

PanAmerican Seed®  
KieftSeed

**NEW VARIETIES 2018**



PanAmerican Seed®  
**KieftSeed**

# welcome

## OPENING NEW DOORS

Welcome to our 2018 seed lineup! For over 50 years, PanAmerican Seed® and Kieft Seed have been creating exceptional flowers and vegetables, providing the highest quality seed to professional greenhouse growers, and helping gardeners around the world plant beauty in their gardens.

This New Variety Bulletin features innovative sales opportunities like the six-colour Lucky Star pentas series, Rockin' Red dianthus and Mad Hatter specialty/hot pepper. See head-turning updates to consumer-favourite series like Cool Wave® pansy and Megawatt begonia. Hear about our all-new, all-proven, all-seed Plug & Play combo program. And, be sure to check out the new Pot Plants section, offering some strong options for this popular market.

Enjoy these exceptional new varieties and what they will bring to your business. Here's to an even stronger partnership in 2018 and beyond!

Your friends at PanAmerican Seed & Kieft Seed

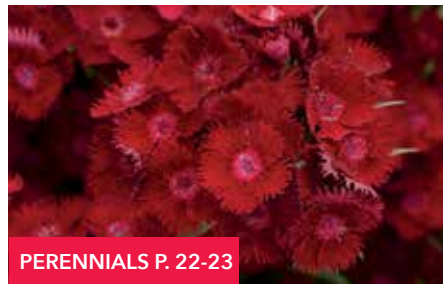




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Our cover stars:  
Megawatt Red Bronze Leaf Begonia, Cool Wave® Raspberry Spreading Pansy, Rockin' Red Dianthus and the Plug & Play combo program.





# plug&play

combos

## All-New, All-Seed, All-Proven

The Plug & Play combo program debuted during Summer 2016 to wide acclaim. This **fresh and relevant** collection is built upon internal and external testing in multiple regions. Trialing in saleable sizes begins at the PanAmerican Seed research greenhouses and in outdoor Summer containers. Then every potential introduction heads out to commercial greenhouses and to real-life gardens. This **fully vetted** collection of 60+ Plug & Play combos - including 9 newcomers - promises easy, economical production; big retail shows and **gardener-satisfying results**.

All the details are in our brochure at [panamseed.com/PlugandPlay](http://panamseed.com/PlugandPlay)



**NEW**

**Combo Blue Petunia**

**SPREADING PETUNIA** ☀️  
*Petunia x hybrida*

### **New Combo Blue F1**

**Height:** 6 to 12 in./15 to 30 cm

**Spread:** 2.5 to 3.25 ft./76 cm to 1 m

**Flower size:** 2 to 3 in./5 to 7 cm

**Seed supplied as:** Pelleted

**Plug crop time:** 5 to 6 weeks

**Transplant to finish:** Spring 6 weeks, Summer 4 weeks

- Chosen specifically for its habit and performance as a combination component.
- Large, velvety deep blue flowers on a mounding, well-branched plant.
- Timing is similar to Easy Wave Blue, with a minimum daylength requirement of 10.5 hours

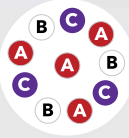
# wave® plug & play combos

## NEW FLYING THE FLAG

Easy Wave® Red Velour, Easy Wave White & Petunia Combo Blue



10 in./25 cm



12 in./30 cm



Transplant to finish: 7 weeks\*

Variety	Seeds per Cell	Plug Size	Plants per Pot		Critical Daylength
			10 in./25 cm	12 in./30 cm	
<b>A</b> Easy Wave Red Velour Petunia	1	288	3	4	11 hrs.
<b>B</b> Easy Wave White Petunia	1	288	2	3	10 hrs.
<b>C</b> Petunia Combo Blue	1	288	2	3	10.5 hrs.



## NEW MAD ABOUT RED

Easy Wave Red Velour & Easy Wave Yellow



8 in./20 cm



10 in./25 cm



12 in./30 cm



Transplant to finish: 7 weeks\*

Variety	Seeds per Cell	Plug Size	Plants per Pot			Critical Daylength
			8 in./20 cm	10 in./25 cm	12 in./30 cm	
<b>A</b> Easy Wave Red Velour Petunia	1	288	2	3	4	11 hrs.
<b>B</b> Easy Wave Yellow Petunia	1	288	2	3	4	10 hrs.



\*Timing assumes the use of daylength extension or lighted plugs where needed, and active growing temperatures.

# wave® plug & play combos

## NEW SWEETHEART

Easy Wave Red Velour & Easy Wave Pink Passion



8 in./20 cm



10 in./25 cm



12 in./30 cm



Transplant to finish: 7 weeks\*

Variety	Seeds per Cell	Plug Size	Plants per Pot			Critical Daylength
			8 in./20 cm	10 in./25 cm	12 in./30 cm	
<b>A</b> Easy Wave Red Velour Petunia	1	288	2	3	4	11 hrs.
<b>B</b> Easy Wave Pink Passion Petunia	1	288	2	3	4	10 hrs.

wave  
PETUNIAS

## NEW VERY VALENTINE

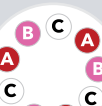
Easy Wave Red Velour, Easy Wave Pink Passion & Easy Wave White



8 in./20 cm



10 in./25 cm



12 in./30 cm



Transplant to finish: 7 weeks\*

Variety	Seeds per Cell	Plug Size	Plants per Pot			Critical Daylength
			8 in./20 cm	10 in./25 cm	12 in./30 cm	
<b>A</b> Easy Wave Red Velour Petunia	1	288	1	2	3	11 hrs.
<b>B</b> Easy Wave Pink Passion Petunia	1	288	1	2	3	10 hrs.
<b>C</b> Easy Wave White Petunia	1	288	1	2	3	10 hrs.

wave  
PETUNIAS

\*Timing assumes the use of daylength extension or lighted plugs where needed, and active growing temperatures.



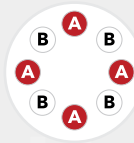
# combos with premium annuals

## NEW FIRE N NICE

Easy Wave Red Velour Petunia & Glitz Euphorbia



10 in./25 cm



12 in./30 cm



*wave*  
PETUNIAS®

Transplant to finish: 7 weeks\*

	Variety	Seeds per Cell	Plug Size	Plants per Pot		Critical Daylength
				10 in./25 cm	12 in./30 cm	
<b>A</b>	Easy Wave Red Velour Petunia	1	288	3	4	11 hrs.
<b>B</b>	Glitz Euphorbia	1	128	3	4	Neutral

PLUG & PLAY

## key grower tips

8 in./20 cm

10 in./25 cm

1.



Transplant



Transplant

2.



After 3 weeks



After 3 weeks

3.



After 6 weeks



After 6 weeks

### 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 is 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 the best balanced combination finish.

**PLUG POSITIONING:** Plant your plugs halfway between the middle of the pot and the rim. A tight circle of plugs is key to getting the intermingled look desired in a multi-plant combination. Planting at the rim results in a "clumpy," less intermingled look. All varieties in each Plug & Play combo are transplanted at the same time in order to finish at the same time. Sow times may vary.

**NOTE:** In multi-species combos, shear Kabloom plugs before transplanting.

### Easy does it!

Next up is PGR application, specifically for multi-species combinations. We recommend the following for the best-toned and fully mixed multi-species combination finish.

