



PanAmerican Seed[®]

KieftSeed

NEW VARIETIES 2019



PanAmerican Seed®
KieftSeed

hello, 2019!

**Welcome to the new PanAmerican Seed®
and Kieft Seed fresh, on-trend collection.**

We are proud to offer you a particularly strong and diverse lineup. Discover flowers and vegetables to strengthen your current program. Be inspired to branch out with a new-to-you class. And perhaps 2019 is the year you'll take a leap in an all-new direction!

Of special note: 20 more exciting selling opportunities in our **Plug & Play** combo program, including first-ever Cool Wave® cool-season selections. Five regal colours in the HUGE-bloomed **Corona** dianthus series. **Big Blue** salvia...this name says it all. A big-time upgrade to essential **Easy Wave® Red** spreading petunia. A pepper to fire up your veggie sales, **Habanero Primero Red**.

For over 60 years, PanAmerican Seed has kept a laser-sharp focus on reliability, consistency and creativity...from our innovative products to unmatched seed quality, well-researched culture and notable marketing programs. We invite you to grow and sell tomorrow's products for today's marketplace: durable, beautiful and profitable.

Enjoy!





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MEET OUR COVER STARS!
Front: Corona Strawberry Dianthus, SunBuzz Sunflower and Ocean Breezes, a Cool Wave® Plug & Play combo.

Back: Easy Wave® Red Improved Petunia and Tattoo Raspberry Vinca.



plug&play

combos

All-seed. All-proven. All you need.

20 on-trend Plug & Play newcomers expand the lineup of easy, fresh and fun combos that deliver. We're excited to offer **first-ever cool-season combos featuring Cool Wave® pansies**. And to answer the big demand for heat lovers, you'll also find **all-new warm-season combos perfect for Summer**.

Plug & Play combos let you **move seamlessly from plant to perfect**. Every Plug & Play seed combo is tested over and over to prove that it delivers unstoppable performance from bench to store to garden. Trialing in saleable sizes begins in our research greenhouses and in our outdoor Summer containers. But we don't stop there - every potential introduction heads out to commercial greenhouses and to real-life gardens. It's only when our customers give the combos they've seen in action two thumbs up that they move into the lineup. All 80 Plug & Play combos promise easy, economical production; big retail shows and **gardener-satisfying results**.

Find all the program details at panamseed.com/PlugandPlay

PLUG & PLAY FUSEABLES®

VALUE

FUSEABLES

BETTER

COOL WAVE® FUSEABLES

NEW FOR 2019: Pump up cool-season sales with the best-performing spreading pansy for Spring and Autumn starring in 2 outstanding combos that you start with our Precision Multi-Pellets. **p. 5**

BETTER

WAVE® FUSEABLES

PREMIUM

PREMIUM ANNUAL FUSEABLES

PLUG & PLAY COMBOS

VALUE

SINGLE-SPECIES PLUG & PLAY COMBOS

NEW FOR 2019: The focus is on sure success with 6 simple yet vibrant, heat-loving combos - 3 feature constant-colour Lucky Star pentas and 3 show off Titan, Valiant and NEW Tattoo vincas. **p. 9-11**

BETTER

COOL WAVE PLUG & PLAY COMBOS

NEW FOR 2019: Stand way above the crowd in Spring and Autumn with the *fastest-growing, longest-lasting, truly trailing pansy* adding a designer look to cool-season baskets and pots. **p. 6-7**

BETTER

WAVE PLUG & PLAY COMBOS

PREMIUM

PLUG & PLAY COMBOS WITH PREMIUM ANNUALS, VEGETABLES & HERBS

NEW FOR 2019: Dramatic good looks and dependable performance meet or beat their vegetative counterparts. Eight new Summer combos featuring popular and unique seed items like Serena® Angelonia, Zahara® Zinnia and Purple Prince Alternanthera make a big statement at retail and on home patios. **p. 12-15**

PREMIUM

PLUG & PLAY COMBOS WITH PERENNIALS

NEW FLOWER DATE

Cool Wave Golden Yellow & Cool Wave Purple



BETTER

COOL
wave
PANSIES



Revolutionary
Fuseables Precision
Multi-Pellets...



flow right
through your
seeder...



transform into
"easy-sow, easy-
grow" plugs...



to grow great-
looking, balanced
combos that sell!

NEW SUNNY SKIES

Cool Wave Blue Skies & Cool Wave Golden Yellow



BETTER

COOL
wave
PANSIES

cool wave® plug & play combos

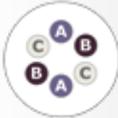
NEW OCEAN BREEZES

Cool Wave Blue Skies, Cool Wave Purple & Cool Wave White

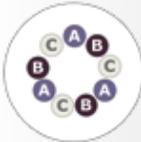
BETTER



8 in./20 cm



10 in./25 cm



12 in./30 cm



Transplant to finish: 7-8 weeks

Variety	Seeds per Cell	Plug Size	Plants per Pot		
			8 in./20 cm	10 in./25 cm	12 in./30 cm
A Cool Wave Blue Skies Pansy	1	128	1	2	3
B Cool Wave Purple Pansy	1	128	1	2	3
C Cool Wave White Pansy	1	128	1	2	3

Grow cool for best finish.



NEW ON A CLEAR DAY

Cool Wave Purple, Cool Wave White & Cool Wave Golden Yellow

BETTER



8 in./20 cm



10 in./25 cm



12 in./30 cm



Transplant to finish: 7-8 weeks

Variety	Seeds per Cell	Plug Size	Plants per Pot		
			8 in./20 cm	10 in./25 cm	12 in./30 cm
A Cool Wave Purple Pansy	1	128	1	2	3
B Cool Wave White Pansy	1	128	1	2	3
C Cool Wave Golden Yellow Pansy	1	128	1	2	3

Grow cool for best finish.



cool wave® plug & play combos

NEW PURPLE SUNSET

Cool Wave Purple, Cool Wave Golden Yellow & Cool Wave Blue Skies

BETTER



8 in./20 cm



10 in./25 cm



12 in./30 cm



Transplant to finish: 7-8 weeks

Variety	Seeds per Cell	Plug Size	Plants per Pot		
			8 in./20 cm	10 in./25 cm	12 in./30 cm
A Cool Wave Purple Pansy	1	128	1	2	3
B Cool Wave Golden Yellow Pansy	1	128	1	2	3
C Cool Wave Blue Skies Pansy	1	128	1	2	3

Grow cool for best finish.



NEW YELLOW HEAVEN

Cool Wave Lemon Improved, Cool Wave White & Cool Wave Golden Yellow

BETTER



8 in./20 cm



10 in./25 cm



12 in./30 cm



Transplant to finish: 7-8 weeks

Variety	Seeds per Cell	Plug Size	Plants per Pot		
			8 in./20 cm	10 in./25 cm	12 in./30 cm
A Cool Wave Lemon Improved Pansy	1	128	1	2	3
B Cool Wave White Pansy	1	128	1	2	3
C Cool Wave Golden Yellow Pansy	1	128	1	2	3

Grow cool for best finish.



NOTE: Individual varieties sold separately.

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. Note that there is an additional input needed in the center of the pot in some mixes in this collection.

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.

