

PanAmerican Seed.

THE BEST IN SEED AND BEYOND

PanAmerican Seed is an innovation-driven, global company that reliably delivers the best solutions on the market. We provide you with strong genetic varieties, bold new colours and the highest-quality seed to give you the best chance for a more profitable season. With our products and your energy, we can grow successfully together.

INNOVATIVE BREEDING

Innovation is at the core of what we do. Our team pushes the boundaries every day, seeking new challenges that will help our customers achieve better performance - both today and moving into the future.



CHALLENGES INSPIRE US

You, our customers, challenge us. Your needs motivate us to be more innovative, reaching higher to uphold our reputation as your best possible supplier. We know that the key to staying ahead of challenges is finding solutions that make growing easier and more profitable for us both. That's why we share our expertise, marketing support and customised programs to fit your business needs. We want to work with you to be your top choice for supplying products for all your customers.

MORE THAN JUST SEED

After celebrating our 75th anniversary in 2022, we realized it was time for PanAmerican Seed to start a new chapter. As we continue to grow as a company in our breeding technologies and production, it is important to symbolise our commitment to global growing success. Therefore, I am happy to introduce our new icon that shows we are more than just seed! This icon represents the people of PanAmerican Seed who get up every day to be better, to do better and to grow better. Join us on this journey as we share more about what drives our team to provide you with the best.

Anne Leventry

President, PanAmerican Seed



SUPPLY

Look no further. Annuals, Perennials, Potted Plants, Cuts, Vegetables, and more - you'll find a comprehensive product assortment that leads the market in depth and breadth. Driven by our innovative global breeding teams and supported by our expert supply management department, we can be flexible to meet your needs.



RELIABILITY

The Premier Lab strives to provide the most superior seed by developing new seed forms, seed-testing protocols, seed quality ratings, plus upgrades such as superior seed coating and pelleting techniques to improve production efficiency for growers.



QUALITY

Our breeding team is the best in the industry at creating innovative new products to help you build your business. They also fine-tune our products, adding on-trend colours and performance upgrades. You can count on the best-quality seeds produced from our global breeding.



AVAILABILITY

Reliable delivery is key to our business. Our dedicated team works on your orders to make all domestic and international shipments run as smoothly as possible. Our state-of-theart seed distribution center guarantees fast, efficient order processing and delivery.



BREEDING LOCATIONS

Illinois, USA California, USA Cartago, Costa Rica Venhuizen, Netherlands Chiang Mai, Thailand

PRODUCTION LOCATIONS

Baja California, Mexico California, USA Yunnan Province, China Jalapa, Guatemala Cartago, Costa Rica Pichidegua, Chile Venhuizen, Netherlands

Some varieties are restricted in certain markets. Please contact your PanAmerican Seed Account Manager for varieties available in your region.



SUPPORT

You'll find a dedicated partner in our global sales representatives, customer service teams and technical experts. They maintain close relationships with our customers, sharing expertise, marketing and sales tools, and customised solutions for your growing challenges. You'll receive support for crop culture, clean environment protocols, plant physiology and pathology, chemical and biological control agents for pests and more, using the most comprehensive resources in the business.





NEW YEAR, NEW TOOLS, NEW INSPIRED SOLUTIONS!

This year, we have created more time, cost and labour-saving solutions to help you work better and smarter. Here is a list of new and improved resources you'll want to take advantage of for the upcoming season. For more details, see the "Inspired Solutions" section we've added starting on p. 230.

We are excited to unveil our newly refreshed website where you'll find more to explore, like:

- Short cuts to quickly access timely news and information.
- Regional recommendations from our experts across the globe.
- Easier product searching that is more user friendly.
- Fast photo library access.
- Enhanced grower scheduling tools.
- Streamlined navigation with greater accessibility.

You'll also find your favorites from the existing site:

- Culture guides
- Seed storage sheets
- Benchcards
- Consumer POP
- Grower calendar
- Tons of product information

Landscape Products for Professionals

We've gathered a collection of products that provide lasting colour and performance for landscaping professionals. See how and why we've chosen the varieties that made the list on **p. 232**.



The NEW So Fast. Grow Fast.™ Program

Keep your benches full and increase sales with these fast-finishing products on **p. 234**.

Calculated Combos™

You can create your own combo just by using our NEW Calculated Combos tool to put together the ideal genus, season, lighting and soil conditions! See how on **p. 236.**

Perennial Scheduling Made Easy

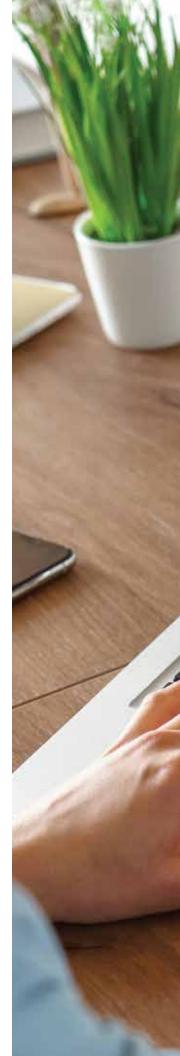
Scheduling perennials to bloom when you are ready to ship has gotten easier with the First-Year-Flowering Tool! It has information on dozens of perennials and does the work of planning for you! Get started on **p. 237**.

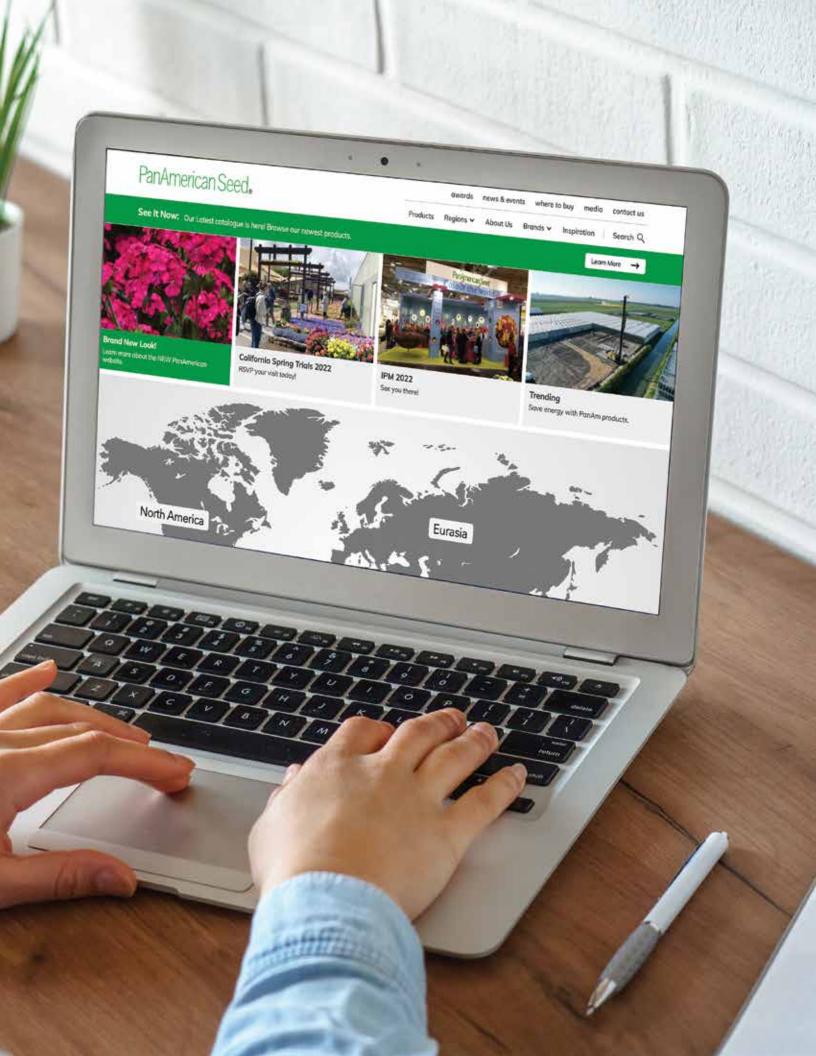
Smart Scheduling

Use this estimator to plan the finish times for your **Wave®** and **Kitchen Minis™** crops. Easier scheduling starts on **p. 238**.



Explore these new tools now!





GROW WITH CONFIDENCE

SEED FORMS

Your order from PanAmerican Seed contains high-quality seed with great performance, so you can be confident in the plants you grow.



This is seed in its natural form, with no enhancements. Examples include Tomato and Verbena.



DE-TAILED

The "tail" on a seed can interfere with an automatic seed-sowing machine. By removing the tail, the seed has a smoother shape that is easier to handle. Marigolds are de-tailed.



PRIMED

Primed seed has had the germination process started, but it is stopped before the root protrudes through the seed coat; the seed is then dried down. Primed seed has more uniform growth and will germinate under a wide range of conditions. Examples include Pansy and Coreopsis.



AMPLIFIED

Seed that is enhanced through a proprietary process, resulting in faster and more uniform germination compared to non-enhanced seed. An example is Echinacea.



COATED

Seed is enhanced through a proprietary process in which a coating is applied to allow easier handling by the grower and in seeders. This is sometimes referred to as a "film coat" or a "slick coat". Examples include Beacon Impatiens and Marigolds.



TREATED

Thiram is applied to the seed for disease control and protection against multiple seedborne and soilborne fungi. The seed is sealed, has no shape or size change, and no dust rubs off. An example is Sunflower.



PELLETED

Pelleted seed has been enhanced through a proprietary process where multiple layers of a yellow pelleting material are applied to increase the size and make the seed more spherical. This improves visibility and makes seeder pickup easier. Examples include Petunia and Begonia.



MULTI-SEED PELLET AND MULTI-SPECIES MULTI-PELLET

Multi-Seed Pellet

The seed undergoes a similar process to pelleted but combines multiple seeds in one pellet. An example of this is Alyssum.

Multi-Species Multi-Pellet

The combining of seeds from multiple species into one pellet, essentially providing a pre-formed mixed container in a pellet. An example of this is SimplySalad®.



PRECISION™ MULTI-SEED PELLET

This form is offered when we want to supply a precise number of seeds in a multi-seed pellet. Each seed is pelleted first, then combined with others into a larger pellet. When the multi-seed form is used for multispecies combinations, we can ensure that a precise number of seeds of each variety of the mix is in every PMPL. An example of this would be SimplyHerbs™.

SEED PELLETING, PRIMING AND TESTING

Today, billions of seeds are coated, pelleted, primed and tested before we sell them to you. You can expect reduced shrink, reduced cost and improved yield using these processes.

PRECISION™ MULTI-PELLETS (PMPL)

The first-ever professional-quality multi-species and single-species Precision Multi-Pellets are specially formulated to deliver a balanced mix of two or three varieties. Trialed and tested in the lab and in the greenhouse, they germinate and grow compatibly. All combo components are present at least 90% of the time.

- Single Speciea Arugula
- Single Species Herb Basil
- Single Species Herb Rosemary
- Single Species Pink Shimmer Cuphea
- Multi-Species
- SimplySalad® Kale Storm Mixture

AMPLIFIED SEED (AMP)

Enhanced through a proprietary process for fast, uniform germination.

Echinacea Artisan

TREATED NON-CHEMICAL (TRN)

Seed has been disinfected without the use of fungicides, reducing the seedling pathogens on the seed.

• Salvia

COATED SEED (CT)

Film-coated seed ensures better flowability through seeders.

- Alyssum
- Impatiens
- Gazania
- Marigold, African
- GerberaGomphrena
- Marigold, French
- Gomphrena
- Zinnia

CERTIFIED ORGANIC SEED

Our organic seed is not treated with any chemicals. Contact your distributor for a complete product listing.

PRIMED SEED (PR)

Primed seed germinates under a wider range of temperatures and delivers better uniformity.

- Coreopsis
- Rudbeckia
- Pansy
- Verbena

Viola

- Papaver
- Verbena Species
- Phlox

MULTI-SEED PELLETS (MPL)

Eliminates the need to run trays through the seeder multiple times.

- Alyssum Multi-Seed Pellet (7-9 seeds)
- Bacopa Multi-Seed Pellet (4-5 seeds)
- Begonia Multi-Seed Pellet (3-4 seeds)
- Dichondra Multi-Seed Pellet (3-4 seeds)
- Helichrysum Multi-Seed Pellet (3-4 seeds)
- Lobelia Multi-Seed Pellet (6-9 seeds)
- Ornamental Grasses Multi-Seed Pellet (5-9 seeds)
- Ornamental Mint (8-12 seeds)
- Portulaca Multi-Seed Pellet (4-5 seeds)
- SimplyHerbs™ Multi-Seed Pellet (7-12 seeds)
- SimplySalad® Multi-Seed Pellet (6-10 seeds)

PELLETED SEED (PL)

Applying a uniform pellet for small seed items improves visibility and makes seeder pick-up easier.

- Angelonia
- Lobelia Species
- Begonia
- Matricaria
- BellisCampanula
- NemesiaPentas
- Celosia
- Petunia
- Coleus
- Petunia, Double
- Dianthus
- Plectranthus
- Digitalis
- Silene
- Exacum
- ToreniaTrachelium
- HeucheraIsotoma
- Verbessum
- Lisianthus
- Verbascum
- _____
- Cut Flower Snapdragons

TREATED SEED (TR)

Uses Thiram for general seedling disease control and Allegiance for protection against downy mildew. Seed is sealed; there is no change in shape/size and no dust or rub-off.

- Sunflower
- Carthamus

















WAVE® IS UNSTOPPABLE!

The petunia brand that has its own **fan club** continues to please crowds and ramp up excitement in home gardeners in early Spring through Summer! The most-asked-for petunia at retail and its signature Wave-brand **Pink Packaging** get the word out about easy spreading colour for pots, baskets, gardens and landscapes. With an in-your-face new van for delivering Wave plants to consumer events, and a **Pink Pot Ambassador** program keeping it high on the social media radar, there's just no stopping Wave!



Shock Wave® Series E3 Easy Wave® Series Easy Wave® Series

Height: 7-10 in. (18-25 cm) Height: 6-12 in. (15-30 cm) Height: 6-12 in. (15-30 cm) Spread: 20-30 in. (51-76 cm) Spread: 25-32 in. (64-81 cm) Spread: 30-39 in. (76-99 cm) Tidal Wave® Series

Height: 16-22 in. (41-56 cm) Spread: 30-60 in. (76-152 cm) Original Wave® Series

Height: 5-7 in. (13-18 cm) Spread: 36-48 in. (91-122 cm)



UNBEATABLE GARDEN PERFORMANCE

For more than 25 years, Wave has been inspiring growers, gardeners and professional landscapers with a continually evolving and improving petunia program. With additional colours and consumer promotions, Wave provides easy spreading colour to home gardens around the world. That's what makes Wave the brand known, bought and trusted by name.

Wave includes 5 petunia series and 1 pansy series, and boasts over 70 colours and mixes. Known for its wide selection of mixes for versatility in gardens, baskets and containers, Wave provides the variety and performance consumers expect from plants for their garden today!

Wake up early season sales!

At 10 hours daylength, E3 Easy Wave will be ready to kick off petunia sales even earlier! With a manageable, uniform plant structure and vigour, the series offers simplified production to save on labour costs. The plants can be grown at lower PGR rates than Easy Wave, so we say it's "Extra Easy" Wave! The plants stay full and lush longer at retail for increased sell-through and the eye-catching appeal consumers expect from the Wave program.



Sweet Taffy Mixture

It's Early, it's Efficient, it's the Evolution of Easy Wave... it's E3!

SPREADING PETUNIA Petunia x hybrida

E3 Easy Wave® Series F1



PRO LANDSCAPE PERFORMER

Height: 6 to 12 in./15 to 30 cm **Spread:** 25 to 32 in./64 to 81 cm **Flower size:** 2.25 to 3 in./6 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

- The best Wave series to fulfill sales earlier in the season.
- Flowers at or under 10 hours daylength.
- E3 Easy Wave offers simplified production, as it can be successfully grown at lower PGR rates than Easy Wave (except Blue).

- All E3 Easy Wave varieties have a similar, uniform plant structure and vigour, providing simplified plant management.
- Plant holding capabilities across the series mean better quality over a longer time period for an extended sales window.
- E3 Easy Wave fulfills the Wave brand promise of easy spreading colour with superior performance: a manageable spreading habit, long bloom time and high colour volume!
- Mounding, spreading habit is impressive in baskets and planters.
- Recommended in Wave branded packaging: premium 306 packs with handle, 4 to 6-in./10 to 15-cm pots and hanging baskets.



Repositioned Yellow

ANNUALS / E3 EASY WAVE









Coral



Blue Requires 10 hours daylength. Most vigorous of the series, so it is recommended to be grown at the Easy Wave PGR rates. Cold durable.

Coral Deep coral-salmon with slight veining. Requires
9.5 hours daylength. Can be produced using the Easy
Wave PGR rates or at half the rate. Cold durable.

Pink Mid-true pink colour. Requires 9.5 hours
daylength. Can be produced using the Easy Wave
PGR rates or at half the rate. Cold durable.

Pink Cosmo Medium pink with deeper pink veins that are more prominent in cooler and lower light conditions. Requires 10 hours daylength. Can be produced using the Easy Wave PGR rates or at half the rate. Cold durable.

Red True deep, vibrant red colour. Requires 9.5 hours daylength. Variety is more receptive to PGRs, so best control is achieved at half the rate of Easy Wave. Cold durable.

Sky Blue Requires 9.5 hours daylength. Flowers will lighten with age and in high light conditions. Can be produced using the Easy Wave PGR rates or at half the rate. Cold durable.

White Pure, clean white. Requires 9 hours daylength. Can be produced using the Easy Wave PGR rates or at half the rate. Cold durable.

Repositioned Yellow Formerly a part of the Easy Wave Series, Yellow now joins E3 Easy Wave, as it flowers at a 10-hour photoperiod, requires less PGRs and holds well to match the series. Cold durable.

Formula Mixture Includes a mixture of all colours in the series.

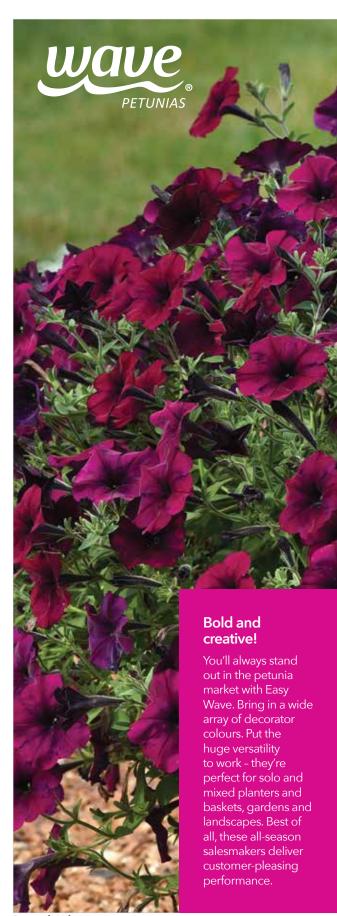
New Sweet Taffy Mixture Includes Pink Cosmo, Yellow and Rose Morn (not available separately). This sweet mix says "Hello, Spring!" It flowers at 10 hours photoperiod and has a uniform, holding plant habit.



Red, Blue, White









Burgundy Star

SPREADING PETUNIA continued

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

- Versatile Easy Wave offers simplified production, maximized plug yields and the ability to meet every ship date for every colour. It lets you grow specialty mixes, too!
- More mounded with more controlled spread than Wave® varieties.
- Recommended in Wave branded packaging: premium 306 packs with handle, 4 to 6-in./10 to 15-cm pots and hanging baskets.

New Blue Improved Plant structure and flowering time are the primary differences compared to original Blue. Improved for a mounded habit, denser branching and flowering in the centre of the plant. Photoperiod is 9.5 hours, making it faster to flower than original Blue. Garden spread and performance match the series. Cold durable.

Burgundy Star Pattern is consistent with standard star petunias - some flowers may be more solid or more white.

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

Pink Passion 8 to 10 days earlier than Pink in Spring natural daylength conditions.

Plum Vein Slightly more upright than others in the series.

Rose Fusion Mid-rose blooms with deep rose veins. Short-day flowering requirement of 9 hours creates early-season sales opportunities.

Beachcomber Mixture NEW Blue Improved, Coral Reef. Pink Passion.

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

Great Lakes Mixture NEW Blue Improved, Violet, White.

Opposites Attract Mixture Coral Reef, Violet. Plum Pudding Mixture

Plum Vein, Violet. **South Beach Mixture**

Coral Reef, Red, Violet.

Starfish Mixture Burgundy Star, White.

The Flag Mixture NEW Blue Improved, Red, White.

Burgundy Velour





Purple Tie Dye

SPREADING PETUNIA continued

Shock Wave® Series F1



Height: 7 to 10 in./18 to 25 cm **Spread:** 20 to 30 in./51 to 76 cm **Flower size:** 1.5 to 2 in./4 to 5 cm

Seed supplied as: Pelleted

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

- Blooms in a 4 to 6-day window.
- Smaller blooms rebound faster from overhead watering and rain than other petunias – stays fresher-looking at retail and outdoors.
- Performs equally well in small spaces, baskets, containers and mixed combos.
- Series features a plant structure and shape like E3 Easy Wave.
- Recommended in Wave branded packaging:
 4-in./10-cm pots, premium quarts, 306 premium packs with handle, hanging baskets.

Coral Crush

Retains colour well in high light.

Denim Flowers are dark bluepurple in cool/low light and greenhouse production; change to blue-lavender-silver in high light and hot conditions.

Pink Vein

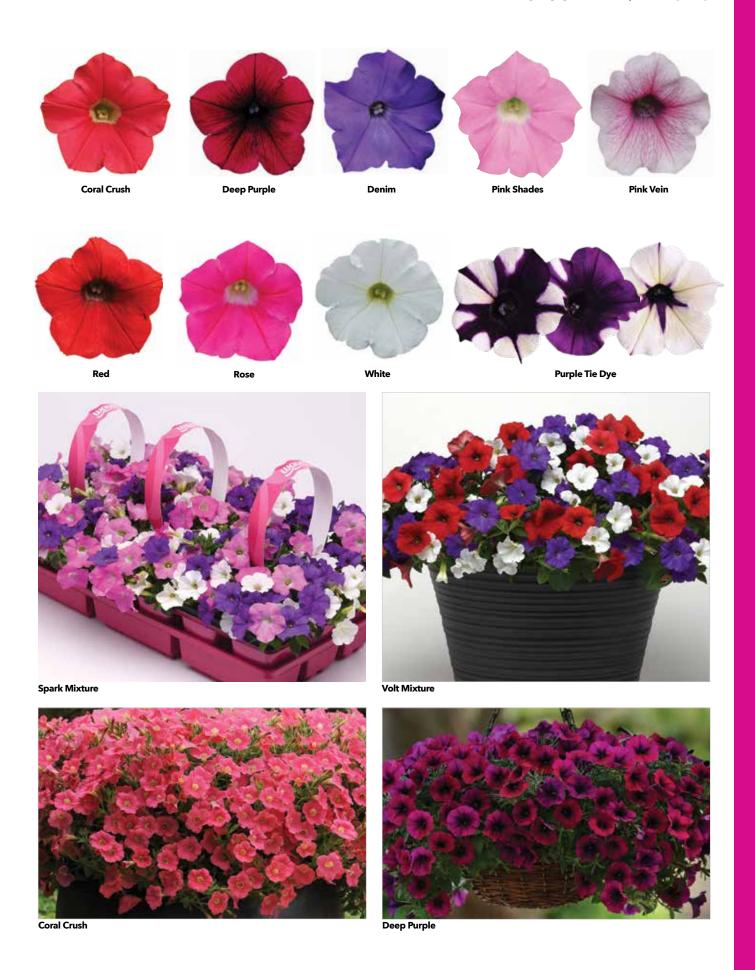
Spread is 30 to 36 in./76 to 91 cm.

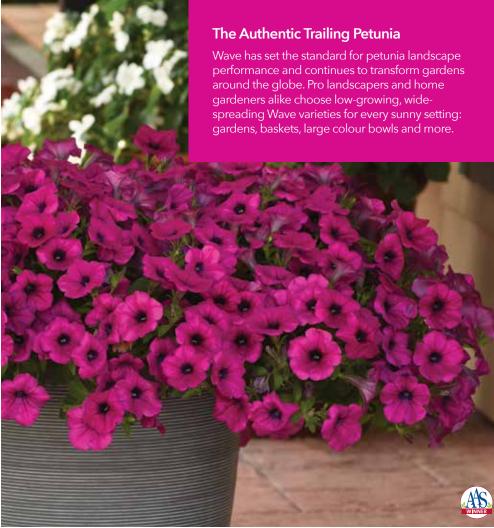
Purple Tie Dye Variable purpleblue and white bicolour pattern is appealing to consumers. Pattern changes based on temperature, light levels and PGRs used; daminozide use will result in more white showing on the blooms. 10.5-hour daylength required.

White Pure white variety requires 10.5 hours daylength for best flowering. Cold durable.

Spark Mixture

Denim, Pink Shades, White. **Volt Mixture** Denim, Red, White.





Purple Classic All-America Selections Classic



Purple



Carmine Velour US 7,642,436; EU PAF All-America Selections Winner



Misty Lilac



Pink



Lavender All-America Selections Winner, Fleuroselect Gold Medal



Purple Classic All-America Selections Classic

SPREADING PETUNIA continued

Wave® Series F₁



PRO LANDSCAPE PERFORMER

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

Seed supplied as: Pelleted

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

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

Carmine Velour Vivid, hot carmine-cherry colour on vigorous, flat, spreading plants. 13 hours daylength required. Cold durable. *All-America Selections Winner* 2019.

Lavender Timing is similar to Misty Lilac. All-America Selections Winner, Fleuroselect Gold Medal.

Misty Lilac Flowers may show appealing white "splashes" when plants are grown in high light or growth regulators are applied. Grows taller than the other Wave colours.

Pink

Timing is similar to Purple Classic.

Purple Begins to flower at 11 hours, and is 12 to 14 days earlier than Purple Classic.

Purple Classic

Blooms about 1 week later than Lavender and Misty Lilac. *All-America Selections Classic*.



Tidal Wave® Series F1



PRO LANDSCAPE PERFORMER

Height, spread and spacing: Growth habit is based on how closely plants are placed the closer the spacing, the taller the plants.

- Spaced a minimum of 12 in./30 cm apart, Tidal Wave petunias form a dense, mounded hedge, 16 to 22 in./41 to 56 cm tall.
- Grown in a restricted space with support, they grow an extra 2 to 3 ft./61 to 91 cm upward, like a vine.
- Spaced up to 24 in./61 cm apart in the garden, the plants make a floriferous groundcover, spreading up to 5 ft./1.5 m across per plant.

Flower size: 2 to 2.5 in./5 to 6 cm Seed supplied as: Pelleted

Plug crop time: 5 to 6 weeks

Transplant to finish: Spring 6 to 8 weeks, Summer 4 to 7 weeks

- Largest and most vigorous of the Wave petunia family, Tidal Wave plants provide super-size colour in big spaces, and are suitable for large city baskets and plantings.
- Excellent landscape performer with terrific recovery from rain. Unlike other petunias, Tidal Waves stay together. Recommended in Wave
- branded packaging: 8-in./20-cm pots.



Red Velour US 7,642,436; EU PAF All-America Selections Winner, Fleuroselect Gold Medal, Fleuroselect Novelty



Red Velour US 7,642,436; EU PAF All-America Selections Winner, Fleuroselect Gold Medal, Fleuroselect Novelty

Purple



Silver All-America Selections Winner



Strawberry Swirl



Blue

SPREADING PANSY O

Cool Wave® Series F₁

Height: 6 to 8 in./15 to 20 cm **Spread:** 24 to 30 in./61 to 76 cm **Flower size:** 2 to 2.5 in./5 to 6 cm

Seed supplied as: Primed

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

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

Blue Skies Cool nights/low PGRs deliver the deepest colour. High temperatures/PGR use show slightly lighter blue colour and broader yellow eye. Small number of blooms show dark purple cap. Matches Golden Yellow for habit and vigour.

Fire Rich dark red with a yellow face brings "fire" to Cool Wave. Shows more red in the face during Winter/Spring production (cool season) and more yellow in the face during Summer/Autumn production (warm season).

Frost White flowers develop light blue "frost" from the edges as they mature. Cool temperatures enhance the colour pattern. **Lemon** Clear, buttery lemon blooms show some genetic dark and light shading.

Morpho Cool nights/low PGRs deliver the deepest colour. High temperatures/ PGR use shows lighter colour and broader yellow eye.

Raspberry Rich, velvety rosypurple with white around flower centre. Shows more rose/ purple in the bloom and less white in the face in Winter/ Spring (cool season) production, and more white in the face in Summer/Autumn (warm season) production. Matches Golden Yellow for vigour.

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

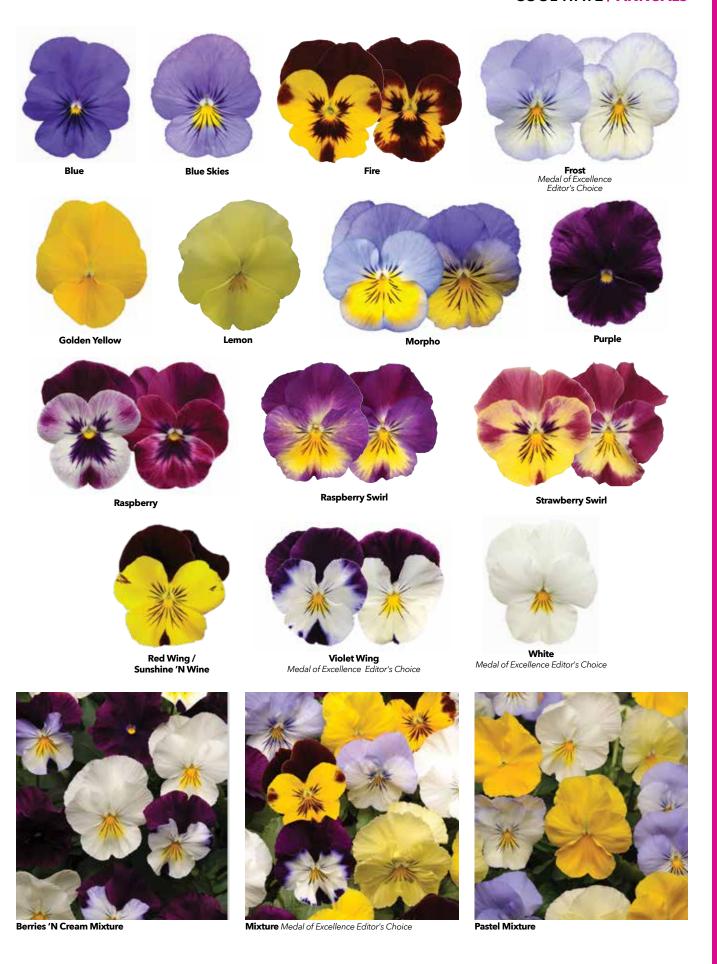
Red Wing Also known as **Sunshine 'N Wine** in North America.

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

Berries 'N Cream Mixture Purple, Violet Wing, White.

Pastel Mixture Frost, Golden Yellow, Lemon and White.

Maximize your growing success Find all you need to grow fantastic Cool Wave pansies in the comprehensive Production Handbook. It's available in English and Spanish at panamseed.com or ask your preferred distributor for a copy.







SPOTLIGHT ON STRONG COLOURS

Shining the light on high-performance annuals that bring reliable colour to sunny and shaded locations, our selection is backed by **industry-leading seed quality** and **consistent**, **deliverable inventory**. One of our most popular series, Beacon® Impatiens, is back with more **award-winning colours** and mixes that offer high resistance to *Plasmopara destructor*, the cause of Impatiens downy mildew. Find out more on **p. 56**.



Your no-pinch, low-hassle angelonia

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











Mixture





ANGELONIA • Angelonia angustifolia

Serena® Series F1

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

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

- Serena fills gardens, landscapes and mixed containers with unique dimensional colour.
- Care-free, continuous bloomer performs well under a wide range of conditions.
- Durable series is a perfect choice for consumers looking for water-wise, heat-loving plants.
- Plants grow up to 50% larger in Florida, southeast Asia and similar southern climates. Mississippi Medallion

Award, Dallas Arboretum FlameProof Award, Louisiana Super Plants Award

Mixture Blue, Purple, Rose, White. Waterfall Mixture

Blue, Purple, White.



Pink All-America Selections Winner

Serenita Series

Serenita® Series F1



PRO LANDSCAPE PERFORMER

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

Transplant to finish: 8 to 9 weeks

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

Sky Blue Colour holds well in high heat/light. Lighter than Serena Blue and distinctive from Serenita Purple. Timing like Raspberry. Mixture Lavender, Pink, Purple, Raspberry, Rose, Sky Blue, White.





















Serena Rose in a 6-in./15-cm pot



Clear Crystal White Alyssum US 7,915,504 Fleuroselect Novelty



Purple Prince Alternanthera

ALTERNANTHERA ••• Alternanthera brasiliana





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 plant 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 highimpact containers!
- Great in low-maintenance landscapes for professionals and home gardeners alike.
- May flower under very short days; light plants at that time of year to prevent bud formation.



Clear Crystal Lavender Shades Alyssum US 7,915,504

ALYSSUM •

Lobularia maritima

Clear Crystal® Series

Height: 6 to 10 in./15 to 25 cm **Spread:** 12 to 14 in./30 to 36 cm

Seed supplied as: Coated, Multi-Seed Pellets

Plua crop time: 4 weeks Transplant to finish: 4 to 6 weeks

- Tetraploid alyssums deliver more vigour than standard diploids for reduced loss and increased profits.
- Few PGRs are needed in most markets - cool-season crop can be grown with little or no heat for Spring pack programs.
- More vigorous with larger flowers than Easter Bonnet.
- Fragrant, large blooms and stronger performance in containers, hanging baskets and in-ground plantings.
- Well-matched series includes the first pigmented tetraploid alyssums.



Deep Pink Alyssum





Easter Bonnet White Alyssum



Easter Bonnet Violet Alyssum Royal Horticultural Society Award of Garden Merit



Easter Bonnet Mixture Alyssum



Clear Crystal Purple Shades Alyssum

Easter Bonnet Series

Height: 4 to 10 in./10 to 25 cm **Spread:** 10 to 12 in./25 to 30 cm

Seed supplied as: Raw, Coated

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

- Offering a full colour range, Easter Bonnet combines uniformity of habit and colour with unsurpassed earliness.
- Covered with dainty, fragrant flowers, plants stay compact and tidy much longer than other alyssums, making these excellent edging plants.



Clear Crystal Mixture Alyssum

ANEMANTHELE See ColorGrass, page 51.

ANEMONE See Cut Flowers, page 176.

ANGELONIA See page 22.

ANTIRRHINUM

See Snapdragon. **AQUILEGIA**

See Perennials, page 132.

ARMERIA See **Perennials**, page 136.

ASCLEPIAS See Cut Flowers, page 176.

AURINIA See Perennials, page 136.





Frizz

ASPARAGUS Asparagus densiflorus 'Sprengeri'

New FuzzyFern™ Frizz

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

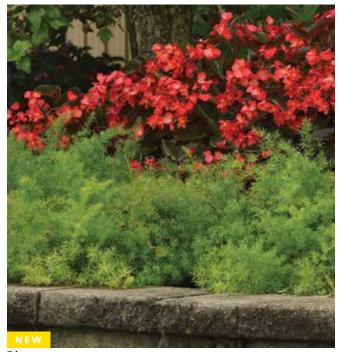
Seed supplied as: Raw

Plug crop time: 7 to 9 weeks Transplant to finish: 14 to 16 weeks, 4-in./10-cm pot, quart/11-cm pot

- Provides a more reliable supply of Asparagus densiflorus 'Sprengeri' seed with higher germination.
- Higher germination provides growers with a money-saving option to produce a reliable plug with fewer seeds.
- Frizz brings a fun texture to mixed containers, hanging baskets, indoor applications, and even landscapes in some regions.
- This trailing foliage item can handle both sun and shade plus indoor and outdoor use for more versatility.

Reliable supply, high quality

With a demand for Asparagus densiflorus 'Sprengeri' in the market and minimal seed available, we set our sights on improving supply with FuzzyFern Frizz! This asparagus fern saves growers money, space and grief by providing a more reliable supply of seed with higher germination.



Frizz

ANNUALS / BLUTOPIA



Blutopia Bacopa



Pinktopia Bacopa



Snowtopia Bacopa



Snowtopia Bacopa



Gryphon Begonia

F1 BACOPA •• Sutera cordata

Blutopia®, Pinktopia and Snowtopia®

Height: 6 in./15 cm **Spread:** 18 to 24 in./46 to 61 cm

Seed supplied as: Multi-Seed Pellets

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

- First-ever bacopas from seed let you fully mechanize production, with easy crop scheduling and quick turns with no pinch.
- Economical for accent plant programs.
- Perform well in large planters and mixed containers.

Blutopia Lavender-blue flowers like traditional blue bacopas. Slightly smaller leaves than Snowtopia, typical of vegetative blue bacopas. Mounded habit. Pinktopia Bright pink colour is great for mixed containers and large planters. The leaf size is the same as Snowtopia, but the leaf

both Blutopia and Snowtopia. Snowtopia White flowers like traditional white bacopas. Larger leaves than Blutopia, similar to vegetative white bacopas. Slightly prostrate.

colour is a brighter green than

FOLIAGE BEGONIA ••

Begonia x hybrida



Height: 14 to 16 in./35 to 40 cm in shade, 12 to 14 in./30 to 35 cm in partial sun; may grow to 30 in./ 75 cm tall in hot/humid conditions **Spread:** 16 to 18 in./41 to 46 cm

Seed supplied as: Multi-Seed Pellets

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

- Easy-care, low-water plant blends beauty with durability to make dramatic mixed or solo containers.
- Fits into existing begonia plug culture; easier and quicker to produce than vegetative foliage types.

 • More tolerant of stress than
- Rex begonias for less shrink.
- Retailers appreciate the longer sales window and versatility for outdoor container and indoor potted plant sales.
- Lets consumers extend their enjoyment by bringing plants indoors at the end of the season.





BEGONIA •• Begonia interspecific

BabyWing® Series F1



PRO LANDSCAPE PERFORMER

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

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

- BabyWing is not daylength sensitive, so it is the first
- interspecific begonia to market.Upright, mounded, controlled plants stand up to shipping.
- Easy, season-long performance in landscapes and containers.
- Heat tolerant and handles stressful conditions well.

Bicolor Novel colour pattern with a hint of "orange glow." Slightly smaller flowers than others in the series, but very floriferous for the same overall flower power.

Red Green leaves can show red picotee edge when young.

New Red Bronze Leaf A unique compact red on bronze foliage variety.

White May show a slight pink blush in full sun. . Well-matched to Pink.



Bicolor



Red





Red Bronze Leaf



White

BEGONIA SERIES



Dragon Wing® Megawatt™ Hula™ BabyWing®

Look to PanAmerican Seed for your complete interspecific program, starting with fastest-to-market **Hula** and **BabyWing** for day-neutral growing...**Megawatt** for big Spring sales...and main-season **Dragon Wing** to perform all Summer long in gardens and professional landscaping.



Red and White Mixture

SPREADING BEGONIA ••

Begonia interspecific

Hula™ Series F₁



PRO LANDSCAPE PERFORMER

Height: 6 to 10 in./15 to 25 cm **Spread:** 20 to 27 in./51 to 69 cm **Flower size:** 0.5 to 1.5 in./1 to 4 cm

Seed supplied as: Pelleted

Plug crop time: 6 to 8 weeks Transplant to finish: 5 to 7 weeks for Spring timing

- Hula is a unique spreading type of begonia that is highly branched and covered in flowers.
- Its trailing habit is perfect for baskets and containers.
- Provides an instant performance advantage for landscapers, with masses of flowers showing on top.

- The series is daylength neutral and it is the earliest interspecific begonia to flower, with timing similar to BabyWing®.
- The high number of flowers provides great colour impact.
- Hula starts to spread at an early stage, and, along with early flowering, it provides growers with a high-quality, attractive, salable plant that is covered with blooms at retail, in both hanging baskets and smaller pot sizes.