**PGRS\*:** Daminozide spray at 2,500 to 5,000 ppm (depending on your conditions) 1 week after transplant, followed by a second daminozide spray 7 to 10 days later. Daminozide will allow the axils to expand, versus a paclobutrazol treatment which can lock up axillary branching. The result is controlled growth early, while still allowing good branching for the combination's development.

When plants grow to the rim and begin to fill the pot, switch to a repeated low rate paclobutrazol drench at 1 to 2 ppm (depending on your conditions). Go easy - too high a rate for the paclobutrazol drench can stop the non-petunia components and lead to a bad mix result.

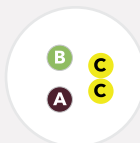
\*Rates are based on trials in the northern U.S.

**IMPORTANT:** All varieties in each Plug & Play combo must be transplanted at the same time in order to finish at the same time. Sow times will vary.

# combos with premium annuals

## NEW LUNCH DATE

Patio Baby Eggplant, SimplyHerbs 'Try Basil' & Bonanza Yellow French Marigold



12 in./30 cm



Transplant to finish: 2 to 3 weeks from step up\*\*

	Variety	Seeds per Cell	Step up Size	Plants per Pot
				12 in./30 cm
<b>A</b>	Patio Baby Eggplant	1	50 liner	1
<b>B</b>	SimplyHerbs 'Try Basil'	1 PMPL	50 liner	1
<b>C</b>	Bonanza Yellow French Marigold	1	50 liner	2

## NEW FOODIE BLUES

Patio Baby Eggplant, Dolce Fresca Basil & Petunia Combo Blue



12 in./30 cm



Transplant to finish: 2 to 3 weeks from step up\*\*

	Variety	Seeds per Cell	Step up Size	Plants per Pot
				12 in./30 cm
<b>A</b>	Patio Baby Eggplant	1	50 liner	1
<b>B</b>	Dolce Fresca Basil	3	50 liner	1
<b>C</b>	Petunia Combo Blue	1	50 liner	2

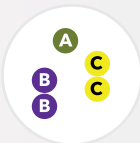
\*\*Timing assumes correct daylength and active growing temperatures; finish for late Spring/Summer.



# combos with premium annuals

## NEW CANTINA HEAT

Sweet Heat Pepper, Petunia Combo Blue & Bonanza Yellow French Marigold



12 in./30 cm

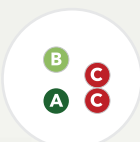


Transplant to finish: 2 to 3 weeks from step up\*\*

Variety	Seeds per Cell	Step up Size	Plants per Pot
			12 in./30 cm
<b>A</b> Sweet Heat Pepper	1	50 liner	1
<b>B</b> Petunia Combo Blue	1	50 liner	2
<b>C</b> Bonanza Yellow French Marigold	1	50 liner	2

## NEW ITALIAN BISTRO

Little Napoli Tomato, SimplyHerbs Curled Parsley & Easy Wave Red Velour Petunia



12 in./30 cm



Transplant to finish: 2 to 3 weeks from step up\*\*

Variety	Seeds per Cell	Step up Size	Plants per Pot
			12 in./30 cm
<b>A</b> Little Napoli Tomato	1	50 liner	1
<b>B</b> SimplyHerbs Curled Parsley	1 MPL	50 liner	1
<b>C</b> Easy Wave Red Velour Petunia	1	50 liner	2

**IMPORTANT:** All varieties in each Plug & Play combo must be transplanted at the same time in order to finish at the same time. Sow times will vary.

*wave*  
PETUNIAS®

# annuals



**NEW**

**Purple Prince Alternanthera**

**ALTERNANTHERA** 🌻 🌻

*Alternanthera brasiliana*

### **New Purple Prince**

**Height:** 10 to 16 in./25 to 41 cm

**Spread:** 18 to 20 in./46 to 51 cm

**Seed supplied as:** Raw

**Plug crop time:** 4 to 5 weeks

**Transplant to finish:** 7 to 8 weeks

- First compact seed alternanthera is an easy-to-grow alternative to vegetative varieties.
- Durable carpet of ruby/burgundy foliage is ready to take on any Summer condition including drought and rain. Imagine this unique colour accent in large cityscapes and as a "spiller" in high-impact containers!
- May flower under very short days; light plants at that time of year to prevent bud formation.





**NEW**

Red Bronze Leaf



**NEW**

Red Bronze Leaf



**NEW**

Red Bronze Leaf

## MEGAsize + MEGAcolour = MEGAsales!

All-new Megawatt debuted for 2017 as a fresh, high-energy option in begonias, pushing this must-have class to a whole new level with great timing benefits, a unique colour, ultimate garden power and more. These bigger-than-life hybrids open the door to earlier Spring sales for garden, planters and baskets.

With this introduction, PanAmerican Seed now offers a complete interspecific program, starting with BabyWing® for day-neutral growing... Megawatt for big Spring sales...and Dragon Wing® to round out the season.

## BEGONIA

*Begonia interspecific*

### Megawatt Series F1

**Height:** 20 to 28 in./51 to 71 cm

**Spread:** 16 to 24 in./41 to 61 cm

**Seed supplied as:** Pelleted

**Plug crop time:** 7 to 8 weeks

**Transplant to finish:** 7 to 9 weeks

- Striking, non-stop flowers keep plants covered in huge colour all through the Summer.
- Bronze Leaf varieties are faster to flower than the Green Leaf varieties.
- Beautiful plants with lush foliage are perfect for landscapes, baskets, big tubs and borders.

**New Red Bronze Leaf** Big flower power! Fits well with the other Megawatt Bronze Leaf varieties for timing and habit.





**NEW**

**Crave Strawberry Star Calibrachoa**



**NEW**

**Serena White Improved Angelonia**

**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

- No-pinch, low-hassle Serena continues to deliver the premium results you expect from vegetative varieties, with less labour and more efficiency.
- Unique 3D colour fills gardens, landscapes and mixed containers.

**New White Improved** Times like current White, with faster secondary flowering. Plants are retail-ready faster, especially for the first shipments.



**NEW**

**Crave Strawberry Star Calibrachoa**

**CALIBRACHOA** ☀️  
*Calibrachoa x hybrida*

**New Crave Strawberry Star F1**

**Height:** 10 to 14 in./25 to 36 cm  
**Spread:** 12 to 16 in./30 to 41 cm

**Seed supplied as:** Pelleted

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

- *The first star pattern in seed calibrachoa!* Flower colour may shade slightly. Under warmer night conditions, the strawberry colour may become lighter, while maintaining a consistent star pattern.
- Plants have good vigour, with a more uniformly branched and controlled habit than Crave Sunset.
- Grows more vigorously than the Kabloom varieties.
- Great colour for Autumn combos.
- Requires 12 hrs. for best flowering.



**NEW**

**First Flame Mixture Celosia**

**CELOSIA** ☀️  
*Celosia plumosa*

**First Flame Series**

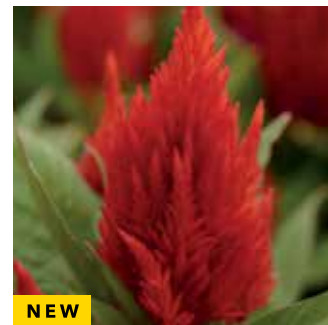
**Height:** 10 to 14 in./25 to 36 cm  
**Spread:** 10 to 16 in./25 to 41 cm

**Seed supplied as:** Coated

**Plug crop time:** 3 to 4 weeks  
**Transplant to finish:** 8 to 10 weeks

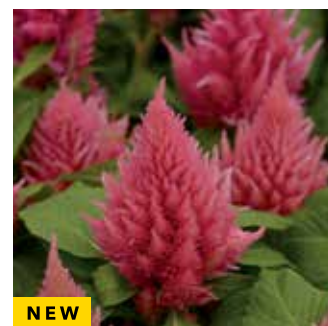
- Excellent, brightly coloured Summer crop finishes 10 to 14 days earlier than competing varieties to reduce production costs.
  - Branches like a regular *C. plumosa* to produce full blooms.
- New Scarlet** The model for the series features outstanding, bright colour and a great habit - fits well with Red and Yellow. Colour holds very well in sun and high light levels.