8 in./20 cm



Transplant



After 3 weeks



After 6 weeks

10 in./25 cm



Transplant



After 3 weeks



After 6 weeks

single-species plug & play combos

NEW AIRBRUSH'D

Tattoo Raspberry, Titan Polka Dot & Titan Rose Halo Vinca

VALUE



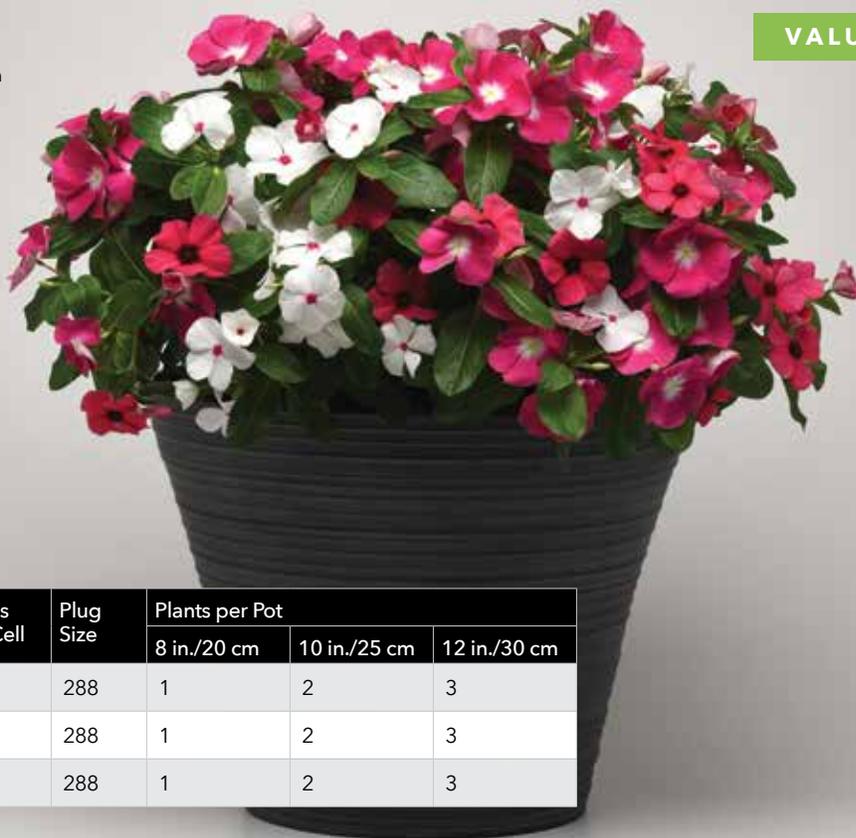
8 in./20 cm



10 in./25 cm



12 in./30 cm



Transplant to finish: 6-7 weeks

Variety	Seeds per Cell	Plug Size	Plants per Pot		
			8 in./20 cm	10 in./25 cm	12 in./30 cm
A Tattoo Raspberry Vinca	1	288	1	2	3
B Titan Polka Dot Vinca	1	288	1	2	3
C Titan Rose Halo Vinca	1	288	1	2	3

NEW BERRY BURST

Tattoo Black Cherry, Titan Really Red & Titan Rose Halo Vinca

VALUE



8 in./20 cm



10 in./25 cm



12 in./30 cm



Transplant to finish: 6-7 weeks

Variety	Seeds per Cell	Plug Size	Plants per Pot		
			8 in./20 cm	10 in./25 cm	12 in./30 cm
A Tattoo Black Cherry Vinca	1	288	1	2	3
B Titan Really Red Vinca	1	288	1	2	3
C Titan Rose Halo Vinca	1	288	1	2	3

NOTE: Individual varieties sold separately.

single-species plug & play combos

NEW SUMMER SMOOTHIE

Valiant Orchid, Valiant Pure White & Valiant Burgundy Vinca

VALUE



8 in./20 cm



10 in./25 cm



12 in./30 cm



Transplant to finish: 6-7 weeks

Variety	Seeds per Cell	Plug Size	Plants per Pot		
			8 in./20 cm	10 in./25 cm	12 in./30 cm
Valiant Orchid Vinca	1	288	1	2	3
Valiant Pure White Vinca	1	288	1	2	3
Valiant Burgundy Vinca	1	288	1	2	3

NEW CHRISTMAS IN JULY

Lucky Star White & Lucky Star Dark Red Pentas

VALUE



8 in./20 cm



10 in./25 cm



12 in./30 cm



Transplant to finish: 8 weeks

Variety	Seeds per Cell	Plug Size	Plants per Pot		
			8 in./20 cm	10 in./25 cm	12 in./30 cm
Lucky Star White Pentas	1	288	2	3	4
Lucky Star Dark Red Pentas	1	288	2	3	4

single-species plug & play combos

NEW SHINING STARS

Lucky Star Lavender, Lucky Star Deep Pink & Lucky Star White Pentas

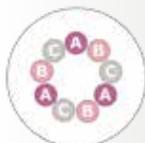
VALUE



8 in./20 cm



10 in./25 cm



12 in./30 cm



Transplant to finish: 8 weeks

Variety	Seeds per Cell	Plug Size	Plants per Pot		
			8 in./20 cm	10 in./25 cm	12 in./30 cm
Lucky Star Lavender Pentas	1	288	1	2	3
Lucky Star Deep Pink Pentas	1	288	1	2	3
Lucky Star White Pentas	1	288	1	2	3

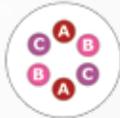
NEW STAR BRIGHT

Lucky Star Dark Red, Lucky Star Deep Pink & Lucky Star Lavender Pentas

VALUE



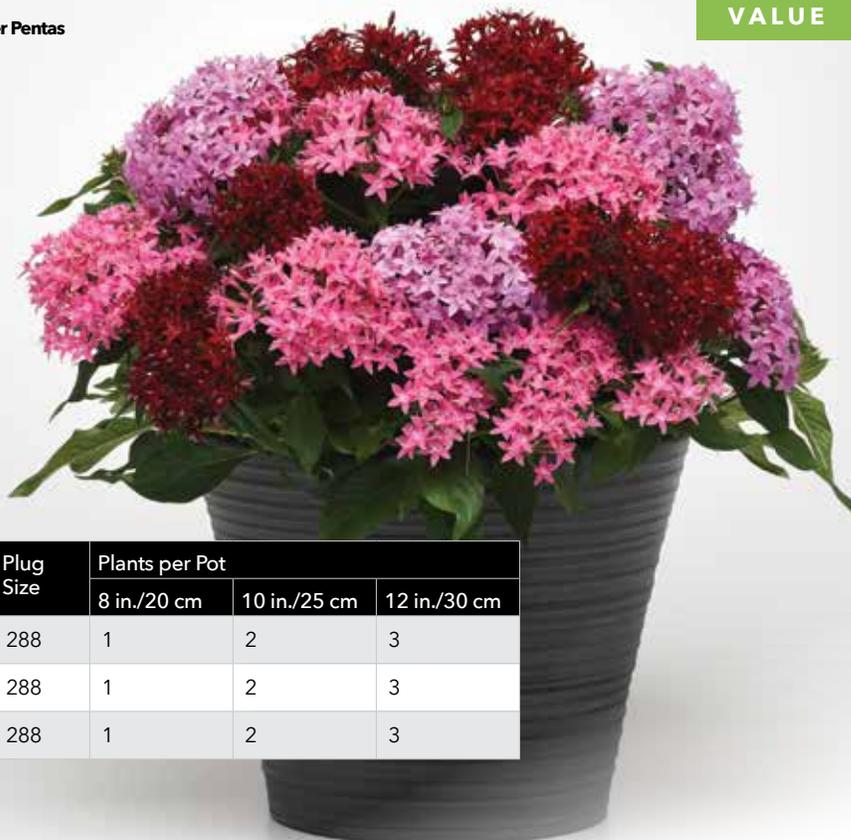
8 in./20 cm



10 in./25 cm



12 in./30 cm



Transplant to finish: 8 weeks

Variety	Seeds per Cell	Plug Size	Plants per Pot		
			8 in./20 cm	10 in./25 cm	12 in./30 cm
Lucky Star Dark Red Pentas	1	288	1	2	3
Lucky Star Deep Pink Pentas	1	288	1	2	3
Lucky Star Lavender Pentas	1	288	1	2	3