Bicolor Red White Features a bicolour pattern that can vary under different conditions.

Blush This blush-to-white colour is unique for spreading begonias. The blush colour can vary under different conditions.

New Red and White Mixture Mix of red and white blooms. The white variety has bigger flowers and is whiter than the current blush variety. White is not available separately.

Unique begonias to complete your program!

Hula Spreading Begonia is fast to fill in landscape beds, creating a blanket of high-impact colour! Adding Hula to our portfolio allows us to expand our offering of begonias that look great on the retail bench! Hula also looks amazing in hanging baskets and mixed containers, for an opportunity to offer a more premium product.





Red Bronze Leaf Improved



Pink Green Leaf



Red Green Leaf

Pink Bronze Leaf



Rose Bronze Leaf



Rose Green Leaf



White Green Leaf



Red Green Leaf



White Green Leaf

MEGAsize + MEGAcolour = MEGAsales!

This fresh, highenergy begonia option has quickly proven itself in the marketplace with great timing benefits and ultimate garden power. These bigger-thanlife hybrids offer amazing colour for gardeners.

BEGONIA • • Begonia interspecific

Megawatt™ Series F₁



PRO LANDSCAPE PERFORMER

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.

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

New Red Bronze Leaf Improved Offers better variety purity, eliminating green-leaf off-types, with deeper bronze foliage colour and improved plant habit with shorter internodes and great basal branching. Earlier to flower, how much earlier depends on daylength conditions.

White Green Leaf Starts to flower slightly earlier than other series varieties (5 to 10 days), but it is a more true, larger-format type than the competition.





Dragon Wing® Series F₁



Height: 12 to 15 in./30 to 38 cm **Spread:** 15 to 18 in./38 to 46 cm Seed supplied as: Pelleted Plug crop time: 7 to 8 weeks Transplant to finish: 7 to 9 weeks

- Grows lush and vigorous in southern U.S. heat and under cool, stressful conditions of northern Europe and Canada.
- Unique and beautiful arching, pendulous habit is spectacular in hanging baskets, large containers and commercial landscape plantings.
- Angel-wing leaves and large blooms give Dragon Wing a dramatically different look.
- Easy to grow from pelleted seed, it surpasses vegetative varieties for branching, vigour and "flower power."
- Features best-in-class "bulletproof" performance, fast fill-in and an easy-care nature. Georgia Gold Medal Winners

New Pink Bronze Leaf Bronze leaf variety with large pink blooms fits the collection for habit and timing.

New Red Bronze Leaf

Core red colour blooms are paired with bronze foliage; fits the unique collection for plant habit and timing.

White Starts flowering around 2 to 12 days earlier than Pink, with a refined, slightly wider habit, great branching and plenty of flowers covering the plant. Flowers can blush in warmer conditions.



Red



Red Bronze Leaf



Pink



White

ANNUALS / AMERIHYBRID PICOTEE







Lace Pink



Big, bold begonias

AmeriHybrid tuberous begonias provide a wide selection of colours, including unique bicolours, along with some of the world's largest blooms! This exciting collection can be sold at a premium price point at retail, and it results in faster turnover in the market.

TUBEROUS BEGONIA ••

Begonia x tuberosa

AmeriHybrid® Picotee Series F₁

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

Seed supplied as: Pelleted

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

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

Lace Apricot

Apricot blooms with a white edge.

Lace Pink

Pink blooms with a white edge.

Lace Red

Red blooms with a white edge.

Sunburst

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



Lace Red







Coral Salmon



Pink





Scarlet Red



Yellow



Red

AmeriHybrid® Ruffled Series F₁

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

Seed supplied as: Pelleted

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

- At 5 to 9 in./13 to 23 cm each, AmeriHybrid Ruffled begonias boast the largest blooms in the world! That's the result of over 100 years of patient breeding and hybridising.

 Each flower has a highly
- consistent double shape.

New Red A vibrant red joins the series. Flower form varies from ruffled to roseform.



Pink







Melon Lace





Sunset Shades

Sun Glow





Sun Glow

TUBEROUS BEGONIA continued

On Top® Series F₁

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

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

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

Melon Lace Melon with a white edge.

Pink Halo White with a deep pink edge.

New Polka Dot Bicolour blooms feature a variable mix of coral and red with white spots and white with a red picotee edge.

Sun Glow Golden yellow with a red edge.

Sunset Shades Yellow with a red edge.

New Surprise A nice mix of white and pink/rose bicolour flowers.







Scarlet Orange

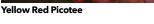




White Pink Picotee









Sun Dancer™ Series F₁

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

Seed supplied as: Pelleted Plug crop time: 7 to 8 weeks Transplant to finish: 9 to 13 weeks

- Double-flowered plants produce more blooms that are larger than other varieties, with a bloom size of 2 to 5 in./5 to 13 cm.
- Because of its excellent branching habit, Sun Dancer fills a hanging basket quickly and cascades up to 16 in./41 cm.

Scarlet Orange More vigorous, with longer flower stems compared to the rest of the series.

White Pink Picotee White with a pink edge. Yellow Red Picotee Yellow with a red edge.

CAMPANULA See Cut Flowers, page 177. **CAPSICUM** See Potted Plants, page 162.

See ColorGrass, pages 50 and 53.

CARTHAMUS See **Cut Flowers**, page 177. **CATHARANTHUS** See Vinca.



Apricot



First Flame Mixture



Ice Cream Orange

Ice Cream Mixture



Dracula



First Flame Purple



Ice Cream Cherry

CELOSIA •



Ice Cream Pink



Ice Cream Salmon

PanAmerican Seed offers you two distinctive types of *C. plumosa* - our shorter Ice Cream series and mid-height First Flame series - to create a

winning lineup that meets your bedding and landscape celosia needs.



Ice Cream Yellow



First Flame Red

Celosia cristata **Dracula**

Height: 8 to 16 in./20 to 41 cm **Spread:** 8 to 12 in./20 to 30 cm

Seed supplied as: Pelleted

Plug crop time: 3 to 4 weeks Transplant to finish: 6 to 8 weeks

- First-of-its-kind novelty celosia shows one big flower atop the plant.
- In the greenhouse, flower is red and foliage is green with some red. Outdoors, foliage is darker and more purple-toned and flower is darker purple.
- Unusual shape and eyecatching colour add drama to landscapes, gardens and containers.
- Good mid-height border plant.

NOTE: Shorter growth in high light.



First Flame™ Series

Celosia plumosa

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

Seed supplied as: Pelleted

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.
- Uniform across all colours for a fuller look in containers.
- Ideal for Asian and southern markets.
- Makes a great border plant; also good in containers.

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. Nonfading in high light/high heat.

Scarlet Model for the series features outstanding, bright colour and great habit - fits well with Red and Yellow. Colour holds very well in sun/high light levels.

Mixture Red, Yellow, Scarlet.

Ice Cream Series

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

Seed supplied as: Pelleted

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

Salmon Clear salmon colour on a very good plant habit - one of the models for the Ice Cream series. Good colour for mixes.

CUT FLOWER CELOSIA
Celway Series, page 180.
Neo Series, page 178.
Spring Green, page 177.
Sunday Series, page 179.



CELOSIA / Request your Product Information Guide for full culture details

CELOSIA (FOLIAGE)

Celosia argentea

Sol™ Collection



- An attractive late-flowering foliage celosia collection for the market!
- Offers relatively fast production time and no downy mildew issues.

Gekko Green

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

Seed supplied as: Pelleted

Plug crop time: 3 to 4 weeks **Transplant to finish:** Spring, 7 to 10 weeks

 Foliage tends to be more green when kept indoors, and it turns to burgundy when the plant is left outdoors for at least 1 to 2 weeks.

Lizzard Leaf

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

Seed supplied as: Pelleted **Plug crop time:** 3 to 4 weeks

Transplant to finish:
Spring, 7 to 10 weeks

- Foliage tends to be more green when kept indoors, and it turns a vibrant burgundy-red when the plant is outdoors for at least 1 to 2 weeks.
- Lizzard Leaf's foliage tends to curl due to genetic factors and can be modified by the climate conditions found in different locations in different degrees, in both indoor and outdoor environments.

Sun-loving foliage celosia brings colour and texture to containers

With limited options for attractive foliage plants from seed, growers often turn to coleus to add interest and texture to containers. The Sol™ Collection is a fantastic foliage celosia with relatively fast production time and no downy mildew issues. It holds well at retail and expands the options for consumers looking for sun-loving foliage accent plants for patio planters with a different texture and look, as well as for quick-growing, low, shrub-like plants that look great at the front of the border.



Sol Gekko Green and Sol Lizzard Leaf



Sol Gekko GreenFleuroselect Gold Medal, Fleuroselect Novelty



Sol Lizzard Leaf Fleuroselect Novelty



Coral Candy All-America Selections Winner



Chocolate Mint



Crimson Gold



Dark Chocolate



Chocolate Covered Cherry

PREMIUM SUN COLEUS



Solenostemon scutellarioides

Showstopping colours...bold patterns...rich textures: Pro landscapers and gardeners love these centre stage varieties for their great looks and reliable performance in sunny gardens and patio planters. Our Premium Sun Coleus can tolerate full sun in regions of high relative humidity such as Hardiness Zones 9 and 10. Foliage will scorch in full sun with low relative humidity. All are suitable for shade.

All Premium Sun Coleus are supplied as pelleted seed.

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

Chocolate Covered Cherry

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

- Boldly patterned, multi-coloured foliage makes a great companion to our other "chocolate" coleus: Chocolate Mint and Dark Chocolate.
- Non-fading colour pattern: rose centre on each leaf is surrounded by deep mahogany and edged with green.
- Late flowering and dwarf size are adaptable to pack and pot programs.
- Performs well in planters and small gardens in sun and shade.

Chocolate Mint

Height: 14 to 20 in./36 to 51 cm **Spread:** 12 to 14 in./30 to 36 cm

- Easy-to-grow, dark-leafed plants show off a rich chocolate colour, with each mid-size leaf finely edged in mint green.
- Upright accent plants are well-suited to in-ground plantings and large containers.

New Coral Candy



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

- Thin, serrated leaves bring a new look to the Premium Sun collection.
- The mounded, compact plants display foliage with a coral-pink centre that blends to green.
- The range of foliage colours displayed can differ depending on environmental conditions.
- Great for mixes and garden beds.

All-America Selections Winner.

Crimson Gold



PRO LANDSCAPE PERFORMER

Height: 14 to 18 in./36 to 46 cm **Spread:** 14 to 18 in./36 to 46 cm

- Well-branched, vigorous plants show off beautiful, bicolour foliage all season.
- Versatile variety thrives in sun and shade.
- Deep red leaves with golden-green edge.
- Late flowering.

Dark Chocolate

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

- Upright accent plants have mid-size leaves in a rich mahogany brown. Slight touches of burgundy appear, especially in full-sun conditions.
- A good choice for large mixed containers and in-ground plantings.
- Rich mahogany brown partners well with many colour schemes.
- •



Lime Delight

Lime Delight



Height: 28 in./71 cm **Spread:** 18 to 22 in./46 to 56 cm

- Bright foliage is the centre of attention in designer gardens.
- Vibrant, lime green to golden colour plays well with others.

Mighty Mosaic



PRO LANDSCAPE PERFORMER

Height: 18 to 26 in./46 to 66 cm **Spread:** 18 to 22 in./46 to 56 cm

- Striking, multi-coloured foliage assures mighty retail appeal.
- Very late-flowering variety is great in the shade and tolerates sun under high humidity.
- Landscape coleus meets retailer and consumer demand for longevity and versatility.

Pineapple Surprise



PRO LANDSCAPE PERFORMER

Height: 18 to 26 in./46 to 66 cm **Spread:** 18 to 22 in./46 to 56 cm

- Unique and versatile tricolour pattern: iridescent chartreuse and deep burgundy hearts are splashed with chartreuse and green. The surprise: Up to 3% of plants can show primarily darker green/burgundy bicolour instead of chartreuse.
- Stable colour/pattern all season like similar vegetative varieties.
- Very late flowering for longerlasting performance and holds very well in extreme weather.

Ruby Heart



PRO LANDSCAPE PERFORMER

Height: 18 to 26 in./46 to 66 cm **Spread:** 18 to 22 in./46 to 56 cm

- Brings a ruby red colour to the collection.
- The thin, chartreuse border on the heart-shaped leaves continues on the undersides and stems, adding brightness.
- Similar greenhouse vigour to Chocolate Mint.
- Similar landscape performance to Crimson Gold.

Watermelon

Height: 20 in./51 cm **Spread:** 18 to 22 in./46 to 56 cm

- Watermelon-coloured leaves with green edges in cool conditions mature to deep pink under warmer conditions.
- Can be used in sunny or shady landscapes.
- Beautifully coloured foliage with late flowering.



Ruby Heart University of Georgia Classic City Award



Mighty Mosaic



Pineapple Surprise



Watermelon

ANNUALS / PREMIUM SHADE COLEUS



Kong Red US PVP 200500015



Kong Lime Sprite



Kong Rose US PVP 200500017



Kong Scarlet



Kong Mosaic



Kong Salmon Pink US PVP 200900035



Kong Empire Mixture



Kong Jr. Rose



Kong Jr. Green Halo



Kong Jr. Lime Vein



Kong Jr. Scarlet

PREMIUM SHADE COLEUS

Solenostemon scutellarioides

Kong® Series



PRO LANDSCAPE PERFORMER

Height: 18 to 20 in./46 to 51 cm **Spread:** 15 to 18 in./38 to 46 cm

Seed supplied as: Pelleted

Plug crop time: 5 to 6 weeks **Transplant to finish:** 3 to 4 weeks

- Extremely large leaves and unique patterns on well-branched plants.
- Excellent shade alternative for large containers, large mixed combos and landscapes.
- Also works in indoor plant programs.
- Prefers full shade for best performance.

KONG Mosaic, Red and Rose are bred by Sakata Seed Corporation.

Lime Sprite Can show rose midrib in deepest shade; flowers at the late end of the series, similar to Red.

Mosaic No two leaves are alike.

Empire Mixture Contains all 6 colours.

Kong Jr.™ Series



PRO LANDSCAPE PERFORMER

Height: 18 to 24 in./46 to 61 cm **Spread:** 20 to 35 in./51 to 89 cm

Seed supplied as: Pelleted

Plug crop time: 5 to 6 weeks Transplant to finish: 3 to 4 weeks

- Kong Jr.'s heart-shaped leaves are 30% smaller than Kong's, but just as stunning. They make Kong Jr. easier to ship, with less breakage and less loss.
- Leaf size is well-matched across the series.
- Well-branched, tidy habit is irresistible to shoppers.
- Performs well in landscapes, patio planters and mixed containers.
- Adds unique colours and patterns not available in Kong series.
- Also works in indoor plant programs.

Lime Vein Shows less veining and less to no rose midrib in the mahogany heart under brighter shade. In deeper shade, vein pattern is stronger and rose may appear in the mahogany heart at midrib.





Black Dragon



Wizard Coral Sunrise

PACK COLEUS •• Solenostemon



scutellarioides **Black Dragon**

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

Seed supplied as: Raw

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

- Exotic, serrated leaves and unusual texture set this variety apart from other coleus.
- Deep red colour with a purplish-black edge.
- Outstanding in packs or pots.



Wizard Golden

Wizard® Series

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

Seed supplied as: Raw

Plug crop time: 5 to 6 weeks Transplant to finish: 7 to 9 weeks

- Low-maintenance, uniform and basal-branching plants are late-flowering, extending their landscape value.
- Mid-sized leaves.
- Great for packs.
- Useful for indoor plant programs.

Coral Sunrise Can start out salmon-pink under cooler conditions and mature to lighter pink when warmer. Good in sun.

Mosaic Earliest of the series.

Sunset Bronze.

Select Mixture Coral Sunrise, Jade, Mosaic, Scarlet, Sunset, Velvet Red.



Wizard Select Mixture



Wizard Jade



Wizard Mosaic



Wizard Rose



Wizard Scarlet



Wizard Sunset



Wizard Velvet Red



Sonata Complete Mixture Cosmos



Sonata Carmine Cosmos



Sonata Pink Blush Cosmos



Sonata Purple Shades Cosmos



Sonata Pink Cosmos



Sonata Red Shades Cosmos



Sonata White Cosmos



Antiquity Cosmos Fleuroselect Novelty



Mandarin Cosmos



Tropic Flame Crossandra



Tropic Yellow Splash Crossandra

COSMOS •• Cosmos sulphureus

Mandarin

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

Seed supplied as: Raw

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

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

COSMOS • Cosmos bipinnatus

Antiquity

Height: 20 to 30 in./51 to 76 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

- 2-in./5-cm flowers open rich burgundy and mature to antique bronze-salmon.
- Very early and floriferous.
- Well-suited to 3.5 to 4-in./9 to 10-cm pots.

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.

Complete Mixture Offers the most complete colour range in Cosmos bipinnatus, adding the unique Purple Shades and Red Shades into the mix.

CROSSANDRA • Crossandra infundibuliformis

Tropic Series

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

Seed supplied as: Raw

Plug crop time: 6 to 7 weeks Transplant to finish: South, 10 to 11 weeks

• Heat-tolerant continuous bloomer makes a premium landscape plant in tropical and semi-tropical areas from Florida to southern Asia.

Yellow Splash Flowers mature quickly to cream with yellow base in Florida trials.



Sweet Talk Deep Pink

CUPHEA • Cuphea ramosissima

Pink Shimmer

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

Seed supplied as: Precision Multi-Pellets

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

- Pink Shimmer can be easily sown for efficient plug production.
- Offers improved natural branching over other varieties.
- A profusion of petite flowers covers the delicate leaves all Summer long.
- · Great for use in combinations of all kinds.
- This reblooming gem requires no deadheading and looks great even under hot conditions.

CUPHEA • Cuphea procumbens

Sweet Talk™ Series F₁

Height: 8 to 14 in./20 to 36 cm **Spread:** 8 to 14 in./20 to 36 cm

Seed supplied as: Raw

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

- A new heat-loving cuphea series from PanAmerican Seed!
- A natural source of nectar, the flowers attract pollinators like bees and hummingbirds.
- Offers a more refined plant form compared to competitors, with tighter branching and less gaps.
- A good option for Spring or Summer production, it is more floriferous and less susceptible to oedema.
- All varieties can be grown with the same PGR schedule.
- Vivid bloom colours stand out on the bench, and include a true Red.

New Deep Pink Features a bold pink colour and the largest landscape size of the series.

New Lavender Splash

The most compact variety of the series has a balanced purple-to-white bloom ratio.

New Red One of the most eye-catching colours in its class and a favorite of hummingbirds.



Sweet Talk Lavender Splash



Sweet Talk Red



Pink Shimmer US PVP 201800290



Cherry



All-America Selections Winner



Pink Magic



Purple

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 Flower size: 1 in./3 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

- Shocking Summer Colour from the most heat-tolerant Interspecific Dianthus!
- Electrifying colours and allseason performance make Jolt stand out in landscapes and premium containers.
- Highly durable plants withstand hot conditions with few disease issues and continue to flower without setting seed.

- Grower-friendly, well-branched plants are easy to produce with less to no PGRs.
- Perfect for Summer premium grower choice quarts and gallons to command a higher price point.
- Strong dark green foliage.
- Performs as a semihardy annual in Zone 7 (0°F/-18°C minimum temperature) and milder.

2019 Louisiana State University Super Plant

Pink All-America Selections Winner 2015.

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



Dash Crimson



Dash Pink



Dash Violet

SINGLE DIANTHUS • Dianthus barbatus

Dash™ Series F₁

Height: 15 to 20 in./38 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/ early Summer, 9 to 10 weeks; late Summer/ Winter, 11 to 12 weeks

- The best D. barbatus for premium container sizes.
- . Well-branched and moderate vigour for fast fill in early Spring and Autumn production. Responds well to PGRs where needed.
- Sweet William-type dianthus requires no vernalisation for flowering.
- Produces masses of fragrant blooms.
- Low-energy crop can be grown cool for cost savings.

Magician Flowers open white and mature to shades of rose.



Dash White

DOUBLE DIANTHUS • Dianthus barbatus interspecific

Dynasty Series F₁

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

Seed supplied as: Pelleted

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

- · Very well-branched, upright and strong-stemmed, these excellent landscape and garden performers double as a great backyard cut flower.
- Fast-blooming plants respond well to growth regulators applied for potted plant height and tighter umbels.
- Performs as a perennial in USDA Hardiness Zones 6a to 9b (-10 to 25°F/-23 to -4°C minimum temperature).

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

CUT FLOWER DIANTHUS Amazon Series, page 182. Sweet Series, page 183.

PERENNIAL DIANTHUS Rockin' Series, page 140.





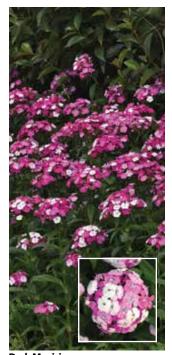
Dynasty Orchid Royal Horticultural Society Award of Garden Merit



Dynasty Purple



Dynasty Rose Lace



Dash Magician



Dynasty Pink Magic



Dynasty Red



Dynasty Mixture



Mixture



Purple



White Purple Eye

Crowned with huge flower power

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



Cherry Red



Rose



Strawberry



SINGLE DIANTHUS •

Dianthus chinensis



Coronet™ Series F₁

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

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

Cherry Red Solid cherry colour; some flowers show a darker red centre.

Purple Times like Cherry with a habit like the solid colours in the series.

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

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

White Clean, clear white.

White Purple Eye Sharply contrasting bicolour with the compact size and timing of Strawberry can use half the rate of PGRs needed for the solid colours in the series.

Mixture Cherry Red, Purple, Rose, Strawberry, White and White Purple Eye. Huge flower size and uniformity make it the best choice in this class of dianthus.



Floral Lace Cherry



Floral Lace Crimson

Floral Lace Purple



Floral Lace Lilac

Floral Lace Red



Floral Lace Mixture



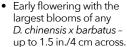
Floral Lace Picotee

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



- Performs well in gardens under tough conditions as an annual or biennial.
- Good for high-density Spring and Autumn pack or small pot programs.
- Bright green leaves.



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

- Well-matched habit and tight flowering window let you bench run and ship all together.
- Early-flowering series is good as an annual or biennial.
- Well-suited to high-density small pack or pot programs for Spring and Autumn sales.



Floral Lace True Rose

Ideal Select Raspberry

Ideal Select Violet

Winner

All-America Selections





Ideal Select Red



Ideal Select White



Floral Lace Violet Picotee



Ideal Select Rose Royal Horticultural Society



Ideal Select WhiteFire Royal Horticultural Society Award of Garden Merit



Floral Lace White



Ideal Select Mixture





Figaro Mixture Dahlia



Silver Falls Dichondra



Emerald Falls Dichondra



Dahlia x hybrida

Figaro™ Series

Height: 14 to 18 in./36 to 46 cm **Spread:** 10 to 12 in./25 to 30 cm

Seed supplied as: Raw

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

- Premium pack item is ideal for borders and containers.
- Each variety contains several shades of that colour.

Mixture Contains 100% semidouble and fully double flowers.



Figaro Orange Shades Dahlia



Figaro Violet Shades Dahlia



Figaro White Dahlia



Silver Falls





Height: 2 to 3 in./5 to 8 cm in the ground Spread/Length: 3 to 4 ft./91 cm to 1.2 m; up to 6 ft./1.8 m in areas with a longer growing season

Seed supplied as: Raw

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

- True cascading habit is excellent for mixed containers or hanging baskets.
- Performs as a low-growing groundcover, but requires well-drained soils.
- Also well-suited to indoor plant programs.
- Very heat and drought tolerant.
- No pinching needed.



Figaro Red Shades Dahlia



Figaro Yellow Shades Dahlia

DICHONDRA ••• Dichondra repens



Emerald Falls





Height: 2 to 4 in./ 5 to 10 cm in the ground Spread/Length: 36 in./91 cm

Seed supplied as: Multi-Seed Pellets

Plug crop time: 5 to 6 weeks Transplant to finish: 7 to 8 weeks

- Denser, tighter and shorter than Silver Falls, without pinching or PGRs.
- Medium green leaves are more rounded and held closer to the stem.
- Good for hanging baskets.
- Also performs well as a heat-tolerant, lowgrowing groundcover.

DIGITALIS

See Perennials, page 139.



Silverdust Dusty Miller



Citrona Orange Erysimum US PVP 200600167

DUSTY MILLER • Cineraria maritima/ Senecio cineraria

Silverdust

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

Seed supplied as: Raw, Pelleted

Plug crop time: 4 to 5 weeks **Transplant to finish:** 7 to 8 weeks

- Finely cut, silvery white, velvety foliage on uniform plants.
- Adds contrast and texture to beds and borders.
- Size and uniform habit also make Silverdust perfect for container plantings.
- Seed is graded for more uniform germination.



Citrona Yellow Erysimum US PVP 200600168

ERYSIMUM Erysimum species

Citrona® Series

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

Seed supplied as: Raw

Plug crop time: 4 weeks Transplant to finish: 7 to 9 weeks

- Very floriferous, well-branched plants display bright, scented blooms in Spring and Autumn.
- No vernalisation needed.
- Matches pansy production well; grow in premium packs, 4-in./10-cm pots and gallons.



EUPHORBIA • Euphorbia graminea

Glamour F1



PRO LANDSCAPE PERFORMER

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

Seed supplied as: Raw

Plug crop time: 3 to 4 weeks Transplant to finish: 5 to 8 weeks

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



Glitz Euphorbia

Glitz F1

Height: 10 to 14 in./25 to 36 cm **Spread:** 12 to 18 in./30 to 46 cm

Seed supplied as: Raw

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

- Delivers the performance of its vegetative counterparts without the headaches.
- The perfect habit for premium mixed containers.
- Easy to grow no pinching needed.
- Suitable for grower choice premium quarts.

GAILLARDIA

See **Perennials**, page 144.

See Perennials, page 145.

Complementary colour

Part of the Fantastic Foliage Collection, ColorGrass® varieties let you grow and sell the broadest range of ornamental grasses from seed! These unique varieties accent landscapes and containers with height, colour and texture.







Amazon Mist Carex



Variety/Exposure	Colour group	Height	Spread	USDA Zones	Containers	Plug crop time (weeks)	Transplant to finish (weeks)	Features	
LOW HABIT (2 to 8 in./5 to 20 cm)									
Isolepis Live Wire I. cernua (Fiber Optic Grass)	Green	6-8 in./ 15-20 cm	18-20 in./ 46-51 cm	8-10	306 pack, 4 in./10 cm, 6 in./15 cm*, Gallon	5	6-7	Annual grasslike plant features a short mound of soft green leaves accented by flower spikes that resemble fiber optic strands. Ideal for adding texture to mixed combos or used as an indoor plant. Dense, mounded habit needs no pinching or PGRs, grows upright when young and drapes as it matures. Performs well in wet conditions. Prefers shade, but can handle sun if moisture is maintained.	
Carex Amazon Mist C. comans (Leatherleaf Sedge)	Green	6-12 in./ 15-30 cm	14 in./36 cm	6-10	4 in./10 cm, 6 in./15 cm*, Gallon	6-7	9-10	Variegated light/medium green grass has twisting tips and an arching habit.	
Carex Bronco C. comans (Leatherleaf Sedge)	Brown	6-12 in./ 15-30 cm	14 in./36 cm	6-10	4 in./10 cm, 6 in./15 cm*, Gallon	6-7	8-9	Bronze-brown variety has an arching habit.	
Luzula Lucius L. nivea	Green	6-12 in./ 15-30 cm	18 in./46 cm	4-9	4 in./10 cm, 6 in./15 cm*, Gallon	4-7	8-9	Upright and arching evergreen grass has flat, mid-green leaves fringed in white hairs. Small, white flowers in spiky inflorescences in Spring/early Summer. Flourishes in damp, shady areas.	

^{*3} plants per pot

The Fantastic Foliage[®] Collection

These plants provide an easy, natural dimension for outdoor spaces. Subtle colour and intricate textures deliver a simple, yet contemporary look. Used in mixed planters or as a standalone feature, these plants are all about the foliage!















Variety/Exposure	Colour group	Height	Spread	USDA Zones	Containers	Plug crop time (weeks)	Transplant to finish (weeks)	Features	
MEDIUM HABIT (8 to 18 in./20 to 46 cm)									
Juncus Starhead J. ensifolius	Green	8-10 in./ 20-25 cm	8-10 in./ 20-25 cm	4-10	4 in./10 cm, 6 in./15 cm*, Gallon	6-7	7-8	Compact variety displays green, broad-leafed foliage and long-lasting dark green star inflorescences.	
Anemanthele Sirocco A. lessoniana	Green/ Brown	12-14 in./ 30-36 cm	22-24 in./ 56-61 cm	7-10	4 in./10 cm, 6 in./15 cm*, Gallon	5-6	6-8	The only pink grass from seed. Colou turns to shades of copper and pink under cool conditions, natural sunligh and maturity. Adds movement and texture to landscapes, gardens, mixed containers and baskets.	
Festuca Festina F. cinerea (F. glauca)	Green	12-18 in./ 30-46 cm	10-15 in./ 25-38 cm	4-10	4 in./10 cm, 6 in./15 cm*, Gallon	6-7	6-7	Very cold-hardy variety produces dense, compact tufts of blue-green, with small, upright brown plumes from Summer to Autumn.	

ANNUALS / COLORGRASS







Blue Dart Juncus Twister Juncus

Pony Tails Stipa







Variety/Exposure	Colour group	Height	Spread	USDA Zones	Containers	Plug crop time (weeks)	Transplant to finish (weeks)	Features	
MEDIUM HABIT (8 to 18 in./20 to 46 cm)									
Juncus Blue Dart J. tenuis	Green	14-16 in./ 36-41 cm	10-12 in./ 25-30 cm	4-10	4 in./10 cm, 6 in./15 cm*, Gallon	6-7	7-8	Linear blue foliage adds texture to small containers and in-ground planting. Strong vertical habit - faster, more reliable alternative to spike dracaena. Easy-care and adaptable to a wider range of conditions, including standing water and drought. Attractive indoor or water plant. Great retail shelf life.	
Juncus Twister O J. effusus spiralis	Green	12-14 in./ 30-36 cm	12-14 in./ 30-36 cm	5-9	4 in./10 cm, 6 in./15 cm*, Gallon	7-8	6-7	Unusual juncus is economical and easy to grow - a fun addition to mixed containers. Shoppers love the small, curly green leaves of this upright plant. Can be grown as a "mini" for expanded sales opportunities. Also thrives in wet conditions, making it a useful pond plant.	
TALL HABIT (18 in./46 cm and taller)									
Stipa Pony Tails S. tenuissima (Mexican Feather Grass)	Green	16-24 in./ 41-61 cm	24 in./61 cm	6-10	4 in./10 cm, 6 in./15 cm*, Gallon	5-6	7-10	Upright grass has fine, needlelike green foliage, with silky green flowers in July that mature to golden blonde.	

^{*3} plants per pot







Red Rooster Carex

Blue Arrows Juncus

Javelin Juncus









Variety/Exposure	Colour group	Height	Spread	USDA Zones	Containers	Plug crop time (weeks)	Transplant to finish (weeks)	Features	
TALL HABIT (18 in./46 cm and taller)									
Carex Phoenix Green C. comans (Leatherleaf Sedge)	Green	20-24 in./ 51-61 cm	16-20 in./ 41-51 cm	6-10	4 in./10 cm, 6 in./15 cm*, Gallon	5-7	6-7	Sturdy, upright, narrow-leafed sedge has bright green foliage. Good heat tolerance. Easy-care for accent in landscapes, planters.	
Carex Red Rooster O. buchananii	Red	20-30 in./ 51-76 cm	12 in./30 cm	6-9	4 in./10 cm, 6 in./15 cm*, Gallon	6-7	8-9	Red-bronze grass has curled tips and upright habit.	
Juncus Blue Arrows J. inflexus	Green	36 in./ 91 cm	12 in./30 cm	5-9	4 in./10 cm, 6 in./15 cm*, Gallon	6-7	6-7	Stiff, upright, blue-green foliage is well-suited to annual bedding and mixed containers. Heat-tolerant in a wide range of environments. Can be grown as a pond plant and drought-tolerant when grown in-ground. Also makes a great indoor plant.	
Juncus Javelin O J. pallidus	Green	48 in./ 122 cm	18-20 in./ 46-51 cm	8-10	4 in./10 cm, 6 in./15 cm*, Gallon	5-6	5-6	Developed from unique genetics and available only from PanAmerican Seed, Javelin makes a dramatic "thriller" for mixed containers. Can grow up to 5 ft./1.5 m tall in gardens/landscapes. Rugged, upright plant can grow in standing water, but also handles heat/drought. Provides great Winter interest, maintaining upright, stiff, straw-colour foliage.	



Clear Orange



Bright Mixture



Rose Stripe



Mixture



Tiger Mixture



Bronze Shades



Red Shades



White







Yellow



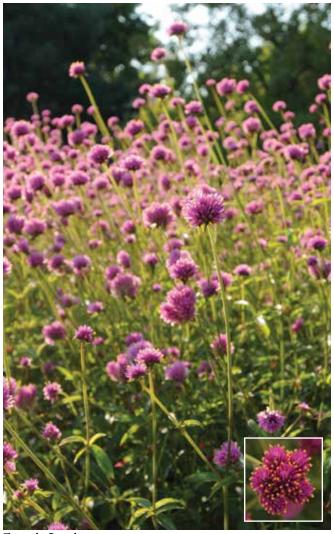
New Day® Series F1

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

Seed supplied as: Coated Plug crop time: 4 to 5 weeks Transplant to finish: 8 to 9 weeks

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

Bright Mixture Bronze Shades, Yellow, Clear Orange, Pink Shades. **Tiger Mixture** Red Stripe and Rose Stripe.



Fireworks Gomphrena

GOMPHRENA • Gomphrena haageana

QIS Series

Height: 24 to 26 in./61 to 66 cm **Spread:** 8 to 10 in./20 to 25 cm

Seed supplied as: Raw

Plug crop time: 5 to 6 weeks Transplant to finish: 10 to 12 weeks

- · Versatile series works well for landscape and garden use.
- Vivid colour range makes these a Summer-long standout.
- Also as a first-class professional cut flower for greenhouse and outdoor production; suited to fresh and dried use.

Also available: Mixture

GOMPHRENA • Gomphrena pulchella

Fireworks

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

Seed supplied as: Coated

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

- More blooms per plant and unique "scaffolding" habit make Fireworks sparkle at retail, then explode with colour in landscapes and containers.
- Vigorous, "tough as nails" plants are drought tolerant, low maintenance.
- Attractive architectural element for landscapes; also excellent for mixed cut flower bouquets.
- Easy to produce, and stays compact as a plug.
- Well-suited to high-margin gallon programs; suitable for field or garden cut flower production.

Mississippi Medallion Award



GOMPHRENA

Also see Cut Flowers, page 184.

See ColorGrass, page 51.

LAVANDULA

See **Perennials**, page 147.

LIMONIUM (STATICE) QIS Series

See Cut Flowers, page 185.



QIS Orange Gomphrena



QIS Red Gomphrena



IMPATIENS •• Impatiens walleriana

Beacon® Series F1



Height: 14 to 18 in./36 to 46 cm **Spread:** 12 to 14 in./30 to 36 cm Flower size: 1.25 to 1.5 in./3 to 4 cm

Seed supplied as: Coated

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

- Beacon impatiens exhibits high resistance to the widely prevalent populations of Plasmopara destructor, which cause Impatiens downy mildew (IDM).
- Beacon impatiens offers the opportunity to bring back into production a well-known, in-demand, easy-to-grow and versatile product for increased sales.
- Extensive trialing has proven that Beacon impatiens provides genetic high resistance to IDM. Beacon is not immune to IDM; there are scenarios where preventative IDM fungicides may be recommended.
- With a plant structure, flowering time, flower size and crop culture that is similar to Super Elfin, Beacon impatiens is easy to incorporate into production planning.
- Fast-filling, season-long colour for gardens and landscapes.



Pearl Island Mixture US 10,285,362; US 11,166,424; EU PAF

Bright Red A warm-toned red on upright mounded, moderately vigorous plants with mid-green foliage.

Coral Coral-pink flowers on mid-vigour, mounded plants with bright green foliage.

New Lipstick A high-demand, strong colour that is deeper and redder than Rose with a similar flowering time.

Orange A bright, clean orange on moderate-vigour, upright mounded plants with bright green foliage.

Rose Well-branched, medium-vigour plants with clear rose flowers.

Salmon A warm salmon-orange flower on mid-vigour, mounded plants with bright green foliage.

Violet Shades Shades of bright violet and burgundyviolet on moderate-vigour, upright mounded plants with mid-green foliage.

White Pure white flowers on moderately vigorous, upright mounded plants with mid-green foliage.

Cape Pine Mixture Formerly Red White Mixture. Bright Red, White.

New Formula Mixture Improved Includes all colours.

Lindau Mixture

Orange, White and Violet Shades.

New Pearl Island Mixture Limited introduction. Includes

Coral, White and Blue Pearl (not available separately). Named for Pearl Island Lighthouse, Nova Scotia, Canada.

Portland Mixture

Rose, Violet Shades and White.

Sanibel Mixture Bright Red, Orange and Violet Shades.



Cape Pine Mixture US 10,285,362; US 11, 166,424; EU PAF Medal of Excellence Industry's Choice, Medal of Excellence <u>Reader's Choice</u>



Lindau Mixture US 10,285,362; US 11,166,424; EU PAF



Portland Mixture US 10,285,362; US 11,166,424; EU PAF



US 10,285,362; US 11,166,424; EU PAF



Pearl Island Mixture



Pearl Island Lighthouse Nova Scotia, Canada US 10,285,362; US 11,166,424; EU PAF

Cape Pine Mixture US 10,285,362; US 11, 166,424; EU PAF Medal of Excellence Industry's Choice, Medal of Excellence Reader's Choice

Cape Pine Lighthouse Newfoundland, Canada



US 10,285,362; US 11,166,424; EU PAF

Lake Constance, Germany

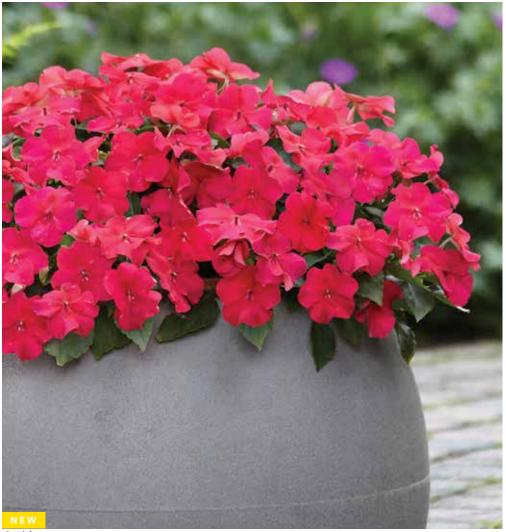
Portland Mixture



Sanibel Mixture US 10,285,362; US 11,166,424; EU PAF

Sanibel Lighthouse Sanibel Island, Florida, USA

Portland Bill Lighthouse



Salmon US 10,285,362; US 11,166,424; EU PAF

Salmon US 10,285,362; US 11,166,424; EU PAF Medal of Excellence Industry's Choice, Medal of Excellence Reader's Choice

Lipstick US 11,166,424; US 10,285,362; EU PAF



Coral, White and Rose



Lipstick US 11,166,424; US 10,285,362; EU PAF



Bright Red US 10,285,362; US 11,166,424; EU PAF Medal of Excellence Industry's Choice, Medal of Excellence Reader's Choice



Coral US 11,166,424; US 10,285,362; EU PAF Medal of Excellence Industry's Choice, Medal of Excellence Reader's Choice



Orange US 11,166,424; US 10,285,362; EU PAF Medal of Excellence Industry's Choice, Medal of Excellence Reader's Choice



Rose US 10,285,362; US 11,166,424; EU PAF



Salmon US 10,285,362; US 11,166,424; EU PAF Medal of Excellence Industry's Choice, Medal of Excellence Reader's Choice



Medal of Excellence Industry's Choice, Medal of Excellence Reader's Choice



Violet Shades US 10,285,362; US 11,166,424; EU PAF White US 10,285,362; US 11,166,424; EU PAF Medal of Excellence Industry's Choice, Medal of Excellence Reader's Choice



Formula Mixture Improved US 10,285,362; US 11,166,424; EU PAF



Coral US 11,166,424; US 10,285,362; EU PAF Medal of Excellence Industry's Choice, Medal of Excellence Reader's Choice



Violet Shades US 10,285,362; US 11,166,424; EU PAF Medal of Excellence Industry's Choice, Medal of Excellence Reader's Choice



Beacon Orange (L) outperforms competing and susceptible varieties (M & R) at the 2019 Inoculation Trial



White Shimmer



4 in./10 cm



Quart/12 cm



Gallon



306 Pack



1801 Tray

INTERSPECIFIC IMPATIENS

Impatiens hybrida

Solarscape™ Series F₁



Height: 9 to 11 in./23 to 28 cm **Spread:** 15 to 20 in./38 to 51 cm **Flower size:**

 $2.5\,\text{to}\,2.75$ in./6 to 7 cm

Seed supplied as: Raw Plug crop time: (288) 4 to 5 weeks, (128) 5 to 6 weeks Transplant to finish: 7 to 10 weeks

Available in North America only.