**New Mixture** Shows off three bright colours: Red, Yellow and NEW Scarlet.



**NEW**

**First Flame Scarlet Celosia**



**NEW**

**Ice Cream Salmon Celosia**

**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; stunning in patio planters or gardens.
- New Salmon** Clear salmon colour on a very good plant habit - one of the models for the Ice Cream series, with a good colour for mixes.





**NEW**

Pink Magic



**NEW**

Pink Magic

### Shocking Summer Colour!

The most heat-tolerant Interspecific Dianthus, Jolt's electrifying colours and all-season performance make them sure standouts in landscapes and garden beds, as well as premium containers. These highly durable plants withstand hot conditions with few disease issues and continue to flower without setting seed. Add in this year's new multicolour "Magic" introduction...you've got all the makings for a really powerful sales surge!

**INTERSPECIFIC DIANTHUS** ☀️  
*Dianthus barbatus interspecific*

#### Jolt 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:** 4 to 5 weeks  
**Transplant to finish:** Late Spring through Autumn finish, 11 to 13 weeks; Winter finish, 14 to 18 weeks

- Grower-friendly, well-branched plants are easy to produce with less to no PGRs.
- Perfect for Summer premium grower choice quarts and gallons.

**New Pink Magic** Flowers open white, then light pink, and mature to dark pink; optimal colour pattern results from high light and cool night temperatures.

#### GERBERA

#### Mega Revolution Series Revolution Series

See Pot Plants, page 25.





**NEW**

**Lavender Improved**

**NEW GUINEA IMPATIENS** 🌞

*Impatiens hawkeri*

**Divine Series F1**

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

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

**Seed supplied as:** Raw

**Plug crop time:** 5 to 6 weeks

**Transplant to finish:** 7 to 8 weeks

- Divine is the affordable, high-quality alternative to *I. walleriana*, with high resistance to Impatiens Downy Mildew, more single colours and mixes than other series, more vigour in planters and landscapes, and more consistent colour and seed quality.

- This grower-friendly series is perfect for shade landscape premium packs, 4-in./10-cm and quart pot programs.

**New Lavender Improved** Features greater plant vigour, deeper bronzing to the foliage and darker colour saturation than original Lavender.

**New Red** Delivers good vigour, deep green foliage and a true red colour; replaces Scarlet Red and Cherry Red.



**NEW**

**Red**



**NEW**

**Lavender Improved**



**NEW**

**Red**







**NEW**

**Akila Grand Canyon Mixture Osteospermum**



**NEW**

**Akila Grand Canyon Mixture Osteospermum**



**NEW**

**Bonanza Bolero Improved French Marigold**

**OSTEOSPERMUM** ☀️  
*Osteospermum ecklonis*

**Akila® Series F1**

**Height:** 16 to 20 in./41 to 51 cm

**Spread:** 16 to 20 in./41 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, sow 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.

**New Grand Canyon Mixture**

First multicolour segregating mix includes popular colours like yellow, magicians and rose-reds, as well as purple, lavender, creams and whites.

**DWARF CRESTED FRENCH MARIGOLD** ☀️  
*Tagetes patula*

**Bonanza Series**

**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 weeks

**Transplant to finish:** 3 to 4 weeks

- The market leader in French marigolds, Bonanza is the one to choose to pump up your pack sales. Popular series delivers earliness with a tight flowering window, uniformity and superior performance under a wide range of conditions.
  - Double crested flowers are the largest of any in this type - 2 to 3 in./5 to 8 cm across - in a wide range of pure, intense colours.
- New Bolero Improved** More reliable seed supply and better germination than original Bonanza Bolero. Flowers a few days earlier but has the same profuse flowering in the garden and attractive bicolor known and loved by consumers.





NEW

SPRING AUTUMN

Raspberry

## 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 2.25 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 season for the popular Wave Brand.
- More vigorous with the most prostrate habit of any spreading pansy – great in combos and as a groundcover.
- Superior overwintering hardiness – Cool Wave is the earliest pansy to return in the Spring.

**New Raspberry** All-new colour class joins Cool Wave! Rich, velvety rosy-purple with white around flower centre. Shows more white in the face in Summer/Autumn (warm season) production. In Winter/Spring (cool season) production, white is diminished and more rose/purple shows in the bloom. Matches Golden Yellow for vigour.

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®  
PANSIES



NEW

SPRING AUTUMN

Raspberry





Matrix Series

**PANSY** 

*Viola x wittrockiana*

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

- Your best option for longer days and warmer growing - less handling, less waste and exceptional holding power for higher profitability.
- Best uniformity of plant habit and timing; the 7-day bloom window in Autumn production lets you ship all colours in the same week.

**New Yellow Improved** Flowers 5 to 7 days earlier, with a larger flower on a more uniform plant. Under the heat of Summer/Autumn production, it outperforms all competition in this key colour class.

LARGE-FLOWERED PANSY

**Spring Matrix Series F1**

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

**Seed supplied as:** Raw, Primed

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

- Your best option for shorter days and cool growing - plants look better, last longer and have the tightest flowering window for less dump.
  - Most uniform Spring-flowering series produces large blooms that maintain good presentation under cold, dark, wet Winter production.
- New Yellow Improved** Produces a slightly larger, more well-branched plant than original Yellow. Earlier in Spring production by about 5 days.



**NEW**  
Spring Matrix Yellow Improved Pansy



**NEW**  
Promise Pure Yellow Improved Pansy



**NEW**  
Matrix Yellow Improved Pansy



**NEW**  
Glitterati Purple Star Pentas

**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.
- New Pure Yellow Improved** 7 to 10 days earlier in Spring production than original Pure Yellow. The plant is more compact, stretches less and has shorter peduncles, giving growers in Northern EU the best choice in this key colour segment.

**PENTAS** 

*Pentas lanceolata*

**Glitterati Purple Star F1**

**Height:** 12 to 22 in./30 to 56 cm  
**Spread:** 10 to 18 in./25 to 46 cm

**Seed supplied as:** Pelleted

**Plug crop time:** 8 to 10 weeks  
**Transplant to finish:** 8 to 10 weeks

- A sure winner! Combines a truly new look for pentas, while still offering the heat/humidity performance that this class is known for.
- Distinctive star pattern combines easily with other varieties, adding a unique component in Fourth of July and other warm/hot season combinations.
- Finishes fast for speed to market, and follow-up blooming keeps the plants in full colour and looking good all season.



# lucky star

## 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, the six-colour series has a tight, compact habit that keeps them looking tidy with virtually no effort. The promise of continuous, showstopping color on full, lush plants...now that's a huge plus!



**NEW**  
Lucky Star Series



**NEW**  
Dark Red

## New 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:** 8 to 10 weeks

**Transplant to finish:** 7 to 8 weeks

- With a 3 to 5-day bloom window and the fastest follow-up blooming of any pentas on the market, 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 effort.