NOTE: Individual varieties sold separately.

plug & play combos

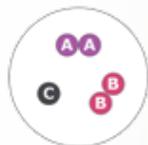
NEW BERRY SPARKLER

Serena Purple Angelonia, Titan Punch Vinca & Purple Flash Ornamental Pepper

PREMIUM



10 in./25 cm



12 in./30 cm



Transplant to finish: 7 weeks

Variety	Seeds per Cell	Plug Size	Plants per Pot	
			10 in./25 cm	12 in./30 cm
A Serena Purple Angelonia	1	128	1	2
B Titan Punch Vinca	1	288	1	2
C Purple Flash Ornamental Pepper	1	105	1	1

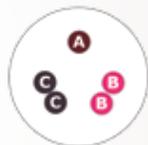
NEW CHERRY JAM

Chocolate Covered Cherry Premium Sun Coleus, Valiant Punch Vinca & Purple Prince Alternanthera

PREMIUM



10 in./25 cm



12 in./30 cm



Transplant to finish: 6 weeks

Variety	Seeds per Cell	Plug Size	Plants per Pot	
			10 in./25 cm	12 in./30 cm
A Chocolate Covered Cherry Premium Sun Coleus	1	288	1	1
B Valiant Punch Vinca	1	288	1	2
C Purple Prince Alternanthera	1	288	1	2

Treat Alternanthera plugs with 0.5 ppm paclobutrazol drench 1 week before transplant.

plug & play combos

NEW INK'D

Tattoo Raspberry Vinca & Serena Blue Angelonia

PREMIUM



8 in./20 cm



10 in./25 cm



12 in./30 cm



Transplant to finish: 6-7 weeks

Variety	Seeds per Cell	Plug Size	Plants per Pot		
			8 in./20 cm	10 in./25 cm	12 in./30 cm
Tattoo Raspberry Vinca	1	288	2	3	4
Serena Blue Angelonia	1	128	2	3	4

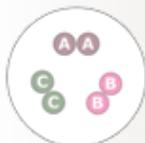
NEW PEACH MELBA PARFAIT

Valiant Apricot Vinca, Serenita® Pink Angelonia & Silver Falls Dichondra

PREMIUM



10 in./25 cm



12 in./30 cm



Transplant to finish: 7 weeks

Variety	Seeds per Cell	Plug Size	Plants per Pot	
			10 in./25 cm	12 in./30 cm
Valiant Apricot Vinca	1	288	1	2
Serenita Pink Angelonia	1	128	1	2
Silver Falls Dichondra	3	288	1	2

NOTE: Individual varieties sold separately.

plug & play combos

NEW SEASIDE DELIGHT

Valiant Orchid Vinca & Serena Blue Angelonia

PREMIUM



8 in./20 cm



10 in./25 cm



12 in./30 cm



Transplant to finish: 6-7 weeks

Variety	Seeds per Cell	Plug Size	Plants per Pot		
			8 in./20 cm	10 in./25 cm	12 in./30 cm
Valiant Orchid Vinca	1	288	2	3	4
Serena Blue Angelonia	1	128	2	3	4

NEW SUMMER CANDY

Titan Really Red Vinca & Serena White Angelonia

PREMIUM



8 in./20 cm



10 in./25 cm



12 in./30 cm



Transplant to finish: 6 weeks

Variety	Seeds per Cell	Plug Size	Plants per Pot		
			8 in./20 cm	10 in./25 cm	12 in./30 cm
Titan Really Red Vinca	1	288	2	3	4
Serena White Angelonia	1	128	2	3	4

plug & play combos

NEW SUN JEWELS

Zahara Yellow Zinnia, Valiant Pure White Vinca & Purple Prince Alternanthera

PREMIUM



10 in./25 cm



12 in./30 cm



Transplant to finish: 6-7 weeks

	Variety	Seeds per Cell	Plug Size	Plants per Pot	
				10 in./25 cm	12 in./30 cm
	Zahara Yellow Zinnia	1	128	1	2
	Valiant Pure White Vinca	1	288	1	2
	Purple Prince Alternanthera	1	288	1	1

Treat Alternanthera plugs with 0.5 ppm paclobutrazol drench 1 week before transplant.

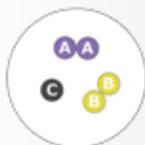
NEW YELLOW TAMBOURINE

Serena Blue Angelonia, Zahara Yellow Zinnia & Purple Flash Ornamental Pepper

PREMIUM



10 in./25 cm



12 in./30 cm



Transplant to finish: 7 weeks

	Variety	Seeds per Cell	Plug Size	Plants per Pot	
				10 in./25 cm	12 in./30 cm
	Serena Blue Angelonia	1	128	1	2
	Zahara Yellow Zinnia	1	288	1	2
	Purple Flash Ornamental Pepper	1	288	1	1

NOTE: Individual varieties sold separately.

annuals



NEW

Kabloom Denim

CALIBRACHOA 
Calibrachoa x hybrida

Kabloom® Series F1

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

Seed supplied as: Pelleted

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

- First-of-its-kind Kabloom is 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 Denim Flat, mounded plants produce flowers with darker blue tones under lower light and cooler conditions; the blooms age to silver-blue under higher light and warmer conditions. Optimal daylength for best flowering is 11 hours. The most prostrate in the series, with a height of 6 to 10 in./15 to 25 cm.

Ease and efficiency, at your fingertips!

The first seed calibrachoa, Kabloom lets you move beyond URCs and liners, and gives you peace of mind in this very popular class. You can schedule based on your needs, not on cutting availability dates. You can still receive product when the weather holds up vegetative shipments. Best of all...grown side by side with vegetative varieties, it's impossible to tell the difference.



NEW

Megawatt Rose Green Leaf Improved



NEW

Megawatt Red Green Leaf Improved



NEW

Megawatt Pink Green Leaf

MEGAsize + MEGAcolour = MEGAsales!

Megawatt offers even more opportunities for 2019 with another colour addition plus two key timing/habit improvements. This fresh, high-energy begonia option has quickly proven itself in the marketplace with great timing benefits, one-of-a-kind varieties, ultimate garden power and more. These bigger-than-life hybrids let you offer the earliest colour to early-bird gardeners.

Look to PanAmerican Seed for your complete interspecific program, starting with fastest-to-market **BabyWing®** for day-neutral growing...

Megawatt for big Spring sales...and main-season **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 from Spring through Autumn...even in heat and drought.
- Sturdy flower stems hold flowers above the foliage for superior show versus others.
- Shows well at retail and perfect for landscapes, baskets, big tubs and borders.

New Pink Green Leaf A "must-have" colour for retail programs. More uniform than the competition, with similar or earlier timing.

New Red Green Leaf Improved Upgraded to match the series for timing and plant habit.