- Great low-maintenance plant provides high-impact colour in full-sun spaces, whether in the ground or in containers.
- The first interspecific impatiens series from seed offers growers the flexibility of an input that is available all year round, making scheduling a breeze.
- Seed-propagated Solarscape provides the same garden performance as vegetative interspecific impatiens without the royalties! Perfect for opening-price-point, nonbranded programs at retail.
- Offers landscape growers a non-branded, costefficient alternative.
- Blooms have tropical appeal, with a satiny texture in vibrant, glowing hues.

Magenta Bliss Features a vibrant, warm magenta/violetpurple colour on uniform plants with green foliage.

Orange Burst Deep coral-orange flowers with some shading to a light salmon-orange.

White Shimmer Shimmering white flowers may have a small percentage of pink at the centre and very pale, blush pink buds and petals.

Magenta Bliss

Impatiens landscapers love

Solarscape seedpropagated interspecific impatiens provides unbeatable colour in full-sun garden beds and containers. Durable Solarscape performs just like vegetative varieties with the flexibility of seed. Landscape growers will appreciate this option to fulfill non-branded needs that grow strong in the sun!



Magenta Bliss



Orange Burst



White Shimmer



Orange Burst

Solarscape™ XL Salmon Glow F₁



PRO LANDSCAPE PERFORMER

Height: 11 to 13 in./28 to 33 cm **Spread:** 18 to 20 in./46 to 51 cm Flower size:

2.5 to 2.75 in./6 to 7 cm

Seed supplied as: Raw

Plug crop time: (288) 4 to 5 weeks, (128) 5 to 6 weeks Transplant to finish: 7 to 10 weeks

Available in North America only.

- Flowers start out a bright salmon colour with shading to lighter salmon-coral.
- XL plant height averages about 20% larger than standard Solarscape.



XL Salmon Glow



XL Salmon Glow



XL Salmon Glow



Regatta Sky Blue Lobelia



Crystal Palace Lobelia



Florida Blue Lisianthus



Florida Pink Lisianthus



Regatta Lilac Lobelia



Blue Lobelia

BEDDING LISIANTHUS • Eustoma grandiflorum

Florida Series F1

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

Seed supplied as: Pelleted

Plug crop time: 8 to 10 weeks Transplant to finish: 12 to 16 weeks

- Our most heat-tolerant series for garden use; can also be used in potted plant programs.
- Resists rosetting in both plug stage and after transplanting.
- Single-plant in 4.5-in./12-cm or multi-plant in larger container.

CUT FLOWER LISIANTHUS ABC Series, page 186. Can Can Series, page 185. Flare Series, page 185.

POTTED PLANT LISIANTHUS Sapphire Series, page 172.



Regatta Lobelia



Regatta Rose Lobelia Fleuroselect Novelty

COMPACT LOBELIA • Lobelia erinus

Crystal Palace

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

Seed supplied as: Raw, Multi-Seed Pellets

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

• Dark blue flowers and bronze foliage.



Regatta White Lobelia



Regatta Mixture Lobelia

Regatta Series

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

Seed supplied as: Raw, Multi-Seed Pellets

Plug crop time: 4 to 5 weeks Transplant to finish: 8 to 10 weeks

- Flowers up to 4 weeks earlier than other trailing varieties, perfect for selling in bloom during Spring.
- Vigorous plants flower profusely, cascading over the edge of hanging baskets, larger containers and colour bowls.



Blue Eyes





Lilac

Riviera Series

Height: 5 in./13 cm **Spread:** 8 in./20 cm

Seed supplied as: Raw, Multi-Seed Pellets

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

- Extra early-flowering series blooms about 15 days earlier than standard varieties for reduced bench time and extended selling season.
- Ball-shaped plants stay compact and mounded, making them perfect for beds, borders, containers and colour bowls.

PERENNIAL LOBELIA **Starship Series**, page 152.

LOBULARIA See **Alyssum**.

LUZULA

See ColorGrass, page 50.



Midnight Blue





Sky Blue





White Fleuroselect Novelty



Mixture





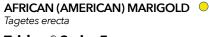


Orange



Yellow

Yellow



Taishan® Series F1

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

Seed supplied as: Coated, De-tailed

Plug crop time: 3 weeks

Transplant to finish: Spring 5 to 6 weeks, Summer 7 to 8 weeks

- Best dwarf African marigold for landscapes 20% shorter peduncles and 15% thicker stems assure less stretch and breakage.
- Big, tightly petalled blooms on super-strong stems look terrific at retail with less waste, better overhead watering tolerance and longer shelf life.
 Better branching with more aggressive side branching fills packs quickly and delivers a healthier look.
 Larger flowers hold their doubleness and shed water well.
 Performance is so spectacular that Taishan was featured in landscapes at the 2008 Olympic Games in Boiling China.

- landscapes at the 2008 Olympic Games in Beijing, China.



Mixture







Orange





AFRICAN (AMERICAN) MARIGOLD continued

Marvel II™ Series F₁

Height: 16 to 18 in./41 to 46 cm **Spread:** 10 to 12 in./25 to 30 cm Flower size: 3 to 3.5 in./8 to 9 cm Seed supplied as: Coated, De-tailed

Plug crop time: 3 weeks

Transplant to finish: Spring 5 to 6 weeks, Summer 7 to 8 weeks

- This intermediate-type African marigold offers improved branching, earliness, flower size and a brighter flower colour.
 Series is uniform under both short and long days.
 Performance-tested durability; sturdy stems hold up in shipping and poor weather.



Mixture





Bolero US PVP 201800074



Deep Orange US PVP 201800517 Fleuroselect Novelty





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.

Flame

Bee





Mixture

FRENCH MARIGOLD •



DWARF CRESTED FRENCH MARIGOLD

Bonanza™ Series



PRO LANDSCAPE PERFORMER

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.

Mahogany with yellow edging. Bolero Attractive bicolour.

Harmony Bronze with gold center.



Janie Bright Yellow



Janie Deep Orange

Janie Series

Height: 8 to 10 in./20 to 25 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

- Good for warmer markets or for late-season sales further north - very heat-tolerant with good garden vigour in warmer temperatures.
- Early and uniform in the pack with excellent shelf life.
- Compact plants hold crested, 2-in./5-cm flowers nicely above the foliage.



Strawberry Blonde US 10,750,692; EU PAF

Fireball & Strawberry Blonde

Fireball

Height: 10 to 12 in./25 to 30 cm **Spread:** 6 to 8 in./15 to 20 cm **Flower size:** 2.5 in./6 cm

Strawberry Blonde

Height: 8 to 10 in./20 to 25 cm **Spread:** 8 to 10 in./20 to 25 cm **Flower size:** 2.25 in./6 cm

Seed supplied as: Coated, De-tailed

Plug crop time: 3 weeks Transplant to finish: Premium packs, 3 to 4 weeks; Quarts or multi-plants in larger pots, 4 to 6 weeks

- Meet the "New World marigolds" - Fireball and companion Strawberry Blonde introduce germplasm never seen before in African or French marigolds that puts multicolour blooms on the same plant.
- Completely new look for premium packs, pots and decorative containers.
- In early Spring growing conditions, flowers age and change colour more slowly for maximum contrast. In warmer conditions, colour changes faster with less distinct contrast.

Flamenco

Height: 10 to 12 in./25 to 30 cm **Spread:** 6 to 8 in./15 to 20 cm **Flower size:** 2 to 3 in./5 to 8 cm

Seed supplied as: Coated, De-tailed

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

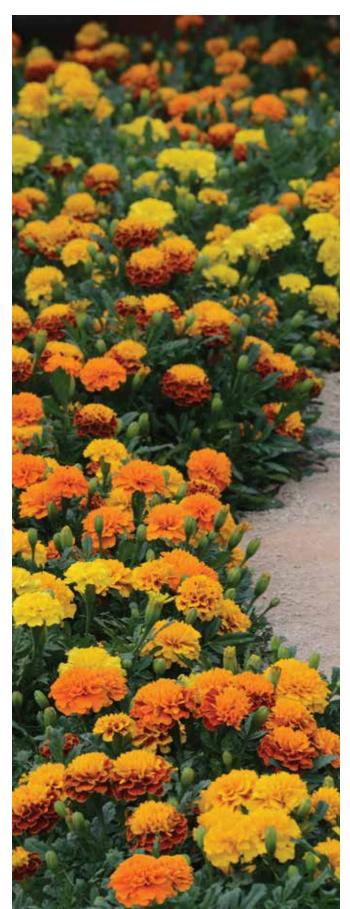
- With its yellow centre and red-tipped petals, this novelty colour will look great in patio containers and gardens alike.
- This standalone variety in the French Marigold assortment calls out its unique pattern, similar to Fireball and Strawberry Blonde.
- Flamenco is in line with the Bonanza series for habit; flowering time is a few days later.



Fireball US 10,750,692; EU PAF



Flamenco US PVP 202000034



Mixture US 9,320,212; US 9,326,464; US 9,326,465; US 9,326,466; US 9,326,467; US 9,326,468





Gold US 9,320,212



Orange US 9,326,467



Spry US 9,326,466



Yellow US 9,326,465



Flame US 9,326,468



Harmony US 9,326,464

HEAT-TOLERANT EXTRA-DWARF CRESTED FRENCH MARIGOLD

Hot Pak™ Series



PRO LANDSCAPE PERFORMER

Height: 6 to 7 in./15 to 18 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

- Extend the marigold season with the first French marigold series bred to bloom all series bred to bloom all Summer long, even in the highest temperatures and humidity - "developed in the heat for the heat." Includes all the key colours, perfectly genetically matched. Stays compact and keeps on flowering without stretching or falling over. Produces 1.75 to 2-in./4.5 to 5-cm blooms. Ideal for pack programs and landscapes.







DWARF ANEMONE FRENCH MARIGOLD

Durango® 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: 4 to 5 weeks

- Early-blooming series sets the highest standard for anemone-type marigolds excellent branching, strong stems, abundant blooms.
- Delivers a well-matched, 5 to 7-day flowering window across all colours.
- Produces uniformly shaped, extra-large, 2 to 2.5-in./ 5 to 5.5-cm flowers atop bushy plants.

Mahogany edged with yellow. Bolero Golden yellow flower petals tipped with red.

Flame

Mahogany edged with orange.

Outback Mixture Bolero, Red, Tangerine, Yellow. Very uniform for timing, habit and flower size.

MATRICARIA

See Cut Flowers, page 188.





Orange





Tangerine



Yellow



Mixture



Outback Mixture



Poetry Blue Nemesia



Poetry Deep Pink Nemesia



Sundrops Mixture Nemesia Fleuroselect Gold Medal



Poetry Mixture Nemesia

NEMESIA • Nemesia foetans

Poetry™ Series F₁

Height: 12 to 14 in./30 to 36 cm **Spread:** 10 to 12 in./25 to 30 cm Seed supplied as: Pelleted

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

- Uniform, grower-friendly varieties in bright colours are ideal for Spring and Autumn premium pack and 4-in./10-cm pot programs.
- Branches very well without pinching to produce bushy plants that fill out fast and full.
- Winter flowering will occur in milder temperatures; will also flower lightly in warmer conditions in partial shade.

NOTE: It is recommended to sow 4 pellets per cell.



Poetry White Nemesia

NEMESIA • Nemesia strumosa

Sundrops Mixture

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

Seed supplied as: Raw

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

- Diverse colour range gold, rose, red shades and white in a wide array of patterns.
- Early-blooming, compact plants are ideal for . small containers.
- Useful as a cool-season crop to accompany Spring pansies.
- Timing fits into the cineraria/ calceolaria crop time.



Mini Mint Ornamental Mint

ORNAMENTAL MINT ••

Mentha requienii



Height: 1 to 2 in./3 to 5 cm **Spread:** 6 to 12 in./15 to 30 cm

Seed supplied as: Multi-Seed Pellets

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

USDA Hardiness Zones: 6a to 9b (-10 to 25°F/-23 to -4°C minimum temperatures)

- Easy, economical way to grow and sell this attractive, highly fragrant groundcover or small potted plant.
- Each multi-seed pellet contains 8 to 12 seeds - one plug in a 4-in./10-cm pot delivers a nice fast fill. Can be direct sown.
- Eliminates dividing, rooting cuttings and broadcasting seed.
- Healthier, more uniform plants make great-looking 4-in./ 10-cm pots, mix components and garden specimens. Can also be marketed as a lawn replacement.

NOTE: Leaves are non-toxic but do not have a palatable flavour.



Kirigami Ornamental Oregano US PVP 201800057

ORNAMENTAL OREGANO •

Origanum x hybrida

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 purplegreen 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.
- Also perfect for hanging baskets, or in borders and rock gardens; can also be dried for use in dried flower arrangements.
- Higher light and cooler night temperatures accent the purple bract colour.

ORNAMENTAL MILLET • •



Pennisetum glaucum

Unique accent plants are appealing at retail and make a dramatic statement in mixed containers, gardens and landscapes.

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 colour for 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.

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)

- 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.

Jester F1



Height: 36 to 48 in./91 to 122 cm Spread: 10 to 14 in./25 to 36 cm

Seed supplied as: Raw

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

- · Young leaves are chartreuse with a subtle burgundy overlay; mature foliage becomes dominantly burgundy especially in full sun. Plants end the season with nearly the same bronze-purple colour as Purple Majesty.
- Jester flowers 7 to 10 days later than Purple Baron and Purple Majesty, and stays compact longer.
- Best grown warm.

Purple Baron F1



Height: 30 to 40 in./76 to 102 cm Spread: 10 to 14 in./25 to 36 cm

Seed supplied as: Raw

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

- Large, thick flower spikes on plants that are better-branched at the base than Purple Majesty.
- Slightly darker purple than Purple Majesty, with leaves that are shorter and wider for easier shipping, on a plant that is about twothirds the mature height.
- Young plants are green; stem and midrib begin to develop purple colour as they mature.
- Shows best colour in full sun.

Purple Majesty



Height:

48 to 60 in./122 to 152 cm Spread: 8 to 12 in./20 to 30 cm

Seed supplied as: Raw

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

- Young plants are green. Stem and midrib of the foliage first turn purple after about 8 leaves have developed. Foliage turns dark purple when plants are moved from the greenhouse outside into full sun.
- Also makes a good cut flower.

MYOSOTIS

See Perennials, page 153.



Copper Prince



Purple Baron



Jade Princess





Purple Majesty All-America Selections Winner



Grand Canyon Mixture



Daisy White All-America Selections Winner, Fleuroselect Gold Medal



Purple





White Purple Eye



Sunset Shades



Grand Canyon Mixture

OSTEOSPERMUM • Osteospermum ecklonis

Akila® Series F1

Height: 10 to 14 in./25 to 36 cm **Spread:** 14 to 20 in./36 to 51 cm Flower size: 2 to 3 in./5 to 8 cm

Seed supplied as: Raw

Plug crop time: 4 to 5 weeks Transplant to finish: Spring 10 to 12 weeks, Autumn 7 to 9 weeks

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



Mixture

Daisy White Petals have a yellow back.

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

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

ORNAMENTAL MINT See page 72.

ORNAMENTAL OREGANO See page 72.

ORNAMENTAL PEPPER See page 83.

Also see Potted Plants, page 162.



True Blue and Yellow

PANSY • • Viola x wittrockiana

MULTIFLORA PANSY

Panola® XP Series F₁

Height: 6 to 8 in./15 to 20 cm **Spread:** 8 to 10 in./20 to 25 cm **Flower size:** 2 to 2.25 in./5 to 6 cm

Seed supplied as: Raw, Primed

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

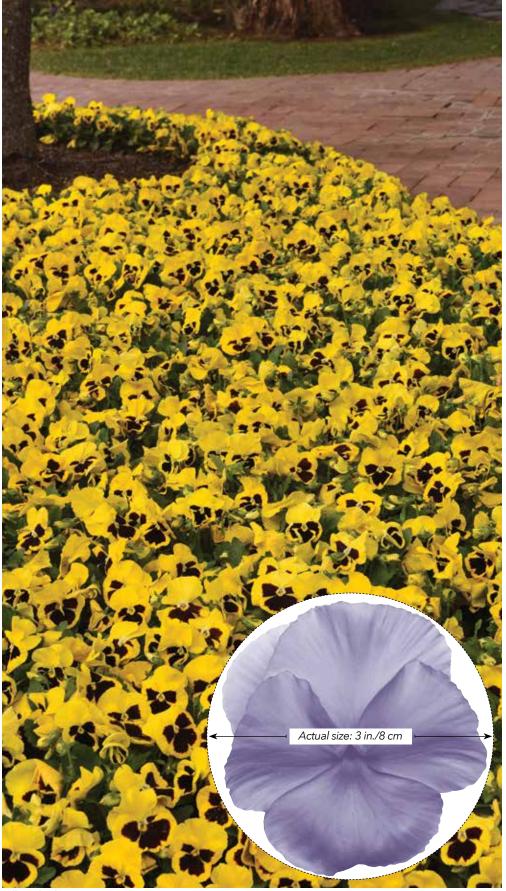
- Panola XP genetics come with a tight 5 to 7-day flowering window, very uniform habit and shorter peduncles across a broad array of colours.
- Panola XP colours outperform standard medium-flowered varieties in all kinds of conditions.
- Exceptional overwintering ability makes Panola the best choice for overwintering guarantee pansy programs.
- Free-flowering, well-branched and compact, the earlyblooming plants maintain their garden height with less stretch in warm climates.
- Plants produce an abundance of blooms for good flower show in the landscape.
- Landscaper-friendly clear colours are perfect for mixing custom blends.

XP Citrus Mixture XP Deep Orange, XP White, XP Yellow.

XP Clear Mixture Includes all clear Panola XP colours.

XP Mixture All Panola XP colours.





Your simplest solution for Spring

If you're using another pansy series and you're not happy with the uniformity or plant habit, try Spring Matrix. It's designed for cool-season, short-day growing conditions – or when you need a large bloom that maintains good presentation under cold, dark, wet Winter production.

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
- Most uniform Spring-flowering series produces large blooms that maintain good presentation under cold, dark, wet Winter production.
- Superior branching without stretching puts more flowers on every plant.

Blue Wing Displays stronger blue colour under cool temperatures.

Blotch Mixture Blue Blotch, Blue Wing, Red Blotch, White Blotch and Yellow Blotch.

Clear Mixture

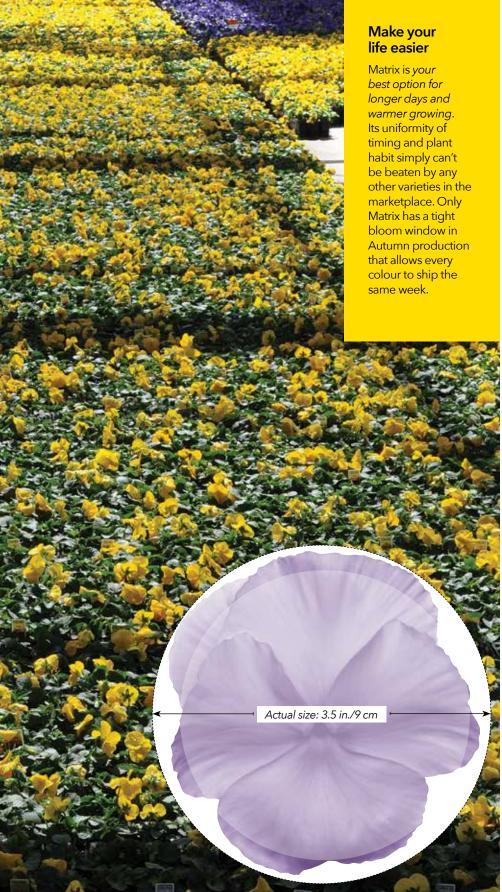
All the clear varieties.

Daffodil Mixture Deep Orange, Lemon, Yellow, White.

Tricolor MixtureBlue, Lemon, Purple.

Yellow Blotch





EXTRA-LARGE FLOWERED PANSY

Matrix® Series F1

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

Seed supplied as: Raw, Primed

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

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

Beaconsfield Largest flowers of this type on the market.

Midnight Glow Features a yellow centre with a deep violet halo around it. Great for Autumn programs.

Solar Flare Blooms show more red in cool temperatures and more yellow in warmer temperatures.

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

Matrix mixtures

Autumn Blaze Mixture Red Blotch, Red Wing, Yellow, Yellow Blotch.

Blotch Mixture Deep Blue Blotch, Ocean, Red Blotch, Red Wing, Rose Blotch, Yellow Blotch, White Blotch.

Citrus Mixture Orange, White, Yellow and Spring Matrix Lemon.

Clear Mixture Light Blue, Orange, Purple, Rose, Yellow, White and Spring Matrix Lemon

Coastal Sunrise Mixture Ocean, Rose Blotch, Sunrise.

Ocean Breeze Mixture Deep Blue Blotch, Ocean, White Blotch.

Raspberry Sundae Mixture Rose Wing, Rose, White Blotch.









Burgundy



RUFFLED PANSY

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





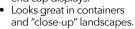
Raspberry





 PanAmerican Seed is the only professional supplier of this unique, frilly flower form count on reliable seed supply. • Great for cool-season







Raspberry Shades of white with rose cap/edge.

Mixture Also includes Lavender Shades (not available separately).



Yellow



Yellow-Blue Swirl



Mixture



Lipstick



Lucky Star Series

Stays in colour... Really!

Lucky Star is bred for the fastest follow-up blooming of any full colour series pentas on the market. Nonstop colour means plants look better getting off the truck and they just keep getting better in the store! Plus, this colour-rich series has a tight, compact habit that keeps them looking tidy with virtually no effort.

PENTAS O
Pentas lanceolata

Lucky Star® Series F₁

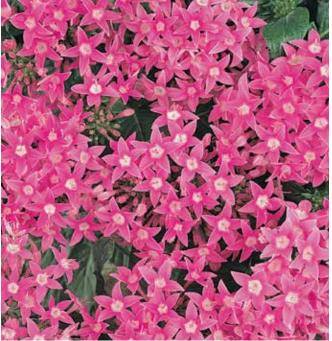
Height: 12 to 16 in./30 to 41 cm **Spread:** 12 to 14 in./30 to 36 cm **Seed supplied as:** Pelleted

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

- With the fastest follow-up blooming of any full colour series 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
- Follow-up blooms do not eclipse the prior flush, so plants stay compact, tight and ready for sale at retail with minimal work.

Violet Faster secondary, followup blooming and a darker colour intensity than other violet pentas on the market.





Butterfly Deep Pink



Butterfly Deep Rose



Butterfly Orchid



Butterfly White



Butterfly Light Lavender



Butterfly Red



Butterfly Mixture



Glitterati Purple Star US 10,631,515

PENTAS continued

Butterfly™ Series 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: 6 to 8 weeks Transplant to finish: South 8 to 10 weeks, North 10 to 12 weeks

- Hybrid vigour provides better stress tolerance than open-pollinated varieties.
- Gives pro landscapers and gardeners alike a mid-size, full-sun series that flourishes in high heat/humidity and tolerates Summer rains well while still showing colour.
- Can be sold as a late Spring to Summer item in cooler areas.
- Large, star-shaped umbels up to 3 in./8 cm across - attract butterflies and hummingbirds.



Glitterati Red Star US 10,631,515

Glitterati™ Series 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: 6 to 7 weeks Transplant to finish: 8 to 10 weeks

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

Red Star Distinctive combination of red and white with a star pattern that is great for Summer patio pots and combinations. Complements Glitterati Purple Star, which was introduced in 2018.

ORNAMENTAL PEPPER •

Capsicum annuum

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

Black Pearl

Height: 14 to 18 in./36 to 46 cm; may grow to 3 ft./91 cm or more in warmer areas with longer growing seasons

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

Transplant to finish: 6 to 7 weeks for Autumn finish (no mature fruit)

- The first black-leafed ornamental pepper is ideal for landscapes and mixed containers.
- Bushy, upright, well-branched plants have greenish foliage when young that matures to glossy black with high light and heat.
- In the landscape, plants develop rounded, shiny black fruit that matures to dark red.
- Best in 6 and 8-in./15 and 20-cm pots, gallons and Mum Pals programs.

NOTE: Fruit is hot.

Calico F₁

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

Transplant to finish: 6 to 7 weeks for Autumn finish (no mature fruit)

- High-appeal, strongly variegated foliage of purple, cream and green.
- Compact, well-branched and rounded accent plants are uniform in size across the crop for easy production.
- Extremly heat-tolerant great for landscaping and mixed containers.
- Best in 6 and 8-in./15 and 20-cm pots, gallons and Mum Pals programs.

NOTE: Fruit is hot.

Midnight Fire

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

Transplant to finish:

7 to 13 weeks for Autumn finish

- Distinctive dark black foliage is accented by purple fruit which mature to bright red - this eyecatching combination is sure to result in fast sell-through.
- Well-branched plants are perfect for stunning Autumn combination planters and large container programs at retail.
- Best in 6 and 8-in./15 and 20-cm pots, gallons and Mum Pals programs.

Purple Flash

Height: 13 to 15 in./33 to 38 cm **Spread:** 19 to 21 in./48 to 53 cm

Transplant to finish: 6 to 7 weeks for Autumn finish (no mature fruit)

- Striking colouration and interesting plant architecture enhance gardens and mixed containers through the toughest conditions, including heat.
- Layered, scaffolding habit creates an exotic look.
- Compact, mounded plants are uniform in size across the crop for easy production.
- Best in 6 and 8-in./15 and 20-cm pots, gallons and Mum Pals programs.

NOTE: Fruit is hot.

Sangria F₁

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

Transplant to finish:

7 to 13 weeks for Autumn finish

- Child-safe, non-pungent fruit is great for public plantings indoors and out.
- Indeterminate plants always have both purple and red peppers for continuous, eye-catching displays.
- Well-branched and somewhat spreading, the uniform, full-bodied plants are ideal for filling in landscapes and containers.
- Best in 6 and 8-in./15 and 20-cm pots, gallons and Mum Pals programs.

Sedona Sun

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

Transplant to finish:

7 to 13 weeks for Autumn finish

- Here's another opportunity to expand Autumn sales - this time in your large pot and home gardener landscape programs.
- Masses of distinctive lemon yellow and carrot orange fruit put a brilliant, multicolour display on every plant.
- Indeterminate habit like Sangria, with similar timing.
- Best in 6 and 8-in./15 and 20-cm pots, gallons and Mum Pals programs.

NOTE: Fruit is hot.



Purple Flash



Black Pearl US PVP 200500020 All-America Selections Winner, Fleuroselect Novelty



Calico Louisiana Super Plant



Midnight Fire Louisiana Super Plant



Sangria



Sedona Sun



Yellow



Yellow

PETCHOA •• Petunia sp. x Calibrachoa sp.

New Caliburst™ Yellow F₁

Height: 6 to 10 in./15 to 25 cm Spread: 20 to 28 in./51 to 71 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

Available in North America only.

- The first petchoa from seed! Caliburst takes the best colours from calibrachoa and delivers them in the habit, flower size and product form of petunias.
- Vibrant yellow flower colour looks exceptional in any season.
- Controlled habit is perfect for quarts (13 cm), gallons (17 cm) and baskets (23 cm+).
- Fantastic for mixed combos with both seed and vegetative components.

 Day neutral flowering with a
- 9-hour daylength response.
- Cold durability like Wave petunias; it can be successfully produced in early Spring.

Petunia Power + Cool Calibrachoa Colours = **Extraordinary** Success!

PanAmerican Seed is excited to introduce Caliburst, the first petchoa from seed! With the vibrant colours from calibrachoas, the cold-durable production and short daylength requirements of E3 Easy Wave petunias, and the ease of seed, it's the perfect formula for excellent Spring and Summer sales! Caliburst performs like a vegetative variety, with the flexibility of seed. With its controlled, manageable habit, it's the coolest for combos and containers.



Caliburst Yellow Petchoa and E3 Easy Wave Pink Cosmo Petunia



Caliburst Yellow Petchoa, E3 Easy Wave Pink Cosmo and Sky Blue Petunia



Caliburst Yellow Petchoa and E3 Easy Wave Blue Petunia



Timing is everything

Getting your crop sown, grown and off to market right on schedule is every grower's fondest wish. Dreams delivers a wellmatched Spring bloom time window across all colours. No need to pick and choose from several series...now that's a dream come true!

PETUNIA O Petunia x hybrida

GRANDIFLORA SINGLE PETUNIA

Dreams™ Series F₁

Height: 10 to 15 in./25 to 38 cm **Spread:** 10 to 12 in./25 to 30 cm Flower size:

3.25 to 3.5 in./8 to 9 cm

Seed supplied as: Raw, Pelleted Plug crop time: 5 to 6 weeks Transplant to finish: 5 to 6 weeks

- Well-branched habit and plant structure assure a high-quality look and excellent performance.
- Consistently high seed quality and good performance in the presence of Botrytis.

Patriot Mixture Red, White, Midnight.

Waterfall Mixture Midnight, Sky Blue, White.





Blackberry US 7,642,436; EU PAF



Antique Shades US 7,642,436; EU PAF



Blue Morn



Sophistica Lime Bicolor, Antique Shades & Lime Green



Lime Bicolor US 7,642,436; EU PAF

SINGLE PETUNIA

GRANDIFLORA

Sophistica® Series F₁

The designer Sophistica Collection combines beautiful flowers in special one-of-a-kind colours with professional seed quality. These premium petunias can command a higher price point at retail and open the door to decorator opportunities.

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 5 weeks Transplant to finish: 5 to 6 weeks

- Abundant grandiflora blooms.
- Plants are well-matched for timing for easier scheduling and shipping.
 Mounded unright habit
- Mounded, upright habit is ideal for premium pots and larger containers.



Blackberry US 7,642,436; EU PAF



Lime Green US 7,642,436; EU PAF

Blackberry Shimmering black with some reddish-purple undertones; yellow breaks may appear under cold growing regimes combined with B-Nine.

Blue Morn Blue margin with silver-white throat; throat will be less noticeable in cooler/ greenhouse production, and more noticeable outside and in warm, high-light conditions.

Lime Bicolor Consistent with traditional star patterns. In cool/low light conditions, blooms show more rose; in warm/high light conditions, blooms show more lime.

Lime Green Yellow with underlying lime tone is a very solid, saturated colour with no veining or fading like traditional yellow petunias.





Peppermint Daddy



Red Daddy



Sugar Daddy





Supercascade Burgundy



Supercascade Pink



Supercascade Red

GRANDIFLORA SINGLE PETUNIA

Daddy® Series F1

Height: 10 to 15 in./25 to 38 cm **Spread:** 10 to 12 in./25 to 30 cm **Flower size:** 4 in./10 cm

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

- The best-selling veined grandifloras and the only full series of veined varieties.
- Features 4-in./10-cm blooms and dependable, high-quality pack habit.

Sugar Light orchid; deep purple veins.



Spread: 10 to 12 in./25 to 30 cm Seed supplied as: Raw, Pelleted Plug crop time: 4 to 5 weeks

Transplant to finish: 5 to 6 weeks

• Huge, 4 to 5-in./10 to 13-cm flowers deliver great retail and garden impact.



Supercascade Rose



Supercascade White



Supercascade Mixture

ANNUALS / EZ RIDER



Ez Rider Blue



COMPACT **GROWING PETUNIA** Grandiflora Ez Rider and multiflora Lo Rider put flexibility at your fingertips and cost savings in your pocket, thanks to their matched and manageable growth from bench to retail. These genetically shorter, more controlled plants need less PGRs and are perfect for high-density programs. The two series solve the seasonal, geographic

and control challenges of traditional petunias - they're perfect for growing and selling high-density cell packs to "promo" hanging baskets.

• Up to half the amount of PGRs are needed - or none under some growing regimes. Suitable for cold growing. Tight bloom window lets you ship and sell all series colours at the same time. Better branching with improved airflow reduces the probability of disease,







Ez Rider Rose

Ez Rider Deep Salmon

Ez Rider White







Ez Rider® Grandiflora Series F1

especially Botrytis. Available in the top-selling colours that make up 75% of petunia sales. Enhanced, longer garden performance in containers and gardens - plants hold together and don't lodge later in the season like traditional petunias can.

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

3.25 to 3.5 in./8 to 9 cm Seed supplied as: Pelleted

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

New Violet This popular colour expands the compact series.

New Mixture Improved A mix of all colours in the series, including NEW Violet.







Lo Rider Red







Lo Rider White

Lo Rider™ Multiflora Series F₁

Height: 7 to 10 in./18 to 25 cm **Spread:** 8 to 12 in./20 to 30 cm

Seed supplied as: Pelleted

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

Violet Times like Blue in cold production conditions and like Pink in Spring natural daylength.

Lo Rider Rose



Pretty Grand Coral



Deep Pink The Pretty collection needs fewer to no PGRs and is suitable for cold growing. Naturally better branching with shorter internodes keeps plants manageable longer. The controlled habit assures tidier baskets than traditional petunias - plants hold together and don't lodge later in the season like standard petunias can. Better branching and flowers above the foliage minimize Botrytis risk. Offers a tight bloom window and longer performance

Pretty Grand™ **Grandiflora Series F1**

in beds and landscapes.

Height: 6 to 10 in./15 to 25 cm Spread: 8 to 12 in./20 to 30 cm Flower size: 3.25 to 3.5 in./8 to 9 cm

Seed supplied as: Pelleted

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

Available in North America only. Flag Mixture Midnight, Red, White.

Pretty Flora™ Floribunda Series F1

Height: 7 to 10 in./18 to 25 cm **Spread:** 8 to 12 in./20 to 30 cm **Flower size:** 2.75 to 3 in./7 to 8 cm

Seed supplied as: Pelleted

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

Available in North America only. Pink Pearl Holds its soft, shimmery colour in high light/ warm night conditions.

Flag Mixture Midnight, Red, White.

Formula Mixture 7 to 9-day flowering window.



Pretty Grand Midnight



Pretty Grand Purple



Pretty Grand Red



Pretty Grand Rose



Pretty Grand Summer



Pretty Grand Violet



Pretty Grand White



Pretty Grand Flag Mixture



Pretty Grand Formula Mixture



Pretty Flora Coral



Pretty Flora Midnight



Pretty Flora Pink









Pretty Flora Rose



Pretty Flora White



Pretty Flora Flag Mixture



Pretty Flora Formula Mixture



Mid-Blue



Reflections Mixture

MULTIFLORA SINGLE PETUNIA

Mirage Series 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 5 weeks Transplant to finish: 4 to 5 weeks

Select colours are available for sale in North America.

- Delivers outstanding performance at every stage seed quality, seedling vigour and plant habit.
 Very broad colour range was selected for performance across a wide range of conditions.
 Perfect balance of show at point-of-sale without sacrificing garden performance.
 Beautiful blooms make impressive displays in mass plantings and gardens all season until frost.





White



Clear Madness Mixture



Just Madness Mixture



Merlot Madness Mixture



Old Glory Madness Mixture



Total Madness Mixture



Waterfall Madness Mixture

FLORIBUNDA PETUNIA

Madness® Series F₁

Height: 10 to 15 in./25 to 38 cm **Spread:** 10 to 12 in./25 to 30 cm **Flower size:** 3 in./8 cm

Flower size: 3 in./8 cm Seed supplied as: Pelleted

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

Available in North America only.

- Home gardeners and pro landscapers across North America know they can count on fantastic flower power...a bounty of vibrant colours...and never-ending shows that last until first frost.
 Exceptional seed quality,
- Exceptional seed quality, plug performance and uniformity across all colours from sow to finish.
- Well-branched, floriferous plants are covered with an abundance of 3-in./8-cm blooms.

Clear Madness Mixture Contains all clear colours except Yellow.

Just Madness Mixture Six veined colours.

Merlot Madness Mixture Burgundy, Deep Rose, Orchid, Pink, White.

Madness Old Glory Mixture Red, White, Midnight.

Total Madness MixtureBright mix of 14 colours.

Waterfall Madness Mixture Beautiful blue-toned mix includes Lilac, Magenta, Midnight and White.



DOUBLE PETUNIA O

Petunia x hybrida

MULTIFLORA DOUBLE PETUNIA

Duo Series F1

Height: 10 to 15 in./25 to 38 cm **Spread:** 10 to 12 in./25 to 30 cm

Seed supplied as: Raw, Pelleted

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

Not available for sale in North America.

- Excellent seed quality, germination and young plant performance.

 • Compact series produces
- masses of double, 2 to 2.25-in./5 to 5.5-cm flowers on well-branched plants.
- Superb for use in large mixed containers, baskets and beds.



Duo Mixture





Duo Burgundy



Duo Lavender



Duo Rose



Duo Rose And White



Duo Salmon



Double Cascade Blue





Double Cascade Pink

GRANDIFLORA **DOUBLE PETUNIA**

Double Cascade Series F1

Height: 10 to 15 in./25 to 38 cm **Spread:** 10 to 12 in./25 to 30 cm

Seed supplied as: Raw, Pelleted

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

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

Valentine Beautiful red blooms can have splashes of white appear on some of the tips. Smaller flowers than the rest of the series. Mixture Includes Valentine.



Double Cascade Orchid Mist



Double Cascade Valentine

Glorious Mixture F1

Height: 10 to 15 in./25 to 38 cm **Spread:** 10 to 12 in./25 to 30 cm

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

Transplant to finish: 6 to 7 weeks

• Bright mix of solids and bicolours.

Pirouette Rose F1

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

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

• Eye-catching, double fringed flowers in distinctive bicolour picotee patterns.



Double Cascade Mixture



Glorious Mixture



Pirouette Rose



Rose And White







Lavender







Satin Pink

FLORIBUNDA DOUBLE PETUNIA

Double Madness™ Series F₁

Height: 10 to 15 in./25 to 38 cm **Spread:** 10 to 12 in./25 to 30 cm Flower size: 3 in./8 cm

Seed supplied as: Pelleted

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

Available in North America only.

- Offers the same superior performance as the
- original Madness series.

 Compact, floriferous plants deliver masses of 2 to 2.25-in./5 to 5.5-cm flowers all Summer.

 • Well-suited to large containers,
- mixed combinations and beds.

Rose



Mixture

PHLOX • Phlox drummondii

21st Century Series F1

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

Seed supplied as: Primed

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

- The world's first F1 phlox delivers outstanding showiness, hybrid germination and vigour.
 Daylength-neutral plants finish fast and uniformly across all colours.
- Vigorous lateral branching makes full, mounded plants, with strong flower power from Spring until frost.
 Outstanding bedding plant also works well in containers.