**Violet** Faster secondary, follow-up blooming and a darker colour intensity than other violet pentas on the market.



**L: Lucky Star Lavender R: Graffiti Lavender**



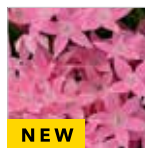
**NEW**  
Dark Red



**NEW**  
Violet



**NEW**  
Deep Pink



**NEW**  
Pink



**NEW**  
Lavender



**NEW**  
White





NEW

Copper Prince Ornamental Millet

**ORNAMENTAL MILLET** 🌻  
*Pennisetum glaucum*

**New Copper Prince F1**

**Height:** 24 to 36 in./61 to 91 cm  
**Spread:** 18 to 24 in./46 to 61 cm

**Seed supplied as:** Raw

**Plug crop time:** 2 to 3 weeks  
**Transplant to finish:** 4 to 5 weeks (green)

- Exciting new colour joins the only ornamental millet seed assortment on the market. Copper Prince begins as a light caramel colour, deepening to copper as it sends up rosy, foxtail-type panicles.
- Rose-bronze panicles add late Summer interest.
- Wide blades and excellent tillering plus height and spread like Jade Princess make this variety perfect for large containers and landscapes.



NEW

Jade Princess Ornamental Millet

**New Jade Princess F1**

**Height:** 24 to 30 in./61 to 76 cm  
**Spread:** 18 to 24 in./46 to 61 cm

**Seed supplied as:** Raw

**Plug crop time:** 2 to 3 weeks  
**Transplant to finish:** 4 to 5 weeks (green)

**Now available for worldwide distribution.**

- Intense chartreuse foliage and rich brown, pollenless panicles have a controlled, mounded shape that is more compact than others in the assortment, so plants ship well.
- Economical grower option - seed can be direct-sown into finish containers, plants are well-suited to pot sizes up to gallons, and the crop finishes fast.
- Great tillering, leading to a bushy plant habit that's perfect for large containers and landscapes.
- NOTE: Jade Princess requires warmer temperatures (above 60°F/16°C) than other millets to perform well.



NEW

Midnight Fire Ornamental Pepper

**ORNAMENTAL PEPPER** 🌻  
*Capsicum annuum*

**New Midnight Fire**

**Height:** 9 to 12 in./23 to 30 cm  
**Spread:** 14 to 16 in./36 to 41 cm

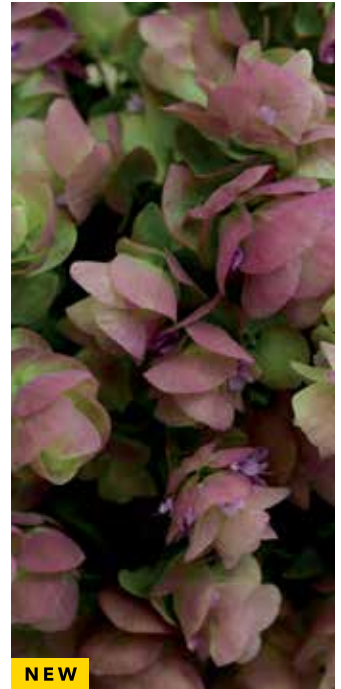
**Seed supplied as:** Raw

**Plug crop time:** 4 to 5 weeks  
**Transplant to finish:** 7 to 13 weeks

- Distinctive dark black foliage is accented by purple fruit which mature to bright red - this eye-catching combination is sure to result in fast sell-through.
- Perfect for gallons at retail, Mum Pals programs, and large mixed containers for Autumn.

**New Harlequin**  
**New Wicked**

See Pot Plants, page 24.



NEW

Kirigami Ornamental Oregano

**ORNAMENTAL OREGANO** 🌻  
*Origanum x hybrid*

**New Kirigami**

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

**Seed supplied as:** Raw

**Plug crop time:** 5 to 6 weeks  
**Transplant to finish:** 9 to 11 weeks

- The perfect patio plant, this eye-catching, non-culinary oregano features large purple-green bracts, rose flowers and clear, light green foliage, with a delicious fragrance to attract pollinators.
- Dense, mounded, slightly trailing plant has a tighter and fuller habit than standard vegetative varieties, so it holds better in shipping and on the retail bench.
- Heat and drought tolerant, with an eye-catching display of texture from Spring until Autumn.



NEW

Midnight Fire Ornamental Pepper



NEW

Kirigami Ornamental Oregano





NEW

**Debonair Lime Green Improved Petunia** US7,642,436

**PETUNIA** 🌞

*Petunia x hybrida*

MULTIFLORA SINGLE PETUNIA

### Debonair Collection F1

**Height:** 10 to 15 in./25 to 38 cm

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

**Seed supplied as:** Pelleted

**Plug crop time:** 4 to 6 weeks

**Transplant to finish:** 5 to 7 weeks

- Designer petunias can command a higher price point and open the door to decorator opportunities.
- Mounded, upright habit is ideal for premium pots and larger containers.

**New Lime Green Improved** Shows off a deeper bloom colour on a plant that is 10 to 12 days faster to flower, with faster secondary flowers. Stronger plant vigour and similar timing to Black Cherry offer a better mixing option.

GRANDIFLORA SINGLE PETUNIA

### Dreams 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:** 5 to 6 weeks

**Transplant to finish:** 5 to 6 weeks

- Dreams continues to deliver a well-matched Spring bloom time window across all colours, so your crop is off to market right on schedule.
- Consistently high seed quality plus well-branched habit and plant structure assure a high-quality look and excellent performance.

**New Burgundy Improved** Kicks it up a notch with faster flowering by approximately 5 days, plus faster secondary branching and flowering for quicker-to-retail sales opportunities. Produces brighter flowers on shorter, more dense plants.



NEW

**Dreams Burgundy Improved Petunia**

COMPACT GROWING  
GRANDIFLORA PETUNIA

### Ez Rider® Series F1

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

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

**Seed supplied as:** Pelleted

**Plug crop time:** 5 to 6 weeks

**Transplant to finish:** 5 to 6 weeks

- These genetically shorter, more controlled plants need less PGRs and are perfect for high-density packs to "promo" baskets.
- Enhanced, longer garden performance in containers and gardens.

**New Red Improved** Offers darker, truer red colour; shorter, denser and better-branched plants; and strong, long plant holding. Averages 3 days faster to flower, with faster secondary blooms for earlier retail sales opportunities.

### Pretty Grand Series F1

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

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

**Seed supplied as:** Pelleted

**Plug crop time:** 5 to 6 weeks

**Transplant to finish:** 5 to 6 weeks

**Available in North America only.**

- The Pretty collection needs fewer to no PGRs - naturally better branching with shorter internodes keeps plants manageable longer.
- Offers a tight bloom window and longer performance in beds and landscapes.

**New Red Improved** It's a *Grand Slam* with 4 big upgrades: Deeper red colour, flower timing that matches White, better plant habit and improved holding.



NEW

**Ez Rider Red Improved Petunia**



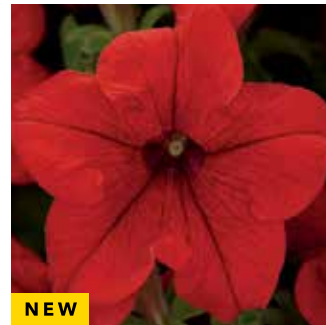
NEW

**Snapshot Appleblossom Snapdragon**



NEW

**Double Zahara Raspberry Ripple Zinnia** US PVPAF



NEW

**Pretty Grand Red Improved Petunia**



NEW

**Double Zahara Fire Improved Zinnia** US PVPAF



NEW

**Double Zahara Mixture Zinnia**

**SNAPDRAGON** 🌞  
*Antirrhinum majus*

### Snapshot Series F1

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

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

**Seed supplied as:** Raw

**Plug crop time:** 5 to 6 weeks

**Transplant to finish:** 6 weeks

- Perfect balance of pack performance and landscape success, with uniform flowering and a 7 to 10-day window for Spring and Autumn sales in packs and small pots.