New Rose Green Leaf Improved Upgraded to match the series for timing and plant habit.



NEW

First Flame Purple 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 colored Summer crop finishes 10 to 14 days earlier than competing varieties to reduce production costs.
- Mid-height series branches like a regular *C. plumosa* to produce full blooms.
- Ideal for Asian and southern markets.

New Purple Unique colour to this type of celosia. About 1 week earlier to flower, with a thicker plume compared to First Flame Red, Yellow and Scarlet. Non-fading in high light/high heat. NOTE: Not included in First Flame Mixture.

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 Purple Shades** Unique variety shows off shades of purple that hold colour well in high light.



NEW

Sonata Purple Shades Cosmos

ORNAMENTAL CORN 
Zea mays

New Pink Zebra

Height: 48 to 60 in./122 to 152 cm
Spread: 12 to 18 in./30 to 46 cm

Seed supplied as: Raw

Plug crop time: 1 to 2 weeks
Transplant to finish: Late Spring 4 to 6 weeks, Autumn 3 to 5 weeks

- Grow late Summer and Autumn sales with the only dwarf variegated ornamental corn on the market. Home gardeners will love the dramatic colour and texture in their late-season mixed planters and gardens, and fresh market farmers will captivate their customers, too!
- Green and white striped foliage adds showy purples/red/pinks in cool nights/long days.
- Better tillering in Autumn than other ornamental corns - each stalk produces many small ears with purple kernels and tassels.
- Great for quarts and gallons, with fast finish from plugs or direct sown.



NEW

Pink Zebra Ornamental Corn



NEW

Dreamscape Deep Rose



NEW

Dreamscape Deep Burgundy



NEW

Dreamscape Purple



NEW

Dreamscape Bright Red



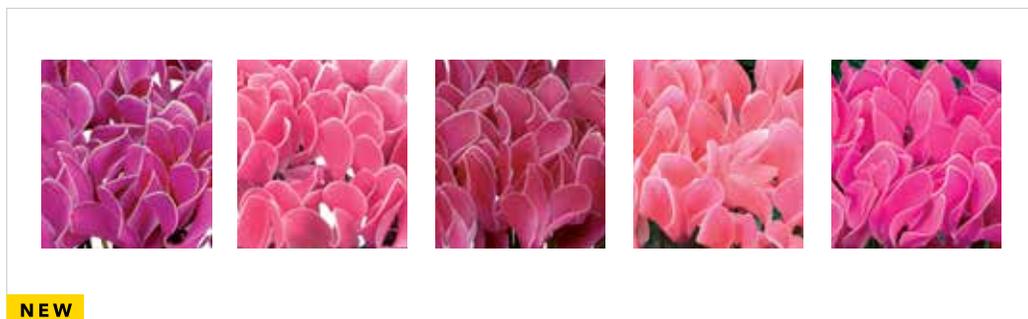
NEW

Dreamscape Salmon Eye



NEW

Dreamscape White



NEW

Dreamscape Dark Flamed Mixture

CYCLAMEN 
Cyclamen persicum

Dreamscape Series F1

Height: 6 to 9 in./15 to 23 cm
Spread: 9 to 13 in./23 to 33 cm

Seed supplied as: Raw

Plug crop time: 8 to 9 weeks
Transplant to finish: 19 to 20 weeks

- Dreamscape varieties are specially bred and selected to deliver the best outdoor performance of any cyclamen.
- Pro landscapers and home gardeners alike can now confidently plant cyclamen in-ground and count on better, longer performance.
- Sow all colours at the same time to ship and sell together.

New Deep Burgundy Unique colour for the outdoor cyclamen market.

New Deep Rose Unique colour for outdoor and landscape use. The model for the series, Deep Rose is outstanding in landscape and garden beds.

New Purple Deep, intense purple colour.

New Salmon Eye Large, dark salmon flowers with very nice eye, on a slightly larger plant than the other Dreamscape varieties.

New White The best white cyclamen for outdoor performance.

New Dark Flamed Mixture Well-balanced mix of dark Flamed colours.

Crowned with huge flower power

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



NEW
Corona Strawberry

DIANTHUS *Dianthus chinensis*

Corona Series F1

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

Seed supplied as: Pelleted

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

- Corona features larger blooms than the competition, plus 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 Cherry Red Solid cherry colour; some flowers show a darker red centre.

New Rose Solid rose colour, with some blooms showing a darker centre.

New Salmon Red Eye Consistent bicoulor pattern of salmon/coral with darker red centre.

New Strawberry Variable pattern in coral/salmon shades. Some flowers are solid coral, some are coral bicoulor and some have a darker coral picotee against a lighter background.

New White Clean, clear white.



NEW
Corona Cherry Red



NEW
Corona Salmon Red Eye



NEW
Corona White



NEW

Corona Cherry Red



NEW

Floral Lace Mixture Improved



NEW

Corona Rose



NEW

L: Corona Strawberry R: Competing variety



NEW

Floral Lace Picotee Improved



NEW

Floral Lace Purple Improved

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.

New Picotee Improved More uniform habit, less stretch and 1 week earlier to flower than original Picotee. Colour pattern is not as distinct a traditional "picotee," but delivers a nice novelty white and rose-red bicolour.

New Purple Improved More controlled habit and richer colour. Replaces both Purple and Violet to offer the best genetic in this important colour class.

New Mixture Improved Streamlined mix includes the most uniform, brightest colours in the series for better uniformity for the finished grower.

FUSEABLES

See Plug & Play, p. 5



NEW

Bonanza Flame Improved Marigold



NEW

Bonanza Flame Improved Marigold



NEW

Bonanza Deep Orange Improved Marigold

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

- 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.
- Fast to flower with a tight flowering window.
- Excellent garden performers under a wide range of conditions.

New Flame Improved Larger flowers and less stretch in the pack; this upgrade brings even greater uniformity into the series.

New Deep Orange Improved Improved habit brings this colour class into line with the series. Replaces Deep Orange (more compact than others in the series).



NEW

Promise Antique Shades Improved Pansy



NEW

Promise Rose Blotch Pansy



NEW

Promise Pure Silver Azure Improved Pansy



NEW

Promise Yellow Blotch Improved Pansy

PANSY 🌻
Viola x wittrockiana

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 Antique Shades Improved Better plant habit and earlier flowering than the original variety.

New Pure Silver Azure Improved Better plant uniformity and habit.

New Rose Blotch Replaces Rose Shades.

New Yellow Blotch Improved Better plant branching and habit plus narrower flowering window.

All-around performance

The market leader in French marigolds, Bonanza is the series to choose when you want to pump up your pack sales. This popular series delivers earliness, large flowers, uniformity and superior performance under a wide range of conditions.



NEW
Matrix Deep Blue Blotch Improved



NEW
Matrix Light Blue Improved



NEW
Spring Matrix Blue Improved



NEW
Halloween Improved



NEW
Frizzle Sizzle Yellow Improved

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 7-day bloom window in Autumn production that allows every colour to ship the same week.

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.
- Extra-large flowers hold up to the heat and PGR stress in Summer/Autumn production.
- Gives pro landscapers the best choice for uniform colour striping, plus the most flowers per plant of any large-flowered pansy.

New Deep Blue Blotch Improved Greater plant vigour and better uniformity to match the series.

New Light Blue Improved Earlier flowering fits series timing; flower colour is upgraded to a lighter blue shade.