Crimson



Scarlet



White

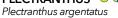


Silver Shield Plectranthus



Heritage Crème Primula

PLECTRANTHUS ••



Silver Shield



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

Seed supplied as: Pelleted

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

- Robust, vigorous and stress-tolerant accent plants have a bushy, upright habit, excellent in landscapes and combination planters.
- Economical, easy-to-produce seed-grown plants offer better branching than vegetative varieties, with no pinching needed.

POPPY

See Papaver in Perennials, page 153.

PRIMULA •• Primula acaulis

Heritage Crème F1

Height: 5 to 6 in./13 to 15 cm **Spread:** 5 to 6 in./13 to 15 cm

Seed supplied as: Raw

Plug crop time: 5 to 6 weeks Transplant to finish: 15 to 17 weeks

- Unique breeding delivers a natural "English Primrose" look in a professional-quality product.
- Long-flowering, mid-size blooms and deep green foliage are produced on compact, mounded plants.

 Contains a small percentage of
- smaller, white-flowered plants.
- Programmable crop can be grown pot-tight in 3.5-in./9-cm programs.



Mixture



Golden Shades



Lemon Shades



Pink Shades



Purple

Primlet® Series

Height: 5 to 6 in./13 to 15 cm **Spread:** 5 to 7 in./13 to 18 cm

Seed supplied as: Raw

Plug crop time: 5 to 6 weeks Transplant to finish: 15 to 17 weeks

- Clusters of scented blooms look like mini-rose bouquets.
- Works well in solo planters and small mixed combinations for late Winter and early
- Spring programs.
 Extended shelf life, long-lasting as an indoor house plant.
 Requires no special culture on the bench.

Purple Most vigorous of the series.



Sunrise



Rose with Edge



Scarlet Red Shades





White





Reintroduction Toucan Fuchsia Purslane



Toucan Scarlet Shades Purslane



Southern Star Blue Ruellia

PURSLANE OPTULACE OF PORTULACE OF PORTULACE OF PORTULACE OF PORTULACE OF PURSLANE OF PURSL

Toucan Series

Height: 3 to 4 in./8 to 10 cm **Spread:** 14 to 16 in./36 to 41 cm

Seed supplied as: Raw

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

- Economical, reliable and programmable seedgrown purslanes for massmarket baskets, containers and groundcover.
- Requires little or no PGRs, no pinching.
- Colourful buds develop into 2-in./5-cm blooms.Heat loving and
- Heat loving and drought tolerant.

NOTE: We recommend sowing 4 seeds per cell. Reintroduction Fuchsia High-quality seed with good germination.

PERENNIAL RUDBECKIA See page 155.



Southern Star Pink Ruellia

RUELLIA O Ruellia brittoniana (Ruellia tweediana)

Southern Star Series

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

Seed supplied as: Raw

Plug crop time: 5 to 6 weeks Transplant to finish: Spring 10 weeks, Summer 8 weeks

- The first dwarf ruellia from seed is easy to program and produces clean green foliage.
- Low-maintenance; tolerates both wet and dry conditions.
- Great for southern perennial programs - hardy to Zone 8 (10°F/-12°C minimum temperature).
- Can be used as an in-ground or container annual in other regions, but not recommended for the far North.

PORTULACA • Portulaca grandiflora

Happy Hour™ Series F₁

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

Seed supplied as: Raw, Multi-Seed Pellets

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

- Sow up to 2 weeks earlier than competing bush-type varieties, as Happy Hour is bred to bloom under shorter days than other portulacas - 10.5 hours.
- Tidy, mounded plants are easier to pack and ship, with less breakage than prostrate types.
- Well-branched plants flower uniformly across the series.
- Extra-appealing at retail, with fuller habit and large, double blooms in vivid colours.

Mixture Banana, Coconut, Deep Red, Fuchsia, Lemon, Orange, Rosita and a scarlet not available separately.

Pink Passion Mixture Rosita, Peppermint, Fuchsia. **Tropical Mixture** Deep Red, Orange, Banana.

TRAILING PORTULACA Portulaca grandiflora

Happy Trails™ Mixture F₁

Height: 6 to 9 in./15 to 23 cm Spread: 14 to 18 in./36 to 46 cm

Seed supplied as: Raw, Multi-Seed Pellets

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

- Trailing portulaca has the shortest photoperiod on the market today - 10 hours.
- Sow up to 2 weeks earlier than any other trailing portulaca to meet market demands.
- Delivers brilliant colours and fantastic spread in the garden.



Happy Hour Banana



Happy Hour Coconut





Happy Hour Deep Red





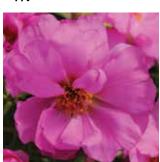
Happy Hour Lemon



Happy Hour Orange



Happy Hour Peppermint



Happy Hour Rosita



Happy Hour Pink Passion Mixture



Happy Hour Tropical Mixture



Happy Trails Mixture



Big Blue US PVP 201700218; EU PBR 49559



Big Blue US PVP 201700218; EU PBR 49559



Big Blue 1 gallon



Lancelot

SALVIA INTERSPECIFIC •

Salvia longispicata x farinacea

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.

SALVIA • • Salvia canariensis

Lancelot

Height: 36 to 42 in./91 to 107 cm **Spread:** 24 to 30 in./61 to 76 cm

Seed supplied as: Raw

Plug crop time: 4 to 5 weeks Transplant to finish: 5 to 6 weeks, foliage only

- A unique plant for the border.
- Produces silvery-white, felted leaves plus lavender flowers in July, with rosy-lavender bracts and a pleasant sage fragrance.
- A water-wise plant and a great pollinator plant, attracting hummingbirds, bees and butterflies.



Lighthouse Purple

SALVIA O Salvia splendens

Lighthouse Series

Height: 24 in./61 cm **Spread:** 10 in./25 cm

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

- Tall, bushy plants display long-lasting colour.
- · Heat resistant and ideal for lowmaintenance landscaping use.

Transplant to finish: 4 to 5 weeks

Also good in large patio containers.

Red Hot Sally II

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

Seed supplied as: Raw

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

Available in North America only.

- Stands out all season in landscapes, gardens, planters and mixed containers.
- Flower spikes are short and full for a dramatic show of colour.
- High seed quality, superior uniformity and excellent heat tolerance.



Lighthouse Red

Scarlet King (Not pictured)

Height: 11 in./28 cm Spread: 8 in./20 cm

Seed supplied as: Raw

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

• Excellent bright colour at finish.

Vista™ Series

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

Seed supplied as: Raw

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

- Dense spikes and dark green foliage hold their colour all season.
- Well-matched in heat tolerance, habit and earliness.
- With a 5 to 7-day flowering window across the series in the greenhouse, Vista can finish 2 to 5 days after other commercial series depending on light conditions, but has better outdoor performance.

PERENNIAL SALVIA

New Dimension Series, page 156.

Patio Series, page 157. Salvatore Blue, page 156.

SCABIOSA

See **Perennials**, page 157.

SILENE

See Perennials, page 157.



Red Hot Sally II







Vista Purple



Vista Red



Vista Rose



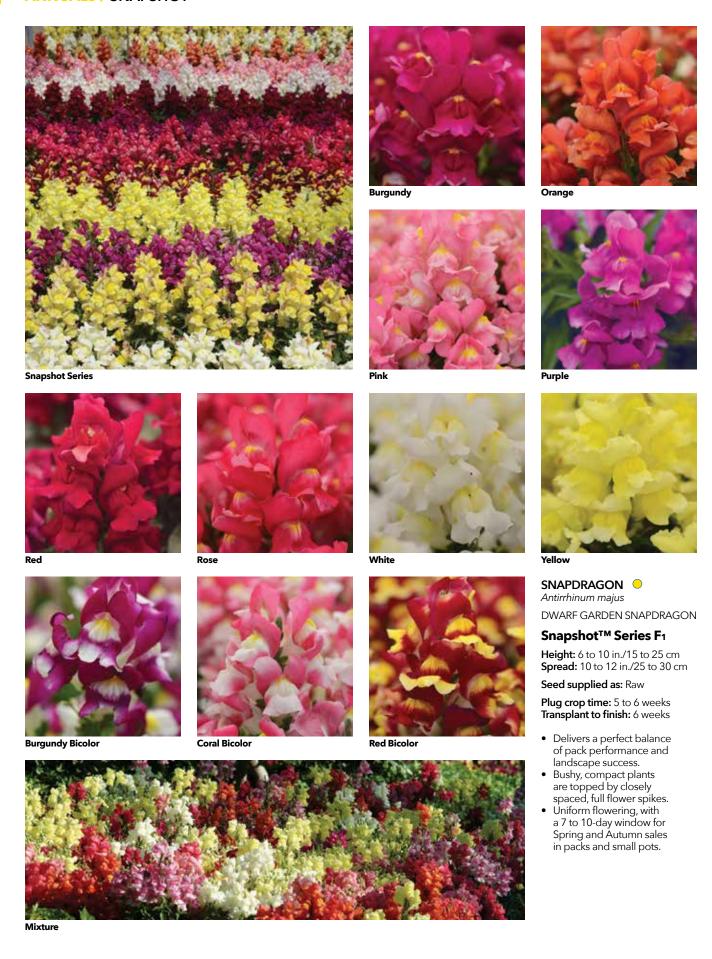
Vista Salmon



Vista White



Vista Mixture





Rose Shades All-America Selections Winner



Mixture

GARDEN/CUT FLOWER **SNAPDRAGON**

Rocket Series F1

Height: 30 to 36 in./76 to 91 cm **Spread:** 16 to 18 in./41 to 46 cm

Seed supplied as: Raw

Plug crop time: 5 to 6 weeks Transplant to finish: 13 to 16 weeks

- Vigorous, heat-tolerant plants reach a uniform height and are topped by excellentquality, closely set blooms.

 • Flowers well under long days.
- Useful as both a home garden series and as a garden cut flower.
- Group 3-4 flowering snapdragon.

CUT FLOWER SNAPDRAGON

New Centum Series, page 194.

Cool Series, page 199.

Early Potomac Series, page 196.

Maryland Series, page 195. Monaco Series, page 198. Potomac Series, page 196.

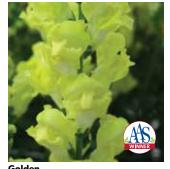


All-America Selections Winner





Rose Shades All-America Selections Winner



Golden All-America Selections Winner



Red All-America Selections Winner



White All-America Selections Winner



Hot Cakes Mixture Stock



Hot Cakes Hot Rose Stock



Hot Cakes Pink Stock



Vintage Mixture Stock

Susie White with Eye Thunbergia



Susie Orange with Eye Thunbergia



Hot Cakes Purple Stock



Hot Cakes White Stock



Susie Yellow With Eye Thunbergia



Susie Mixture Thunbergia

STOCK • Matthiola incana SELECTABLE BEDDING STOCK

Hot Cakes Series

Height: 10 to 16 in./25 to 41 cm **Spread:** 6 to 8 in./15 to 20 cm

Seed supplied as: Raw

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

- Easy-to-select, fully double plugs produce more attractive plants than comparable greyleaf, non-selectable types that can show up to 50% singles.
- Very well-branched, dwarf plants with fragrant, bright blooms deliver outstanding performance in landscapes and garden beds.

BEDDING STOCK

Vintage Mixture

Height: 15 to 20 in./38 to 51 cm **Spread:** 12 to 14 in./30 to 36 cm

Seed supplied as: Raw

Plug crop time: 4 weeks Transplant to finish: 7 to 8 weeks

- Dwarf variety blooms up to 1 week faster, with better branching than comparable varieties.
- Non-selectable Vintage produces over 55% double flowers.
- Sturdy, well-branched plants are excellent oudoor performers.
- Prefers cool growing conditions; no vernalisation needed.

STATICE See Limonium.

STIPA

See ColorGrass, page 52.

CUT FLOWER STOCK (MATTHIOLA)

Aida Series, page 188.

Column Stock, page 191.

Figaro Series, page 188.

Katz Series, page 192.

Katz Hi Double White, page 192.

Mathilda Series, page 189. Opera Series, page 190.

SUNFLOWER See Potted Plants, page 173. THUNBERGIA • Thunbergia alata

Susie[™] Series

Height:

72 to 96 in./183 to 244 cm

Seed supplied as: Raw

Vine length: 6 to 8 ft./1.8 to 2 m

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

- Distinctive flowering vine offers 3 "black-eyed" varieties and a formula mix.
- Can "pop" into flower in as little as 6 weeks.
- Excellent in hanging baskets or window boxes.
- Good for colour packet and mail order markets.





Burgundy



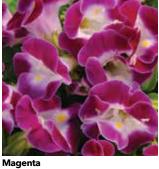


Lemon Drop





Rose





Kauai™ Series

Height: 8 in./20 cm Spread: 8 in./20 cm

Seed supplied as: Pelleted

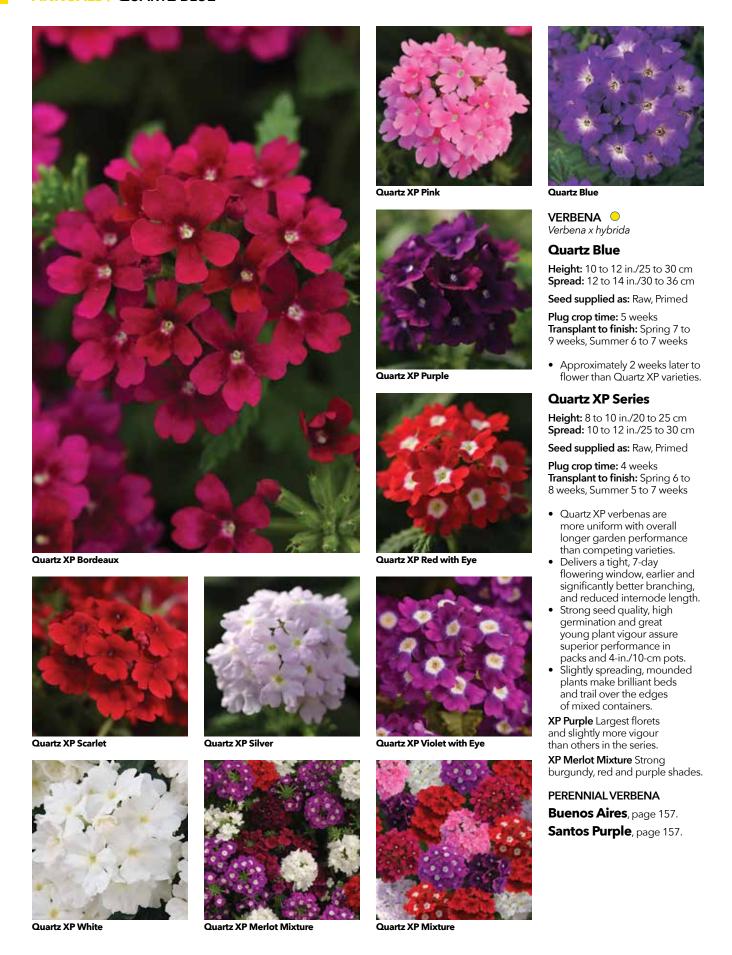
Plug crop time: 5 to 6 weeks Transplant to finish: 5 to 7 weeks

- Compact series offers the fullest complement of the most vivid colours.
- Easy to schedule with a tight, 7 to 9-day flowering window.
- Crop management is easier and more cost-effective with this compact torenia.
- Superior performance in extreme heat and humidity.
- Brings an exotic look to small gardens, mixed combos and colour bowls; also suited to indoor containers.
- Includes unique colours Lemon Drop and Magenta.





Deep Blue





XP Hot Rose US PVP 200900084

VINCA • Catharanthus roseus

TRAILING VINCA

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 vinca offering a true red.
- Mediterranean XP varieties fill in fast with terrific coverage.
- XP varieties deliver a tight, 5 to 7-day flowering window; luxurious spreading habit; larger flowers and reliable germination.
- Low water needs.

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

XP Dark Red Same deep red as Pacifica XP Dark Red. Slightly more mounded habit than others in the series.

XP Red Same true red as Pacifica XP Really Red. Slightly more mounded habit than others in the series.





XP Dark Red US PVP 200900043



XP Hot Rose US PVP 200900084





XP Red US PVP 200900081







XP Peach US PVP 200900080



XP Strawberry US PVP 200900083





XP Rose Halo



XP White US PVP 200900053



Cranberry



Robust and ready for anything Mother Nature sends!

Titan is up to 2 weeks faster to flower than openpollinated vincas, with superior branching and big 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.



Bubble Gum Mixture



Clear Mixture



Mixture



Summer Breeze Mixture

F1 UPRIGHT VINCA

Titan™ Series F₁



PRO LANDSCAPE PERFORMER

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

- Upgrade your vinca for the best germination and the most reliable supply available on the market!
- 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./10cm and 6-in./15-cm pots.

Blush Colour does not fade to white in heat and humidity, and flowers retain the large eye.

Cranberry Features a rich, velvety, dark red bloom colour with a lighter centre. Times with Really Red. Landscape height is on the tall side of the series at 16 in. (41 cm).

Really Red Same colour as Pacifica Really Red. A top-selling vinca colour and a key colour for landscapers.

Bubble Gum Mixture Blush, Icy Pink, Rose.

Clear Mixture Burgundy, Dark Red, Lilac, Punch, Pure White.

Summer Breeze Mixture Lavender Blue Halo, Lilac, Pure White.





Mixture US 9,451,748; US 9,451,749; US 9,451,751; US 9,451,752



Apricot and Burgundy



Orchid US 9,451,750





Burgundy US 9,451,748



Lilac US 9,451,752



Magenta US PAF



Pure White

F1 UPRIGHT VINCA continued

Valiant™ Series F₁



PRO LANDSCAPE PERFORMER

Height: 14 to 20 in./36 to 51 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

- The Valiant series is selected in Florida to have field resistance to aerial Phytophthora.
- Makes well-branched, market-ready plants with large flowers that show off high-impact colour at point of sale and in the landscape
- of sale and in the landscape.

 Superior hybrid vigour allows Valiant vinca landscapes to better survive environmental stresses such as sun, heat, drought, salt and cool/damp conditions.
- Low maintenance with good landscape longevity.

Orchid Slightly less vigorous than others in the series.

Mixture Apricot, Burgundy, Lilac, Punch, Pure White.

Punch US 9,451,751

UPRIGHT VINCA

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 wellbranched plants display one-of-a-kind flowers.
- Tight flowering window with an easy-to-grow, uniform, upright habit across all colours.
- Outstanding in hot and sunny conditions.

NOTE: Tattoo blooms display the best colour contrast under warm conditions with moderate light; colours lighten with increased temperatures and light. Grown under cooler conditions and lower light, colours appear darker overall with less contrast and more purple colouration being expressed.

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

Blueberry A unique colour perfect for combining with other plants to create heat-loving red, white and blue mixes.

Orange Features a medium orange colour with a consistent dark centre. Petal colour lightens in high light and temperatures. Similar size and timing to Tattoo Black Cherry.

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

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

Tangerine Dark purple swirls airbrushed onto tangerine-colour blooms with a bright eye.

American Pie Mixture Includes Blueberry, plus two Pacifica XP varieties, Really Red and White.



Black Cherry US PVP 201800427 Medal of Excellence Industry's Choice

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 dark purple. Adding these novelties 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!



Blueberry US PVP 202100168





Papaya US PVP 201800424 Medal of Excellence Industry's Choice



Tangerine US PVP 201800425 Medal of Excellence Industry's Choice



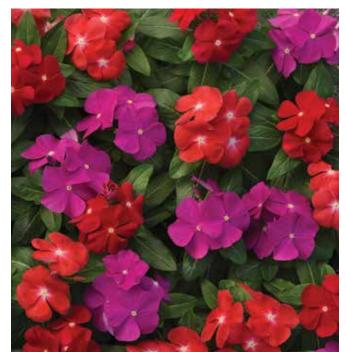
Raspberry US PVP 201800426 Medal of Excellence Industry's Choice



American Pie Mixture US PVP 202100168; US PVP 200600190



Pacifica XP Series



XP Bold Mixture



XP Mixture

UPRIGHT VINCA continued

Pacifica XP Series



PRO LANDSCAPE PERFORMER

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

- Tight, 5 to 7-day flowering window and uniform, upright habit across all colours.

 XP genetics assure precise, programmable, predictable growing. Outstanding in hot, dry and sunny conditions.

 Very floriferous and well-branched plants show off bright flowers with an overlapping, fully rounded form that won't show gaps in hot temperatures.

XP Bold Mixture Deep Orchid, Orange, Really Red.





XP Orange Jump Up Improved

Send the best-looking violas to retail

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

Sorbet® XP Series F1



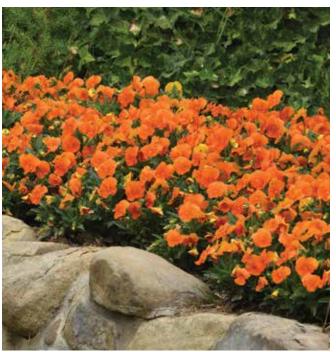
PRO LANDSCAPE PERFORMER

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

Seed supplied as: Raw, Primed

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

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



XP Deep Orange

XP Deep Orange Deepest orange-flowered viola on the market; uniform, controlled plants for ease of production. Superior to competing varieties in colour, timing, uniformity.

XP Delft Blue

Blue and white bicolour. Fleuroselect Gold Medal.

XP Morpho Bicolour pattern changes with environment; more blue under cool Spring conditions.

XP Neptune

Beautiful cream with blue picotee.

New XP Orange Jump Up Improved Upgraded for its habit, this improved variety has slightly more vigour to match the rest of the series, with XP timing.

XP Pink Wing

Highly sought-after pink cap/ white face colour pattern.

XP Raspberry

Rose-pink and white shades. XP Red Excellent red colour

with staying power; times on the late side of the series.

XP Rose Blotch Rose with a defined blotch. Times on the early side of the series.

XP True Blue Best true blue V. cornuta. Less stretch, better plant structure and truer blue colour than competing varieties.

XP Yellow Burgundy Jump Up Yellow face with burgundy cap.

XP Yellow Pink Jump Up Lavender-pink cap fades with age and heat or PGR stress,

similar to other pink cap types. XP YTT Opens white, then changes to azure blue.

XP Autumn Select Mixture

Bold seasonal colours selected for optimal timing and habit uniformity in Autumn.

XP Blueberry Sundae Mixture XP True Blue, XP Delft Blue, XP White.

XP Citrus Mixture XP Deep Orange, XP Yellow, XP White.

XP Harvest Mixture XP Deep Orange, XP Purple, XP Yellow.

XP Jump Up Mixture XP Denim Jump Up, XP Lemon Jump Up, original XP Orange Jump Up, XP White Jump Up, XP Yellow Jump Up.

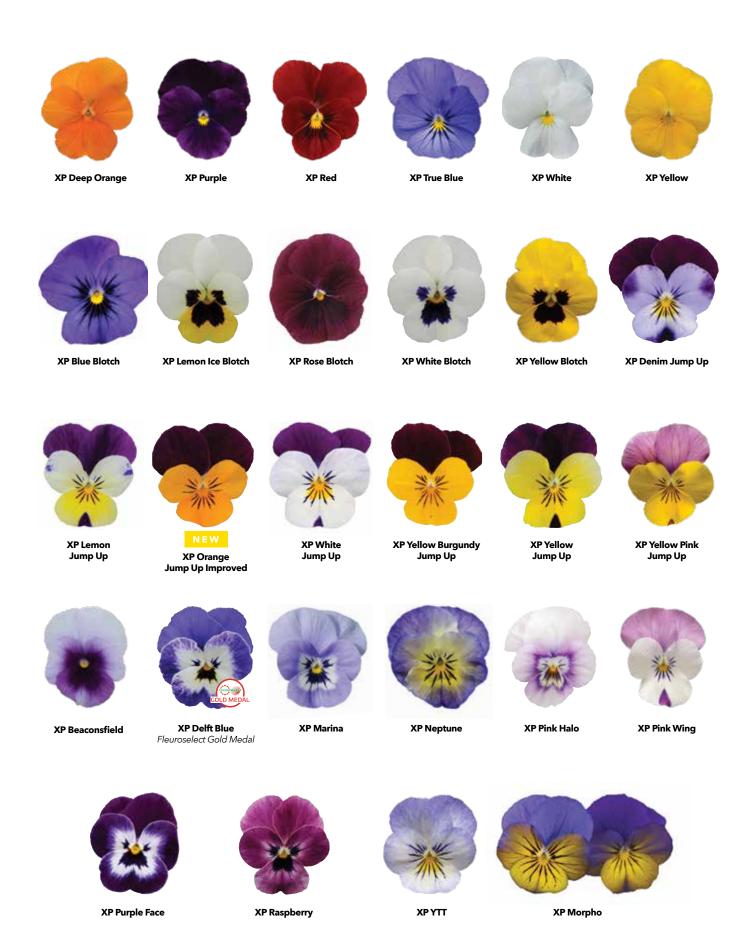
XP Spring Select Mixture Selected for optimal timing and habit uniformity in Spring.



XP Rose Blotch



XP Delft Blue Fleuroselect Gold Medal





XP Autumn Select Mixture



XP Blueberry Sundae Mixture



XP Citrus Mixture



XP Harvest Mixture





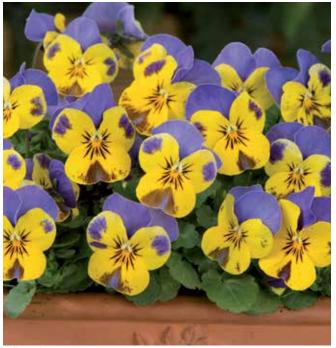
XP Jump Up Mixture

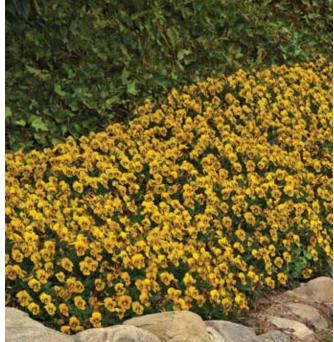


XP Mixture



XP Spring Select Mixture





Yellow Blue Jump Up

Tiger Eye



Black Delight



Carmine Rose



Fire



Honeybee



Icy Blue



Lavender Pink



Lemon Chiffon



Midnight Glow

VIOLA continued

Sorbet® Series F1

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

Seed supplied as: Raw, Primed

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

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

Fire Colour pattern varies by environment.

Honeybee Yellow/copper-orange bicolour; bright and sunny for Spring production. 30% more vigorous and longer peduncles than other Sorbet varieties.

Tiger Eye Unusual striped pattern is excellent for Fall sales. Habit and timing match Sorbet XP.



Orchid Rose Beacon



Tiger Eye



Yellow Blue Jump Up

Quicktime™ Series F1

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

Seed supplied as: Raw, Primed

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

- Early-blooming, freeflowering plants provide bright colour in early Spring and Autumn gardens.
- Reduced daylength sensitivity and free-flowering selection criteria make Quicktime viola the best option for saving growing time in cold-grown, overwinterproduced viola crops.
- Compact plants are covered in 1 to 1.5-in./3 to 4-cm blooms.
- A well-branched, fullbodied plant that fills out the pot or pack.
- Features "Hyperflora" flowering power, so it has multiple blooms at first flower and continues with fast secondary and tertiary flowering.

Frizzle Sizzle Mini Series F1

Height: 6 to 8 in./15 to 20 cm **Spread:** 6 to 8 in./15 to 20 cm Flower size: 1.25 to 1.5 in./3 to 4 cm

Seed supplied as: Raw, Primed

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

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

Purple Shades Frilled purple flower with an attractive dark eye.

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

Yellow Frilled yellow flower with an attractive dark eye.

Mixture Yellow, Purple Shades and Tapestry.

Shorter production time = cost savings

Flowering 2 weeks faster than comparable series, Quicktime allows you to sow your viola crop 2 weeks later and still ship on time in Spring. With reduced labour and less heat needed in the greenhouse, the cost savings are quick to add up!



Quicktime Yellow Blue Jump Up



Quicktime Blue



Frizzle Sizzle Mini Mixture



Quicktime **Blue Purple Jump Up**



Quicktime



Frizzle Sizzle Mini **Purple Shades**



Quicktime Lemon Jump Up



Quicktime Yellow Blotch



Frizzle Sizzle Mini Tapestry



Quicktime Mickey



Quicktime Yellow Violet Jump Up



Frizzle Sizzle Mini Yellow



Bonfire Mixture



Raspberry Lemonade Mixture

ZINNIA O Zinnia marylandica

Zahara® Series



PRO LANDSCAPE PERFORMER

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

Seed supplied as: Raw, Coated

Plug crop time: 3 weeks **Transplant to finish:** Spring 8 to 9 weeks, Summer 5 to 6 weeks

- 20% larger flowers than competing varieties means more colour on the bench than any other diseaseresistant zinnia...more retail impact...flower power that lasts in the landscape.
 Less care needed at retail
- Less care needed at retail for faster turns, less dump and better sell-through.
- Outstanding performer in heat, drought.

Fire Bright orange-red hue intensifies outdoors.

Raspberry Matches Fire for habit.

Red One of the largest flowers in the series. Colour varies by environment.

Starlight Rose Colour pattern varies by environment; best colour from high light, good fertilisation and cool nights. All-America Selections Winner, Fleuroselect Novelty.

Bonfire Mixture Red, Fire, Yellow. **Raspberry Lemonade Mixture** Raspberry, Yellow, Starlight Rose.





Cherry US PVP 201600029



Fire US PVP 201000090



Raspberry US PVP 201500215



Red US PVP 201600030



Starlight Rose All-America Selections Winner, Fleuroselect Novelty



Sunburst Fleuroselect Gold Medal, Fleuroselect Novelty



White US PVP 201400297



Yellow US PVP 201500214



Bonfire Mixture



Raspberry Lemonade Mixture



Raspberry Ripple US PVP 201800173



Bright Orange Fleuroselect Novelty



Cherry US PVP 201600027 *All-America* Selections Winner, Fleuroselect Novelty



Salmon US PVP 201900097



Raspberry Ripple US PVP 201800173

White Fleuroselect Novelty



Yellow US PVP 202000360



Fire US PVP 201600032 All-America Selections Winner, Fleuroselect Gold Medal, Fleuroselect Novelty



Brilliant Mixture

ZINNIA continued

Double Zahara™ Series



PRO LANDSCAPE PERFORMER

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

- Fully double, diseaseresistant zinnia series makes a huge colour show!
- Double Zahara blooms are fully double and are larger than the competition.
- 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.

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

Cherry Slightly less double than others in the series. *All-America Selections Winner*.

Fire

All-America Selections Winner.

Raspberry Ripple Colour can vary under different environmental conditions. Cooler temperatures accentuate the rose; as flowers age and under more heat, the white comes out more.

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

White Outstanding white has larger and more double flowers than the competition. Up to 2% of plants can show pink blushing in the flowers.

Yellow Same colour as Zahara Yellow, but appears more vibrant due to double shape and high petal count.

Brilliant Mixture Yellow, Cherry, Fire.

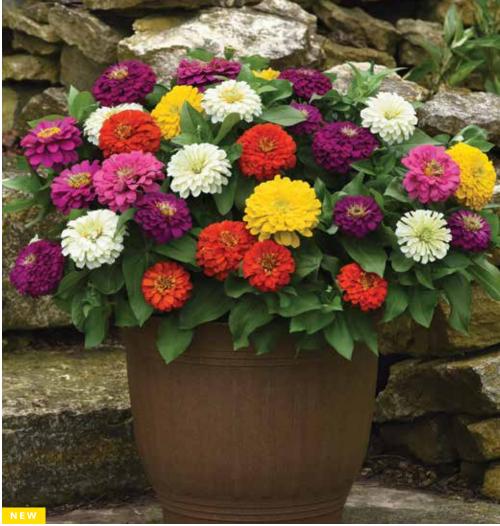
Mixture Cherry, Salmon, Yellow, Fire, White.



Mixture



Yellow US PVP 202000360



Mixture Improved



Orange



Pink



White





Fuchsia

ZINNIA 🔵 Zinnia elegans (syn. Zinnia violaceae)

Zesty™ Series

Height: 18 to 24 in./46 to 61 cm **Spread:** 18 to 24 in./46 to 61 cm Seed supplied as: Coated

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

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

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

Orange Vibrant orange colour. Similar in height to Purple.

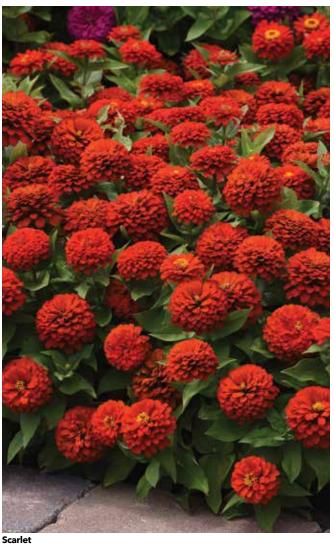
Pink A darker pink shade with more purple/rose tones than the competition.

Purple Stunning and unique deep purple colour.

Scarlet The most compact variety in the series.

White A true white colour. Yellow In the middle of the series for height. Can be less double than the rest of the colours in low light conditions.

New Mixture Improved Includes Fuchsia, Pink, Purple, Scarlet, White, Yellow and now Orange.







Orange and Yellow



Fuchsia





REPEAT PERFORMANCE

Kieft Seed is a brand known globally for its **professional-quality** perennials from seed, with a full lineup of unique genetic varieties that growers can count on for **reliability** and **easy programming.** But don't take our word for it, prove it for yourself by growing some of our most popular perennials, like Earlybird™ Aquilegia and Artisan™ Collection Echinacea. Now you can get them ready for retail on your time, using the **First-Year-Flowering Tool** at **panamseed.com.**



AQUILEGIA ••• Aquilegia x hybrida

Earlybird™ Series F₁

Height: 9 to 11 in./23 to 28 cm **Spread:** 8 to 10 in./20 to 25 cm Flower size: 2 to 3 in./5 to 8 cm

USDA Hardiness Zones: 3a to 9b (-40 to 25°F/-40 to -4°C minimum temperatures)

A First-Year-Flowering Perennial.

Seed supplied as: Raw

Plug crop time: 6 to 9 weeks Transplant to finish: 12 to 16 weeks (20 to 30 weeks overwintered)

- Strong colours and colour combinations spark new interest in Aquilegia!
- Series has a low cold requirement and short juvenility for growing in warm Winter climates.
- Features a controlled habit, with relatively short stems on well-mounded plants.
- A flowering window of 10 to 12 days, plus a short harvest window, make it an excellent choice for early-Spring programs.
- Purple White, Purple Yellow and Red Yellow are unique colours in F1 Aquilegia.

Blue White Features a slightly more slender plant habit compared to the rest of the series.

Purple White Flowers 2 to 3 days earlier than the rest of the series.

Purple Yellow Flowers 5 to 7 days later than the series average, and is 2 in. (5 cm) taller.





Winky Double Red-White



Winky Single Purple-White



Winky Single Red-White



Winky Double Rose-White



Winky Single Blue-White



Winky Single White



Winky Single Rose-Rose

AQUILEGIA (COLUMBINE)

Aquilegia vulgaris

Winky Double Series

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

USDA Hardiness Zones: 3a to 8b (-40 to 15°F/-40 to -9°C minimum temperatures)

Seed supplied as: Raw

Plug crop time: 7 to 8 weeks Transplant to finish: 26 to 40 weeks

- Unique double, upward-facing flowers in one-of-a-kind colour patterns offer "something
- different" for big retail appeal. Excellent uniformity during culture and harvest.
- Full and vigorous habit. Long shelf life.
- Versatile uses.

Winky Single Series

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

USDA Hardiness Zones: 3a to 8b (-40 to 15°F/-40 to -9°C minimum temperatures)

Seed supplied as: Raw

Plug crop time: 7 to 8 weeks Transplant to finish: 26 to 40 weeks

- Winky's unique colours and abundance of upright-facing flowers make for strong sales appeal - the most floriferous Aquilegia at retail!
- Plants ship and retail well.
- Uniform in habit and height, with strong stems and vigorous, bushy habit.

 • Useful for containers
- and landscapes.
- Flowers Spring to early Summer, with recommended sowing time June to July.



Blue And White

Swan Series F₁

Height: 20 to 24 in./51 to 61 cm **Spread:** 12 to 14 in./30 to 36 cm

USDA Hardiness Zones: 3a to 9b (-40 to 25°F/-40 to -4°C minimum temperatures) A First-Year-Flowering Perennial.

Seed supplied as: Raw

Plug crop time: 6 to 9 weeks Transplant to finish: 22 to 28 weeks

- The true garden Aquilegia! Abundant large blooms in vibrant colours make this an excellent home garden cut flower.
- Early and economical to grow can be flowered in Spring from an Autumn sowing when grown in a cool greenhouse (night temperatures lower than 60°F/16°C) with no special vernalisation treatment.
- Multi-stemmed plants are well-matched for uniform size, exceptional garden performance and large blooms. Easy to force into flower
- in containers.
- Very high bud count for more flowers per plant.

Pink And Yellow Slightly earlier than other Swan colours, flowering 2 to 3 weeks faster.



Burgundy And White Royal Horticultural Society Award of Garden Merit



Lavender



Pink And Yellow



Red And White



Violet And White



Mixture



White



Yellow Royal Horticultural Society Award of Garden Merit



Ballerina Lilac Armeria



Bellissima Mixture Bellis



Bellissima Red Bellis



Bellissima Rose Bellis



Bellissima White Bellis





Gold Rush Aurinia



Rapido Blue Campanula



ARMERIA •• Armeria pseudarmeria

Ballerina Series

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

USDA Hardiness Zones: 7a to 9b (0 to 25°F/-18 to -4°C minimum temperatures)

A First-Year-Flowering Perennial.

Seed supplied as: Raw

Plug crop time: 5 to 6 weeks Transplant to finish: 12 to 15 weeks

- High-quality, programmable perennial fits right into your early-season program.
- Compact and uniform plants produce cushion-shaped, grassy foliage and long, strong stems topped with globe-shaped blooms.

AURINIA • Aurinia saxatile

Gold Rush

Height: 5 to 8 in./13 to 20 cm **Spread:** 5 to 8 in./13 to 20 cm Flower size: 0.5 to 3 in./1 to 8 cm

USDA Hardiness Zones: 3a to 9a (-40 to 20°F/-40 to -7°C minimum temperatures)

Seed supplied as: Raw

Plug crop time: 6 to 7 weeks Transplant to finish: 26 to 32 weeks

- Shorter-stemmed Aurinia features a more uniform plant habit and earlier flowering than the competition.
- Evergreen early-Spring flowering perennial forms neat rosettes.

BELLIS • Bellis perennis

Bellissima™ Series

Height: 6 to 10 in./15 to 25 cm **Spread:** 5 to 8 in./13 to 20 cm

USDA Hardiness Zones: 4a to 7b (-30 to 5°F/-34 to -15°C minimum temperatures)

A First-Year-Flowering Perennial.

Seed supplied as: Pelleted

Plug crop time: 5 weeks Transplant to finish: 8 to 14 weeks

- Robust, early-blooming plants are strong landscape performers in cool climates.
- . Needs no vernalisation to flower.
- Displays an abundance of large, fully double flowers.

CAMPANULA • Campanula carpatica

Rapido Series F1

Height: 5 to 7 in./13 to 18 cm Spread: 5 to 8 in./13 to 20 cm

USDA Hardiness Zones: 3a to 9b (-40 to 25°F/-40 to -4°C minimum temperatures)

A First-Year-Flowering Perennial.

Seed supplied as: Pelleted

Plug crop time: 7 to 10 weeks Transplant to finish: 9 to 12 weeks

- Earliest C. carpatica up to 4 weeks earlier than other varieties.
- Delivers good young plant and finished plant vigour, while maintaining compact habit.
- Very short harvest window.
- Showy Spring perennial is ideal for high-volume bench run potted plant programs for 4-in./10-cm pots or gallons.

CAMPANULA Also see page 161.

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Double the Sun Fleuroselect Novelty

COREOPSIS • Coreopsis grandiflora

Double the Sun

Height: 12 to 14 in./30 to 36 cm **Spread:** 12 to 14 in./30 to 36 cm Flower size: 2 to 3 in./5 to 8 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 10 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 Sunfire.
- Great controlled habit with strong flowering.
- Ideal for quart and 1-gallon production in Spring and Summer with 13-hour critical daylength.