- Bushy, compact plants are topped by closely spaced, full flower spikes.

**New Appleblossom** Clean white colour is brushed with soft yellow and rose tones. The habit and timing match the other bicolours in the series.

**ZINNIA** 🌞  
*Zinnia marylandica*

### Double Zahara Series

**Height:** 16 to 20 in./41 to 51 cm

**Spread:** 16 to 20 in./41 to 51 cm

**Seed supplied as:** Raw, Coated

**Plug crop time:** 3 weeks

**Transplant to finish:** Spring 8 to 9 weeks, Summer 5 to 6 weeks

- The only fully double, disease-resistant zinnia series has bigger flowers than the competition for more colour show.
- Superior all-season performance and durability in landscapes and containers, especially in sunny, hot and dry conditions.

**New Fire Improved** Deeper colour saturation and larger flower size than current Fire.

**New Raspberry Ripple** *New bicolor for the series!* Colouring can vary under different environmental conditions. Cooler temperatures accentuate the rose; as flowers age and under more heat, the white comes out more.

**New Mixture** Contains Cherry, Salmon Rose, Yellow, NEW Fire Improved and white (not available separately).



NEW

Sorbet Honeybee



NEW

Sorbet XP Yellow Blotch Improved



NEW

Sorbet XP Deep Orange



NEW

Sorbet XP True Blue



NEW

Sorbet XP Red Blotch



NEW

Sorbet Yellow Violet Jump Up



NEW

Sorbet XP Blue Blotch Improved



NEW

Sorbet XP Ocean Breeze Mixture



NEW

Sorbet XP Blueberry Sundae Mixture



NEW

Sorbet XP Raspberry Sundae Mixture

VIOLA   
*Viola cornuta*

**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 weeks

**Transplant to finish:** 3 to 5 weeks

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

• 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; early; stay compact in both heat and cold; excellent overwintering; wide range of clear colours allows for custom mixes.

**New Blue Blotch Improved**

Flowers 5 to 7 days earlier in Autumn and up to 2 weeks earlier in Spring. Brighter colour and larger blotch mean better colour show at retail, in containers and in-ground.

**New Deep Orange** Deepest orange-flowered viola on the market; uniform, controlled plants for ease of production. Superior to Penny Orange in colour, timing and uniformity.

**New Red Blotch** Best plant and timing of any red blotch on the market for Autumn production; more branched, uniform plant and up to 1 week earlier in Autumn production than Penny, Admire and Sorbet red blotch varieties. Replaces Sorbet (standard) Red Blotch.

**New True Blue** Best true blue solution in the *V. cornuta* category. Less stretch and truer blue colour than Penny Blue; better plant and truer blue colour than Admire Blue. Replaces Sorbet (standard) Blue Heaven.

**New Yellow Blotch Improved** Best choice on the market for a yellow blotch viola. 3 to 5 days earlier in Autumn, 7 to 10 days earlier in Spring than current Sorbet XP, Penny or Admire yellow blotch varieties, plus significantly more blooms per plant. Larger blotch.

**New Blueberry Sundae Mixture** Contains XP True Blue, XP Delft and XP White. Replaces XP Blueberry Frost Mixture and XP Beaconberry Mixture.

**New Ocean Breeze Mixture** Contains NEW XP Blue Blotch Improved, XP Coconut Swirl, XP Marina and XP White Blotch. Replaces Sorbet (standard) Ocean Breeze Mixture.

**New Raspberry Sundae Mixture** Contains XP Pink Halo, XP Raspberry and XP White Blotch. Replaces XP Orchidberry Frost Mixture.

**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 weeks

**Transplant to finish:** 3 to 5 weeks

• Plants cover the soil at flowering with more blooms and less stretching, and fewer PGRs are needed, with superior holdability and less shrink.

• Use in Autumn and Spring programs - the novelty colours have good retail and home garden appeal.

**New Honeybee** Yellow/copper-orange bicolor; bright and sunny for Spring production. 30% more vigorous and longer peduncles than other violas in the Sorbet collection, so best to use more PGRs on this variety.

**New Yellow Violet Jump Up** Brings a new colour to the assortment - bright violet purple caps make this "jump up" stand out over other varieties on the market. Earlier than the Sorbet XP series.



# KieftSeed

## perennials



**NEW**  
Bandera Pink Lavandula



Sun Up Coreopsis



Sunfire Coreopsis



Early Sunrise  
Coreopsis



Rising Sun  
Coreopsis

**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:** 5 to 6 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 offers a 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.

**New Pink** Important second colour is the perfect partner to Purple. Features large, soft pink flags on spikes with deep rose flowers.

**COREOPSIS** ☀️  
*Coreopsis grandiflora*

### Early Sunrise

### Rising Sun

### Sun Up

### Sunfire

**New!** Now available as **primed seed** to deliver reliable plug production, improved order fill rate, uniform quality in plug trays and as a finished product, and improved margin.

PanAmericanSeed.

# rockin' red



**NEW**

Rockin' Red Dianthus

## Rockin' the Garden!

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

### DIANTHUS

*Dianthus x barbatus interspecific*

#### Rockin' Red F1

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

**Spread:** 10 to 12 in./25 to 30 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:** Pelleted

**Plug crop time:** 4 to 6 weeks

**Transplant to finish:** 8 to 9 weeks

- Rockin' Red 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.

PERENNIALS



# pot plants



NEW

Harlequin Ornamental Pepper



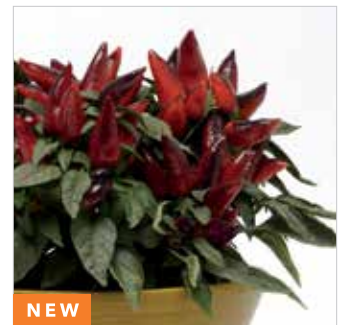
NEW

Wicked Ornamental Pepper



NEW

Harlequin Ornamental Pepper



NEW

Wicked Ornamental Pepper

## ORNAMENTAL PEPPER 🌞🌱

*Capsicum annuum*

### New Harlequin

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

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

**Seed supplied as:** Raw

**Plug crop time:** 4 to 5 weeks

**Transplant to finish:** 7 to 13 weeks

- Distinctive, large fruit starts yellow and matures to red.
- Compact determinate variety should be sold at first colour or with a few fruit changing to red – these eye-catching Autumn tones are sure to sell fast!
- Excellent branching for a large-fruited pepper – suitable for quarts and Mum Pals programs.
- Recommended for 4.5-in./11-cm pots to gallons.
- Fruit has medium heat.

### New Wicked

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

**Spread:** 5 to 7 in./13 to 18 cm

**Seed supplied as:** Raw

**Plug crop time:** 4 to 5 weeks

**Transplant to finish:** 7 to 13 weeks

- Compact plant shows off extra-large fruit that starts purple and matures to red. These stunning peppers will certainly capture retail attention!
- Determinate variety should be sold at first colour or with a few fruit changing to red.
- Perfect for quart and Mum Pals programs, plus Autumn mixed containers.
- Fruit has mild heat.