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 Blue Improved** Earlier flower timing is in line with the series during Spring production. Flower colour is now a more true blue tone.

New Halloween Improved F1

Height: 6 to 8 in./15 to 20 cm
Spread: 8 to 10 in./20 to 25 cm
Flower size: 1.75 to 2 in./4 to 5 cm

Seed supplied as: Raw, Primed

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

- Replaces Halloween II with less stretch under Autumn growing conditions and a larger flower size.
- Blooms are a unique, uniform pure black colour, on strong, short peduncles.
- Early, well-branched and floriferous plants are great for Autumn pots and packs, and overwinter with ease when planted in-ground.

Frizzle Sizzle Series F1

Height: 6 to 8 in./15 to 20 cm
Spread: 8 to 10 in./20 to 25 cm
Flower size: 2.5 in./6 cm

Seed supplied as: Raw, Primed

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

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

New Yellow Improved Flowers 5 days earlier with greater hybrid uniformity.



NEW

Cool Wave Fire

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 and selling season for the popular Wave® Brand.
- Superior overwintering hardiness – Cool Wave is the earliest pansy to return in the Spring.

New Fire All-new colour joins Cool Wave! Rich dark red with a yellow face brings “fire” to Cool Wave.

New Lemon Improved Clear, buttery lemon blooms show some genetic dark and light shading. Replaces Lemon Surprise.

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.



Top: Shows more yellow in face during Summer/Autumn production (warm season)
 Bottom: Shows more red in face during Winter/Spring production (cool season)



NEW

Cool Wave Lemon Improved



NEW

Lucky Star Mixture



NEW

Lucky Star Raspberry



Lucky Star arrives tidy and ready for retail sale.



L: Lucky Star Violet R: Competing violet variety

Stays in colour... Really!

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

Non-stop 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. The promise of continuous, show-stopping colour on full, lush plants... now that's a huge plus!

PENTAS 🌞

Pentas lanceolata

Lucky Star® Series F1

Height: 12 to 16 in./30 to 41 cm

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

Seed supplied as: Pelleted

Plug crop time: 6 to 7 weeks

Transplant to finish: 7 to 8 weeks

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

New Raspberry Bright, no-fade colour is the first-of-its-kind for pentas!

New Mixture Dark Red, Deep Pink, Lavender, NEW Raspberry, Violet, White.



NEW

Easy Wave Red Improved



NEW

Easy Wave Violet Improved

SPREADING PETUNIA 🌞

Petunia x hybrida

Easy Wave® Series F1

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

Spread: 30 to 39 in./76 to 99 cm

Flower size: 2 to 3 in./5 to 8 cm

Seed supplied as: Pelleted

Plug crop time: 4 to 6 weeks

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

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

New Red Improved Offers many upgrades compared to original Red. Improved seed quality. Denser plant with more branching and shorter peduncles for a more controlled, holdable plant structure. Plant is slightly smaller with approximately 10% less spread. Foliage is dark green. Flowers are a deeper, richer red colour that does not wash out. Flower size is slightly smaller, yet not as small as Easy Wave Yellow. Timing to first flower is similar; however Easy Wave Red Improved is approximately 3 days faster to salable stage.

New Violet Improved 2 to 3 days slower to first flower than original Violet. Improved and more densely branched for a fuller plant. Less upright vigour and shorter peduncles for improved manageability. Deeper colour for improved retail show. Sturdier flowers for a less floppy appearance - delivers a better retail and garden show.

New Formula Mixture Improved NEW Violet Improved, NEW Red Improved, Blue, White, Pink Passion, Neon Rose, Silver.

New Great Lakes Mixture Improved NEW Violet Improved, Blue, White. Flowering window is now 2 days shorter.

New Opposites Attract Mixture Improved NEW Violet Improved, Coral Reef. Same time to first flower, with a narrower window to 50% flower by 3 days.

New Plum Pudding Mixture Improved NEW Violet Improved, Plum Vein. Flowering time to 50% flower narrows to 1 day.

New South Beach Mixture Improved NEW Violet Improved, NEW Red Improved, Coral Reef. Window to first flower shortens from 5 to 3 days.

New The Flag Mixture Improved NEW Red Improved, White, Blue. Time for first flower is the same; however, the time to 50% flower narrows from 3 days to 1 day.

All-season salesmakers kick it up a notch!

Red and Violet get big-time upgrades for 2019...and that moves 6 eye-catching mixes to the next level, too! Always a standout in the petunia market, bold and creative Easy Wave lets you bring in a wide array of decorator colours. Put the huge versatility to work - they're perfect for solo and mixed planters and baskets, gardens and landscapes. Best of all, Easy Wave delivers customer-pleasing performance all Summer.



NEW

Easy Wave Red Improved



NEW

Easy Wave Violet Improved

wave
PETUNIAS



NEW

Easy Wave Formula Mixture Improved Petunia



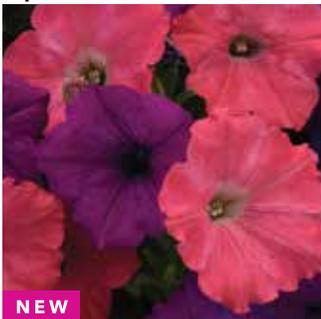
NEW

Easy Wave Great Lakes Mixture Improved Petunia



NEW

Optic Mixture Primula



NEW

Easy Wave Opposites Attract Mixture Improved Petunia



NEW

Easy Wave Plum Pudding Mixture Improved Petunia



NEW

Optic Blue Primula



NEW

Optic Yellow Primula



NEW

Easy Wave South Beach Mixture Improved Petunia



NEW

Easy Wave The Flag Mixture Improved Petunia



NEW

Optic Cream Primula



NEW

Optic Rose Primula



NEW

Optic Scarlet Primula



NEW

Optic White Primula



NEW

Optic Copper Primula

PRIMULA 
Primula acaulis

Optic Series F1

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

Seed supplied as: Primed

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

- Full-flowering varieties with tidy green foliage provide bright and rich, non-fading color 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 crop.

New Blue One of the most compact in the series, featuring small, ruffled leaves.

New Copper Shades of copper spark up Autumn mixes.

New Cream One of the fastest to flower in the series.

New Rose One of the earliest to flower in the series, and one of the best varieties due to its uniformity and great habit.

New Scarlet One of the latest to flower in the series, with a more compact habit.

New White Flowers can be slightly ruffled.

New Mixture All of the important colours and some novelties, for a good, balanced, uniform mix with short flowering window.

The name says it all!

Big Blue salvia is exactly that – a vigorous flowering annual in a sales-inspiring clear blue colour. *The first of its type from seed*, this big beauty will pump up mid-Summer sales in large containers. Super easy and super showy for both landscapers and home gardeners for their back-of-border plantings, sending out blue spires continuously from July to first frost with little to no extra care.



NEW

Big Blue US PVPAF

SALVIA INTERSPECIFIC

Salvia longispicata x farinacea

New Big Blue

Height: 24 to 36 in./61 to 91 cm

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

Seed supplied as: Raw

Plug crop time (288 tray): 4 weeks

Transplant to finish: 8 to 13 weeks, depending on light, heat and daylength conditions

- Great performer in heat and low-water conditions.
- Low-maintenance plant does not need deadheading.
- Hummingbirds, bees, butterflies and more flock to Big Blue in the garden.
- At its best in full sun, but will tolerate dappled shade or partial sun.