Early Sunrise

Height: 24 in./61 cm Spread: 22 to 24 in./56 to 61 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: 11 to 13 weeks

- Our most vigorous Coreopsis. Produces golden-yellow,
- semi-double flowers constantly all Summer.
- Can also be marketed as an annual in premium packs.
- For 2-gallon and larger containers in Summer, Early Sunrise is the optimal choice.



Early Sunrise All-America Selections Winner, Fleuroselect Gold Medal



Sunfire

Sunfire

Height: 24 in./61 cm **Spread:** 22 to 24 in./56 to 61 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: 10 to 12 weeks

- Naturally compact in a pack or 4-in./10-cm pot, requiring less PGRs, or no PGRs in certain conditions.
- Can also be marketed as an annual in premium packs.
- Golden yellow flower with deep red blotch.



SunKiss US PVP 201700014, EU PBR 46544

SunKiss

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

- A colour breakthrough in seed C. grandiflora: SunKiss is the brightest yellow with large blotch available.
- Larger, deep red blotch and larger flowers than Sunfire.
- Controlled habit fewer PGRs needed, or no PGRs in certain conditions.
- Well-branched and floriferous.
- Excellent heat-tolerant plant for novice and expert gardeners alike - reliable, easy to grow and the colour blends well with almost everything.



Guardian Blue



Guardian Lavender



Guardian White



Guardian Mixture





Diamonds Blue



Blue Donna

DELPHINIUM • Delphinium elatum

Guardian Series F1

Height: 30 to 39 in./76 to 99 cm **Spread:** 10 to 12 in./25 to 30 cm

USDA Hardiness Zones: 4a to 7b (-30 to 5°F/-34 to -15°C minimum temperatures)

A First-Year-Flowering Perennial.

Seed supplied as: Raw

Plug crop time: 6 to 7 weeks Transplant to finish: 16 weeks

- Breeding breakthrough makes it easy to program your crop to meet shipping dates.
- Very uniform blooming within each variety, especially under short days.
- Works well as a tall landscape/ perennial variety, as a commercial cut flower, and in potted plant programs.
- Up to 6 weeks faster from transplant to bloom than O.P. types for more turns per sq. ft./ sq. m of greenhouse space.
- Also suitable as a greenhouse cut flower or for garden cut flower production.
- As a greenhouse cut flower, Guardian can be grown under the same conditions as dianthus and snapdragons.
- Produces excellent stem quality for good cut flower shipability.

Dasante Blue F1

Height: 28 to 34 in./71 to 86 cm **Spread:** 10 to 12 in./25 to 30 cm

USDA Hardiness Zones: 4a to 7b (-30 to 5°F/-34 to -15°C minimum temperatures)

A First-Year-Flowering Perennial.

Seed supplied as: Raw

Plug crop time: 6 to 7 weeks Transplant to finish: 11 to 13 weeks

- Dasante Blue shows off vibrant true blue flowers with light purple accents and white bees.
- The grower-friendly, uniform plants are more compact, more responsive to PGRs and naturally earlier than other D. elatum types.
- Easy-care, cool-season crop can be grown with little or no heat for energy savings.
- Plants ship well, with more plants per rack in flower than any other delphinium for tremendous retail impact.
- Best for gallons with 3 plants per pot.
- Suitable for greenhouse, field or garden cut flower production.

DELPHINIUM •



Delphinium grandiflorum

Diamonds Blue F1

Height: 16 to 24 in./41 to 61 cm **Spread:** 10 to 12 in./25 to 30 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: Raw

Plug crop time: 6 to 7 weeks Transplant to finish: 10 to 12 weeks

The first F1 spurless Delphinium from seed eliminates the need for tissue culture inputs. Supplied with up to 25% higher germination than O.P. types for more efficient young plant production.

DELPHINIUM •



Delphinium x belladonna

Blue Donna

Height: 32 to 40 in./81 to 102 cm **Spread:** 8 to 10 in./20 to 25 cm

USDA Hardiness Zones: 5a to 9b (-20 to 25°F/-29 to -4°C minimum temperatures)

A First-Year-Flowering Perennial.

Seed supplied as: Raw

Plug crop time: 5 to 6 weeks Transplant to finish: 12 to 16 weeks

True blue Delphinium has improved uniformity and colour, increased productivity and more stems per sq. ft./sq. m.

DELPHINIUM

Also see Cut Flowers.

Dasante Blue

Showy for early sales

Be fast to market with this attractive Digitalis in an exciting array of colours customers will love! Dalmatian offers uniformity, a great habit and early flowering, making it an ideal premium end cap product in larger containers. Get the series that's easier for shoppers to spot!



Crème



Rose



Dalmatian Series F1

Height: 16 to 20 in./41 to 51 cm **Spread:** 12 to 14 in./30 to 36 cm

USDA Hardiness Zones: 5a to 9b (-20 to 25°F/-29 to -4°C minimum temperatures)

A First-Year-Flowering Perennial.

Seed supplied as: Pelleted

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

- Uniform in height and early flowering.
- Well-branched with excellent habit and compact foliage.
- Striking colours on good-quality spikes.
- Suitable for 1 and 2 gallons and up.
- Premium end cap product.



Purple Fleuroselect Novelty





Peach



Mixture



Rockin' Series

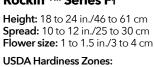






Dianthus x barbatus interspecific Rockin¹™ Series F₁

DIANTHUS ••



5a to 8b (-20 to 15°F/-29 to -9°C minimum temperatures) A First-Year-Flowering Perennial.

Seed supplied as: Pelleted Plug crop time: 4 to 6 weeks Transplant to finish: 8 to 9 weeks

• The Rockin' series opens the door to premium product sales in perennial quart and gallon programs for mid-Spring and the Autumn decorating season.

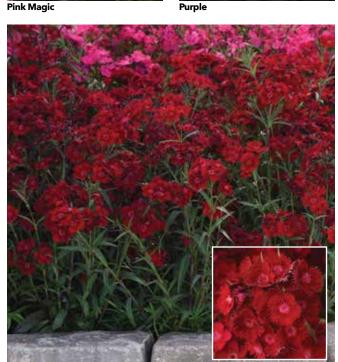
 Lacy, slightly scented flowers top full and long-lasting plants - this one delivers lots of plant for the money, and that's sure to satisfy shoppers.

 Reliably overwinters to USDA Zone 5 (-20°F/-29°C minimum temperatures) to assure multi-year performance.

The best colour intensity occurs in the high light and cool temperatures of outdoor production.

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

ANNUAL DIANTHUS See page 44. **CUT FLOWER DIANTHUS** See page 182.



Rockin' the garden! This dynamite

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

Echinacea x hybrida

Artisan™ Collection F₁



Height: 16 to 28 in./41 to 71 cm **Spread:** 10 to 25 in./25 to 64 cm **Flower size:** 3 to 4 in./8 to 10 cm

USDA Hardiness Zones: 4a to 10b (-30 to 35°F/-34 to 2°C minimum temperatures)

A First-Year-Flowering Perennial.

Seed supplied as: Amplified

Plug crop time: 5 to 6 weeks Transplant to finish: 13 to 17 weeks

- The first F1 hybrid
 Echinacea individual colour
 collection from seed!
- Offers consistency of plant structure for a uniform, highly branched, full plant.
- Features uniform flowering, so all plants are ready to sell at the same time.
- Seed input provides flexibility for production and labour management.
- Amplified seed form is enhanced through a proprietary process, resulting in faster and more uniform germination compared to non-enhanced seed.

Red Ombre

Flowers open red and soften in colour as they mature.

Soft Orange Flowers open deep orange and soften as they mature.

Yellow Ombre Features the same excellent branching as Red Ombre and Soft Orange, with a more upright habit and the foliage is a lighter mid-green. About 2 to 4 in. (5 to 10 cm) taller than the rest of the collection, and a small percentage of the plants are 6 to 8 in. (15 to 20 cm) taller, with the same plant habit and an intense golden yellow colour.

All-America Selections Regional Award Winner, Southeast and West/Northwest!

The first F1 hybrid seed Echinacea collection is just better!

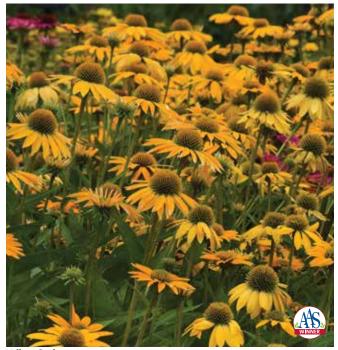
The Artisan™ Collection of seed Echinacea offers consistency of plant structure for uniform and highly branched, full plants. The series also provides uniformity of flowering, so all plants are ready to sell at the same time. Plus, the benefit of a seed input provides flexibility for production, so it fits better in your schedule.



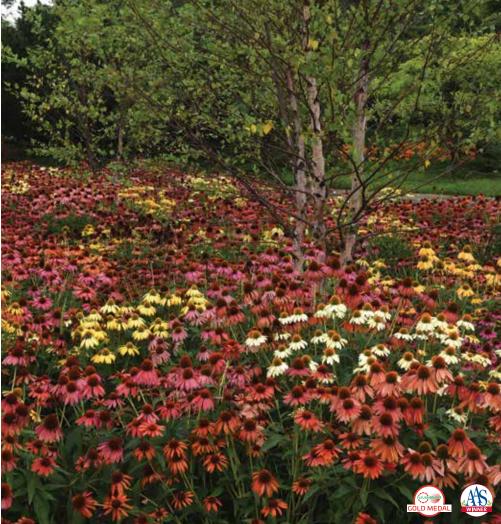
Red Ombre US 7,982,110 Medal of Excellence Industry's Choice



Soft Orange US 7,982,110 Medal of Excellence Industry's Choice



Yellow Ombre US 7,982,110
All-America Selections Winner, Medal of Excellence Industry's Choice,



Cheyenne Spirit US 7,982,110 All-America Selections Winner, Fleuroselect Gold Medal, Medal of Excellence Best Performing Variety



Cheyenne Spirit

ECHINACEA Chinacea purpurea

Cheyenne Spirit



Height: 18 to 24 in./46 to 61 cm first year; 22 to 30 in./56 to 76 cm second year

Spread: 10 to 16 in./25 to 41 cm first year; 14 to 20 in./36 to 51 cm second year

USDA Hardiness Zones: 4a to 10b (-30 to 35°F/-34 to 2°C minimum temperatures)

A First-Year-Flowering Perennial.

Seed supplied as: Raw

Plug crop time: 5 to 6 weeks Transplant to finish: 13 to 17 weeks

- Plants are shorter, better branched and fuller than many tissue-culture varieties. This makes it possible to grow without PGRs and offers the ability to ship on tightly spaced racks.
- Flexible scheduling is possible to meet a range of market dates.
- Fits a broad range of sizes from premium packs to gallons.
 Packs are suitable for incolour or green plant sales for landscape or prairie-to-go uses.
- Broad and consistent palette includes shades of red, orange, purple, scarlet, cream, vellow and white.
- cream, yellow and white.
 Long retail shelf life, heat and drought tolerance, and excellent Winter hardiness.

More colours! More flowers! More sales!

Award-winning Cheyenne Spirit gives you the more economical way to bring these highdemand colours to market, compared to traditional tissueculture material. This incredibly vibrant segregating mix delivers maximum flower power at retail, and continues to shine in landscapes with its superior performance.

PowWow® Series



Height: 16 to 20 in./40 to 50 cm first year; 22 to 24 in./56 to 61 cm second year **Spread:** 12 to 16 in./30 to 41 cm

USDA Hardiness Zones: 4a to 10b (-30 to 35°F/-34 to 2°C minimum temperatures)

A First-Year-Flowering Perennial.

Seed supplied as: Raw

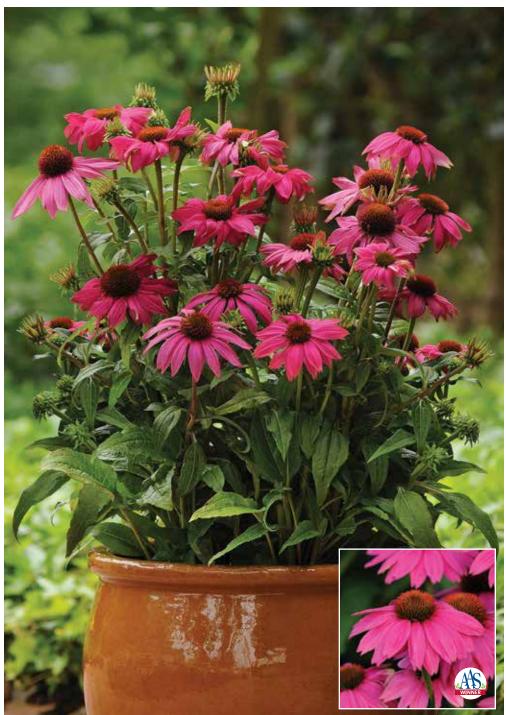
Plug crop time: 5 to 6 weeks Transplant to finish: 13 to 17 weeks

- PowWow puts more flowers on every plant than any other seed Echinacea, for a terrific, non-fading colour show!
- Colour-packed pair is wellmatched for habit and timing.
- Fuller, shorter and better branched than many tissue culture Echinacea can be grown without growth regulators and shipped tight on racks.

 • Programmable to meet
- market dates.
- Versatile series works well from gallon containers to premium packs.
- · Packs are suitable for landscaper in-colour or green plant sales, and for prairie-to-go programs.

 • Very drought-tolerant,
- easy-care plants stay tidy at retail with long holdability.

Wild Berry Unique intense rose flowers with dark rose center. Produces up to 2% taller plants.



Wild Berry US 7,982,110; EU PBR 35233 All-America Selections Winner





Red



Bright Bicolor





Fast, non-fading

dry conditions, and they put out intense, non-fading colour all season long. Create more colourful landscapes and mixed containers with Mesa.

colour that won't quit The first seed F1 Gaillardia fills quart and gallon containers quickly with bold, brilliant colour. These plants hold up under



Yellow All-America Selections Winner, Fleuroselect Gold Medal

GAILLARDIA O



Gaillardia x grandiflora, Gaillardia aristata x Gaillardia pulchella

Mesa™ Series F₁

Height: 14 to 16 in./36 to 41 cm **Spread:** 20 to 22 in./51 to 56 cm

USDA Hardiness Zones: 5a to 10b (-20 to 35°F/-29 to 2°C minimum temperatures)

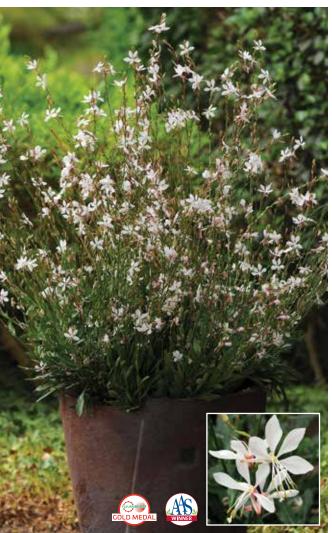
A First-Year-Flowering Perennial.

Seed supplied as: Raw

Plug crop time: 5 to 6 weeks Transplant to finish: 11 to 13 weeks

- The first F1 Gaillardia from seed puts out lots of fast colour on sturdy plants.
- Strong, early-flowering, well-branched plants fill quart and gallon containers quickly while maintaining the controlled height.
- Compared with other seed Gaillardia, Mesa varieties are more uniform in habit and flowering time, for easier scheduling and shipping.
- Very drought tolerant once established, with intense, non-fading colour all season.
- Upright, well-balanced plants perform well in landscapes and mixed containers.

Red Surpasses the competition in several areas: more consistent, redder colour; more uniform vigour/habit; 1 week earlier flowering. Flowers uniformly at 10 hours. Within the series, in Spring production, Red is 14 to 20 days earlier to flower than Bright Bicolor and Yellow. In Summer production, it is 1 week earlier than Bright Bicolor and 14 to 20 days earlier than Yellow.



Sparkle White Gaura All-America Selections Winner, Fleuroselect Gold Medal



Palace Purple Heuchera



Melting Fire Heuchera EU PBR 20557 Fleuroselect Novelty

GAURA • Gaura lindheimeri

Sparkle White



PRO LANDSCAPE PERFORMER

Height: 12 to 24 in./30 to 61 cm Spread: 12 to 20 in./30 to 51 cm

USDA Hardiness Zones: 5b to 9a (-15 to 20°F/-26 to -7°C minimum temperatures)

A First-Year-Flowering Perennial.

Seed supplied as: Raw

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

- Early, naturally compact and long-flowering variety is easy to grow, with no pinching necessary.
- Significant timing improvements over older seed Gaura genetics -2 to 3 weeks faster. At 12 to 13-week crop time, it compares with vegetative varieties.
- Can be finished in 4 to 6-in./10 to 15-cm pots to save labour and bench time.
- Durable, drought-tolerant variety is compact enough for containers and floriferous enough to use as a bedding plant.

HEUCHERA •• Heuchera micrantha

Palace Purple

Foliage height: 10 in./25 cm Flower height: 20 in./51 cm Spread: 14 to 16 in./36 to 41 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: 6 to 8 weeks Transplant to finish: 10 to 12 weeks

• Compact variety has highly attractive foliage of strong bronze-purple, with small white flowers appearing later.

HEUCHERA •• Heuchera x hybrida

Melting Fire

Foliage height: 8 in./20 cm Flower height: 18 in./46 cm **Spread:** 12 to 14 in./30 to 36 cm

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

Seed supplied as: Pelleted

Plug crop time: 8 to 10 weeks Transplant to finish: 12 to 16 weeks

- The only seed strain to deliver a strong-coloured, red-purple, curled-leaf Heuchera.
- Seedlings germinate over a longer period, and deliver the same quality plants.
- Strong garden performer has good weather tolerance.
- Excellent-quality plants.
- True tissue culture alternative.



Luna Red Hibiscus



Whiteout Iberis Fleuroselect Novelty



Luna Mixture Hibiscus



Luna Pink Swirl Hibiscus



Luna White Hibiscus



Luna™ Series F₁

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

USDA Hardiness Zones: 5a to 9b (-20 to 25°F/-29 to -4°C minimum temperatures)

A First-Year-Flowering Perennial.

Seed supplied as: Raw

Plug crop time: 3 to 4 weeks Transplant to finish: 10 to 13 weeks

- Produces big, bushy, well-branched plants without pinching.
- Numerous 6 to 8-in./ 15 to 20-cm flowers.
- Ideal for large containers or in perennial gardens.
- Very responsive to PGRs.
 Higher germination than other seed varieties.



Luna Rose Hibiscus



Whiteout Iberis Fleuroselect Novelty

IBERIS Olderis sempervirens

Whiteout F1

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

USDA Hardiness Zones: 3a to 8b (-40 to 15°F/-40 to -9°C minimum temperatures)

Seed supplied as: Raw

Plug crop time: 3 to 4 weeks Transplant to finish: 26 to 36 weeks; sow May to mid-August, finish March to May

- Delivers more uniform flowering and plant habit than other seed varieties.
- Improved branching and centre fill provides a more attractive finished plant.
- No pinching needed, for less labour and plant loss.



LAVANDULA • Lavandula angustifolia

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 strongstemmed 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.



Ellagance Snow

Ellagance Series

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

USDA Hardiness Zones: 5b to 8b (-15 to 15°F/-26 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)

- Ellagance stands out from other seed and vegetative lavenders for its excellent uniformity, colour range, earliness and spike quality.
- Outstanding branching fills pots quickly and finishes with large, dense flower spikes and very strong stems.
- Spreading and upright plants have rich grey-green foliage.
- Winter hardy, cold tolerant and durable performance; foliage holds up better compared to other lavenders.
- High uniformity means harvest times are short and comparable to any vegetative variety.
- Ships well; long-flowering in perennial beds and patio planters.
- Great as a garden plant and for drying and arranging.
- Large, elegant flowers bloom all Summer and attract butterflies

Snow The only true white Lavender from seed. Finish time is 3 to 4 weeks later than Ellagance Purple.



Ellagance Purple Fleuroselect Gold Medal

Lavance Deep Purple

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

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

A First-Year-Flowering Perennial.

Seed supplied as: Raw

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

- Produces the deepest purple-blue Summer colour with no bleaching, on the most controlled L. angustifolia available.
- The only well-bulked Summer English Lavender - does not break in shipping.
- Strong branching.
- Best for Summer production, longer days and higher temperatures. Can also be scheduled for traditional overwintering production with potting Weeks 28 to 32.
- Highly scented.
- Attracts bees and butterflies, but does not attract deer and rabbits.



Lavance Deep Purple EU PBR 48822



Blue Spear EU PBRAF



Blue Spear EU PBRAF



Blue Spear EU PBRAF

Your full Lavender program in one place!

Find four great varieties to boost your regionally focused program of Lavandula angustifolia from PanAmerican Seed. With Blue Spear, Avignon Early Blue, the Ellagance Series and Lavance Deep Purple, we have all the seed Lavender you'll need. Find detailed information in our regional Lavender Scheduling Tool at panamseed.com/ perennials.

LAVANDULA continued

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 12-hour daylength).



Bandera Purple, Pink, Deep Purple and Deep Rose



Bandera Purple Fleuroselect Gold Medal,

LAVANDULA • Lavandula stoechas

Bandera Series

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

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

A First-Year-Flowering Perennial.

Seed supplied as: Raw

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

11 to 14 weeks (28 to 35 weeks overwintered, only in high light/low humidity areas)

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



Bandera Pink

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

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

Pink Large, soft pink flags on spikes with deep rose flowers.

Purple 1 week later to flower than the rest of the series.

LAVANDULA O Lavandula multifida

Spanish Eyes

Height: 16 to 25 in./41 to 64 cm Spread: 20 to 30 in./51 to 76 cm

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

A First-Year-Flowering Perennial.

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

Seed supplied as: Raw

10 to 12 weeks

- Fast-growing tender perennial/ annual variety flowers all Summer, right up until frost.
- Soft-textured and finely cut fernleaf foliage is topped by branched, 4-in./10-cm spikes that are beautiful in bud and stunning when blooms open.
- Free-flowering in pot and garden.



Bandera Deep Rose Fleuroselect Novelty

Make the change to seed L. stoechas today!

Professional-quality L. stoechas Bandera is an excellent seed option for this class. This compact, bushy, no-pinch plant has great flower power just 11 to 14 weeks from transplant, and it's quick to finish compared to vegetative varieties. Plus, no pinch means less production time, making it an all-around perennial winner.





Spanish Eyes



White Lion



White Lion

Complete your seed shasta Leucanthemum F1 package!

Use White Lion for early-Spring sales from overwintered production (previously only possible with vegetative varieties) and for Spring sales from annual production. White Lion has a critical daylength of only 10 hours. Use Madonna for late Spring and Summer sales in long-day conditions. Madonna has a critical daylength of 14.5 hours. Both offer better uniformity in height and habit over their seed counterparts; plus, they provide an excellent alternative to vegetative Leucanthemum with no vernalisation needed and no risk for bacterial infection. With these two options, you'll have easy-to-ship plants for early Spring into Summer on the bench and in the store.



White Lion



Madonna Fleuroselect Gold Medal, Fleuroselect Novelty

LEUCANTHEMUM •

Leucanthemum x superbum

White Lion F₁

Height: 8 to 10 in./20 to 25 cm **Spread:** 8 to 12 in./20 to 30 cm Flower size: 3 to 3.5 in./8 to 9 cm

USDA Hardiness Zones: 3b to 9a (-35 to 20°F/-37 to -7°C minimum temperatures) A First-Year-Flowering Perennial.

Seed supplied as: Raw

Plug crop time: 5 to 6 weeks Transplant to finish: annual, 9 to 12 weeks; overwintered, 18 to 26 weeks (18 in southern regions)

- The Spring Shasta! This unique compact seed Leucanthemum can be grown in short days (10-hour daylength requirement) - perfect for early Spring sales!
- An alternative to vegetative varieties that doesn't require vernalisation and has no risk of bacterial infection.
- Ideal for an annual production schedule. No supplemental lighting needed, flowers under natural days.
- Perfect for overwintered production in natural short days, finished under natural short days, when it will bulk more uniformly. No supplemental light or Night Interruption needed.
- No other seed variety offers this early programming solution!

Madonna F1

Height: 8 to 10 in./20 to 25 cm **Spread:** 8 to 12 in./20 to 30 cm **Flower size:** 2.5 to 3 in./6 to 8 cm

USDA Hardiness Zones: 3b to 9a (-35 to 20°F/-37 to -7°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

- Madonna offers better uniformity in height and habit over the competition.
- Compact, first-year-flowering F1 shasta with a critical daylength of 14.5 hours is an alternative to vegetative varieties that doesn't require vernalisation and has no risk of bacterial infection.
- Features excellent vigour and leaf quality for optimal finishing in quarts to large containers using multiple plugs.
- It also offers a reduced percentage of "too small" plants compared to standard seed varieties.
- With a larger percentage of saleable plants, Madonna requires less labour for harvesting and grading.
- Up to 15% of petals may have laced-edge petals for a unique look.



Madonna Fleuroselect Gold Medal, Fleuroselect Novelty



Madonna Fleuroselect Gold Medal, Fleuroselect Novelty



Scarlet



Burgundy



Scarlet Bronze Leaf



Scarlet Bronze Leaf



LOBELIA O

Lobelia x speciosa

Starship™ Series F₁

Height: 20 to 24 in./51 to 61 cm **Spread:** 8 to 12 in./20 to 30 cm

USDA Hardiness Zones: 6a to 10b (-10 to 35°F/-23 to 2°C minimum temperatures) A First-Year-Flowering Perennial.

Seed supplied as: Pelleted

Plug crop time (288 tray): Scarlet, 7 to 9 weeks; all others, 8 to 10 weeks Transplant to finish: 14 to 18 weeks

- Earlier flowering; improved branching; low stretch; uniform, controlled habit; and huge flower power assure a better-quality finished plant than the competition.
- Pretty Summer plant for beds and borders prefers higher temperatures, humidity and moisture.
- Good germination and plug yield.
- Versatile series works well from 5-in./13-cm pots to highervalue 1 and 2-gallon containers.
- Performs well in both annual and perennial combos.
- Attracts hummingbirds and butterflies.

Blue This variety has a height of 24 to 28 in./61 to 71 cm, which is 6 to 8 in./15 to 20 cm taller than the rest of the series. It also has green leaves, in contrast to the bronze leaves of the other varieties.

Burgundy Features the same habit as Scarlet and Rose.

Rose A bright rose colour. Matches Scarlet for timing and uniformity.

Scarlet Bronze Leaf The most bronze-leaved variety in the series grows to 24 to 26 in./61 to 66 cm in height, about 4 to 6 in./ 13 to 15 cm taller than Scarlet, and is 1 week later to flower. Features an indemand combination of deep bronze leaves with intense scarlet flower power.

ANNUAL LOBELIA See page 62.



Mon Amie Blue Myosotis US PVP 200800070



Mon Amie Pink Myosotis

MYOSOTIS (FORGET-ME-NOT) Myosotis sylvatica

Mon Amie Series

Height: 8 to 10 in./20 to 25 cm **Spread:** 6 to 8 in./15 to 20 cm Flower size: 0.2 to 0.3 in./1 cm

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

A First-Year-Flowering Perennial.

Seed supplied as: Raw

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

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

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

Mixture Combines Blue, Pink and White (not available separately).

ORNAMENTAL OREGANO KIRIGAMI See page 70.





Champagne Bubbles Pink Papaver



Champagne Bubbles Scarlet Papaver



Champagne Bubbles Mixture Papaver



Champagne Bubbles Yellow Papaver



Champagne Bubbles White Papaver



Champagne Bubbles Series F₁

Mon Amie Mixture Myosotis

Height: 15 in./38 cm Spread: 6 in./15 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: Primed

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

- Hybrid vigour delivers uniform flowers, earliness and longlasting garden performance compared to O.P. varieties.
- Many large, cup-shaped flowers top bushy, strongstemmed plants.
- Performs well in hot-day, cool-night conditions.
- Good Winter item in Florida, California and similar climates.



Blue Steel Perovskia Fleuroselect Novelty



Electric Blue Penstemon

It's as tough as... STEEL!

A perennial first: Grow high-quality, affordable Perovskia from professionalgrade seed. Blue Steel has higher and much more uniform germination than other seed varieties so you'll grow top-notch plugs easily and efficiently. No vernalisation or overwintering is needed, so production time is slashed. And grown beside leading vegetative varieties, you can't see a difference.



Bluesette Perovskia Fleuroselect Novelty

PENSTEMON •

Penstemon heterophyllus

Electric Blue

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

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

A First-Year-Flowering Perennial.

Seed supplied as: Raw

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

Good performer in warm climates, producing multiple stems with branched spikes holding intense blue flowers.

PEROVSKIA • Perovskia atriplicifolia

Blue Steel

PRO LANDSCAPE PERFORMER

Height: First year, 18 to 24 in./ 46 to 61 cm; second year and on, 30 to 36 in./76 to 91 cm Spread: First year, 14 to 22 in./ 36 to 56 cm; second year and on, 20 to 38 in./51 to 97 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: Raw

Plug crop time: 5 to 11 weeks Transplant to finish: 9 to 15 weeks

- Sturdy, controlled habit in the landscape is comparable to the vegetative leader.
- Aromatic, silvery foliage carries clouds of small blue flowers on strong silver stems that do not break or split easily.
- High flower show rate with 1 to 3 plugs per 1-gallon container or 3 to 5 per 2-gallon container.
- Pinch for optimal branching.
- Heat/drought tolerant, very hardy.

Bluesette



PRO LANDSCAPE PERFORMER

Height: First year, 14 to 22 in./ 36 to 56 cm; second year and on, 18 to 26 in. (46 to 66 cm) Spread: First year, 14 to 24 in./ 36 to 61 cm; second year and on, 124 to 30 in. (61 to 75 cm) Flower size: 0.2 to 0.3 in./1 cm

USDA Hardiness Zones: 4a to 9a (-30 to 20°F/-34 to -7°C minimum temperatures)

A First-Year-Flowering Perennial.

Seed supplied as: Raw

Plug crop time: 5 to 8 weeks Transplant to finish: 10 to 14 weeks

- The first and only compact, branching and early Perovskia from seed.
- Works well at the front of the landscape, as well as in a single premium patio container or mixed combo.
- A true alternative to vegetative varieties.
- This facultative long-day plant will flower earlier in long days, as well as in higher light intensity and temperatures.
- Features a long flowering period, with ornamental foliage, a pleasing fragrance and attracts bees and butterflies.
- Novelty type brings added value and appeal to a variety of garden spaces.

A natural daylength growing solution!

Here's a new first-yearflowering solution for growers that cannot finish Goldsturm under their natural growing conditions. Goldblitz provides a more economical input option for natural daylength growers, as the plugs do not require special treatment to perform to the same quality as Goldsturm.



Goldblitz



PRO LANDSCAPE PERFORMER

Height: 24 to 28 in./61 to 71 cm **Spread:** 14 to 18 in./36 to 46 cm Flower size: 3 to 3.5 in./8 to 9 cm

USDA Hardiness Zones: 3a to 9b (-40 to 25°F/-40 to -4°C minimum temperatures)

A First-Year-Flowering Perennial.

Seed supplied as: Primed

Plug crop time: 6 to 7 weeks Transplant to finish: 15 to 20 weeks

- Will flower fully as an annual crop if sown in early Spring in natural conditions, assuming that Summer provides a minimum of 14.5 hours daylength; Goldsturm requires 15 hours critical daylength.
- Shortens the production time for a finished flowering crop to 2 to 3 weeks compared to Goldsturm.
- Provides a more economical input option for natural daylength growers, as the plugs do not require special treatment.
- It has a slightly smaller leaf and flower size than Goldsturm.
- Fleuroselect Gold Medal award winner for both container and garden performance.



Goldblitz Fleuroselect Gold Medal

Goldsturm



PRO LANDSCAPE PERFORMER

Height: 24 to 28 in./61 to 71 cm Spread: 14 to 18 in./36 to 46 cm Flower size: 3 to 4 in./8 to 10 cm

USDA Hardiness Zones: 3a to 9b (-40 to 25°F/-40 to -4°C minimum temperatures)

A First-Year-Flowering Perennial.

Seed supplied as: Primed

Plug crop time: 6 to 8 weeks Transplant to finish: 20 to 24 weeks

- Superior seed quality compared to other Goldsturm strains.
- Premium, late Summerflowering perennial is considered "best in class" for landscapes.
- Upright plants produce a large, single, scentless bloom on every stem, over tight, dark green foliage.

Goldsturm needs early sowing and optimal natural growing conditions to provide 100% First Year Flowering.



Goldsturm



Salvatore Blue Fleuroselect Novelty



Salvatore Blue Fleuroselect Novelty



New Dimension Rose



New Dimension Blue

SALVIA O Salvia nemorosa

New Dimension™ Series

Height: 8 to 10 in./20 to 25 cm **Spread:** 6 to 8 in./15 to 20 cm **Flower size:** 0.2 to 0.3 in./1 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: Treated, Non Chemical

Plug crop time: 5 to 6 weeks Transplant to finish: 8 to 11 weeks

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

Salvatore Blue

Height: 10 to 12 in./25 to 30 cm **Spread:** 6 to 8 in./15 to 20 cm **Flower size:** 0.2 to 0.3 in./1 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: Treated, Non Chemical

Plug crop time: 5 to 6 weeks Transplant to finish: 8 to 10 weeks

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

SALVIA O Salvia patens

Patio Deep Blue

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

USDA Hardiness Zones: 8a to 10b (10 to 35°F/-12 to 2°C minimum temperatures)

A First-Year-Flowering Perennial.

Seed supplied as: Raw

Plug crop time: 5 to 6 weeks Transplant to finish: 7 to 11 weeks

- With its excellent branching plant habit, Patio is more compact and richer flowering than similar strains.
- Also works well as an annual.
- Well-suited to Summer containers and borders/beds.

SCABIOSA • Scabiosa columbaria

Blue Note

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

USDA Hardiness Zones: 5a to 9b (-20 to 25°F/-29 to -4°C minimum temperatures)

A First-Year-Flowering Perennial.

Seed supplied as: Raw

Plug crop time: 6 to 8 weeks Transplant to finish: 12 to 14 weeks

- Uniform and compact, with no PGRs needed in production.
- Long-flowering, basalbranching plants have dense, dark green foliage and abundant, short-stemmed, clear blue flowers all season.

SILENE Silene alpestris

Starry Dreams

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

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

A First-Year-Flowering Perennial.

Seed supplied as: Pelleted

Plug crop time: 5 to 6 weeks Transplant to finish: 10 to 12 weeks

- Produces a compact, fresh green leaf cushion from which small, star-shaped, upward-facing pure white flowers emerge.
- · Excellent for container production, with elegant finished quality.



Patio Deep Blue Salvia

VERBASCUM • Verbascum x hybrida

Southern Charm

Height: 24 to 30 in./61 to 76 cm Spread: 12 to 18 in./30 to 46 cm

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

A First-Year-Flowering Perennial.

Seed supplied as: Pelleted

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

- Florets are arranged in pairs, doubling the life of the flower spike.
- Plants bloom in Spring, go dormant under high temperatures and rebloom in Autumn.

VERBENA • Verbena bonariensis

Buenos Aires

40 to 50 in./102 to 127 cm Spread: 12 to 16 in./30 to 41 cm

USDA Hardiness Zones: 7a to 9b (0 to 25°F/-18 to -4°C minimum temperatures)

A First-Year-Flowering Perennial.

Seed supplied as: Primed

Plug crop time: 6 to 7 weeks Transplant to finish: 16 to 18 weeks

• Tall, free-flowering Verbena with open plant habit is grown primarily as an annual and used as a pretty accent plant or height divider in the border.



Blue Note Scabiosa



Starry Dreams Silene

VERBENA • Verbena rigida

Santos Purple

Height: 12 in./30 cm **Spread:** 48 in./122 cm **USDA Hardiness Zones:** 7a to 11 (0°F/-18°C minimum temperatures) A First-Year-Flowering Perennial.

Seed supplied as: Primed

Plug crop time: 6 to 7 weeks Transplant to finish: 11 to 13 weeks

- One of the best tough and long-lasting landscape perennials available - very heat and drought tolerant, plus exceptional performance in cool climates.
- Compact and upright, wellbranched plants bloom late Spring through Summer.
- High powdery mildew resistance.
- Ideal for combo planters.



Southern Charm Verbascum



Buenos Aires Verbena



Santos Purple Verbena





THE GIFT OF UNIFORMITY

Potted plants are an ideal gift for almost any occasion, and our selection is guaranteed to bring a smile to any face. These plants offer **easy production** for the grower, great **shelf appeal** for the retailer and a **grab-n-go attraction** for the consumer. Take our three gerbera series: the vibrant colours of Revolution™, Mega Revolution™ and ColorBloom™ are synchronized across each series, so they **bloom together** and stay in bloom **longer.** They can't help but provide consumer-pleasing performance for the giver and the receiver.

POTTED PLANTS / CONCERTINA



Concertina Red, Yellow & Purple

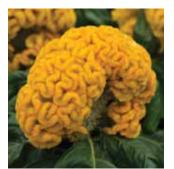




Concertina Pink

Concertina Purple





Concertina Red

Concertina Red Dark Leaf

Concertina Yellow



Kosmo Purple Red



CELOSIA • Celosia cristata

CELOSIA O Celosia spicata

Concertina™ Series

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

Seed supplied as: Pelleted

Plug crop time: 3 to 4 weeks Transplant to finish: 4 to 6 weeks **Kosmo Series** Height: 8 in./20 cm

Spread: 8 to 10 in./20 to 25 cm Seed supplied as: Pelleted Plug crop time: 3 to 4 weeks

• Genetically dwarf series

for year-round pot and

pack programs needs

no PGRs or pinching.
• Produces a main stem at

the base with many side spikes; flower heads top

well-proportioned leaves. Short production time, long

Transplant to finish: 9 to 11 weeks

Concertina is best for use as an indoor potted

plant and in a sunny spot outdoors on the patio.

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

Pink Slightly more vigorous

compared to the rest of the series.

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

retail shelf life and excellent potted performance.

than the rest of the series. Red Dark Leaf More vigorous

Mixture Pink and Red Dark Leaf in the mix are slightly more vigorous compared to the rest of the series.

Kosmo Cherry



Kosmo Orange



Recommend pot size Series No. of Varieties **Concertina Series** 5 & 1 mix 4-4.5 in./10-11 cm, Quart Kosmo Series 6 & 1 mix 4-4.5 in./10-11 cm, Quart

Kosmo Pink US PVP 200400022









CAMPANULA • Campanula medium

Campanella™ Series F₁

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

Seed supplied as: Pelleted Plug crop time: 6 to 7 weeks Transplant to finish: 7 to 10 weeks

- The Campanella series features larger blooms and includes a unique lavender colour.
 The more vigorous plants are suitable for larger pots.
 Fills pots better with more flowers.
 Around 1 week later to flower than other campanula on the market.

Series	No. of Varieties	Recommend pot size
Campanella	3	4-4.5 in./10-11 cm, Quart



Blue





Lavender





POTTED PLANTS / ACAPULCO



Acapulco Multicolor



Acapulco Purple



Acapulco Red



Acapulco Orange



Acapulco Yellow

ORNAMENTAL PEPPER (INDOOR/OUTDOOR PEPPER) Capsicum annuum

Seed supplied as: Raw

- Unique assortment is bred for shorter production times.
 Compact growth means no PGRs are needed.
 Good retail shelf life.
 Excellent indoor/outdoor performance.