### New Midnight Fire

See Annuals, page 19.

# revolution & mega revolution



**NEW**

**Mega Revolution Deep Rose with Light Eye**



**NEW**

**Revolution Red with Light Eye Improved**



**NEW**

**Revolution Salmon Shades with Light Eye**



**NEW**

**Revolution Yellow with Light Eye Improved**



**NEW**

**Revolution Bicolor Mixture**

**NEW**

**Revolution Yellow with Light Eye Improved**



## GERBERA

*Gerbera jamesonii*

### Mega Revolution Series F1

Height: 8 to 12 in./20 to 30 cm

Spread: 8 in./20 cm

Flower size: 4 in./10 cm

Seed supplied as: Coated

Plug crop time: 6 to 7 weeks

Transplant to finish: 8 to 10 weeks

- Vigorous, bushy plants with very large flowers - beats competing series for both vigour and bloom size.
- Ideal for 6-in./15-cm pots and larger.

#### **New Deep Rose with Light Eye**

Superior dark colour is great for mixes and combo pots, and fits well with the rest of the series. Colour holds very well under high light levels. Replaces Purple Shades.

### Revolution Series F1

Height: 6 to 10 in./15 to 25 cm

Spread: 8 to 10 in./20 to 25 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.
- Fully programmable for high-density production year-round.
- Best for 4.5 to 5.5-in./11 to 13-cm pots, quarts.

**New Red with Light Eye Improved** Now offers one of the best varieties of the series for timing, plant habit and uniformity.

**New Salmon Shades with Light Eye** Features short stems, making it a good mix component, with shades from deep salmon to pink.

**New Yellow with Light Eye Improved** The best yellow variety in the series is a big improvement over older yellow varieties, with a strong colour and good uniformity.

**New Bicolor Mixture** Available in North America only. Includes all four bicolor varieties.

## 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 consistent, fully programmable, high-density crops year-round.



# cut flowers

PRODUCTION GUIDE			
Class/Variety	Greenhouse	High Tunnel	Field
CELOSIA			
Neo Series	X		
SNAPDRAGON			
Maryland Dark Orange Improved	X	X	

See the full chart of all PanAmerican Seed cut flowers on page 235 of the 2016 Catalogue.

FLORAL SELECTION GUIDE FOR BOUQUETS				
Class/Variety	Focal	Filler	Line	Volume
CELOSIA				
Neo Series	X			
SNAPDRAGON				
Maryland Dark Orange Improved			X	

See the full chart of all PanAmerican Seed cut flowers on page 211 of the 2016 Catalogue.



NEW

**Maryland Dark Orange Improved Snapdragon**

**SNAPDRAGON** ☀️  
*Antirrhinum majus*

## Maryland Series F1

(Group 1, 2)

**Stem length:** 39 to 60 in./1 to 1.5 m

**Planting density:** 6 to 10 plants/ft<sup>2</sup> (64 to 106 plants/m<sup>2</sup>); high-density planting under high-light or field situation

**Best for:** Greenhouse, high tunnel

**Seed supplied as:** Raw

**Plug crop time:** 4 to 5 weeks

**Transplant to finish:** 8 to 18 weeks

- Energy-efficient series is your best choice for cool-season, low-light and low-temperature conditions.
- Group with other Group 1, 2 varieties (Cool, Purple Twist and Red Delilah) for Autumn, Winter and Spring programs.

**New Dark Orange Improved** (Group 2) More uniform stems, thicker caliper and better taper than original. Replaces Maryland Golden Bronze and Maryland Dark Orange, allowing cut flower growers to streamline their production with one best-in-colour-class variety.

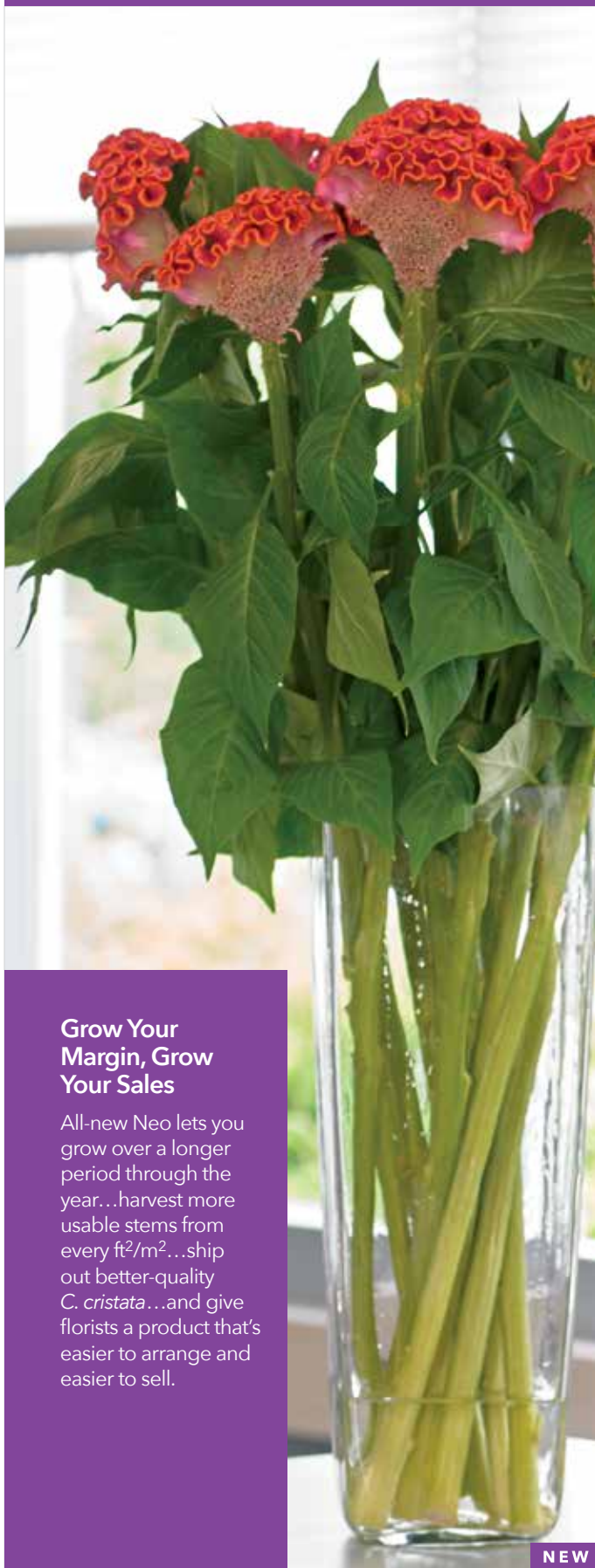


**Katz Series Matthiola**

## The power of caring & sharing

We are proud to support PANCAN for pancreatic cancer research by donating 5% of our net seed sales of Katz Matthiola in honor of Philip Katz.

PanAmerican Seed was honored to have Philip Katz as our Cut Flower Product Manager for 13 years. Philip spearheaded the drive to grow our business in this important market into one that is now supplying commercial growers around the globe with outstanding, high-quality cut flower varieties. After a valiant battle, the disease took Philip from all of us. The debut of a new matthiola series was timely and let us honor Philip in a way he would have truly appreciated.



Neo Orange

**Grow Your Margin, Grow Your Sales**

All-new Neo lets you grow over a longer period through the year...harvest more usable stems from every ft<sup>2</sup>/m<sup>2</sup>...ship out better-quality *C. cristata*...and give florists a product that's easier to arrange and easier to sell.