NEW

Big Blue US PVPAF



NEW

Snapshot Burgundy Bicolor Snapdragon



NEW

Snapshot Coral Bicolor Snapdragon



NEW

Mediterranean XP Burgundy Halo Trailing Vinca



NEW

Titan Dark Red Improved Vinca US PAF

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.

TRAILING VINCA 🌻
Catharanthus roseus

Mediterranean XP Series

Height: 4 to 6 in./10 to 15 cm
Spread: 20 to 30 in./51 to 76 cm

Seed supplied as: Raw

Plug crop time: 5 weeks
Transplant to finish (basket): Spring 12 to 14 weeks, Summer 8 to 10 weeks

- The only full series of trailing vincas offering a true red.
- Mediterranean XP varieties fill in fast with terrific coverage.
- XP genetics deliver a tight, 5 to 7-day flowering window; luxurious spreading habit; larger flowers and reliable germination.

New Burgundy Halo Vibrant, deep burgundy with bright white eye.

Robust and ready for anything Mother Nature sends!

Titan is up to 2 weeks faster to flower than open-pollinated vincas, with superior branching and the biggest flowers in all the top-selling colours. The most uniform F1 vinca series on the market shows off flowers that are up to 50% larger than O.P. types in cooler temperatures.

UPRIGHT VINCA 🌻
Catharanthus roseus

Titan® Series F1

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

Seed supplied as: Raw

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

- More stress-tolerant due to hybrid vigour - tolerates heat and drought and can withstand cooler and wetter conditions compared to O.P. types.
- Perfect for landscapes and containers of all types.
- Well-suited to packs, 4-in./10-cm and 6-in./15-cm pots.

New Dark Red Improved Matches the series for both flowering and finish timing.



NEW

Tattoo Raspberry US PVPAF



NEW

Tattoo Papaya US PVPAF

UPRIGHT VINCA 
Catharanthus roseus

Tattoo Series

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

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

Seed supplied as: Raw

Plug crop time: 5 weeks

Transplant to finish: 5 to 6 weeks

- Very floriferous and well-branched plants display one-of-a-kind flowers with an overlapping, fully rounded form that won't show gaps in hot temperatures.
- 3 to 5-day flowering window with an appealing upright habit across all colours.
- Outstanding in hot and sunny conditions.
- NOTE: Tattoo blooms display the best colour contrast under warm conditions with higher light; colours brighten with increased temperatures and light. Grown under cooler conditions and lower light, colours appear darker overall with less contrast.

New Black Cherry Swirls of cherry and raspberry are lightly airbrushed with black tones.

New Papaya Beautiful, soft "orangesicle"-toned petals are marked with an inky black eye.

New Raspberry Deep raspberry blooms mature to a soft rose colour, each accented with an inky black eye.

New Tangerine Swirls of black airbrushed onto tangerine-colour blooms with a bright eye.

Make your mark on vinca sales!

The art of plants comes alive on every Tattoo bloom – each petal looks like it is inked or airbrushed with soft brush strokes of black. Adding these standout newcomers to your lineup shows that you have your finger on the pulse of what today's gardener really wants: bold, fun, head-turning. Tattoo... without a doubt, the most unique vinca on the market today!



NEW

Tattoo Black Cherry US PVPAF



NEW

Tattoo Papaya US PVPAF



NEW

Tattoo Raspberry US PVPAF



NEW

Tattoo Tangerine US PVPAF



NEW
Sorbet XP Yellow Burgundy Jump Up Viola



NEW
Double Zahara Salmon Zinnia



NEW
Double Zahara Bright Orange Zinnia



NEW
Sorbet XP Pink Wing Viola



NEW
Sorbet XP Yellow Improved Viola



NEW
Sorbet Yellow Blue Jump Up Viola



NEW
Double Zahara White Zinnia

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.

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: Early Spring 6 to 8 weeks, Autumn 4 to 5 weeks

- Sorbet XP needs fewer PGRs, with superior holdability and less shrink. Their 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; wide range of clear colors allows for custom mixes.

New Pink Wing Highly sought-after pink cap/white face colour pattern joins the Sorbet XP series. Replaces Sorbet Pink Wing.

New Yellow Burgundy Jump Up Yellow face with burgundy cap.

New Yellow Improved Upgraded flower quality shows little to no whiskering; delivers greater flower power than original XP Yellow.

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: 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 colors have good retail and home garden appeal.

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 a huge colour show!
- Award-winning, all-season performance and durability in landscapes and containers, especially in sunny, hot and dry conditions.
- Intermediate size is perfect for mid-level plantings in the landscape. Works well in containers, too.

New Bright Orange Intense bright orange colour on highly double flowers. Very floriferous, with slightly smaller flowers than others in the series.

New Salmon Holds its colour under hot conditions, while others in this colour class start to wash out.

New White Outstanding white joins the series, with larger and more double flowers than the competition. Up to 2% of plants can show pink blushing in the flowers.

KieftSeed

perennials

double the sun



NEW

Double the Sun

The early bird gets the...Sales!

There's early...and then there's Double the Sun! This bright newcomer is 2 to 3 weeks earlier than our Early Sunrise and other comparable varieties in the early cool season. In Summer, it finishes 1 to 2 weeks earlier. Get this favourite perennial class into the store before any other compact, semi-double yellow coreopsis, and listen as those registers ring.

COREOPSIS

Coreopsis grandiflora

New Double the Sun

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

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

USDA Hardiness Zones: 4a to 9b
(-30 to 25°F/-34 to -4°C minimum temperatures)

A First-Year-Flowering Perennial.

Seed supplied as: Primed

Plug crop time: 5 to 7 weeks

Transplant to finish: 9 to 12 weeks

- Semi-double, clear golden yellow flowers are the same large, 2.5-in./6-cm size as SunKiss and Early Sunrise, and bigger than Sun Up and Sunfire.
- Great controlled habit with strong flowering.
- Ideal for quart and 1-gallon production in Spring and Summer with 13-hour critical daylength. For 2-gallon and larger containers in Summer, Early Sunrise is the optimal choice.

PanAmericanSeed.

blue spear



NEW

Avignon Early Blue



NEW

Blue Spear

LAVANDULA 🌞

Lavandula angustifolia

New Avignon Early Blue

Height: 10 to 12 in./25 to 30 cm

Spread: 9 to 11 in./23 to 28 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: 5 to 6 weeks

Transplant to finish: 10 to 14 weeks
(24 to 36 weeks overwintered)

- *Grow early, grow easy, grow beautiful!* This tight, well-branched and strong-stemmed plant shows deeper blue blooms earlier than similar English Lavenders.
- Grown as annual in the early cool season, Avignon Early Blue finishes about 2 weeks earlier than our Ellagance Purple and 1 week before the competition.
- Critical daylength is only 10 hours, like Ellagance Purple, but Avignon Early Blue grows better in cool conditions.

Pump up your lavender program!

These two newcomers join the Ellagance series and Lavance Deep Purple to boost our regionally focused program and round out the *Lavandula angustifolia* assortment from Kieft Seed. Find detailed information in the regional Lavender Scheduling Tool at panamseed.com/perennials.