Ornamental Peppers						
Variety	Fruit colour	Plug crop time (weeks)	Potting to sale (weeks)	Pot size	Fruit size	Height
Acapulco [™] Series	Multicolor, Orange, Purple, Red, Yellow	3-4	12-13	4.25 x 5 in./11-13 cm 3 ppp: 6.5-8 in./ 17-19 cm	0.5 x 1.5 in./1.5 x 4 cm	6 in./15 cm
Salsa XP Series	Deep Orange, Purple, Red, Yellow, Yellow-Red, Mixture	3-4	12-13	2.25-4.25 in./6-11 cm	0.3 x 1 in./1 x 3 cm	4 in./10 cm
Samba Series	Dark Orange, Red, Yellow, Mixture	3-4	14-15	4-5 in./10-13 cm	0.75 x 1.5 in./2.5 x 4 cm	6 in./15 cm





Samba Dark Orange



Salsa XP Deep Orange





Salsa XP Yellow

Salsa XP Mixture

Salsa XP Yellow-Red







Samba Red







Samba Yellow

POTTED PLANTS / HOT POPS





Hot Pops Yellow US 9,307,712



Chilly Chili US 7,087,819 and 7,393,995 All-America Selections Winner



Blaze



Cupala











Red Missile



Wicked



Masquerade

	Fruit colour	Plug crop	Potting to sale	Pot size	Fruit size	Height
MALL DOTS 2 F	F :- /10 1F /C	time (weeks)	(weeks)			
	- 5 in. /10-15 cm (Comp					
lot Pops Series	Purple, Yellow	4-5	7-13 for Autumn finish	4.25-5 in. 11-13 cm or 3 ppp: 6-8 in. 15-19 cm	0.4/1 cm round	4-5 in./10-13 cm
Small, round pep Compact, heavily Perfect for quart a	tumn potted plant sale pers show multiple colo branched plants with o nd Mum Pals program o hot on Hot Pops Purpl	ours simultaneo determinate gro s, plus Autumn r	usly to make a hig wth. nixed containers.	h-impact display for out	door and indoor decorating	J.
Blaze	Yellow to red	4-5	7-13 for Autumn finish	4-4.5 in./10-12 cm	0.75 x 2.25 in./2 x 6 cm	4-8 in./10-20 cm
ed - these eye-ca	atching Autumn tones a and Mum Pals program	are sure to sell fa	st!	nching should be sold at	first colour or with a few fru	it changing to
Cupala	Lime to red	3-4	11-12	4-4.5 in./10-12 cm	0.3 x 2.75 in./1 x 7 cm	4.5 in./12 cm
Medusa	Ivory to yellow to orange to bright red	4-5	7-13 for Autumn finish	4 in./10 cm	2-2.5 in./5-6 cm	6-8 in./15-20 cm
iolds fruit well, al	lowing for great shelf li Orange	te and long sale	s period.	4-4.5 in./10-12 cm	0.3 x 2 in./1 x 5 cm	6 in./15 cm
	5					
				3 ppp: 6.5-7.5 in./ 17-19 cm		
Vicked	Purple to red	4-5	7-13 for Autumn finish		1 x 2.75 in./3 x 7 cm	6-8 in./15-20 cm
Compact plants s Determinate varion Perfect for quart a	how extra-large fruit the ety should be sold at fir nd Mum Pals program	at will certainly c st colour or with	Autumn finish apture retail atten a few fruit changi	17-19 cm 4-4.5 in./10-12 cm tion!	1 x 2.75 in./3 x 7 cm	6-8 in./15-20 cm
Compact plants s Determinate varie Perfect for quart a NOTE: Fruit has m	how extra-large fruit the ety should be sold at fir nd Mum Pals program	at will certainly c st colour or with s, plus Autumn r	Autumn finish apture retail atten a few fruit changi	17-19 cm 4-4.5 in./10-12 cm tion!	1 x 2.75 in./3 x 7 cm	6-8 in./15-20 cm
Determinate varie Perfect for quart a NOTE: Fruit has m	how extra-large fruit the ety should be sold at fir nd Mum Pals program hild heat.	at will certainly c st colour or with s, plus Autumn r	Autumn finish apture retail atten a few fruit changi	17-19 cm 4-4.5 in./10-12 cm tion!	1 x 2.75 in./3 x 7 cm 2-2.5 in./5-6 cm	6-8 in./15-20 cm 9-10 in./23-25 cm
Compact plants s Determinate varie Perfect for quart a NOTE: Fruit has m ARGER POTS 6- Chilly Chili F1 Child-safe, non-pu F1 vigour makes i	how extra-large fruit the sty should be sold at fir and Mum Pals program wild heat. 8 in./15-19 cm (More volume) Yellow-green to	at will certainly cost colour or with s, plus Autumn rigorous plants) 4-5 door and outdors and gardens.	Autumn finish apture retail atten a few fruit changi nixed containers. 7-13 for Autumn finish or use in public ar	17-19 cm 4-4.5 in./10-12 cm tion! ing to red. 6 in./15 cm d residential areas.		
Compact plants so Determinate varie Perfect for quart a NOTE: Fruit has manager POTS 6-Chilly Chili F1 Child-safe, non-put vigour makes in Dverall plant size	how extra-large fruit the sty should be sold at fir and Mum Pals program wild heat. 8 in./15-19 cm (More vorange to dark redungent fruit – ideal for intexcellent for container	at will certainly cost colour or with s, plus Autumn rigorous plants) 4-5 door and outdors and gardens.	Autumn finish apture retail atten a few fruit changi nixed containers. 7-13 for Autumn finish or use in public ar	17-19 cm 4-4.5 in./10-12 cm tion! ing to red. 6 in./15 cm d residential areas.		
Compact plants so Determinate varie Perfect for quart a NOTE: Fruit has manager POTS 6-Chilly Chili F1 Child-safe, non-put vigour makes in Diverall plant size	how extra-large fruit the sty should be sold at fir and Mum Pals program wild heat. 8 in./15-19 cm (More vorange to dark reduced angent fruit - ideal for intexcellent for contained is about 30% larger that	at will certainly cost colour or with s, plus Autumn rigorous plants) 4-5 door and outdo rs and gardens. an Medusa, with	Autumn finish apture retail atten a few fruit changi nixed containers. 7-13 for Autumn finish or use in public ar similar crop time.	17-19 cm 4-4.5 in./10-12 cm ation! ing to red. 6 in./15 cm and residential areas.	2-2.5 in./5-6 cm	9-10 in./23-25 cm 8 in./20 cm
Compact plants s Determinate varie Perfect for quart a NOTE: Fruit has m ARGER POTS 6- Chilly Chili F1 Child-safe, non-put To vigour makes in Diverall plant size Harlequin Masquerade	how extra-large fruit the by should be sold at fir and Mum Pals program wild heat. 8 in./15-19 cm (More vorange to dark reduced angent fruit - ideal for intexcellent for container is about 30% larger that Multicolour Purple and orange to reduced angent fruit - ideal for intexcellent for container is about 30% larger that Multicolour	at will certainly cost colour or with s, plus Autumn rigorous plants) 4-5 door and outdoes and gardens. an Medusa, with 3-4 4-5	Autumn finish apture retail atten a few fruit changi nixed containers. 7-13 for Autumn finish or use in public ar similar crop time. 13-14 7-12 for Autumn finish	17-19 cm 4-4.5 in./10-12 cm ation! ing to red. 6 in./15 cm 4-5-6 in./12-15 cm 4-8 in./10-20 cm or 3 ppp: 5-8 in./ 13-19 cm	2-2.5 in./5-6 cm 0.5 x 0.75 in./1.5 x 2.5 cm	9-10 in./23-25 cm
Compact plants s Determinate varie Perfect for quart a NOTE: Fruit has m ARGER POTS 6- Chilly Chili F1 Child-safe, non-pu Toverall plant size Harlequin Masquerade Tapered fruit in m Good for use in co	how extra-large fruit the by should be sold at fir and Mum Pals program wild heat. 8 in./15-19 cm (More vorange to dark reduced angent fruit - ideal for intexcellent for container is about 30% larger that Multicolour Purple and orange to reduced angent fruit - ideal for intexcellent for container is about 30% larger that Multicolour	at will certainly cost colour or with s, plus Autumn rigorous plants) 4-5 door and outdoes and gardens. an Medusa, with 3-4 4-5	Autumn finish apture retail atten a few fruit changi nixed containers. 7-13 for Autumn finish or use in public ar similar crop time. 13-14 7-12 for Autumn finish	17-19 cm 4-4.5 in./10-12 cm ation! ing to red. 6 in./15 cm 4-5-6 in./12-15 cm 4-8 in./10-20 cm or 3 ppp: 5-8 in./ 13-19 cm	2-2.5 in./5-6 cm 0.5 x 0.75 in./1.5 x 2.5 cm	9-10 in./23-25 cm 8 in./20 cm

POTTED PLANTS / SAPPHIRE



Princess Deep Blue



Royal Dane Deep Blue



Royal Dane White



Princess White



Plug crop time: 5 to 6 weeks Transplant to finish: Varies by variety

Seed supplied as: Pelleted

- Low cost and fast production.
 Perfect crop for Summer production.
 Long-lasting flowers have a sweet fragrance.
 Extremely good shelf life.
 Sales period: March to October.

Variety	Colour	Potting to sale (weeks)	Pot size	Height
Princess Series	Deep Blue, White	10-12	4-5 in./ 10-13 cm	4.5-6 in./ 12-15 cm
Royal Dane Series	Deep Blue, White	10-12	2.25-5 in./ 6-13 cm	4.5-6 in./ 12-15 cm



Bright Red



Watermelon



Bright Orange with Light Eye



Deep Rose with Light Eye



Orange with Light Eye



Rose with Light Eye



Scarlet Red with Light Eye



White with Light Eye



Orange with Dark Eye Improved



Bright Rose with Dark Eye



Yellow with Dark Eye



Select Mixture

Gerbera jamesonii Mega Revolution™

GERBERA •

Series F₁ Height: 6 to 10 in./15 to 25 cm **Spread:** 12 to 14 in./30 to 36 cm **Flower size:** 4 to 5 in./10 to 13 cm

Seed supplied as: Coated

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

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

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

Bright Red Contains a mix of dark and light eyes.

Bright Rose with Dark Eye

Smaller flowers and slightly taller compared to the series average.

Deep Rose with Light Eye

Superior dark colour is great for mixes and combo pots. Colour holds very well under high light levels.

New Orange with Dark Eye Improved Offers better height control and habit uniformity, improved flower quality and a stronger colour.

Scarlet Red with Light Eye Largest flowers on the market; best red variety in the series.

White with Light Eye Cleaner white colour than the competition.

Yellow with Dark Eye Best dark-eyed yellow gerbera on the market.

Select Mixture Uniform mix of bold, bright colours.



Orange with Dark Eye Improved



Orange with Dark Eye



Deep Pink with Light Eye

Hit your schedule every time

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

GERBERA continued

Revolution™ Series F₁

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

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

- When it comes to uniformity of flowering window across a complete colour range, Revolution is the leading standard-size pot gerbera.
- Industry-leading seed quality.
- Better second flush of flowers than the competition assures much longer bloom time for the consumer.
- Best for 5-in./13-cm pots.

Bicolor Red Lemon

A unique bicolour in gerberas.

Deep Orange with Dark Eye More compact variety has a good, deep orange colour.

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

New Orange with Dark Eye Highly uniform variety has a great strong orange colour and lots of broad petals. Times perfectly with the rest of the series.

Red with Light Eye Puts multiple blooms up at one time and has the shortest cropping window of any gerbera.

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

Yellow with Light Eye

Best yellow variety in the series is a big improvement over older yellow varieties, with a strong colour and good uniformity.

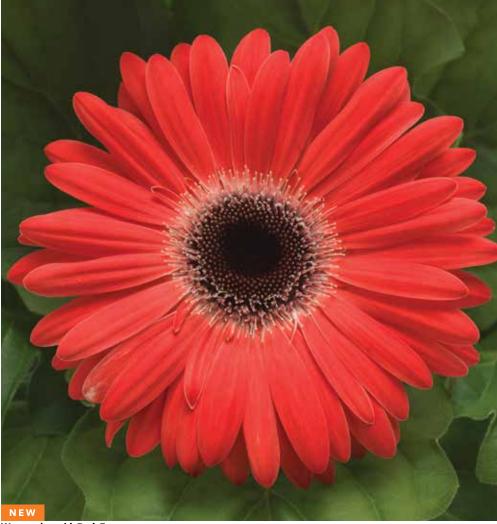
Bicolor Mixture Includes all four bicolour varieties.

Select Mixture Uniform mix of bold, bright colours.

PROGRAM STANDOUTS

Make sure you include these sure-fire sellers in your Revolution gerbera program! Bicolor Red Lemon Bicolor Red White Bicolor Rose White Bicolor Yellow Orange Bright Rose with Light Eye Golden Yellow with Dark Eye Orange with Light Eye NEW Orange with Dark Eye Red with Light Eye Red with Dark Eye Red with Dark Eye Select Mixture





Watermelon with Dark Eye



Mega Revolution Scarlet, Revolution Bright Rose with Light Eye and ColorBloom Bicolor Orange Yellow

Series	No. of Varieties	Recommend pot size
Mega Revolution	11 & 1 mix	6 in./15 cm
Revolution	16 & 2 mixes	5 in./13 cm
ColorBloom	10 & 1 mix	Quart/11 cm

GERBERA continued

ColorBloom™ Series F₁

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

Seed supplied as: Coated

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

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

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

Bicolor Red White A unique bicolour for this quart/11-cm pot market segment! Fits the series for controlled plant habit and consumer performance; 5 days later to flower like Bicolor Orange Yellow and Deep Orange with Dark Eye.

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

Deep Orange with Dark Eye Features a good orange colour that doesn't fade under higher light conditions. Fits the series very well for plant habit and consumer performance; 5 days later to flower like Bicolor Red White and Bicolor Orange Yellow.

Red with Dark Eye

More uniform in colour and around 1 week earlier to flower than competing reds.

New Watermelon with Dark Eye Features slightly larger flowers than other series varieties and the colour varies a bit within the population. Colour holds best

White with Dark Eye Clear white and uniform in colour.

Yellow with Dark Eye

Slightly smaller flowers than the rest of the series.

under low light conditions.

Mixture Includes all varieties.





Stays tidy for smaller pots



Cherry with Light Eye



Deep Rose with Light Eye



Red with Light Eye



Deep Orange with Dark Eye



Red with Dark Eye



Watermelon with Dark Eye



White with Dark Eye



Yellow with Dark Eye



Bicolor Orange Yellow



Bicolor Red White



Yellow with Dark Eye, Bicolor Orange Yellow, Deep Rose with Light Eye and Red with Light Eye

POTTED PLANTS / SPLASH SELECT



Splash Select Rose Hypoestes



Sapphire Blue Chip Lisianthus



Sapphire Blue Lisianthus



Sapphire Blue Chip Lisianthus



Sapphire Pink Rim Lisianthus



Sapphire White Lisianthus



Splash Select Pink Hypoestes



Splash Select Rose Hypoestes



Splash Select™ Series

Height: 4 to 6 in./10 to 15 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 grower's choice for mass market pot production, with excellent shipping tolerance and shelf life.
- Crop time can be reduced by planting multiple-sown young plants in each pot.
- Heat tolerant and shade tolerant.
- Can be used as an indoor plant or offered with other bedding annuals.
- The garden height for this plant is 10 to 18 in./25 to 46 cm; the height listed above is potted height.



Splash Select Red Hypoestes



Splash Select White Hypoestes

LISIANTHUS • Eustoma grandiflorum

Sapphire Series F1

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

Seed supplied as: Pelleted

Plug crop time: 8 to 10 weeks Transplant to finish: 12 to 16 weeks

- Our most compact series for indoor plant use.
- Extremely well-branched.Single plug in 4-in./10-cm or multi-plant in larger container.

Series	No. of varieties	Recommend pot size
Splash Select Hypoestes	4	Cell Pack, 3 ppp: 4-6 in./10-15 cm
Sapphire Lisianthus	4	4-6 in./10-15 cm

More colour = repeat sales!



Choco Sun



Miss Sunshine



SUNFLOWER • Helianthus annuus

Ballad F1

Height: 24 to 30 in./61 to 76 cm **Spread:** 6 to 8 in./15 to 20 cm

Seed supplied as: Raw, Treated

Plug crop time: 2 to 3 weeks Transplant to finish: 8 to 9 weeks

- Excellent florist gift item or indoor plant; also wellsuited to warm landscape markets like Florida.
- Pollen-free, dwarf sunflower produces well-formed, 4 to 5-in./10 to 13-cm flowers.
- Flowers at short height under short days; under long Summer days, plants are taller without growth regulators.

Choco Sun

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

Seed supplied as: Raw, Treated

Plug crop time: 2 to 3 weeks Transplant to finish: 8 to 9 weeks

- Very compact, well-branched plants set a large bloom on the central stalk, with several smaller flowers on side shoots.
- Excellent uniformity and earliness allow for easy scheduling and deliver a high yield of saleable plants.
- Ideal for containers, window boxes and gardens.

Miss Sunshine F₁

Height: 10 to 16 in./25 to 41 cm **Spread:** 6 to 8 in./15 to 20 cm

Seed supplied as: Raw, Treated

Plug crop time: 2 to 3 weeks Transplant to finish: 7 to 8 weeks

- Dwarf, golden yellow sunflower is easy and economical to produce, needing fewer PGRs and flowering at a shorter height under short days.
- Pollen-free plants have 3 to 4-in./8 to 10-cm blooms with a fast flush of secondary flowers.
- Perfect for mixed and mono planters.

SunBuzz F1

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

Seed supplied as: Raw, 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-leafed 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.
- Fast flowering and a compact habit.



SunBuzz

Series	Recommend pot size
Ballad	5 in./13 cm, Gallon
Choco Sun	5-6 in./13-15 cm, Gallon
Miss Sunshine F ₁	4.5-5 in./12-13 cm/Quart/11 cm
SunBuzz F1	5-6 in./13-15 cm, Gallon





QUALITY BY DESIGN

The BloomStudios brand includes high-quality cut flowers developed through **innovative breeding** for the professional florist market. Commercial cut flower growers around the globe count on our outstanding, **high-quality varieties** that ship and store exceptionally well... create better arrangements...and ultimately delight the consumer. BloomStudios varieties feature strong stems, bold colours and unique appeal for cut flower bouquets and grower bunches throughout the world.



Mona Lisa Mixture Anemone



Mona Lisa Deep Blue Anemone



Mona Lisa Pink Anemone



Mona Lisa Scarlet Eye Anemone



Mona Lisa Orchid Shades Anemone



Mona Lisa Red Bicolor Anemone



Mona Lisa White Anemone



Mona Lisa Wine White Bicolor Anemone

ANEMONEAnemone coronaria

Mona Lisa® Series F1

Form Supplied As: Raw

Cultivation Type:

Greenhouse, High Tunnel Planting Density: 22 to 44 plants/ sq. metre (2 to 4 plants/sq. foot). Usage: Focal

Stem Length: 18 in./46 cm

Bloom Size:

4 to 4.5 in./10 to 11 cm

The large, bright blooms of Mona Lisa Anemone are a masterpiece in any bouquet. Mona Lisa varieties produce up to 18 flowers per plant and are best grown cool without the need for supplemental light. Low temperatures (8 to 12°C/46 to 54°F) promote optimum stem length.

Harvest Recommendation: Harvest when flower buds are fully coloured and about 30-40% open/cupped stage. Avoid harvesting fully open

flowers with pollen shed.

Post-Harvest Recommendation:

Avoid ethylene exposure; an ethylene-inhibiting treatment is recommended. Hydrate and store in cooler at 1-3°C (34-38°F) in commercial floral solution at recommended rates.

Vase Life Recommendation: 5-7 days

Mixture Deep Blue, Orchid Shades, Pink, Red Bicolor, Scarlet Eye, White and Wine White Bicolor.



Silky Gold Asclepias



Silky Deep Red Asclepias

ASCLEPIAS Asclepias curassavica

Silky Series

Form Supplied As: Raw

Cultivation Type:

Greenhouse, High Tunnel, Field **Planting Density:** 22 to 32 plants/sq. metre (2 to 3 plants/sq. foot).

Usage: Filler Stem Length:

24 to 28 in./61 to 71 cm

High-quality series is bred for greenhouse and outdoor field production.

Harvest Recommendation:

Harvest early in the day when 50-65% of flowers are open. Do not sear the stems in hot water as you would do with other Asclepias.

Post-Harvest Recommendation:

After harvest, change solutions 2-3 times to eliminate any latex exudate. Holding solution is optional. Avoid ethylene exposure; an ethylene-inhibiting treatment is recommended. Store at 4-7°C (40-45°F). Transport in solution if possible.

Vase Life Recommendation: Consumer floral preservative recommended to keep water clear. Vase life 8-10 days.

Deep Red Golden yellow centres.



Campana Deep Blue Campanula



Campana Lilac Campanula



Campana Pink Campanula

Campana Series F₁

Form Supplied As: Pelleted

Greenhouse, High Tunnel

CAMPANULA

Cultivation Type:

Campanula medium



Campana White Campanula



CARTHAMUS Carthamus tinctorius

Grenade Orange

Form Supplied As: Coated

Cultivation Type: High Tunnel, Field

Planting Density: 40 to 62 plants/ sq. metre (4 to 6 plants/sq. foot). Usage: Filler

Stem Length:

32 to 40 in./81 to 102 cm

Planting Density: 64 to 80 plants/ sq. metre (6 to 8 plants/sq. foot). Usage: Line, Secondary Stem Length: 30 to 34 in./76 to 86 cm Top-quality professional cut

flower series is a low-energy crop, suitable for Summer or Winter production. See Technical Resources at bloomstudios.com for daylength requirements. Well-matched across the series for timing and habit, Campana delivers strong stems, good foliage and excellent uniformity.

Harvest Recommendation: Harvest stems when two to three flowers are fully open.

Post-Harvest Recommendation: Using cool water, use a hydrating solution upon harvest. Move to a holding solution and store at 2°C (37°F). Avoid ethylene exposure; an ethylene-inhibiting treatment is recommended.

Vase Life Recommendation: Commercial preservative is recommended. Vase life up to 10 days.

Features thornless leaves and round flower buds atop stems of uniform length. Best grown as a direct-sown crop, in field and high tunnel applications. Good for fresh and dried use; can also be used green when harvested young.

Harvest Recommendation: Harvest when flowers are starting to open for blooming use. Cut stems young/green for use as green filler.

Post-Harvest Recommendation: Hydration solution followed by holding solution. Short-term cold storage at 2-4°C (35-40°F) is tolerated. Not ethylene sensitive.

Vase Life Recommendation: 5-8 days



Campana White Campanula

CELOSIA

Celosia cristata (Cockscomb)

Spring Green

Form Supplied As: Pelleted

Cultivation Type:

Greenhouse, High Tunnel Planting Density: 64 to 80 plants/ sq. metre (6 to 8 plants/sq. foot).

Usage: Secondary Stem Length:

40 to 48 in./102 to 122 cm

Programmable production and good for economical, highdensity programs. High yields, strong stems and few off-shoot flowers. Flowers hold colour well and are well-suited to dried use.

Harvest Recommendation: Harvest stems as crest is almost completely full.

Post-Harvest Recommendation: Strip 50-75% foliage. Use distilled water; no need for hydration or holding solutions. Avoid cold storage if possible.

Vase Life Recommendation: 7-14 days



Grenade Orange Carthamus



Spring Green Celosia



Orange EU PBR 44055



Gold EU PBR 46508



Orange EU PBR 44055



Pink EU PBR 43694



Red EU PBR 46509



Rose EU PBR 43693

Grow your margin, grow your sales

Neo lets you grow over a longer period through the year and yield more usable stems from every sq. metre/sq. foot. Ship out better quality *C. cristata* and give florists a product that's easier to arrange and easier to sell. Less long-day sensitive, making it easier to produce over a longer period during the year for most growers. Features unique colours and a much better leaf habit. Easier to work with for bouquets or flower arrangements due to smaller leaves.

CELOSIA CRISTATA continued

Neo™ Series

Form Supplied As: Pelleted

Cultivation Type: Greenhouse, High Tunnel

Planting Density: 64 to 80 plants/ sq. metre (6 to 8 plants/sq. foot). Usage: Secondary

Stem Length: 28 to 40 in./71 to 102 cm

Harvest Recommendation:

Harvest stems as crest is almost completely full.

Post-Harvest Recommendation:

Strip 50-75% foliage. Use distilled water; no need for hydration or holding solutions. Avoid cold storage if possible.

Vase Life Recommendation: 7-14 days

Gold Deepest yellow colour available on the market. *NOTE: More sensitive to fusarium wilt compared to the rest of the series.*

Orange Unique colour for the market will stir up interest for growers, retailers and florists.

Pink Beautiful dark-stemmed variety, with slightly smaller bloom. 7-11 weeks transplant to finish.

Red Slightly shorter stem length. 9-13 weeks transplant to finish.

Rose The tallest of the series, with bigger flower heads. 9-13 weeks transplant to finish.



Bright Pink

CELOSIA Celosia plumosa

Sunday™ Series

Form Supplied As: Pelleted

Cultivation Type:

Greenhouse, High Tunnel, Field Planting Density: 64 to 80 plants/ sq. metre (6 to 8 plants/sq. foot).

Usage: Secondary Stem Length:

28 to 40 in./71 to 102 cm

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

Harvest Recommendation: Harvest stems as plume is 90-100% developed.

Post-Harvest Recommendation: Strip 50-75% foliage. Use distilled water; no need for hydration or holding solutions. Avoid cold storage if possible.

Vase Life Recommendation: 7-14 days

Mixture Mix of Dark Pink, Orange, Bright Pink, Cherry, Purple and Gold.





















Mixture

CUT FLOWERS / CELWAY









Purple

Terracotta







CELOSIA Celosia spicata

Celway™ Series

Form Supplied As: Pelleted

Cultivation Type:

Greenhouse, High Tunnel, Field Planting Density: 64 to 80 plants/sq. mere (6 to 8 plants/sq. foot).

Usage: Filler Stem Length:

40 to 48 in./102 to 122 cm

One central spiky plume is surrounded by several smaller spikes for a well-filled look. Short, programmable production time. Suitable for high-density production. Strong stems with small top leaves allow for good sleeving and shipability.



Post-Harvest Recommendation: Strip 50-75% foliage. Use distilled water; no need for hydration or holding solutions. Avoid cold storage if possible.

Vase Life Recommendation: 7-14 days

Purple, Terracotta and White offer great field production.



Mixture



Blue Donna

DELPHINIUM Delphinium elatum

Guardian Series F1

Form Supplied As: Raw

Cultivation Type:

Greenhouse, High Tunnel, Field Planting Density: 25 to 45 plants/ sq. metre (2 to 4 plants/sq. foot).

Usage: Line Stem Length:

30 to 39 in./76 to 99 cm

Guardian is an F1 hybrid delphinium elatum that delivers programmable and reliable yields of stems.

Harvest Recommendation:

Harvest stems when the first 1 to 2 flowers are fully open. For local markets, harvest when 30% of florets have opened.

Post-Harvest Recommendation:

Delphinium are highly sensitive to ethylene; it is recommended to treat with an ethylene-inhibiting product immediately after harvest. Hydrate and store in a cooler at 1-3°C (34-38°F) in a commercial floral holding solution at the manufacturer recommended rate.

DELPHINIUM

Delphinium x belladonna

Blue Donna

Form Supplied As: Raw

Cultivation Type:

Greenhouse, High Tunnel, Field **Planting Density:** 9 to 18 plants/ sq. metre (1 to 2 plants/sq. foot).

Usage: Line Stem Length:

32 to 40 in./81 to 102 cm

Blue Donna is great for producing deep blue flowers during the warmer periods of growing.

Harvest Recommendation:

Harvest stems when 75-80% of the florets have opened.

Post-Harvest Recommendation:

Delphinium are highly sensitive to ethylene; it is recommended to treat with an ethylene-inhibiting product immediately after harvest. Hydrate and store in a cooler at 1-3°C (34-38°F) in a commercial floral holding solution at the manufacturer recommended rate.





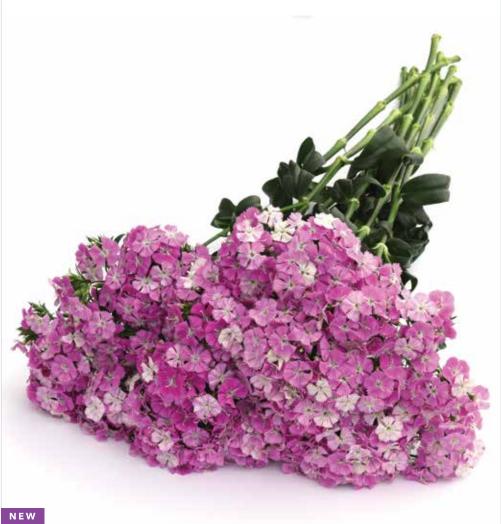
Guardian Lavender



Guardian White



Guardian Mixture



Lavender Magic



Lavender Magic



Neon Purple Royal Horticultural Society Award of Garden Merit



Neon Duo

Neon Cherry



Rose Magic Royal Horticultural Society Award of Garden Merit

Dependable performance... by the bunch!

Versatile and programmable, Amazon can be produced year-round without vernalisation and is the best dianthus for warmer production seasons. Whether you're looking for a high-appeal filler for bouquets or an exceptional product for grower bunches, Amazon is the one you want!

DIANTHUS

Dianthus barbatus interspecific

Amazon™ Series F₁

Form Supplied As: Pelleted

Cultivation Type:

Greenhouse, High Tunnel
Planting Density: 40 plants/sq.
metre (3 to 4 plants/sq. foot).
Usage: Filler, Secondary

Stem Length:

18 to 36 in./46 to 91 cm

Harvest Recommendation: Harvest stems when 50%

of florets have opened.

Post-Harvest Recommendation:

Dianthus are sensitive to ethylene; it is recommended to treat with an ethylene-inhibiting product. Hydrate and store in a cooler at 1-3°C (34-38°F) in commercial floral holding solution at the manufacturer recommended rates.

ASCFG 2004 Cut Flower of the Year!

New Lavender Magic

Florets open white and gradually transition to lavender, providing the magic! For best colour, grow under glass or direct sunlight. Plastic covering will result in more muted colouration.

Neon Duo Mix of Neon Cherry and Neon Purple.

Rose Magic Blooms start white and age to pink, then to deep rose; all colours show on individual flower heads.



Cherry



Black Cherry



Coral Royal Horticultural Society Award of Garden Merit





Deep Pink Maxine







Purple White Bicolor



DIANTHUS Dianthus barbatus

Sweet™ Series F₁

Form Supplied As: Pelleted

Cultivation Type: Greenhouse, High Tunnel Planting Density: 64 plants/ sq. metre (6 plants/sq. foot). Usage: Filler, Secondary Stem Length: 18 to 36 in./46 to 91 cm

Versatile and programmable series can be produced without vernalisation and is the best dianthus for cooler production seasons. A top-notch filler series that features large, long-lasting blooms on strong stems.

Harvest Recommendation: Harvest stems when 20-50% of florets are open.



Pink Magic

Post-Harvest Recommendation:

Dianthus are sensitive to ethylene; it is recommended to treat with an ethylene-inhibiting product. Hydrate and store in a cooler at 1-3°C (34-38°F) in commercial floral holding solution at the manufacturer recommended rates.

New Cherry Adding an additional red colour to the assortment, this bright cherry-red colour is a good fit between Scarlet and Red.

Deep Pink Maxine More intense colour than Sweet Pink. A topselling colour in most markets.

Neon Purple Bright purple colour really pops in bouquets.

Rose Magic Flowers open white, change to pink, and then mature to a rich rose for a tricolour look on the stem. Similar to the pattern of the very popular Amazon Rose Magic.

White Pure white with no grey anthers.

Mixture Includes Black Cherry, Purple White Bicolor and White.



Red





Scarlet Royal Horticultural Society Award of Garden Merit



Mixture



QIS Carmine Gomphrena



QIS Orange Gomphrena



QIS Red Gomphrena



QIS Mixture Gomphrena

GOMPHRENAGomphrena haageana

QIS Series

Form Supplied As: Raw

Cultivation Type: High Tunnel, Field

Planting Density: 11 to 21 plants/sq. metre (1 to 2 plants/sq. foot). Usage: Filler

Stem Length: 24 to 26 in./61 to 66 cm

Vivid colour range makes these a first-class professional cut flower for greenhouse and outdoor production; suited to fresh and dried use.

Harvest Recommendation: Harvest when flowers are in colour and head is rounded, but before heads elongate.

Post-Harvest Recommendation: Good-quality, clean water. No additional benefits from use of commercial floral solutions. Store at 3-4°C (36-41°F) if necessary for less than 7 days for best performance.

Vase Life Recommendation: 14-16 days

GOMPHRENA Gomphrena pulchella

Fireworks

Form Supplied As: Coated

Cultivation Type:

Greenhouse, High Tunnel, Field Planting Density: 11 plants/sq. metre (1 plant/sq. foot). Usage: Filler Stem Length:

36 to 48 in./91 to 122 cm

Vigorous, "tough as nails" plants are productive and make an excellent filler flower for mixed bouquets, fresh or dried. Easy to produce and suitable for field production.

Harvest Recommendation: Harvest when flower heads are sized up and in colour.

Post-Harvest Recommendation: Good-quality, clean water. No

Good-quality, clean water. No additional benefits from use of commercial floral solutions. Store at 3-4°C (36-41°F) if necessary for less than 7 days for best performance.

Vase Life Recommendation: 14-16 days



Fireworks Gomphrena



Frosted Explosion Grass Panicum

GRASS PANICUMPanicum capillare

Frosted Explosion

Form Supplied As:

Multi-Seed Pellets **Cultivation Type:**

Greenhouse, High Tunnel, Field **Planting Density:** 25 to 32 plants/sq. metre (2 to 3 plants/sq. foot).

Usage: Filler Stem Length: 24 to 30 in /61 to 76 cm

This easy-to-grow grass adds a delicate texture to any bouquet. Dries well. Facultative shortday flowering response; see bloomstudios.com technical resources for key growing tips.

Harvest Recommendation: Harvest stems when panicles are tufted green all the way to fully

exploded and bronze tinged.

Post-Harvest Recommendation: Use a sharp cut and place stems in a holding solution after harvest.

Vase Life Recommendation: 10-14 days

First place winner, filler category at ProFlora 2019! ASCFG 2010 Dried Cut Flower of the Year!



QIS Apricot Limonium



Limonium



Limonium Limonium LIMONIUM (STATICE)

Limonium sinuatum

QIS Series

Form Supplied As: Raw

Cultivation Type: High Tunnel, Field Planting Density: 10 to 20 plants/ sq. metre (1 to 2 plants/sq. foot). Usage: Filler Stem Length: 30 to 35 in./76 to 89 cm

Widely recommended by professional cut flower growers in the world, QIS ("Quality in Seed") is a considerable improvement over standard seed varieties in uniformity, colour, flower size and stem quality. Produces clouds of tiny, non-shattering flowers. Delivers shipability and long vase life. Popular for both fresh and preserved cut flower production. Stiff stems do not require netting.

Harvest Recommendation: Harvest stems when 50% or more of florets are open,

and sepals are coloured. Post-Harvest Recommendation: Harvested stems should be

placed in a hydration solution, then moved to a holding solution for best performance. Ethylene-inhibiting treatments are recommended. Make sure moisture on the stems is dried off prior to storage to prevent Botrytis. Store at 3-5°C (36-41°F).

Vase Life Recommendation: Vase life average 8 days. Stems may also be dried.

Mixture Includes Dark Blue, Pale Blue, Rose, White and Yellow.



QIS Rose Limonium



Can Can Carmine Rose Lisianthus



Can Can Purple Lisianthus

DOUBLE FLOWERED LISIANTHUS

Eustoma grandiflorum

Flare Series F1

Form Supplied As: Pelleted

Cultivation Type:

Greenhouse, High Tunnel Planting Density: 65 to 85 plants/ sq. metre (6 to 8 plants/sq. foot). Usage: Focal, Secondary Stem Length:

36 to 45 in./91 to 114 cm

(Group 1.5-2) Flare Lisianthus has medium, double flowers, with a topflowering habit ideal for use in bouquets. The series has been bred and selected for reduced sensitivity to rosetting, resulting in less risk in production.

Harvest Recommendation: Harvest when the first flower has fully opened.

Post-Harvest Recommendation: Hydrate flowers with a floral hydration solution for one hour at room temperature. Store in a cooler at $2-5^{\circ}$ C (36-41°F) in a commercial floral holding solution at the manufacturer recommended rates.

Vase Life Recommendation: 10-14 days



QIS Dark Blue Limonium

Can Can Series F₁

Form Supplied As: Pelleted

Cultivation Type: Greenhouse, High Tunnel

Planting Density: 65 to 85 plants/ sq. metre (6 to 8 plants/sq. foot). **Usage:** Focal, Secondary Stem Length:

36 to 45 in./91 to 114 cm

(Group 2-2.5)

Can Can Lisianthus has medium, double flowers with a topflowering habit ideal for use in bouquets. It is a group 2-2.5, laterflowering version of the popular Flare series, which is group 1.5-2.

Harvest Recommendation: Harvest when the first flower has fully opened.

Post-Harvest Recommendation: Hydrate flowers with a floral hydration solution for one hour at room temperature. Store in a cooler at 2-5°C (36-41°F) in a commercial floral holding solution at the manufacturer recommended rates.

Vase Life Recommendation: 10-14 days



Flare Deep Rose Lisianthus



Flare Deep Blue Lisianthus



Lisianthus



Flare White Lisianthus



Flare Yellow Lisianthus



3 Rose



1 Purple



1 Rose Rim



1 Misty Blue



1 Deep Rose



1 Green



1 White



1 Yellow

DOUBLE-FLOWERED LISIANTHUS continued

ABC™ Series F₁

Form Supplied As: Pelleted

Cultivation Type: Greenhouse, High Tunnel Planting Density: 65 to 85 plants/ sq. metre (6 to 8 plants/sq. foot). Usage: Focal Stem Length: 36 to 45 in./91 to 114 cm

ABC lisianthus have large double flowers and are ideally suited to tunnel and outdoor production. They have been bred and selected for reduced sensitivity to rosetting, resulting in less risk in production.

Harvest Recommendation: Harvest when the first flower has fully opened.

Post-Harvest Recommendation: Hydrate flowers with a floral hydration solution for one hour at room temperature. Store in a cooler at 2-5°C (36-41°F) in a commercial floral holding solution at the manufacturer recommended rates.

Vase Life Recommendation: 10-14 days





Aida White Matthiola



Vegmo Single Matricaria



Vegmo Snowball Extra Matricaria



Vegmo Sunny Ball Matricaria

MATRICARIA (TANACETUM) Tanacetum parthenium

Vegmo Series

Form Supplied As: Pelleted

Cultivation Type: Greenhouse, High Tunnel Planting Density: 72 to 80 plants/ sq. metre (7 to 8 plants/sq. foot). Usage: Filler Stem Length: 28 to 36 in./71 to 91 cm

Fast year-round crop with good uniform stems. Popular filler flower with good post-harvest life.

Harvest Recommendation: Harvest when stem has 65-75% of flowers open.

Post-Harvest Recommendation: Use a holding solution for best performance.

Vase Life Recommendation: Vase life average 11 days.

Also available: Yellow



Aida Apricot Matthiola



Figaro Lavender Matthiola

NORTHERN GREENHOUSE SELECTABLE MATTHIOLA (STOCK)

Matthiola incana

Aida Series

Form Supplied As: Raw

Cultivation Type: Greenhouse, High Tunnel Planting Density: 64 plants/ sq. metre (6 plants/sq. foot).

Usage: Line Stem Length: 32 in./81 cm

Aida is a seedling selectable type matthiola, resulting in maximum yield. It is best for production under moderate temperatures and light levels.

Harvest Recommendation: Harvest when 3-5 florets

have opened.

Post-Harvest Recommendation:

Matthiola are sensitive to ethylene; it is recommended to treat with an ethylene-inhibiting product. Hydrate and store in a cooler at 1-3°C (34-38°F) in commercial floral holding solution at the manufacturer recommended rates.

Vase Life Recommendation: 5-8 days



Aida Purple Matthiola



Figaro Light Rose Matthiola

Figaro Series

Form Supplied As: Raw

Cultivation Type:

Greenhouse, High Tunnel Planting Density: 64 plants/ sq. metre (6 plants/sq. foot).