Gold



Orange



Pink



Red



Rose

**CELOSIA**   
*Celosia cristata*

**New Neo Series**

**Height:** 28 to 40 in./71 to 102 cm  
**Planting density:** 6 to 8 plants/ft<sup>2</sup> (65 to 86 plants/m<sup>2</sup>)  
**Best for:** Greenhouse

**Seed supplied as:** Coated

**Plug crop time:** 2 to 3 weeks  
**Transplant to finish:** 8 to 12 weeks

- Less long day sensitive, making it easier to produce over a longer period during the year for most growers.
- Features new, unique colours and a much better leaf habit.
- Easier to work with for bouquets or flower arrangements due to smaller leaves.

**Gold** The deepest yellow colour available on the market. **NOTE:** More sensitive to Fusarium compared to the rest of the series.

**Orange** A unique colour to the market that will stir up interest for growers, retailers and florists.

**Pink** The fastest to flower of the series and the only dark-stemmed variety, with a slightly smaller bloom.

**Red** The slowest to flower and also a bit shorter compared to the rest of the series.

**Rose** The tallest of the series, with a more rose colour, bigger flower heads and lighter green stems than Pink. Also slower to flower than Pink.





# handPicked

vegetables & herbs



**EasyPick Gold II**

**SQUASH (ZUCCHINI)** 🌞

*Cucurbita pepo*

**Easy Pick Series F1**

**Height:** 36 to 52 in./91 to 132 cm

**Spread:** 36 to 52 in./91 to 132 cm

**Seed supplied as:** Raw

**Days from transplant to harvest:** 30 to 35

**Fruit size:** Harvest from a very small size with a flower attached, up to 10-in./25-cm fruit.

**Best for:** Home gardener container, Home gardener in-ground, Fresh Market Farmer in-ground, Fresh Market Farmer Protected Culture

**Plug crop time:** 2 to 3 weeks (direct sow)

- Well-matched, smooth-textured duo offers open habit with nearly no spines on the petioles for painless harvest.
- Simply twist to pick - less scarring and clean harvest mean longer shelf life.
- Parthenocarpic variety - plants will produce fruit without insect pollination.
- Best in-ground.

**New Gold II** Offers improved disease resistance to ZYMV (Zucchini Yellow Mosaic Virus), WMV (Watermelon Mosaic Virus) and PRSV (Papaya Ring Spot Virus).



Hansel and Gretel



**NEW**  
Gretel

**EGGPLANT** 🌞  
*Solanum melongena*

**New Gretel F1**

**Height:** 36 to 52 in./91 to 132 cm  
**Spread:** 24 to 36 in./61 to 91 cm

**Seed supplied as:** Raw

**Days from transplant to harvest:**  
55 to 60

**Fruit size:** 3 to 4 in./8 to 10 cm long (baby size); 4 to 6 in./10 to 15 cm long (full size)

**Growth:** Indeterminate

**Best for:** Home gardener container, Home gardener in-ground, Fresh Market Farmer in-ground, grown with or without support or trellis

**Plug crop time:** 4 to 5 weeks

**Transplant to finish:** 4 to 5 weeks

- Earliest white eggplant is highly productive, producing clusters of glossy mini-fruit that is tender and non-bitter, about 3 to 4 in./7 to 10 cm long.
- Petite, 3-ft./90-cm plants have thornless leaves/calyx for easy, painless harvest; can be grown in-ground or in a large container, with or without support.
- More productive and 5 to 7 days earlier to ripen than O.P. types.
- *All-America Selections Winner* grows a slightly larger plant with slightly smaller fruit than Hansel.



**NEW**  
Hansel

**New Hansel F1**

**Height:** 24 to 42 in./61 to 107 cm  
**Spread:** 24 to 36 in./61 to 91 cm

**Seed supplied as:** Raw

**Days from transplant to harvest:**  
50 to 55

**Fruit size:** 2 to 3 in./5 to 7 cm long (baby size); 6 to 10 in./15 to 25 cm long (full size)

**Growth:** Indeterminate

**Best for:** Home gardener container, Home gardener in-ground, Fresh Market Farmer in-ground, grown with or without support or trellis

**Plug crop time:** 4 to 5 weeks

**Transplant to finish:** 4 to 5 weeks

- Early-maturing, highly productive black-purple eggplant produces clusters of glossy mini-fruit about 2 to 3 in./5 to 7 cm long.
- Petite, 3-ft./91-cm plants have thornless leaves and calyx for easy, painless harvest and are great for containers.
- *All-America Selections Winner* can be grown in-ground or in a large container, with or without support.



# tomatoes



Little Tomato Collection L to R: Little Napoli, NEW Little Bing and NEW Little Sicily

## TOMATO 🌞

*Solanum lycopersicum*

### New Little Bing F<sub>1</sub>

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

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

**Seed supplied as:** Raw

**Days from transplant to harvest:** 60 to 65

**Fruit size:** 1 in./2.5 cm

**Growth:** Determinate

**Best for:** Home gardener container, grown with or without a support or trellis

**Plug crop time:** 4 to 5 weeks

**Transplant to finish:** 2 to 6 weeks

- Fruit sets and ripens over a period of a few weeks, allowing harvest of many tomatoes at one time.
- Yields large amounts of flavour-filled, red cherry tomatoes for fresh eating or to add to recipes.
- Can be grown without or without the support of a trellis.

### New Little Sicily F<sub>1</sub>

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

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

**Seed supplied as:** Raw

**Days from transplant to harvest:** 60 to 65

**Fruit size:** 3 to 4 oz./85 to 110 g

**Growth:** Determinate

**Best for:** Home gardener container, grown with or without a support or trellis

**Plug crop time:** 4 to 5 weeks

**Transplant to finish:** 2 to 6 weeks

- Determinate habit will set the majority of flowers and ripened fruit in a period of a few weeks for a large harvest.
- Produces an abundance of good-tasting, small red slicer tomatoes that are great eaten fresh or used in recipes.
- Compact and sturdy plants can be grown successfully with or without a trellis.



NEW

Little Bing Cherry Tomato



NEW

Little Sicily Slicer Tomato

## Little Collection = Big Success!

Our Little Collection - including the two newcomers here plus popular Little Napoli - features dwarf determinate tomato plants with compact, tidy habits and healthy green foliage that look good in the store and on the patio. At less than 2 ft./61 cm tall, this tasty trio flourishes in mid-size containers, stays a manageable size and produces lots of tomatoes at the peak of Summer.



NEW

**Tidy Rose Beefsteak Tomato**

**New Tidy Rose F1**

**Height:** 36 to 60 in./91 to 152 cm

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

**Seed supplied as:** Raw

**Days from transplant to ripe fruit:** 60 to 65

**Fruit size:** 5 to 7 oz./140 to 200 g

**Growth:** Dwarf indeterminate

**Best for:** Home gardener container, Home gardener in-ground; grown with a support or trellis

**Plug crop time:** 4 to 5 weeks

**Transplant to finish:** 2 to 6 weeks

- Popular Tidy Treats has a new pink beefsteak companion - both grow like a determinate but produce like an indeterminate.
- Good in small-space gardens and containers, but unlike other patio types they continue to produce all season.
- Beautiful ribbed, deep pink beefsteaks with rich heirloom flavour are perfect for any culinary use.