New Blue Spear

Height: 11 to 13 in./28 to 33 cm

Spread: 9 to 11 in./23 to 28 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: 5 to 6 weeks

Transplant to finish: 11 to 15 weeks
(24 to 36 weeks overwintered)

- *The showiest English Lavender you can grow and sell!* Blue Spear shows off bigger, taller spikes than any other seed lavender, with more upright flower stems that stand closer to each other for huge impact from a distance.
- Very easy to grow, with high uniformity, good habit and earliness (if grown with minimum 13-hour daylength).
- Bred for maximum show, Blue Spear is best used as a perennial in USDA Hardiness Zones 6a to 8b.

revolution



NEW

Revolution Red with Dark Eye Improved Gerbera

GERBERA 

Gerbera jamesonii

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.

New Red with Dark Eye Improved

Replaces Scarlet Red with Dark Eye with more uniform colour, stem length and plant size, plus shorter flowering window.

New Select Mixture Improved

Uniform mix of bold, bright colours now includes the latest and best genetics of the Revolution series. More uniform for flower timing, plant size and stem length than original Select Mixture.



NEW

Revolution Select Mixture Improved Gerbera

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.



NEW

Hot Pops Yellow Ornamental Pepper
US9,307,712

ORNAMENTAL PEPPER 🌻
Capsicum annuum

Hot Pops Series

Height: 4 to 5 in./10 to 13 cm
Spread: 6 to 8 in./15 to 20 cm

Seed supplied as: Raw

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

- Hot Pops Purple has a new companion! Pump up your Autumn pot plant sales with a new fruit form and multicolours.
- Small, round peppers show off multiple colours simultaneously to make a high-impact display for outdoor and indoor decorating.
- Best for ornamental use. Fruit is edible but not palatable - Hot Pops Yellow fruit is medium hot, while Hot Pops Purple is very hot.

New Yellow Shows both yellow and red fruit. Sow Hot Pops Yellow 1 week earlier to time finish with Hot Pops Purple.



NEW

SunBuzz

More colour = repeat sales!

Meet the pot sunflower they'll want again and again. SunBuzz keeps pumping out more blooms, thanks to the big show of secondary flowers. On the production end, SunBuzz lets you grow and sell a compact plant with fewer PGRs, so you send a good-looking and cost-effective product off to market.



NEW

SunBuzz

SUNFLOWER 🌻
Helianthus annuus

New SunBuzz F1

Height: 12 to 20 in./30 to 51 cm
Spread: 8 to 12 in./20 to 30 cm

Seed supplied as: Treated

Plug crop time: 2 to 3 weeks
Transplant to finish: 6 to 8 weeks

- Clear, yellow-filled flowers make SunBuzz a real standout!
- Compact, smaller-leaved plants are more manageable and programmable on the bench, and more appealing in the store.
- Delivers better seed uniformity and needs fewer PGRs than similar varieties.
- A big improvement over Ballard, with less long day sensitivity, faster flowering and a more compact habit.

PanAmericanSeed®

cut flowers

sweet



NEW

Sweet Purple Improved

DIANTHUS ☀

Dianthus barbatus

Sweet Series F1

Height: 18 to 36 in./46 to 91 cm

Seed supplied as: Pelleted

Planting density: 4 to 6 plants/ft.²
(42 to 64 plants/m²)

Best for: Greenhouse, high tunnel;
also suitable for field

Plug crop time: 4 to 5 weeks

Transplant to finish: Late Spring/
Summer greenhouse/field, 8 to
9 weeks; Late Summer/Winter
greenhouse, 9 to 13 weeks; Field,
15 to 18 weeks

- Top-notch filler series features large, fragrant and long-lasting blooms on strong, straight stems.
- Produces high yields of saleable stems.
- Taller growth comes from early, Autumn-transplanted, greenhouse-grown plants.

New Purple Improved Richer colour and improved uniformity.

**Best in class
makes the best
bouquets**

Sweet offers the best commercial *D. barbatus* series available. With no vernalization needed for first-year-flowering, you can program for year-round production. Add to that the very uniform height and flowering, excellent retail holdability and 11 separate bright colours, and you've got one sweet series to grow and send to market!

PanAmericanSeed.



NEW
Sunday Purple



NEW
Sunday Cherry



NEW
Sunday Bright Pink



NEW
Sunday Orange Improved

PRODUCTION GUIDE

Class/Variety	Greenhouse	High Tunnel	Field
CELOSIA			
Sunday Bright Pink, Cherry, Orange Improved & Purple	X	X	
DIANTHUS			
Sweet Purple Improved	X	X	X

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

FLOREAL SELECTION GUIDE FOR BOUQUETS

Class/Variety	Focal	Filler	Line	Volume
CELOSIA				
Sunday Bright Pink, Cherry, Orange Improved & Purple		X	X	X
DIANTHUS				
Sweet Purple Improved		X		X

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

CELOSIA

Celosia plumosa

Sunday® Series

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

Seed supplied as: Coated

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

Best for: Greenhouse, high tunnel

Plug crop time: 2 to 3 weeks

Transplant to finish: 12 to 16 weeks

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

New Bright Pink Slightly shorter plumes compared to other Sunday varieties.

New Cherry Bright cherry colour. Slightly larger leaves than other Sunday varieties.

New Orange Improved More stem length, less daylength sensitivity and darker orange colour than current Orange.

New Purple Unique colour.

handPicked

vegetables & herbs



NEW
Butterbaby Squash

BUTTERNUT SQUASH ☀️
Cucurbita moschata

New Butterbaby

Height: 8 to 12 in./20 to 30 cm
Spread: 84 to 120 in./213 to 305 cm

Seed supplied as: Raw

Days to maturity from direct seed:
100 to 105

Fruit length: 4 to 6 in./10 to 15 cm

Fruit width: 3 to 4 in./8 to 10 cm

Plant habit: Restricted vine

Best for: Home Gardener in-ground, Fresh Market Farmer in-ground

Plug crop time: 2 to 3 weeks (128 plug), 3 to 4 weeks (direct sow)
Transplant to finish: 2 to 3 weeks

- Produces an abundance of sweet, personal-size mini butternuts with classic light tan skin colour.
- High proportion of uniform fruit - around 1 lb./454 g each - means less grading for the fresh market farmer and satisfaction for the home gardener. Depending on vine spacing, average fruit size can range from 0.5 to 1.5 lb./227 to 680 g each.
- Restricted vines will not take over the garden like traditional butternuts; can be grown on a trellis to save even more space.
- Excellent storage quality - will last up to 4 months or more after harvest.
- Powdery Mildew resistance improves the ability to harvest high-quality fruit.



NEW
Snackabelle Red Pepper

SWEET PEPPER ☀️
Capsicum annuum

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

Fruit characteristics: Mini bell, green to deep red

Fruit length: 2 to 2.25 in./5 to 6 cm

Fruit width: 2 to 2.25 in./5 to 6 cm

Plant habit: Compact

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

Plug crop time: 5 to 6 weeks
Transplant to finish: 4 to 7 weeks (no fruit), 7 to 9 weeks (green fruit)

- This mini bell excels across the board: earliness, ease and eating!
- "Easy-out" stem and seeds - simply push down or cut around cap to release seed cavity for quick cleaning.
- Thick-walled, blunt-end peppers have a rich, sweet flavour that's great for fresh eating from green to red, and holds up well through grilling and stuffing.
- Superior disease resistance package for Bacterial Leaf Spot Races 1-3, 7, 8, plus Tobacco Mosaic Virus.
- Supplied as professional-quality, disease-tested seed.

habanero primero red



NEW

Habanero Primero Red



NEW

Habanero Primero Red



NEW

Habanero Primero Red

HOT PEPPER

Capsicum chinense

New Habanero Primero Red F1

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

Spread: 18 to 24 in./46 to 61 cm

Seed supplied as: Raw

Days to maturity from transplant:

75 to 80 to full ripe, 60 to 65 to green

Fruit characteristics: Habanero, green to bright red

Fruit length: 2.75 to 3.5 in./7 to 9 cm

Fruit width: 1.25 to 1.5 in./3 to 4 cm

Plant habit: Large

Heat level: Hot (4/5)

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

Plug crop time: 5 to 6 weeks

Transplant to finish: 4 to 7 weeks (no fruit), 7 to 9 weeks (green fruit)

- Thanks to outstanding vigour that assures stronger plants in packs and small pots, Primero Red goes head to head for early-season retail with bells and jalapeños.
- Early flowering allows large pots to be sold with flowers and immature fruit.
- Intermediate resistance to Tomato Spotted Wilt Virus (TSWV).
- Supplied as professional-quality, disease-tested seed, with high germination rates even at lower temperatures than *C. annuum* varieties.
- Bred in collaboration with the University of Wisconsin.