Usage: Line

Stem Length: 30 in./76 cm

Figaro is a seedling selectable type matthiola, resulting in maximum yield. It is best for production under cooler temperatures and lower light.

Harvest Recommendation:

Harvest when 3-5 florets have opened.

Post-Harvest Recommendation:

Matthiola are sensitive to ethylene; it is recommended to treat with an ethylene-inhibiting product. Hydrate and store in a cooler at 1-3°C (34-38°F) in commercial floral holding solution at the manufacturer recommended rates.

Vase Life Recommendation: 5-8 days



PROGRAMMABLE TUNNEL OR FIELD-GROWN MATTHIOLA (STOCK)

Mathilda™ Series

Form Supplied As: Raw

Cultivation Type: Greenhouse, High Tunnel Planting Density: 64 plants/ sq. metre (6 plants/sq. foot). Usage: Line Stem Length: 25 to 32 in./64 to 81 cm

Mathilda is a seedling selectable type matthiola, resulting in maximum yield. It the newest breeding in this type and offers a highly uniform series for production under moderate temperatures and light levels.

Harvest Recommendation: Harvest when 3-5 florets have opened.

Post-Harvest Recommendation: Matthiola are sensitive to ethylene; it is recommended to treat with an ethylene-inhibiting product. Hydrate and store in a cooler at 1-3°C (34-38°F) in commercial floral holding solution at the manufacturer recommended rates.

Vase Life Recommendation: 5-8 days

Blue Improvement over Aida Blue. Lavender Intense lavender colour.

Pink Slightly taller than White and Yellow.

Yellow Offers the best selectable yellow variety, with consistent, uniform colour.



Pink





Opera Fedora



Opera Debora



Tosca Blue Sea



Tosca White



Opera Francesca





Tosca Yellow



NORTHERN GREENHOUSE SELECTABLE MATTHIOLA (STOCK) continued

Opera Series

Form Supplied As: Raw

Cultivation Type: Greenhouse, High Tunnel Planting Density: 64 plants/ sq. metre (6 plants/sq. foot). **Usage:** Line Stem Length: 32 in./81 cm

Opera is a seedling selectable type matthiola, resulting in maximum yield. It is best for production under moderate temperatures and light levels.

Harvest Recommendation: Harvest when 3-5 florets have opened.

Post-Harvest Recommendation: Matthiola are sensitive to ethylene; it is recommended to treat with an ethylene-inhibiting product. Hydrate and store in a cooler at 1-3°C (34-38°F) in commercial floral holding solution at the manufacturer recommended rates.

Vase Life Recommendation: 5-8 days

Tosca Series

Form Supplied As: Raw

Cultivation Type: Greenhouse, High Tunnel Planting Density: 64 plants/ sq. metre (6 plants/sq. foot). Usage: Line

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

Tosca is a seedling selectable type matthiola, resulting in maximum yield. It requires less cold during bud formation, resulting in a more programmable series in warmer conditions.

Harvest Recommendation: Harvest when 3-5 florets have opened.

Post-Harvest Recommendation:

Matthiola are sensitive to ethylene; it is recommended to treat with an ethylene-inhibiting product. Hydrate and store in a cooler at 1-3°C (34-38°F) in commercial floral holding solution at the manufacturer recommended rates.

Vase Life Recommendation: 5-8 days



American Beauty



Appleblossom



Apricot

TRADITIONAL FIELD-GROWN MATTHIOLA (STOCK) Matthiola incana

Column Stock Series

Form Supplied As: Raw

Cultivation Type: Field Planting Density: 2.5 kg/hectare (2.2 lbs./acre).

Usage: Line Stem Length: 24 to 30 in./61 to 76 cm

Column Stock will produce approximately 50% double-flowering plants. It is best suited for field production in mild climates.

Harvest Recommendation: Harvest when 3-5 florets have opened.

Post-Harvest Recommendation: Matthiola are sensitive to ethylene; it is recommended to treat with an ethylene-inhibiting

product. Hydrate and store in a cooler at 1-3°C (34-38°F) in commercial floral holding solution at the manufacturer recommended rates.

Vase Life Recommendation: 5-8 days











Avalanche









Pink Sweetheart



Miracle Crimson









Katz Hi Double White

More usable stems

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



Katz Apricot



Katz Bright Rose

PROGRAMMABLE TUNNEL OR FIELD-GROWN MATTHIOLA (STOCK)

Katz Hi Double White

Form Supplied As: Raw

Cultivation Type: High Tunnel, Field Planting Density: 26 plants/ sq. metre (12 plants/sq. foot). Usage: Line

Stem Length: 32 in./81 cm

Katz Hi Double Matthiola will produce approximately 90% double-flowering plants. It requires less cold during bud formation, resulting in a more programmable series in warmer conditions.

Harvest Recommendation: Harvest when 3-5 florets have opened.

Post-Harvest Recommendation: Matthiola are sensitive to ethylene; it is recommended to treat with an ethylene-inhibiting product. Hydrate and store in a cooler at 1-3°C (34-38°F)

in commercial floral holding solution at the manufacturer recommended rates.

Vase Life Recommendation: 5-8 days



Katz Blue



Katz Cherry Blossom

Katz Series

Form Supplied As: Raw

Cultivation Type: High Tunnel, Field Planting Density: 126 plants/ sq. metre (12 plants/sq. foot). Usage: Line

Stem Length: 32 in./81 cm

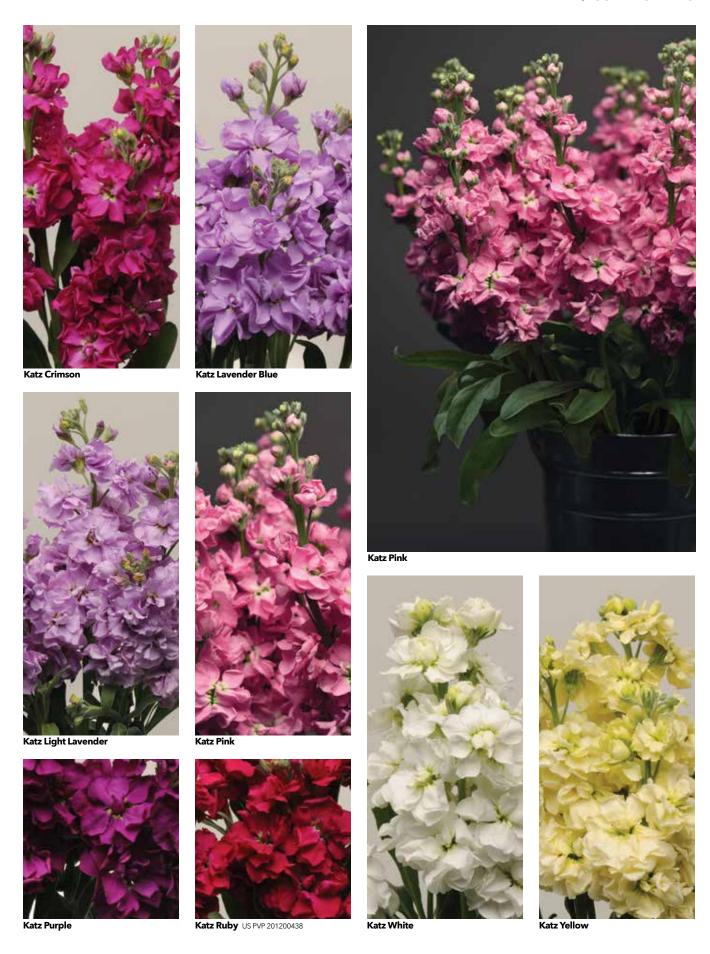
Katz Matthiola will produce approximately 50% doubleflowering plants. It requires less cold during bud formation, resulting in a more programmable series in warmer conditions.

Harvest Recommendation: Harvest when 3-5 florets have opened.

Post-Harvest Recommendation: Matthiola are sensitive to ethylene; it is recommended to treat with an ethylene-inhibiting product. Hydrate and store in a cooler at 1-3°C (34-38°F) in commercial floral holding solution at the manufacturer recommended rates.

Vase Life Recommendation: 5-8 days

Cherry Blossom ASCFG 2013 Fresh Cut Flower of the Year!



CUT FLOWERS / CENTUM









recommended rates.



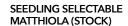
Deep Blue



Deep Rose



Yellow



New Centum™ Series

Form Supplied As: Raw

Cultivation Type: Greenhouse, High Tunnel Planting Density: 64 plants/ sq. metre (6 plants/sq. foot). Usage: Line Stem Length: 25 to 32 in./64 to 81 cm

Centum is a seedling selectable type matthiola, resulting in maximum yield of high-quality, fully double stems. Our selection of Centum has had consistent breeding for improvement and stock seed selection, which has resulted in more uniform populations and phenotypic purity over competing sources.
Centum is a Group 2, Spring Flowering type that tolerates transitional temperatures from Spring into early Summer; it delivers sturdy spikes and heavy stems across a full colour range.

Harvest Recommendation: Harvest when 3-5 florets have opened.

Post-Harvest Recommendation: Matthiola are sensitive to ethylene; it is recommended to treat with an ethylene-inhibiting product. Hydrate and store in a cooler at 1-3°C (34-38°F) in commercial floral holding solution at the manufacturer

Vase Life Recommendation: 5-8 days

NEW

Red





Bright Yellow (2)









Dark Orange (2)

	YEAR-ROUND SNAPDRAGON PROGRAM						
Series	Series Group Days, Light & Temperature						
Potomac	4	Long days • High light • Greater than 16°C (60°F)					
Monaco	3	Moderate days ● Moderate light ● 10-13°C (50-55°F)					
Maryland	2	Short days • Moderate light • 10-13°C (50-55°F)					
Cool	1	Short days • Low light • 7-10°C (40-50°F)					

December 21-22 (Winter Solstice) • September 22-23 (Autumn Equinox) June 20-22 (Summer Solstice) • March 20-21 (Vernal Equinox)

SNAPDRAGON

Antirrhinum majus

Maryland Series F1

Form Supplied As: Raw

Cultivation Type:

Greenhouse, High Tunnel

Planting Density:

85 to 106 plants/sq. metre (8 to 10 plants/sq. foot).

Usage: Line

Stem Length:

39 to 60 in./99 to 152 cm

Maryland is a group 2 snapdragon best for short days, moderate light levels and temperatures of 10-13°C (50-55°F).

Harvest Recommendation: Harvest stems when 5-6 florets have opened. Keep snapdragons vertical after harvest to prevent stems from curling.

Post-Harvest Recommendation: Snapdragons are sensitive to ethylene; it is recommended to treat with an ethylene-inhibiting product after harvest. Hydrate and store in a cooler at 2-5°C (36-41°F) in commercial floral holding solution at the manufacturer recommended rates. Always keep snapdragon stems vertical during storage.

Vase Life Recommendation: 7-10 days

Flamingo Bright salmon-rose.

Yosemite Pink Darker than True Pink.

Also available: Ivory (1,2)



White (2)











Royal (1,2)







Yosemite Pink (1,2)



Early Potomac White (3)



Early Potomac Orange (3)



Early Potomac Rose (3)



Early Potomac Pink (3)



Early Potomac Yellow (3)

Snaps second to none

PanAmerican Seed is the world-leading supplier of F1 forcing snaps, with an unsurpassed choice of top-producing varieties selected for stem and flower quality, photoperiodic response and earliness to flower. With selections streamlined into 4 flowering response groups - including our popular Potomac family - you'll find it a "snap" to build an all-year program of successful growing.

SNAPDRAGON continued

Early Potomac™ Series F₁

Form Supplied As: Raw

Cultivation Type: Greenhouse, High Tunnel Planting Density: 106 to 128 plants/sq. metre (10 to 12 plants/sq. foot). Usage: Line Stem Length: 39 to 60 in./99 to 152 cm

Early Potomac is a group 3 snapdragon best for moderate daylength, moderate to high light levels and temperatures of 13-16°C (55-60°F).

Harvest Recommendation: Harvest stems when 5-6 florets have opened. Keep snapdragons vertical after harvest to prevent stems from curling.

Post-Harvest Recommendation: Snapdragons are sensitive to ethylene; it is recommended to treat with an ethyleneinhibiting product after harvest. Hydrate and store in a cooler at 2-5°C (36-41°F) in commercial floral holding solution at the manufacturer recommended rates. Always keep snapdragon stems vertical during storage.

Vase Life Recommendation: 7-10 days

Potomac™ Series F₁

Form Supplied As: Raw

Cultivation Type: Greenhouse, High Tunnel Planting Density: 106 to 128 plants/sq. metre (10 to 12 plants/sq. foot). Usage: Line Stem Length: 39 to 60 in./99 to 152 cm

Potomac is a group 4 snapdragon best for long days, high light and temperatures greater than 16°C (60°F).

Harvest Recommendation: Harvest stems when 5-6 florets have opened. Keep snapdragons vertical after harvest to prevent stems from curling.

Post-Harvest Recommendation: Snapdragons are sensitive to ethylene; it is recommended to treat with an ethylene-inhibiting product after harvest. Hydrate and store in a cooler at 2-5°C (36-41°F) in commercial floral holding solution at the manufacturer recommended rates. Always keep snapdragon stems vertical during storage.

Vase Life Recommendation: 7-10 days

Appleblossom
White and rose bicolour.
Ivory White
White with yellow bee.





White (2,3)



Red (2,3)



Rose (2,3)



Violet (2,3)



Yellow (2,3)

SNAPDRAGON continued

Monaco Series F₁

Form Supplied As: Raw

Cultivation Type: Greenhouse, High Tunnel Planting Density: 80 to 106 plants/sq. metre (8 to 10 plants/sq. foot). Usage: Line Stem Length: 32 to 60 in./81 to 152 cm

Monaco is a group 3 snapdragon best for moderate daylength, moderate light levels and temperatures of 10-13°C (50-55°F).

Harvest Recommendation:

Harvest stems when 5-6 florets have opened. Keep snapdragons vertical after harvest to prevent stems from curling.

Post-Harvest Recommendation: Snapdragons are sensitive to ethylene; it is recommended to treat with an ethyleneinhibiting product after harvest. Hydrate and store in a cooler at 2-5°C (36-41°F) in commercial floral holding solution at the manufacturer recommended rates. Always keep snapdragon

stems vertical during storage. **Vase Life Recommendation:** 7-10 days



Yellow (2,3)



Cool Crimson (1,2)



Cool Yellow (1,2)



Cool White (1,2)

Cool Rose (1,2)

Cool Series F1

Form Supplied As: Raw

Cultivation Type: Greenhouse, High Tunnel Planting Density: 85 to 106 plants/sq. metre (8 to 10 plants/sq. foot). Usage: Line Stem Length: 39 to 60 in./99 to 152 cm

Cool is a group 1 snapdragon best for short daylength, low light intensity and temperatures of 7-10°C (40-50°F).

Harvest Recommendation: Harvest stems when 5-6 florets have opened. Keep snapdragons vertical after harvest to prevent stems from curling.

Post-Harvest Recommendation: Snapdragons are sensitive to ethylene; it is recommended to treat with an ethyleneinhibiting product after harvest. Hydrate and store in a cooler at 2-5°C (36-41°F) in commercial floral holding solution at the manufacturer recommended rates. Always keep snapdragon

stems vertical during storage. Vase Life Recommendation: 7-10 days

TRACHELIUM Trachelium caeruleum

Lake Series

Form Supplied As: Pelleted

Cultivation Type: Greenhouse Planting Density: 11 plants/ sq. metre (1 plant/sq. foot). Usage: Filler Stem Length: 30 to 42 in./76 to 107 cm

The Lake collection from seed offers simplified ordering and production. Lake varieties produce large central flower umbels with small satellites. See technical resources at bloomstudios.com for daylength requirement.

Harvest Recommendation: Harvest stems when half or more of florets are open.

Post-Harvest Recommendation: Clear water or a holding solution are preferred. Store at 4°C (40°F). Avoid exposure to ethylene, and use of an ethylene-inhibiting treatment is recommended.

Vase Life Recommendation: Vase life average 11 days. Extended cold storage will decrease vase life.







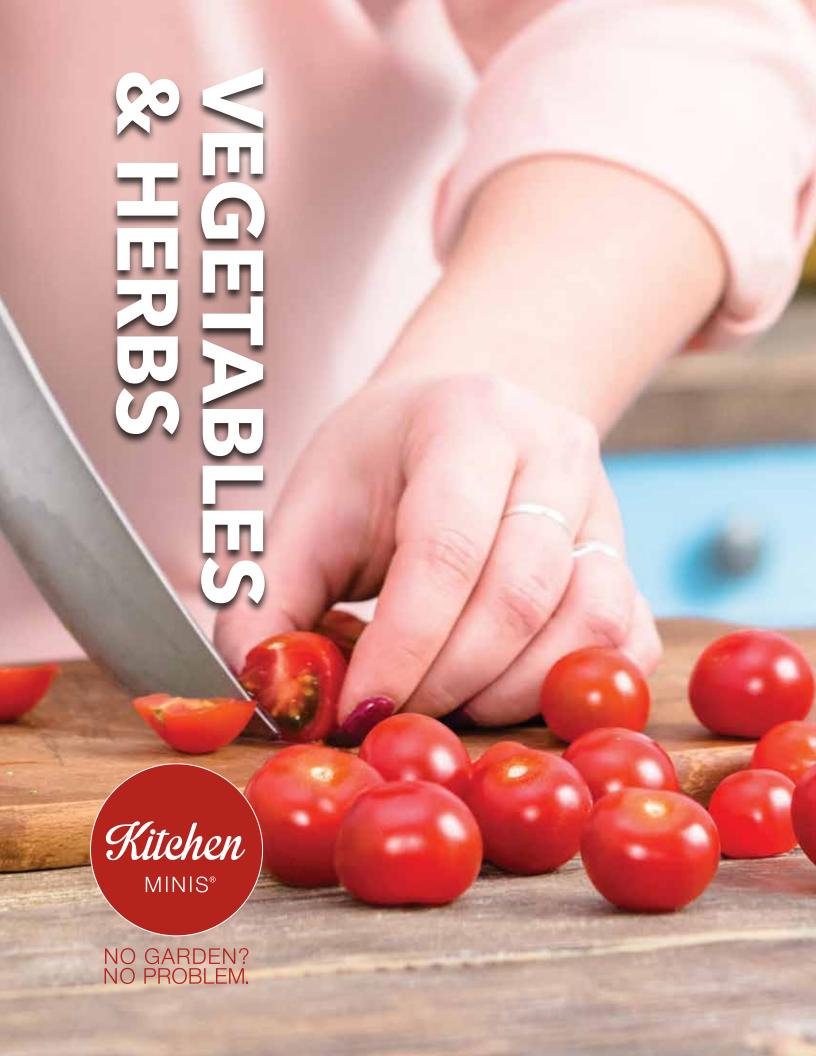
Lake Forest Purple



Lake Michigan White



Lake Michigan Violet





TABLETOP PLANTS BRING OUTDOOR FLAVOUR INDOORS!

For compact-growing vegetable plants that provide a **space-saving option** for consumers without a large space for a garden, Kitchen Minis™ tabletop veggies are the perfect solution. With tomatoes, sweet and hot peppers, and a brand-new cocktail cucumber, the Kitchen Minis collection brings **home gardening success** and **fresh vegetable flavour** to your kitchen counter or windowsill. We also offer expert culture recommendations and growing tips to help you **grow your best.**

VEGETABLES & HERBS / KITCHEN MINIS



Quick Snack



Quick Snack

MINI POTTED CUCUMBER •

Cucumis sativus

New Quick Snack

Height: 20 to 24 in./51 to 61 cm **Spread:** 15 to 20 in./38 to 51 cm

Seed supplied as: Raw

Class: Cocktail

Flower Type: Parthenocarpic Fruit Characteristics: Dark green skin, smooth **Fruit Size:** 1.5-2.5 in./4-6 cm long x 1 in./3 cm wide

Days to maturity from direct seed: 38-45

Plug crop time:

direct sow 3-4 weeks, or 128 cell tray 1-2 weeks Potting to sale: 6 weeks Pot size: 6-8 in./15-20 cm

- Plants benefit from being trellised to keep upright and pinched when plant reaches top of trellis.
- Deliciously crisp and sweet cucumbers for your recipes! Eat fresh off the plant, or add to a vegetable platter or fresh salad.
- Produces handfuls of small, cocktail-sized cucumbers over a few weeks.
- Parthenocarpic variety will set fruit without a pollinator! Perfect for growing indoors or on a balcony. If grown on its own, fruit will be seedless. If grown next to other cucumbers with male flowers, there is potential to set seed.
- Be sure to place it in a location with high light and keep wellwatered to allow fruit to mature.
- For best flavour, pick when fruit is 1.5-2.5 in. /4 to 6 cm long.



Cocoa

MINI POTTED TOMATO

Solanum lycopersicum
(Lycopersicon esculentum)

Seed supplied as: Raw

Plant benefits from being grown dry. Support fruit weight by inserting sticks close to the central stem at the time of flowering. Ship with some ripe fruit.







Name	Fruit characteristics	Growth	Plug crop time (weeks)	Potting to sale (weeks)	Pot size	Comments
CHERRY						
Cocoa F1	Dark red 0.5-1 in./1-3 cm long x 0.5-1 in./1-3 cm wide	CD	2-3	10-12	4-6 in./ 10-15 cm	Cocoa will brighten up your windowsill or patio table, and it has a tidy plant habit. Cocoa provides uniquely burgundy-coloured fruit that is deliciously sweet for your recipes!
Red Velvet F1	Red 0.5-1 in./1-3 cm long x 0.5-1 in./1-3 cm wide	CD	2-3	10-12	4-6 in./ 10-15 cm	Red Velvet will brighten up your windowsill or patio table, and it has a tidy plant habit. Red Velvet provides beautiful red-coloured fruit that is deliciously sweet for your recipes!
Siam F1	Bright red 0.5-1 in./1-3 cm long x 0.5-1 in./1-3 cm wide	CD	2-3	10-12	6-8 in./ 15-20 cm	Siam will brighten up your windowsill or patio table, and provides deliciously sweet fruit for your recipes! With Siam, you'll enjoy handfuls of fruit over a few weeks.

CD: compact, determinate.

VEGETABLES & HERBS / KITCHEN MINIS





Hot Burrito







Hot Fajita

MINI EDIBLE POTTED PEPPER •

Capsicum annuum

Seed supplied as: Raw

Pepper plants are ready to place inside on a sunny counter or windowsill, or outside on a patio table. They are ideally sold with some ripe fruit - 'ready-to-harvest'. They continue to produce tasty vegetables over 4 to 6 weeks.

Name	Fruit characteristics	Plug crop time (weeks)	Potting to sale (weeks)	Pot size	Comments
нот					
Cosmo	Blunt conical, purple to red 2 in./5 cm long x 0.75 in./2 cm wide	3-4	16-18	6-8 in./ 15-20 cm	Brilliant purple, snack-sized fruit turns red when fully mature. Use fresh or cooked to add a medium amount of spice to any dish.
Hot Burrito	Blunt, upright, conical, light green to red 4 in./10 cm long x 0.75 in./2 cm wide	3-4	14-16	6-8 in./ 15-20 cm	Lime-green fruit will ripen to bright red for a colourful display of fruit on top of the foliage. Broad, conical fruit is mildly spicy and great for adding to a sauce or slow-cooking with braised savoury dishes.
Hot Fajita	Medium chili, light green to red 4 in./10 cm long x 0.5 in./1 cm wide	3-4	14-16	6-8 in./ 15-20 cm	Upright plant habit will show off eye-catching lime- green fruit that ripens to bright red. The long, tapered peppers are fleshy and spicy, perfect for cooking.
Hot Lemon Zest	Habanero, green to yellow 1 in./3 cm long x .5 in./1 cm wide	3-4	15-17	6-8 in./ 15-20 cm	Don't be fooled by the gorgeous lemon-yellow fruit; these peppers pack a punch of heat. Small, teardrop-shaped peppers are great for spicing up a salsa or hot sauce!



Tamale









Fresh Bites Red

Fresh Bites Yellow

Name	Fruit characteristics	Plug crop time (weeks)	Potting to sale (weeks)	Pot size	Comments
Tamale	Blunt conical, green to red 2 in./5 cm long x 0.75 in./2 cm wide	3-4	14-16	4-6 in./ 10-15 cm	Jazz up your tamales and enchiladas with this crisp, juicy, thick-walled pepper with a mild, spicy flavour. Dark green fruit ripens to bright red and hangs down on a medium-sized plant.
Taquito	Small, upright, chili, green to red 1.5 in./4 cm long x 0.3 in./1 cm wide	3-4	15-17	3-4 in./ 8-10 cm	This pint-sized pepper plant is perfect for a windowsill with decorative, upright, conical peppers and small foliage. Spicy fruit ripens from green to bright red and is great for adding to a stir-fry.
SWEET					
Fresh Bites Series Capsicum annuum	Snack, green to orange, red and yellow 2.25 in./6 cm long x 1.25 in./3 cm wide	3-4	15-17	5-6.5 in./ 13-17 cm	Deliciously sweet, thick-walled, vibrant red, orange and yellow snack peppers taste great eaten right off the plant, chopped up in a salad or grilled.







FRESH IDEAS WITH GREAT TASTE

HandPicked Vegetables, our novel collection of high-quality vegetables and herbs, supplies the **flavour** and **harvests** to satisfy fresh market growers, farmstand shoppers and home gardeners. The varieties offer fresh, home-grown taste with **exceptional fruit quality**, earlier and longer harvests, and barrels of delicious produce. You'll find expert growing information and best practices at **panamseed.com/vegetables.**

VEGETABLES & HERBS / HANDPICKED







Patio Snacker

CUCUMBER •

Cucumis sativus

GherKing

Seed supplied as: Raw

Name	Туре	Fruit characteristics	Days to maturity from direct seed	Fruit size	Flower type	Disease resistance	Comments
GherKing F1	European pickler	Dark green skin, highly spined	55-60	3-5 in./8-13 cm long	Gynoecious, parthenocarpic	HR: CMV-1, S IR: DM, PM	Early, large yields of bitter- free fruit; won't become bitter if left on the vine. Great for high-tunnel production and gardens lacking pollinators; vigorous vines are best when trellised. Cylindrical, dark green gherkins with white spines are perfect for pickling and fresh eating. Best in-ground.
Martini F1	American slicer	White skin, slightly spined	55-60	5-6 in./13-15 cm long x 1.5-2 in./4-5 cm wide	Monoecious	IR: PM	Features a non-yellowing, white exterior and earlier yields. Very tender, "no peel" skin if harvested at 5 to 6 in./13 to 15 cm length, with white, bitter-free interior that is very sweet and crunchy. Staying power in the heat of Summer. Best in-ground.
Patio Snacker F1	American slicer	Medium green skin, moderately spined	50-55	6-8 in./15-20 cm long x 1.5-2 in./4-5 cm wide	Monoecious, parthenocarpic		Controlled yet vigorous variety produces short, branching vines. Fruit has good flavour, crunchy texture and non-bitter peel. High-yielding with continuous harvest. Great for large containers with a small trellis; works well in pack/pot programs.

Disease terminology: HR = High Resistance, IR = Intermediate Resistance Disease codes: CMV-1 - Cucumber Mosaic Virus Race 1, DM - Downy Mildew, PM - Powdery Mildew, S - Scab Flower Type: Gynoecious - predominantly female flowers, Monoecious - plants contain both male and female flowers, Parthenocarpic - plant has the ability to set fruit without pollination



Patio Baby All-America Selections Winner



Asian Delite



Fairy Tale All-America Selections Winner



Gretel All-America Selections Winner



Hansel All-America Selections Winner

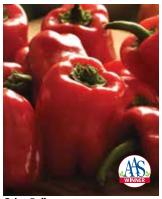
EGGPLANT • Solanum melongena

Name	Days to maturity from transplant	Fruit size	Fruit characteristics	Calyx colour	Plant habit	Comments
Asian Delite F1	50-55	5-7 in./13-18 cm long (baby size) 9-12 in./23-30 cm long (full size)	Bright purple, elongated	Green and Black	Upright, semi- spineless	Slender, elongated eggplants are glossy with bright purple skin and white, tender, non-bitter flesh. Fruit can be sliced lengthwise for grilling or lightly frying, and tender skin does not need to be peeled. Sliced or diced fruit is great for a stir-fry or curry; its non-bitter flavour and tender texture will complement any sauce. Plants are upright and semi-spineless, so they are very easy and painless to harvest. Great in an in-ground garden or large container.
Fairy Tale F1	50-55	1-2 in./3-5 cm long (baby size) 2-6 in./5-15 cm long (full size)	Striped purple and white, elongated	Green	Upright, semi- spineless	Early-maturing, highly productive variety produces clusters of attractive white fruit with violet/purple stripes. Elongated tear-drop shaped fruit are sweet and non-bitter, with a tender skin and few seeds. Fruit can be harvested when very small or left on the plant until fully mature. Petite plant habit between 18 to 24 in. (46 to 61 cm) is perfect for growing in containers or small-space gardens, with or without support. All-America Selections Winner.
Gretel F1	55-60	3-4 in./8-10 cm long (baby size) 4-6 in./10-15 cm long (full size)	White, elongated	Green	Upright, semi- spineless	Earliest white eggplant is highly productive, producing clusters of glossy mini-fruit that are tender and non-bitter. Indeterminate, 3-ft. (91-cm) plants can be grown in-ground or in large containers, with or without support. More productive and 5 to 7 days earlier to ripen than O.P. types. Slightly larger plant with slightly smaller fruit than Hansel. All-America Selections Winner.
Hansel F1	50-55	2-3 in./5-8 cm long (baby size) 6-10 in./15-25 cm long (full size)	Black-purple, elongated	Green	Upright, semi- spineless	Early-maturing, highly productive variety produces clusters of glossy, black-purple eggplants. Non-bitter, tender fruit can be used in many culinary recipes. Like white Gretel, the petite, 3-ft. (91-cm) plants can be grown in-ground or in large containers, with or without support. All-America Selections Winner.
Patio Baby F1	40-45	2-3 in./5-8 cm long (baby size)	Purple, egg	Green	Compact, spineless	Unique, high-yielding, compact variety produces baby-size eggplants very early, and continues producing throughout the season. Fits well into retail patio programs. Best in-ground and in containers. All-America Selections Winner.

VEGETABLES & HERBS / HANDPICKED



Aji Rico All-America Selections Winner



Cajun Belle All-America Selections Winner



Golden Cayenne



La Bomba II Jalapeño



Mad Hatter All-America Selections Winner

PEPPER 🔍

Seed supplied as: Raw

Name	Days to maturity from transplant	Fruit characteristics	Plant habit	Disease resistance	Comments
НОТ					
Aji Rico F1 Capsicum baccatum	70-75 to full ripe, 50-55 to green	Conical, green to red 3-4 in./8-10 cm long x 1.25-1.75 in./3-4 cm wide	Extra large, vigorous		Unique, hybrid hot pepper has more vigour, higher yield and earlier ripening than O.P. heirlooms. Narrow, conical fruit with delicate citrus flavour and medium heat is crispy and thin-walled - perfect fresh or cooked, green or red. Best in-ground; large indeterminate plants benefit from a support. All-America Selections Winner. Also available as organic seed.
Cajun Belle Capsicum annuum	60-65 to full ripe, 45-50 to green	Mini bell, green to red 2-3 in./5-8 cm long x 2-3 in./5-8 cm wide	Medium		Produces bell peppers with mildly spicy taste just right for fresh eating and salsa. Harvest green or red. Best in-ground and in containers. All-America Selections Winner.
Golden Cayenne Capsicum annuum	85-90 to full ripe, 70-75 to green	Cayenne, green to yellow 3-5 in./8-13 cm long x 0.5-0.75 in./1-2 cm wide	Bush, medium		Cayenne-shaped fruit will mature from green to golden yellow and increase in heat as they ripen. Golden Cayenne fruit are excellent for cooking or fresh eating in salsa and sauces, or dried and ground into a unique, golden yellow powder. Compact bush plant performs well in medium-sized containers or in-ground, with or without support.
La Bomba II F1 Capsicum annuum	65-70 to full ripe, 50-55 to green	Jalapeño, green to red 3-3.25 in./8 cm long x 1-1.15 in./3 cm wide	Tall	HR: BLS 1-3, TMV	Upgraded for superior disease resistance. Bears very large, high-quality jalapeños with little to no checking. Best in containers or in-ground.
Mad Hatter F1 Capsicum baccatum	85-90 to full ripe, 65-70 to green	Unique disc, green to red 2-3.5 in./5-9 cm long x 2-2.5 in./5-6 cm wide	Extra large, vigorous		Flat-disc peppers are crunchy and crisp, with a delicate floral scent and rich flavour that intensifies/sweetens as it matures. In hot, dry climates, a small number of fruit will have a touch of heat close to the seed cavity, but fruit wings are always sweet. Best in-ground with support. All-America Selections Winner.







Pot-a-peño All-America Selections Winner

Primero Red Habanero

Sweet Heat

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Name	Days to maturity from transplant	Fruit characteristics	Plant habit	Disease resistance	Comments
нот					
Pot-a-peño F1 Capsicum annuum	60-65 to full ripe,	Jalapeño, green to red 3-4 in./8-10 cm long x	Bush, compact,		Pot-a-Peño's unique compact habit is perfect for patio containers.
))	45-50 to green	0.75-1.25 in./2-3 cm wide	medium		Early maturing means this will be one of the first peppers to fruit in the garden.
					Tons of jalapeño fruit grow under a dense canopy of small, dark green leaves.
					Harvest fruit green for a traditional spicy zip in any dish or allow to ripen to red for a sweet, spicy flavour.
					All-America Selections Winner.
Primero Red F1 Capsicum chinense	60-65 to	Habanero, green to red 2.75-3.5 in./7-9 cm long x 1.25-1.5 in./3-4 cm wide	Large, vigorous	IR: TSWV	One of the earliest ripening habaneros on the market, with fruit ready to harvest as early as bell peppers. Produces huge yields of fruit larger than other standard habaneros, with just about one-third the heat.
,,,,	green				Early flowering - can be sold in large pots with flowers and immature fruit.
					Best in containers or in-ground.
					Also available as organic seed.
Sweet Heat F1	55-60 to	Snack, green to red	Compact		One of the earliest peppers to bear fruit!
Capsicum annuum	full ripe, 40-45 to	3.5-4 in./9-10 cm long x 1.25-1.75 in./3-4 cm wide			Compact, bushy plants let you ship or sell larger containers with developing fruit.
)	green				Sweet and mildly spicy peppers can be harvested green or red.
					Best in containers or in-ground.

) = mild)) = mildly hot))) = medium hot)))) = hot))))) = extra hot

Disease terminology: HR = High Resistance, IR = Intermediate Resistance
Disease codes: BLS - Bacterial Leaf Spot, TMV - Tobacco Mosaic Virus, TSWV - Tomato Spotted Wilt Virus

VEGETABLES & HERBS / HANDPICKED







Peppi Red





Peppi Cornissimo

Snackabelle Red

Name	Days to maturity from transplant	Fruit characteristics	Plant habit	Disease resistance	Comments
SWEET					
Peppi Cornissimo F1 Capsicum annuum	95-100 to full ripe, 80-85 to green	Corno, green to red 6-7 in./15-18 cm long x 2.25-2.5 in./6 cm wide, 4-4.5 oz. (113 to 128 g)	Large, tall, vigorous		Extra-large corno-shaped fruit ripens from green to red, with outstanding thick walls, rich flavour and more sweetness than most large-fruited peppers. Fruit is often seedless, for less preparation time for chopping and cooking. Great on the grill or stuffed and baked in the oven. To produce seedless fruit, grow it in isolation from other (non-seedless) pepper varieties. If not isolated, it will produce larger, great-tasting fruit with just a few seeds. Best grown in-ground with support of stakes or a cage.
Peppi Red and Yellow F1 Capsicum annuum	75-80 to full ripe, 55-60 to green	Red: Snack, green to red Yellow: Snack, green to yellow 3.5-4.5 in./9-11 cm long x 1.25-1.75 in./3-4 cm wide, 1-2 oz. (28-57 g)	Large, tall, vigorous		These small, pointed fruits offer incredible sweetness and rich flavour. The fruit are often seedless and are great for snacking fresh off the plant. To produce seedless fruit, grow it in isolation from other (non-seedless) pepper varieties. If it is not isolated, it will produce larger, great-tasting fruit with just a few seeds. Best grown in-ground with support of stakes or a cage.
PeppiGrande Red F1 Capsicum annuum	80-85 to full ripe, 60-65 to green	Corno, green to red 5-6 in./13-15 cm long x 1.5-2 in./4-5 cm wide, 2.5-3.5 oz. (71-99 g)	Large, tall, vigorous		Corno-shaped pepper has outstanding crisp texture, rich flavour and more sweetness than large-fruited peppers. Fruit is often seedless, which means less preparation time for chopping and cooking; great on the grill or baked stuffed with cheese. To produce seedless fruit, grow it in isolation from other (non-seedless) pepper varieties. If it is not isolated, it will produce larger, great-tasting fruit with just a few seeds. Best grown in-ground with support of stakes or a cage.
Snackabelle Red F1 Capsicum annuum	70-75 to full ripe, 55-60 to green	Mini bell, green to red 2-2.25 in./5-6 cm long x 2-2.25 in./5-6 cm wide, 1-2 oz. (28-57 g)	Compact	HR: BLS 1-3, 7, 8, TMV	Thick-walled, blunt-end peppers have rich, sweet flavour great for fresh eating from green to red, and hold up well through grilling and stuffing. "Easy-out" stem and seeds - simply push down or cut around cap to release seed cavity for quick cleaning. Best in containers or in-ground.



Candy Cane Chocolate Cherry







Trailblazer



Prism

calle Red		iidiibid201			1113111
Name	Days to maturity from transplant	Fruit characteristics	Plant habit	Disease resistance	Comments
SWEET					
New Prism F1 Capsicum annuum	75-80 to full ripe, 60-65 to green	Midi bell, light green to red 2-2.5 in./5-6 cm long x 2.25-2.5 in./6 cm wide, 2.25-2.75 oz. (64 to 78 g)	Tall, upright	HR: BLS 0-3, 7, 8	Sweet midi bell matures from light green to orange, and then to red. Can be harvested at all stages of maturity for a multicoloured "mix" on each plant. Midi bell size is perfect for stuffed peppers, eating fresh in salads and recipes that call for a small portion of bell pepper. Early maturing and highly productive. Seed has a high germination rate and offers resistance to Bacterial Leaf Spot 0-3, 7 and 8.
Trailblazer F1 Capsicum annuum	70-75 to full ripe, 50-55 to green	Bell, green to yellow 3.5-3.75 in./9-10 cm long x 3.25-3.5 in./8-9 cm wide, 8-9 oz. (227 to 255 g)	Tall, upright	HR: BLS 0-3, 7, 8	Tall, upright plants yield early-maturing, vibrant yellow, medium-to-large, blocky bell peppers. Holds its yellow colour longer, so it is slower to turn gold/orange. Three to four-lobed fruit is perfect for stuffing. Sweet, bright flavour and thick-walled fruit add crunch to salads. Seed has a high germination rate and offers high disease resistance to Bacterial Leaf Spot 1-3, 7 and 8.
Candy Cane Chocolate Cherry F1 Capsicum annuum	70-75 to full ripe, 55-60 to green	Mini bell, green/white stripe to chocolate/ red stripe 3.5-3.75 in./9-10 cm long x 2.5-2.75 in./6-7 cm wide, 3.5-4.5 oz. (99 to 128 g)	Medium		Mini bell pepper plant has unique, eyecatching variegated foliage. Early-maturing fruit ripens from green and white stripes to unique chocolate and cherry red stripes. Sweet flavour and crisp texture make it perfect for fresh eating at any stage of ripeness. Best in containers or in-ground, with or without support.
Candy Cane Red F1 Capsicum annuum	60-65 to full ripe, 40-45 to green	Snack, green/white stripe to red 3.5-4 in./9-10 cm long x 1.25-1.75 in./3-4 cm wide	Medium		Snack pepper has unique, eye-catching variegated foliage, plus fruit that ripens from green striped to solid red. Sweet flavour, thin walls, crispy texture. Perfect for fresh eating at any stage of ripeness. Best in containers or in-ground, with or without support.

