range in each Revolution series, so your product flows smoothly. No surprises…you grow, pick, pack and ship just as you planned. High uniformity enables a consistent, fully programmable, high-density crop year-round.

**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 standard-size 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.

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**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**
**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**

*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

**New Salsa Purple Yellow Ornamental Pepper**

**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

**New Salsa Purple Yellow Ornamental Pepper**
CUT FLOWERS
**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.

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**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** Large-flowered, deep blue campanula fits the series for timing, and is the best-quality variety in the series, plus it features good vase life.
CELOSIA

**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 high-density programs.**
- **• Excellent shipability and vase life.**
- **New Mixture Improved** Contains all new and improved colours: Dark Pink, Orange, Bright Pink, Cherry, Purple and Gold.

**New**

Mathilda Lavender Matthiola

NORTHERN GREENHOUSE SELECTABLE MATTHIOLA (STOCK)

**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.

See the full chart of all PanAmerican Seed cut flowers on page 179 of the 2018/2019 Catalogue.
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.
CUT FLOWERS / KATZ HI DOUBLE WHITE

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 Matthiola – feature 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 bouquet.

More Usable Stems
NEW Katz Hi Double White provides greater than 90% yield of usable double-flowered stems, and this top-selling colour also has flower quality to match current Katz White.

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

NEW
Katz Hi Double White

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.

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.

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

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

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NEW
Katz Hi Double White

Request your Product Information Guide for full culture details
**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.

**SNAPDRAGON**

*Antirrhinum majus*

- **Stem Length:** 39 to 60 in./ 99 to 152 cm
- **Seed supplied as:** Raw
- **Planting density:** 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.

**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.
**NEW**
**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)

- 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

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Fantastic for the Fresh Market

NEW Artemis and NEW Helix are two key introductions for the Fresh Market industry, offering great performance in high tunnels and open fields, along with a great disease resistance package. And, customers will be hooked once they taste their rich, sweet flavour!

**Artemis**
- **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 root-zone 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 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)
- • Experience the taste of Summer with a perfect balance 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.

**Helix**
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!

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.

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.

Newton Basil

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.

Lemon Sun Squash

BASIL
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.
- Best grown in-ground.
ACCEPTANCE OF TERMS

These terms and conditions shall govern orders for Goods placed with Seller. Purchaser shall acknowledge these terms and conditions and Seller’s proposal, if any, constitute the entire agreement between Seller and Purchaser and supersedes any prior price agreements and representations. Any prior or contemporaneous understandings, 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 and 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 a part of any contract between Seller and Purchaser.

PRICING

Prices and availability are subject to change without notice. Although Seller tries to assure accuracy of prices, we cannot be held responsible for typographical or other errors in the price list. Purchaser’s price is determined by referring to the current 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 on panamseed.com for North American, European and International credit-approved customers. A 2% per month finance charge (the maximum permitted by law) 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 available.

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 72 HOURS OF RECEIPT.

(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. For terms of 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 package 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 $125 (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 treatment 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 performance 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 control of Purchaser, or any other cause similar or dissimilar which is beyond Seller’s reasonable control.

INSURANCE

Seller does not provide insurance via Air Mail, but insures all other shipments in transit, in commercially reasonable amounts.

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 return shipments 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
203 East 12th Street
West Chicago, Illinois USA 60185-2698

SEED COUNT

All seed counts given are approximate quantities due to variation based on a lot by lot basis. 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 the Seller until the Purchaser has paid 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 Seller.

LIMITATION OF WARRANTY

Seller warrants, to the extent required by law, that the 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 BYOPERATION OF LAW OR OTHERWISE, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, TITLE AND NONINFRINGEMENT.

LIMITATION OF REMEDY

Seller’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 by or at all times within (12) MONTHS OF THE DELIVERY OF THE GOODS which are the subject of the claim and shall be subject to mandatory binding arbitration in accordance with the commercial arbitration rules of the American Arbitration Association, said arbitration to be held 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 or in effect therein, 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 AGREEMENT OUT OF OR RELATING TO THE SALE OF MERCHANDISE HEREUNDER SHALL BE MAINTAINED IN THE STATE OR FEDERAL COURT LOCATED IN DUFAGE 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 expenses (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 that the Goods may be the subject 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.

TRADEMARKS

Trademarks are and shall remain the property of Ball Horticultural Company, unless otherwise indicated. Nothing herein shall grant Purchaser a license to use any such trademark.

SALE LIMITATIONS

PANAMERICAN SEED PRODUCTS ARE NOT AVAILABLE FOR SALE IN AND MAY NOT BE SOLD INTO AUSTRALIA, NEW ZEALAND, KOREA, BRAZIL AND SOUTH AFRICA. THE COMPANY’S PRODUCTS MAY NOT BE SOLD, DIVERTED, TRANSFERRED OR RE-EXPORTED, DIRECTLY OR INDIRECTLY, TO ANY INDIVIDUAL, ENTITY OR DESTINATION THAT IS SUBJECT TO UNITED STATES OR UNITED NATIONS SANCTIONS PROGRAMS OR EMBARGOS (INCLUDING, BUT NOT LIMITED TO, OFAC SANCTIONS PROGRAMS OR OTHERS THOSE LISTED ON OPAC’S “SPECIALLY DESIGNATED NATIONALS” LIST) WITHOUT AN APPROPRIATE EXPORT LICENSE.

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

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