**Super early!
Super tasty!
Super yields!**

Habanero Primero Red is the earliest ripening habanero on the market, with fruit ready to harvest and enjoy as early as bell peppers! And what a harvest it is - expect huge yields of peppers that are larger than other habaneros. But that's not all - these big beauties have just about one-third the heat of standard habaneros, letting gardeners appreciate their rich flavour in fresh salsa and cooking. Primero Red is sure to be a Super seller!



Precision Multi-Pellets



SimplyHerbs Dill



SimplyHerbs Curled Parsley

Start strong, finish stronger!

Seven of our SimplyHerbs varieties and several of our SimplySalad® 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 ready to go!*

SIMPLYHERBS ☀

Dill

Curled Parsley

Large-Leaf Italian Flat Leaf Parsley

Rosemary

New! SimplyHerbs Dill, Curled Parsley, Large-Leaf Italian Flat Leaf Parsley and Rosemary are now available as Precision Multi-Pellets, joining Basil, 'Try Basil' and Sage with this upgraded seed form.

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

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



SimplyHerbs Large-Leaf Italian Flat Leaf Parsley



SimplyHerbs Rosemary

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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 for North American, European and international credit-approved customers. A 2% per month finance charge (24% annual rate) will be added to all past due balances at the end of each month. Seller has no obligation to ship any Goods until payment in full is received.

MINIMUM ORDERS

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

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 RESOLD 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 EMBARGOES (INCLUDING, BUT NOT LIMITED TO, OFAC SANCTIONS PROGRAMS AND THOSE LISTED ON OFAC'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.

IMAGES

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Visit panamseed.com for current Terms & Conditions of Sale and current Variety Protection Information.

planning calendar

January 2018							
Wk	S	M	T	W	T	F	S
1		1	2	3	4	5	6
2	7	8	9	10	11	12	13
3	14	15	16	17	18	19	20
4	21	22	23	24	25	26	27
5	28	29	30	31			

February 2018							
Wk	S	M	T	W	T	F	S
5					1	2	3
6	4	5	6	7	8	9	10
7	11	12	13	14	15	16	17
8	18	19	20	21	22	23	24
9	25	26	27	28			

March 2018							
Wk	S	M	T	W	T	F	S
9					1	2	3
10	4	5	6	7	8	9	10
11	11	12	13	14	15	16	17
12	18	19	20	21	22	23	24
13	25	26	27	28	29	30	31

April 2018							
Wk	S	M	T	W	T	F	S
14	1	2	3	4	5	6	7
15	8	9	10	11	12	13	14
16	15	16	17	18	19	20	21
17	22	23	24	25	26	27	28
18	29	30					

May 2018							
Wk	S	M	T	W	T	F	S
18			1	2	3	4	5
19	6	7	8	9	10	11	12
20	13	14	15	16	17	18	19
21	20	21	22	23	24	25	26
22	27	28	29	30	31		

June 2018							
Wk	S	M	T	W	T	F	S
22					1	2	
23	3	4	5	6	7	8	9
24	10	11	12	13	14	15	16
25	17	18	19	20	21	22	23
26	24	25	26	27	28	29	30

July 2018							
Wk	S	M	T	W	T	F	S
27	1	2	3	4	5	6	7
28	8	9	10	11	12	13	14
29	15	16	17	18	19	20	21
30	22	23	24	25	26	27	28
31	29	30	31				

August 2018							
Wk	S	M	T	W	T	F	S
31				1	2	3	4
32	5	6	7	8	9	10	11
33	12	13	14	15	16	17	18
34	19	20	21	22	23	24	25
35	26	27	28	29	30	31	

September 2018							
Wk	S	M	T	W	T	F	S
35							1
36	2	3	4	5	6	7	8
37	9	10	11	12	13	14	15
38	16	17	18	19	20	21	22
39/40	23/30	24	25	26	27	28	29

October 2018							
Wk	S	M	T	W	T	F	S
40		1	2	3	4	5	6
41	7	8	9	10	11	12	13
42	14	15	16	17	18	19	20
43	21	22	23	24	25	26	27
44	28	29	30	31			

November 2018							
Wk	S	M	T	W	T	F	S
44					1	2	3
45	4	5	6	7	8	9	10
46	11	12	13	14	15	16	17
47	18	19	20	21	22	23	24
48	25	26	27	28	29	30	

December 2018							
Wk	S	M	T	W	T	F	S
48							1
49	2	3	4	5	6	7	8
50	9	10	11	12	13	14	15
51	16	17	18	19	20	21	22
52/1	23/30	24/31	25	26	27	28	29

January 2019							
Wk	S	M	T	W	T	F	S
1			1	2	3	4	5
2	6	7	8	9	10	11	12
3	13	14	15	16	17	18	19
4	20	21	22	23	24	25	26
5	27	28	29	30	31		

February 2019							
Wk	S	M	T	W	T	F	S
5						1	2
6	3	4	5	6	7	8	9
7	10	11	12	13	14	15	16
8	17	18	19	20	21	22	23
9	24	25	26	27	28		

March 2019							
Wk	S	M	T	W	T	F	S
9						1	2
10	3	4	5	6	7	8	9
11	10	11	12	13	14	15	16
12	17	18	19	20	21	22	23
13/14	24/31	25	26	27	28	29	30

April 2019							
Wk	S	M	T	W	T	F	S
14		1	2	3	4	5	6
15	7	8	9	10	11	12	13
16	14	15	16	17	18	19	20
17	21	22	23	24	25	26	27
18	28	29	30				

May 2019							
Wk	S	M	T	W	T	F	S
18			1	2	3	4	
19	5	6	7	8	9	10	11
20	12	13	14	15	16	17	18
21	19	20	21	22	23	24	25
22	26	27	28	29	30	31	

June 2019							
Wk	S	M	T	W	T	F	S
22							1
23	2	3	4	5	6	7	8
24	9	10	11	12	13	14	15
25	16	17	18	19	20	21	22
26/27	23/30	24	25	26	27	28	29

Key Events

FL/IPM
Essen, Germany
Jan. 23-26, 2018

ASTA
San Diego, CA
Jan. 27-30, 2018

California Spring Trials
California, USA
April 14-19, 2018

National Hardware Show
Las Vegas, NV
May 8-10, 2018

Flower Trials
Netherlands & Germany
June 12-15, 2018

Salon du Végétal
Nantes, France
June 19-21, 2018

Cultivate
Columbus, OH
July 14-17, 2018

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