NEW

**Candy Cane Red Snack Pepper**

**PEPPER** 🌞

*Capsicum annuum*

**New Candy Cane Red F1**

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

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

**Seed supplied as:** Raw

**Days from transplant to harvest:** 40 to 45 mature green striped; 60 to 65 ripe red

**Fruit size (L x W):** 3.5 to 4 in. x 1.25 to 1.75 in./9 to 10 cm x 3 to 4 cm

**Growth:** Indeterminate

**Best for:** Home gardener container, Home gardener in-ground, Fresh Market Farmer in-ground, grown with or without support or trellis

**Plug crop time:** 5 to 6 weeks

**Transplant to finish:** 4 to 7 weeks

- Snack pepper with uniquely variegated foliage and striped fruit will stand out on the retail shelf and in the garden.
- Elongated bell-shaped fruit ripens from green and white stripes to solid red; thin walls and crispy texture make it perfect for fresh eating at any stage of ripeness.
- Ideal for growing in-ground or in a container.



NEW

**La Bomba II Jalapeño Pepper**

**New La Bomba II F1**

**Height:** 32 to 40 in./81 to 102 cm

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

**Seed supplied as:** Raw

**Days from transplant to harvest:** 50 to 55 mature green; 65 to 70 ripe red

**Fruit size (L x W):** 3 to 3.25 in. x 1 to 1.5 in./7 to 8 cm x 3 to 4 cm

**Growth:** Indeterminate

**Best for:** Home gardener container, Home gardener in-ground, Fresh Market Farmer in-ground; grown with support or trellis

**Level of heat:** Medium

**Plug crop time:** 5 to 6 weeks

**Transplant to finish:** 4 to 7 weeks

- Upgraded for superior disease resistance to Bacterial Leaf Spot Races 1, 2 and 3, as well as Tobacco Mosaic Virus.
- Performs like original La Bomba - the strong, easy-harvest plants bear very large, high-quality jalapeños with little to no checking.





NEW

**Mad Hatter Specialty/Hot Pepper**

## PEPPER 🌞

*Capsicum baccatum*

### New Mad Hatter F1

**Height:** 36 to 48 in./91 to 122 cm

**Spread:** 36 to 48 in./91 to 122 cm

**Seed supplied as:** Raw

**Days from transplant to harvest:**

65 to 70 mature green; 85 to 90 ripe red

**Fruit size (L x W):** 2 to 3.5 in. x 2 to 2.5 in./5 to 9 cm x 5 to 6 cm

**Growth:** Indeterminate

**Best for:** Home gardener in-ground, Fresh Market Farmer in-ground; grown with support or trellis

**Level of heat:** Mild

**Plug crop time:** 5 to 6 weeks

**Transplant to finish:** 4 to 7 weeks

- Eye-catching flattened-disc shaped fruit has lobes or wings, and is crunchy and crisp for perfect fresh eating at mature green or ripe red stage.
- Fruit has a delicate floral scent and rich flavour that intensifies and sweetens as it matures.
- When grown in hot, dry climates, a small percentage of fruit will have a touch of heat close to the seed cavity, but fruit wings will always remain sweet.
- Large-stature plants benefit from a support or trellis.

## New & Cool Heats Up Sales!

Different. One-of-a-kind. Versatile. That's what stands out in the garden center and at fresh markets. And that's why you'll definitely want to add Mad Hatter to your order - this intriguing specialty/hot pepper ticks the box on all counts: looks, performance, taste and that oh-so-cool factor! This unique hybrid *Capsicum baccatum* is early and very productive, yielding more fruit than similar O.P. varieties. It won't be long until your customers are asking for Mad Hatter by name!



NEW

**Mad Hatter Specialty/Hot Pepper**



NEW

**Everleaf Genovese Basil**

## BASIL 🌞

*Ocimum basilicum*

### New Everleaf Genovese

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

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

**Seed supplied as:** Raw

**Days from transplant to harvest:**

30 to 45

**Best for:** Home gardener container, Home gardener in-ground, Fresh Market Farmer in-ground

**Plug crop time:** 4 to 5 weeks

**Transplant to finish:** 3 to 8 weeks

- Compact, well-branched variety with short internodes makes a beautiful columnar plant that stays tidy in both in-ground or container gardens.
- Robust Genovese flavour stands up to cooking - perfect for pesto and adding to sauce.
- Later flowering than most basil varieties allows for very large harvests; can be harvested continually.
- Intermediate resistance to Downy Mildew and standard resistance to Fusarium make it a standout in any garden!



Precision Multi-Pellets



SimplyHerbs Basil



SimplyHerbs 'Try Basil'



SimplyHerbs Sage



**NEW**  
SimplySalad Cress



**NEW**  
SimplySalad Arugula

## Start Strong, Finish Stronger!

Our new single-species SimplySalad mixes and three of our SimplyHerbs varieties are now supplied as Precision Multi-Pellets. This revolutionary seed technology guarantees that all varieties are present and at the ideal seed count for better germination and better uniformity. Plus, the rounded shape makes hand or mechanical sowing easier and more efficient. The Precision Multi-Pellets flow right through your seeder to create "easy-sow, easy grow" plugs that grow into great-looking, balanced product that sells. *One pellet into one plug and you're good to go!*

### SIMPLYHERBS

#### Basil

#### 'Try Basil'

#### Sage

**New!** These three varieties are now available as **Precision Multi-Pellets**.

For Growers producing Basil, 'Try Basil' and Sage, this offers reliable plug production, improved order fill rate, uniform quality in plug trays and improved margin, meaning more sales.

For Hydroponic Growers producing Basil and 'Try Basil', this offers a higher percentage of transplantable plugs and a more uniform finished product.

### SIMPLYSALAD®

NEW Arugula and Cress debut the first single-species additions to the popular SimplySalad series. Both offer the same superior benefits to gardeners, retailers and growers. Precision Multi-Pellets assure a high level of uniformity of germination, making both of these newcomers great for use in hydroponic systems.

#### New Arugula

*Eruca sativa*

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

**Seed supplied as:** Precision Multi-Pellets

**Days from sowing to harvest:** 30 to 45

**Harvestable size:** 3 to 4 in./8 to 10 cm (baby leaf); 4 to 10 in./10 to 25 cm (mature leaf)

**Best for:** Home gardener container, Home gardener in-ground, Fresh Market Farmer in-ground; Hydroponic systems

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

- Quick to establish and can be harvested at a young leaf size for a mild, nutty flavour; leaves become spicy as they mature or are exposed to high temperatures.
- Upright type is perfect for bunching; includes a mix of lobes and smooth shapes perfect for salads or braising.
- Great addition to any garden including hydroponic systems.

#### New Cress

*Barbarea verna*

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

**Seed supplied as:** Precision Multi-Pellets

**Days from sowing to harvest:** 40 to 60

**Harvestable size:** 3 to 4 in./8 to 10 cm (baby leaf); 4 to 10 in./10 to 25 cm (mature leaf)

**Best for:** Home gardener container, Home gardener in-ground, Fresh Market Farmer in-ground, Hydroponic systems

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

- Single-species multi-seed leafy green makes a great addition to any garden.
- Rosette-forming plants with no stem-roots stay in a neat, tidy bunch for many weeks before flowering.
- Leaves have a great lobe shape and spicy flavour perfect for salads or braising.



# terms & conditions of sale

## 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 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](http://panamseed.com) for North American, European and International credit-approved customers. A 1% per month finance charge (12% 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 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 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 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 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:

## West Chicago

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.

## 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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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.

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