VEGETABLES & HERBS / HANDPICKED











Micro Tom

TOMATO • Solanum lycopersicum

Seed supplied as: Raw

Artemis		Chocolate Sprinkles	
Name	Days to maturity from transplant	Fruit characteristics	(
CHERRY			
Artemis F1	50-55	Round, medium, red	П

Name	Days to maturity from transplant	Fruit characteristics	Growth	Disease resistance	Comments
CHERRY					
Artemis F1	50-55	Round, medium, red 1-1.3 in./3 cm long x 1 in./3 cm wide, 0.3-0.5 oz. (9 to 14 g)	I	HR: LM, N, TMV, ToMV	One bite of these super-sweet, rich, red cherry tomatoes will have you craving more. The unique, crisp, firm texture is great in a salad or for sauce. High disease resistance to root-zone and foliar disease will ensure excellent plant health. Best grown in-ground, including high tunnels.
Chocolate Sprinkles F1	50-55	Elongated, medium, dark red with green stripes 1.5 in./4 cm long x 1 in./3 cm wide	I	HR: F1, N	First in this type with a disease-resistance package. Unique dark red with green stripe exterior and purple flesh colour. Produces more fruit with better flavour than similar O.P. varieties. Best in-ground. Also available as organic seed.
Helix F1	50-55	Elongated, medium, bright red 1-1.4 in./3-4 cm long x 1 in./ 3 cm wide, 0.3-0.5 oz. (9 to 14 g)	I	HR: LB, N, TMV, ToMV	Experience the taste of Summer with a perfect balance of sweet and acid from Helix red cherry tomato. With early-ripening fruit and high yields, Helix is perfect for fresh eating. High resistance to root-zone and foliar diseases, including late blight resistance, will help ensure excellent plant health. Best grown in-ground.
Little Bing F1	60-65	Elongated, medium, red 1 in./3 cm long	CD	HR: F2, V	Part of the Little collection of dwarf determinate varieties. 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. Best in containers, with or without support.
Micro Tom	50	Round, small, red 0.5-0.75 in./1-2 cm long	CD		Novelty variety produces an extremely dwarf plant covered with sweet fruit. Well-suited to 3 to 4-in./8 to 10-cm pot production. Best in containers. Medal of Excellence Best Program









Midnight Snack

Orange Zinger

Sugar Rush

Name	Days to maturity from transplant	Fruit characteristics	Growth	Disease resistance	Comments
CHERRY					'
Midnight Snack F1	65-70	Round, medium, red with black overlay 1.5 in./4 cm long	I		Unique cherry tomato ripens red with an overlay of glossy black-purple on the skin when exposed to sunligh due to the accumulation of anthocyanin pigment. Sure to capture attention at retail and on the farm stand! Productive all season, yielding fruit that is well balanced and flavourful. Great in salads or eaten straight off the plant, Midnight Snack is a guilt-free treat any time of the day or night. Best in-ground, grown with support. All-America Selections Winner.
Orange Zinger F1	60-65	Round, large, dark orange 1.5-2 in./4-5 cm long	I	HR: F1	The high-quality, crack-resistant, tasty, dark orange tomatoes have big tomato flavour with a balance of sweet and tangy. Best in-ground.
Sugar Rush F1	50-55	Elongated, medium, red 0.75-1.25 in./2-3 cm long x 0.5-1 in./1-3 cm wide	I	HR: F1	Super-sweet elongated fruit has one of the highest Brix ratings of this type. Fast-maturing and very productive all season; produces long trusses of fruit with great flavour and texture. Best in-ground.
Tidy Treats F1	50-55	Round, small, red 0.75-1 in./2-3 cm long	CI	HR: F1, V	Tons of fruit power on a compact plant! Good in small-space gardens and containers, but unlike other patio types, Tidy Treats continues to produce red cherry tomatoes all season. Habit stays compact like a determinate but produces like an indeterminate. Best in containers or in-ground, grown with support.

Disease terminology: HR = High Resistance, IR = Intermediate Resistance
Disease codes: EB - Early Blight, F1 - Fusarium Race 1, F2 - Fusarium Race 2, LB - Late Blight, LM - Leaf Mold,
N - Nematodes, SLS - Septoria Leaf Spot, TMV - Tobacco Mosaic Virus, ToMV - Tomato Mosaic Virus, V - Verticillium
Growth: CD - Compact Determinate, CI - Compact Indeterminate, D - Determinate, I - Indeterminate, SD - Semi-determinate

VEGETABLES & HERBS / HANDPICKED









Marzito



SunDipper

Name	Days to maturity from transplant	Fruit characteristics	Growth	Disease resistance	Comments
CHERRY					
Topsy Tom F1	50-55	Round, medium, red 1 in./3 cm long x 1.25 in./3 cm wide	SD		Perfect for "upside down" and traditional planters. Compact/mounded. Pliable stems ship well, hold abundant fruit, won't break in wind. Continues to put out branches with many trusses of split-resistant, sweet fruit.
Tumbler F1	48-50	Round, medium, red 1.25 in./3 cm long	D		This superior variety for baskets and containers has a graceful, cascading habit. Prolific, extra-early plants produce up to 6 lbs./2.7 kg of very sweet cherry tomatoes.
SPECIALTY SM	ALL-FRUITED				
Marzito F1	50-55	Elongated, mini marzano, red 2-2.25 in./5-6 cm long x0.5-0.75 in./1-2 cm wide	I	HR: F1, LM, N, TMV, ToMV	Versatile and perfect for all occasions - eating fresh off the vine or cooking up in a quick sauce. The elongated shape is reminiscent of a small Roma tomato, which is great for cooking. The firm texture and sweet, rich flavour mean it can be eaten fresh like cherry and grape tomatoes. Great disease resistance, too! Resistant to leaf mold, Fusarium, nematodes and tobacco mosaic virus. Best grown in-ground, including high tunnels.
Sun Dipper F1	60-65	Elongated, pointed, orange 2-2.5 in./5-6 cm long x 0.5-0.7 in./1-2 cm wide	I	HR: F1, N, TMV	Sun Dipper is an orange "dipper" tomato with elongated fruit that is easily held between your fingers for dipping into dressing on a vegetable platter. This unique elongated fruit shape is eyecatching and delicious, and it's perfect for differentiating vegetable programs at retail. Performs well in field production as well as high tunnels. Prune plant to 1 to 2 leaders to increase fruit size up to 3 to 4 in. (8 to 10 cm) long.

garden favourites



Seed supplied as: Raw





Heirloom Marriage Cherokee Carbon



Heirloom Marriage Genuwine



Candyland Red (Fruit shown actual size) All-America Selections Winner

				All-America Selections Willing
Name	Days to maturity from transplant	Fruit characteristics	Growth	Comments
CURRANT				
Candyland Red	55-60	Round, small, red 0.5 in./1 cm long x 0.5 in./1 cm wide	1	Stays compact and tidy, so it won't take over like other sprawling currants; easy to grow and earlier, too. Branched trusses make for accessible harvest and fruits detach without damage for more usable fruit. Very high yields of tiny, red fruit deliver very sweet flavour. Best in-ground. All-America Selections Winner.
HEIRLOOM MARRIAGET	M COLLECTION			
Big Brandy F1	75-80	Beefsteak, pink 12-15 oz. (340 to 425 g)	I	Big, pink fruit with outstanding flavour is a cross of Big Dwarf and Brandywine. Best in-ground.
Cherokee Carbon F1	75-80	Beefsteak, purple 10-12 oz. (283 to 340 g)	I	Robust purple beefsteak with rich flavour. A cross of Cherokee Purple and Carbon. Best in-ground. Also available as organic seed.
Genuwine F1	70-75	Slicer, red 10.5-11.5 oz. (298 to 326 g)	I	Big red slicer tomato is a cross of Costoluto Genovese and Brandywine. Ready to harvest 12 to 19 days earlier than Brandywine! Best in-ground.

VEGETABLES & HERBS / HANDPICKED









TOMATO • Solanum lycopersicum

Sunrise Sauce

Seed supplied as: Raw

DarkStar

Little Napoli

Days to maturity from transplant Disease resistance Fruit characteristics Growth **BEEFSTEAK** BlushingStar F1 70-75 Oblate, ribbed, pink HR: LB, SLS Upgrade your garden with heirloom tomato flavour and modern hybrid tomato performance. 2.25-2.5 in./6 cm long x 3.75-4 in./10 cm wide, Early-maturing, pink beefsteak fruit are sweet 12-16 oz. (340 to 454 g) and savoury, with higher yield potential and fewer blemishes than most heirlooms. Large, pink beefsteak fruit are perfect for eating fresh on a sandwich or preserving in sauce. Offers disease resistance to late blight and septoria leaf spot. Best grown in the ground with support of a trellis or cage. DarkStar F1 70-75 Oblate, ribbed, purple HR: LB, V Upgrade your garden with heirloom tomato flavour and modern hybrid tomato performance. 2-2.25 in./5-6 cm long Early-maturing, rich, purple beefsteak fruit has higher yield potential and fewer blemishes than most heirlooms. x 3-3.25 in./8 cm wide, 8-10 oz. (227 to 283 g) Large, purple beefsteak fruit is perfect for eating fresh on a sandwich or for preserving in sauce. Offers high disease resistance to late blight, too. Best grown in the ground with support of a trellis or cage. **ROMA** Bellatrix F1 65-70 D HR: F2, F3, Oval, red Bellatrix has high resistance to late blight, LB, TMV, a common disease of tomato plants. 2.75-3 in./7-8 cm long x ToMV 2-2.25 in./5-6 cm wide, It also has resistance to Fusarium, a 4.5-5 oz. (128 to 142 g) common root zone disease. Red Roma/paste tomatoes ripen in a short period of time, allowing for a large harvest for cooking sauce or making salsa. Best grown in the ground or in a large container, with or without support of a trellis or cage. Little Napoli F1 60-65 CD HR: F1, V One of the only patio Romas, with disease 2-2.5 oz. (57 to 71 g) resistance for better garden success. High yields for such a small plant; enough can be harvested at one time for a batch of salsa or sauce. Best in containers. Sunrise Sauce F1 55-60 D The only professional non-heirloom orange Orange HR: F1, V Roma/paste/cooking tomato on the market. 3-4 oz. (85 to 113 g) Yields large amounts at one time to harvest enough to make a batch of sauce or salsa. Small plants are ideal for small-space gardens and large containers. Easy-to-peel tomatoes are sweet and meaty, with a taste like traditional Romas. Best flavour comes with cooking; can also be enjoyed fresh. Best in-ground.









Loki	Stellar

Name	Days to maturity from transplant	Fruit characteristics	Growth	Disease resistance	Comments
SLICER			·		
Homeslice F1	60-65	Round, red 5-6 oz. (142 to 170 g)	D	HR: F1, V	Vigorous, compact variety produces very early and bountiful yields of exceptional slicers. Perfect for patio containers and small gardens.
Little Sicily F1	60-65	Round, small, red 3-4 oz. (85 to 113 g)	CD		Companion to Little Bing and Little Napoli, the compact, sturdy plants produce the majority of ripened fruit over a few weeks for a large harvest. Abundant, good-tasting, small, red slicer tomatoes are great eaten fresh or used in recipes. Best in containers, with or without a trellis.
Loki F1	70-75	Medium, round, red 2.25-2.5 in./6 cm long x 3-3.25 in./8 cm wide, 6-8 oz. (170 to 227 g)	I	HR: F1, F2, LM, N, TMV, ToMV	Huge tomato flavour and performance. Early-maturing, round, red slicer fruit has high yield potential. Leaf mold resistance is great for growing in high tunnels or areas with high humidity. Best grown in the ground.
Stellar F1	70-75	Round, red 5-7 oz. (142 to 198 g)	D	HR: F2, LB, V IR: EB, SLS	The perfect slicer for areas with high disease pressure. Produces lots of round, red fruit that is perfect for all uses. Best in-ground; benefits from trellis for support.

Disease terminology: HR = High Resistance, IR = Intermediate Resistance
Disease codes: EB - Early Blight, F1- Fusarium Race 1, F2 - Fusarium Race 2, F3 - Fusarium Race 3, LB - Late Blight, LM - Leaf Mold,
N - Nematodes, SLS - Septoria Leaf Spot, TMV - Tobacco Mosaic Virus, ToMV - Tomato Mosaic Virus, V - Verticillium
Growth: CD - Compact Determinate, CI - Compact Indeterminate, D - Determinate, I - Indeterminate, SD - Semi-determinate

VEGETABLES & HERBS / HANDPICKED





Butterbaby Squash



Autumn Frost Squash

Honeynut Squash

Name	Туре	Exterior colour	Days to maturity from direct seed	Fruit size/weight	Plant habit	Disease resistance	Comments					
WINTER SQUAS	WINTER SQUASH											
Autumn Frost F1 Cucurbita moschata	Specialty Round	Dark tan	100-105	5-7 in./13-18 cm long x 5-6 in./13-15 cm wide	Medium Vine	IR: PM	Uniquely ribbed, round fruit ripens to dark tan with a frosted overlay. Fruit is similar in taste to a butternut squash, with superior quality, rich flavour and a shelf life of up to 4 months after maturity, allowing for a supply of high-quality fruit throughout the Winter season. Fruit can be prepared like a winter squash; cut lengthwise or cut the top 2 in./5 cm off, scoop seeds out and roast; perfect for stuffing. Best grown in-ground. Also available as organic seed.					
Butterbaby Cucurbita moschata	Mini butternut	Tan	100-105	4-6 in./10-15 cm long x 3-4 in./ 8-10 cm wide, 0.5-1.5 lb. (227 to 680 g)	Restricted Vine	IR: PM	Produces many sweet, personal- sized butternuts. 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. Best in-ground; can be grown on a trellis to save even more space. Also available as organic seed.					
Honeynut Cucurbita moschata	Mini butternut	Dark tan	105-110	4-5 in./10-13 cm long x 2.5-4 in./ 6-10 cm wide, 8-16 oz./ 227 to 454 g	Restricted Vine		Produces exceptionally sweet, small fruit that are manageable to prepare. The first widely adaptable small-fruited butternut squash in a highgerminating, uniform strain. Higher yielding than traditional varieties. Best in-ground.					

Disease terminology: HR = High Resistance, IR = Intermediate Resistance
Disease codes: PRSV - Papaya Ringspot Virus, PM - Powdery Mildew, WMV - Watermelon Mosaic Virus, ZYMV - Zucchini Yellow Mosaic Virus







Lemon Sun Squash



Fresca Strawberry

STRAWBERRY • Fragaria x ananassa

Fresca

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

Seed supplied as: Raw Days from transplant to ripe fruit: 85

- Produces medium-size berries from the start of Summer through Autumn.
 Best in baskets, containers and in-ground.

Name	Туре	Exterior colour	Days to maturity from direct seed	Fruit size/weight	Plant habit	Disease resistance	Comments
SUMMER SQUAS	SH						
Easy Pick Gold II F1 Cucurbita pepo	Zucchini	Gold	45-50	1-10 in./ 3-25 cm long	Bush	IR: PRSV, WMV, ZYMV	Open habit with nearly no spines on the petioles for easy and continuous harvests with no pain and less scarring on fruit. Parthenocarpic variety means that plants will produce fruit without insect pollination. Harvest from a very small size with a flower attached. Best in-ground.
Lemon Sun F1 Cucurbita pepo	Patty Pan	Yellow	40-45	1-3 in./3-8 cm long x 1-5 in./ 3-13 cm wide	Bush		Vigorous and strong bush plant habit will produce exceptional yields of uniform, yellow, scalloped, disc-shaped fruit with no green on the blossom end. Fruit are sweet and tender; harvest from baby with the flower attached to full size, 4 to 5 in./10 to 13 cm wide. Large quantities of male flowers are perfect for frying. Best grown in-ground.

VEGETABLES & HERBS / HANDPICKED

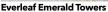














Everleaf Thai Towers

Towering over other basils

The aromatic and vibrant flavour of the Everleaf basils complements any dish! These well-branched basils with short internodes make beautiful, tidy, towering plants that have huge harvest potential and brighten gardens or mixed containers.

Name	Height	Spread	Days to maturity from transplant	Comments
BASIL				
Dolce Fresca Ocimum basilicum	12-14 in./ 30-36 cm	10-12 in./ 25-30 cm	28	Mid-size plant has a unique, bushy habit with shorter internodes that shows better at retail than traditional basils and holds its controlled size in the garden without getting tall and leggy. More usable leaf yields, with traditional sweet Genovese basil flavour. All-America Selections Winner.
Everleaf Emerald Towers Ocimum basilicum	24-36 in./ 61-91 cm	8-12 in./ 20-30 cm	30-45	Flowers up to 10 to 12 weeks later than standard basil. Well-branched variety with short internodes makes a beautiful, towering plant with huge harvest potential that stays tidy for many uses, including in-ground, container gardens and hydroponics. Traditional Genovese flavour is perfect for eating fresh in Caprese salads or chopped fresh in recipes. Dark green, glossy foliage and tidy columnar habit stand out at retail.
Everleaf Genovese Ocimum basilicum	18-24 in./ 46-61 cm	12-18 in./ 30-46 cm	30-45	Flowers up to 8 weeks later than standard basil. First basil bred for season-long performance and continual harvesting. Compact variety has short internodes and excellent branching, perfect for in-ground or container gardens. Robust Genovese flavour stands up to cooking - perfect for pesto and adding to sauce. Intermediate resistance to downy mildew and standard resistance to Fusarium make it a standout in any garden!







Dolce Fresca All-America Selections Wir	nner	Newton Basil		Purple Ruffles Basil All-America Selections Winner
Name	Height	Spread	Days to maturity from transplant	Comments
BASIL				
Everleaf Thai Towers Ocimum basilicum	24-36 in./ 61-91 cm	8-12 in./ 20-30 cm	30-45	Flowers up to 10 to 12 weeks later than standard Thai basil with huge harvest potential. Well-branched variety with short internodes makes a beautiful, columnar plant that stays tidy for many uses, including inground, container gardens and hydroponics. Aromatic and vibrant licorice flavour complements any dish, especially Thai cuisine. Blends well when cooked in a curry or chop fresh on Pad Thai to experience full licorice aroma. Masses of medium-green leaves with occasional purple flecks and soft purple stems will brighten any retail display.
Newton Ocimum basilicum	12-20 in./ 30-51 cm	10-16 in./ 25-41 cm	21-30	Fast-growing variety with traditional Genovese flavour features high resistance to Fusarium. Unlike similar varieties, Newton does not have a licorice aftertaste, appealing to a wide range of consumers. Large, bright green, crinkled leaves are great for vegetable wraps and fresh chopped herbs.
Purple Ruffles Ocimum basilicum	18-24 in./ 46-61 cm	18-24 in./ 46-61 cm	28	Ornamental variety has fragrant, ruffled, deep purple leaves with mild anise flavour. All-America Selections Winner.



SINGLE-SPECIES MULTI-SEED PELLETS

SimplyHerbs[™] Series

SimplyHerbs Try Basil and Rosemary are available as **Precision™ Multi-Pellets**.

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.

All varieties are best inground and in containers.



Name	Seed supplied as	Seeds per pellet	Height	Spread	Days to harvest from transplant	USDA hardiness zones
Try Basil Ocimum basilicum	PMPL*	8	24-30 in./61-76 cm	12-16 in./30-41 cm	28	
Oregano Origanum vulgare	MPL	9-14	12-30 in./30-76 cm	12-24 in./30-61 cm	28	5a-9b
Rosemary Rosmarinus officinalis	PMPL	7	12-24 in./30-61 cm	12-24 in./30-61 cm	42	7a-10b
Thyme Thymus vulgaris	MPL	8-14	12-18 in./30-46 cm	12-18 in./30-46 cm	42	5a-9b

 $MPL - Supplied \ as \ multi-species \ multi-pellets, \ with \ 3 \ or \ more \ seedlings \ per \ pellet. \ PMPL - \ Precision \ ^{\texttt{M}} \ Multi-Pellets \ assure \ high \ germination \ uniformity. \ ^{\texttt{E}} \ Each \ pellet \ includes \ Genovese, \ serrated \ and \ dark \ red \ selections.$

MULTI-SPECIES & SINGLE-SPECIES MULTI-PELLETS •

SimplySalad® Series

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

Plug crop time: 2 to 3 weeks

- SimplySalad introduced the first multispecies multi-seed pellets for salad.
- Easy to grow with very quick crop times and only one pellet needed.
- Can be direct-sown in 4 to 6-in./10 to 15-cm pots and colour bowls.
- Produces more vivid colours when finished cool.
- Gardeners will enjoy as both a colourful, mixed-texture ornamental and a delicious, nutritious edible.
- Performs best for consumers in full sun in cool weather, or partial shade as temperatures warm up.
- Best in containers.



Alfresco Mixture



Arugula



City Garden Mixture



Global Gourmet Mixture



Kale Storm Mixture



Summer Picnic Mixture



Wonder Wok Mixture

Name	Seed supplied as	Seeds per pellet	Height	Spread	Days to maturity from transplant	Comments
Alfresco Mixture	MPL	10-12	12 in./30 cm	12 in./30 cm	2-4 weeks	Red and green leaf lettuces with arugula, endive and radicchio.
Arugula	PMPL	6	12-18 in./30- 46 cm	12-18 in./30- 46 cm	2-4 weeks	Quick to establish, upright variety with a mix of lobes and smooth shapes - perfect for bunching. Harvest as young leaves with a mild, nutty flavour; leaves become spicy as they mature or are exposed to high temperatures.
City Garden Mixture	MPL	7-9	12 in./30 cm	12 in./30 cm	2-4 weeks	Red and green lettuces.
Global Gourmet Mixture	MPL	10-12	12 in./30 cm	12 in./30 cm	2-4 weeks	Red and green leaf lettuces with spicy Asian greens.
Kale Storm Mixture	PMPL	8	12-24 in./30- 61 cm	12-24 in./30- 61 cm	2-4 weeks	The first all-kale SimplySalad includes an attractive mix of textures and colours, including purple, green and blue. Lasts longer in the container than lettuce and won't bolt. Can also be planted in the ground for all-season harvest.
Summer Picnic Mixture	MPL	10-12	12 in./30 cm	12 in./30 cm	2-4 weeks	A season extender! Heat-tolerant, late- bolting mix of red and green lettuces.
Wonder Wok Mixture	MPL	10-12	12 in./30 cm	12 in./30 cm	2-4 weeks	Mix of Asian greens including mustards, kale and bok choy.

MPL - Supplied as multi-species multi-pellets, with 3 or more seedlings per pellet. $PMPL-Precision \ ^{TM}\ Multi-Pellets\ assure\ high\ germination\ uniformity.$

VEGETABLES & HERBS / PRODUCTION GUIDE

Class/Variety	Page	Fresh Market		Home Garden		
		Field	Hydroponic	Protected Culture	In-ground	Container
AMERICAN SLICER CUCUMBER						
Martini F1	208	Х			Х	
Patio Snacker F1*	208				Х	X
EUROPEAN PICKLER CUCUMBER						
GherKing F1	208	X		Х	Х	
EGGPLANT						
Asian Delite F1	209	X			Х	X
Fairy Tale F1	209	X			Х	X
Gretel F1	209	X			Х	X
Hansel F1	209	X			X	Х
Patio Baby F1	209	Х			Х	Х
HOT PEPPER						
Aji Rico F1	210	Х			X	
Cajun Belle	210	Х			Х	Х
Golden Cayenne*	210				X	Х
La Bomba II F1	210	Х			X	Х
Mad Hatter F1	210	X			X	
Pot-a-peño F1	211	X			X	X
Primero Red F1	211	X			X	X
Sweet Heat F1*	211				X	X
SWEET PEPPER						
Candy Cane Chocolate Cherry F1	213	X			X	X
Candy Cane Red F1	213	X			X	X
Peppi Cornissimo F1	212	X			X	
Peppi Red F1	212	Х		X	X	
Peppi Yellow F1	212	X		X	X	
PeppiGrande Red F1	212	X		X	X	
New Prism F1	213	X			X	X
Snackabelle Red F1	212	X			X	X
Trailblazer F1	213	X			X	X
SIMPLYSALAD®						
Alfresco Mixture	225		X		X	X
Arugula	225	X	X		X	X
City Garden Mixture	225		X		X	X
Global Gourmet Mixture	225		X		X	X
Kale Storm Mixture	225	X	Х		X	X
Summer Picnic Mixture	225		X		X	X
Wonder Wok Mixture	225		X		X	Х

 $[\]hbox{^*Compact variety -} \ best-suited to \ home \ garden \ use.$

PRODUCTION GUIDE / VEGETABLES & HERBS

Class/Variety	Page	Fresh Market			Home Garden	
		Field	Hydroponic	Protected Culture	In-ground	Container
MINI BUTTERNUT SQUASH				Culture		
Butterbaby	220	Х			X	
Honeynut	220	X			X	
PATTY PAN SQUASH						
Lemon Sun F1	221	Х			Х	
SPECIALTY ROUND SQUASH						
Autumn Frost F1	220	Х			Х	
ZUCCHINI SQUASH						
Easy Pick Gold II F1	221	×		Х	Х	X
STRAWBERRY						
Fresca*	221				X	Х
BEEFSTEAK TOMATO						
BlushingStar F1	218	Х			Х	
DarkStar F1	218	X			Х	
CHERRY TOMATO						
Artemis F1	214	Х		X	X	
Chocolate Sprinkles F1	214	X		X	Х	
Helix F1	214	X			X	
Little Bing F1*	214					X
Micro Tom*	214					Х
Midnight Snack F1	215	Х			X	
Orange Zinger F1	215	X			Х	
Sugar Rush F1	215	Х			X	
Tidy Treats F1*	215				X	Х
Topsy Tom F1*	216					X
Tumbler F1*	216					Х
CURRANT TOMATO						
Candyland Red	217	X			X	
HEIRLOOM MARRIAGE™ TOMATO						
Big Brandy F1	217	X			Х	
Cherokee Carbon F1	217	Х			X	
Genuwine F1	217	X			Х	
ROMA TOMATO						
Bellatrix F1	218	X			Х	X
Little Napoli F1*	218					Х
Sunrise Sauce F1	218	X			Х	

VEGETABLES & HERBS / PRODUCTION GUIDE

Class/Variety	Page	Fresh Market			Home Garden	Home Garden	
		Field	Hydroponic	Protected Culture	In-ground	Container	
SLICER TOMATO						<u>'</u>	
Homeslice F1	219	X			X	X	
Little Sicily F1*	219					X	
Loki F1	219	X		X	X		
Stellar F1	219	X			X		
SPECIALTY SMALL-FRUITED TOMATO							
Marzito F1	216	X		X	X		
New Sun Dipper F1	216	X		X	X		
SIMPLYHERBS™							
Oregano	224	X			X	X	
Rosemary	224	X			X	X	
Thyme	224	X			X	X	
Try Basil	224	Х	Х		X	Х	
BASIL							
Dolce Fresca	222	Х	X		X	X	
Everleaf Emerald Towers	222	Х	X		Х	Х	
Everleaf Genovese	222	Х			Х	Х	
Everleaf Thai Towers	223	X	X		X	Х	
Newton	223	X	X		X	Х	
Purple Ruffles	223	Χ			Х	X	

 $^{{}^{\}star}\text{Compact}$ variety - best-suited to home garden use.









PanAmerican Seed.

KEEPING IN TOUCH











panamseed.com

In addition to the helpful tools on our website, you can find us on social media with all the latest tips and tricks, real-life experiences and how-to videos. Follow us to be a part of the growing community!











INSPIRED SOLUTIONS

Looking for new solutions? It's time to get inspired with tools that make **scheduling premium crops, perennials** and **combos quick and easy**. With our dedication to breeding, research, trialing and creating **time-saving solutions**, we'd like to introduce you to several new and popular tools that you can add to your toolbox.

LANDSCAPE PRODUCTS FOR PROFESSIONALS

At PanAmerican Seed, we know how important growers are to professional landscapers. For this segment of our industry, we provide support through product development, breeding and trialing designed for landscape performance.

We focus on several important professional landscaper requirements, testing products under conditions including: sun and 50% shade, overhead irrigation, speed to fill, maintenance requirements and season-long colour impact.

Products designated as a Pro Landscape Performer are listed on the PAS website.



Our collection of landscape varieties has been selected based on these key elements:



Interspecific Impatiens Solarscape Magenta Bliss Trial • Elburn, IL: 27 plants, full sun, 14 in./36 cm spacing









Discover Helpful Plant Lists and Resources

- Find a Plant Supplier
- Plant Calculator
- Regional Plant Selector
- Build A Landscape Sell Sheet Tool



Find the right landscape solution today!



SOW FAST. GROW FAST.™

A program designed to fill your bench fast, and clear it even faster!

What if your empty bench could be filled and ready for additional sales in 10 WEEKS OR LESS?

With the Sow Fast. Grow Fast.™ program, you can keep your **benches full** after Spring for additional **shoulder season sales.** Expertly **designed** and meticulously **trialed**, it's the top growing program proven to fill benches with quality seed product fast. Sow Fast. Grow Fast. offers 113 varieties from seed that will be ready for sales in **10 weeks or less.** It's time to say goodbye to your empty bench and hello to more shoulder season sales!



113 VARIETIES

33 сомвоѕ

20 SERIES

10 WEEKS CROP TIME OR LESS

SOLUTION TO KEEP YOUR SALES GROWING!



Bonanza[™] Gold Marigold

PROVEN GERMINATION • CALCULATED FINISH TIMES • QUICK TURN-AROUND

MIX AND MATCH FOR PERFECT POTTED PLANTS AND CREATIVE COMBINATIONS

	ADT		DLI		
	71°F/22°C		15 mol m ⁻² d ⁻¹		
		TOTAL C	OP TIME		
	Quart (4.25 in./11 cm)		Gallon (6 ir	n./15 cm)	
CLASS/SERIES/VARIETY	Weeks from Sowing	Plugs per pot	Weeks from Sowing	Plugs per pot	
Alternanthera, Purple Prince	8	1	8	1	
Celosia Foliage, Sol™	9	1	9	1	
Celosia, Ice Cream	9	1	10	3	
Coleus, Kong Jr [™]	9	1	10	1	
Coleus, Kong*	9	1	9	1	
Coleus, Premium Sun	9	1	10	1	
Coleus, Wizard*	9	1	10	1	
Dahlia, Figaro™	10	1	10	3	
Hibiscus, Mahogany Splendor	8	1	8	1	
Impatiens, Beacon*	10	1	10	3	
Marigold, African, Taishan*	10	1	10	3	
Marigold, French, Bonanza™	7	1	7	3	
Marigold, French, Durango*	7	1	7	3	
Ornamental Millet, Copper Prince	8	1	8	3	
Petunia, Ez Rider*	10	1	10	3	
Petunia, Lo Rider™	10	1	10	3	
Petunia, Pretty Flora [™]	10	1	10	3	
Petunia, Pretty Grand™	10	1	10	3	
Portulaca, Happy Hour™	10	1	10	3	
Salvia, Lancelot	10	1	10	2	
Salvia, Lighthouse	8	1	8	3	
Salvia, Red Hot Sally II	8	1	8	3	
Salvia, Vista™	8	1	8	3	
Sunflower, Miss Sunshine	7	1	7	3	
Vinca, Pacifica XP	10	1	10	3	
Zinnia, Double Zahara*	10	1	10	3	
Zinnia, Zahara*	10	1	10	3	
Zinnia, Zesty™	9	1	9	1	

Zinnia, Zesty™ 9 1

*Depending on location, these are early-Spring conditions.



Lo Rider™ Rose Petunia Ice Cream Orange Celosia Lighthouse Red Salvia Lo Rider™ Blue Petunia



Lighthouse Red Salvia Durango™ Orange Marigold Purple Prince Alternanthera

COMBOS YOU CAN COUNT ON

To save you time and stress in guessing, we've calculated the time it will take for you to grow your perfect combo! Through dedicated research and development, we have predetermined the ideal genus, season, light exposure and planting type to provide you with a combo that you can count on.

IT'S AS EASY AS:



Your Calculated Combos™ results will provide you with plants per pot, crop time plug and finished time, so you can stop calculating and get growing!



Solarscape Shimmer White Impatiens Solarscape Magenta Bliss Impatiens Serena Purple Angelonia

Hula Pink Begonia Hula Red Begonia Sparkle White Gaura

Solarscape Orange Burst Impatiens Mediterranean XP Burgundy Halo Vinca Pony Tails Stipa



Create Your Own Combo!

FIRST-YEAR-FLOWERING TOOL

ACCURATE PERENNIALS SCHEDULING MATTERS

It's easier than ever before to schedule your seed perennials with Kieft Seed.™ Use our interactive scheduling tool and resource guide to plan, sow and grow dozens of perennial crops to hit specific bloom weeks for maximum sales opportunities.



Choose from hundreds of flowering options that have broken vernalisation barriers.



EASY TO ACCESS. EASY TO USE, EASY TO STAY IN THE KNOW.



Hit your bloom week with this easy resource

SCHEDULING: KNOW BEFORE YOU GROW

The Smart Scheduling Tool from PanAmerican Seed is an easy-to-use estimator for growers to help plan and schedule their crops. It was developed to provide accurately predicted finish times for key crops, targeting our Wave® petunias and Kitchen Minis™ programs.

The tool takes into consideration environmental conditions such as temperature, media and light, as well as other factors that influence plant growth and development. You can use the tool to calculate precise ship dates with exact product specs - the keystone of floriculture crop production.



TOOLS YOU CAN USE



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THE PANAMERICAN SEED TEAM IS HERE TO HELP!

USE THE POWER OF RECOGNITION

The "stamp of approval" on these reliable, proven varieties assures landscapers and home gardeners that they are selecting and planting superior performers. Growers and retailers benefit from the added promotional efforts that these winners receive, both at their debut and for years to come.









Coleus, Premium Sun Coral Candy All-America Selections Winner



Echinacea Artisan Collection Yellow Ombre All-America Selections Winner, Medal of Excellence Industry's Choice

ALL-AMERICA SELECTIONS

Angelonia Serenita Pink Coleus, Premium Sun Coral Candy Coreopsis Early Sunrise Dianthus Ideal Select Violet Interspecific Dianthus Jolt Pink Echinacea Cheyenne Spirit Echinacea PowWow Wild Berry Eggplant Fairy Tale Eggplant Gretel Eggplant Hansel Gaillardia Mesa Yellow Gaura Sparkle White Basil Dolce Fresca Basil Purple Ruffles Ornamental Millet Purple Majesty Osteospermum Akila Daisy White Pepper Aji Rico Pepper Cajun Belle Pepper Mad Hatter Ornamental Pepper Black Pearl Ornamental Pepper Chilly Chili Spreading Petunia Tidal Wave Red Velour Spreading Petunia Tidal Wave Silver Spreading Petunia Wave Carmine Velour Spreading Petunia Wave Lavender Spreading Petunia Wave Purple Classic Snapdragon Rocket Bronze Snapdragon Rocket Golden Snapdragon Rocket Orchid Snapdragon Rocket Red Snapdragon Rocket Rose Shades Snapdragon Rocket White Tomato Candyland Red Tomato Midnight Snack Vinca Pacifica XP Burgundy Halo Zinnia Double Zahara Cherry Zinnia Double Zahara Fire Zinnia Zahara Starlight Rose

ALL-AMERICA SELECTIONS REGIONAL

Echinacea Artisan Collection Yellow Ombre Eggplant Patio Baby Pepper Pot-a-peño

FLEUROSELECT GOLD MEDAL

Armeria Ballerina Red Celosia Foliage, Sol Gekko Green Coreopsis Early Sunrise Cosmos Sonata White Echinacea Cheyenne Spirit Gaillardia Mesa Yellow Gaura Sparkle White Lavandula Bandera Purple Lavandula Ellagance Purple Leucanthemum Madonna Nemesia Sundrops Mixture Osteospermum Akila Daisy White Spreading Petunia Tidal Wave Red Velour Spreading Petunia Wave Lavender Rudbeckia Goldblitz Viola Sorbet XP Delft Blue Zinnia Double Zahara Fire Zinnia Zahara Sunburst



Impatiens Beacon Bright Red Reader's Choice



Rudbeckia Goldblitz



Pot-a-peño Jalapeño Pepper

FLEUROSELECT NOVELTY

Alyssum Clear Crystal White Celosia Foliage, Sol Gekko Green Celosia Foliage, Sol Lizzard Leaf Coreopsis Double the Sun Digitalis Dalmatian Purple Heuchera Melting Fire Iberis Whiteout Lavandula Bandera Deep Purple Lavandula Bandera Deep Rose Lavandula Bandera Purple Leucanthemum Madonna Lobelia Regatta Rose Lobelia Riviera White French Marigold Bonanza Deep Orange Ornamental Pepper Black Pearl Perovskia Blue Steel Perovskia Bluesette Spreading Petunia Tidal Wave Red Velour Salvia New Dimension Rose Salvia Salvatore Blue Silene Starry Dreams

MEDAL OF EXCELLENCE BEST PERFORMING VARIETY

Vinca Pacifica XP Burgundy Halo

Zinnia Double Zahara Cherry

Zinnia Double Zahara Fire

Zinnia Double Zahara White

Zinnia Zahara Starlight Rose

Zinnia Zahara Sunburst

Zinnia Double Zahara Bright Orange

Echinacea Cheyenne Spirit

MEDAL OF EXCELLENCE EDITOR'S CHOICE

Spreading Pansy Cool Wave Frost Spreading Pansy Cool Wave Mixture Spreading Pansy Cool Wave Violet Wing Spreading Pansy Cool Wave White

MEDAL OF EXCELLENCE BEST PROGRAM

Edible Potted Pepper Fresh Bites Orange Edible Potted Pepper Fresh Bites Red Edible Potted Pepper Fresh Bites Yellow Edible Potted Pepper Adobo Edible Potted Pepper Cosmo Edible Potted Pepper Hot Burrito Edible Potted Pepper Hot Fajita Edible Potted Pepper Hot Joker Edible Potted Pepper Hot Lemon Zest Edible Potted Pepper Piñata Edible Potted Pepper Tamale Edible Potted Pepper Taquito Tomato Micro Tom Edible Potted Tomato Cocoa Edible Potted Tomato Red Velvet Edible Potted Tomato Siam

MEDAL OF EXCELLENCE INDUSTRY'S CHOICE Echinacea Artisan Collection Red Ombre Echinacea Artisan Collection Soft Orange Impatiens Beacon Bright Red Impatiens Beacon Coral Impatiens Beacon Lipstick Impatiens Beacon Orange Impatiens Beacon Rose Impatiens Beacon Salmon Impatiens Beacon Violet Shades Impatiens Beacon White Impatiens Beacon Cape Pine Mixture Impatiens Beacon Formula Mixture Improved Impatiens Beacon Lindau Mixture Impatiens Beacon Pearl Island Mixture Impatiens Beacon Portland Mixture Impatiens Beacon Sanibel Mixture Interspecific Impatiens Solarscape Magenta Bliss Interspecific Impatiens Solarscape Orange Burst Interspecific Impatiens Solarscape White Shimmer Interspecific Impatiens Solarscape XL Salmon Glow Vinca Tattoo Black Cherry

Vinca Tattoo Papaya Vinca Tattoo Raspberry

Vinca Tattoo Tangerine

MEDAL OF EXCELLENCE READER'S CHOICE

Impatiens Beacon Bright Red Impatiens Beacon Coral Impatiens Beacon Lipstick Impatiens Beacon Orange Impatiens Beacon Rose Impatiens Beacon Salmon Impatiens Beacon Violet Shades Impatiens Beacon White Impatiens Beacon Cape Pine Mixture Impatiens Beacon Formula Mixture Improved Impatiens Beacon Lindau Mixture Impatiens Beacon Pearl Island Mixture Impatiens Beacon Portland Mixture Impatiens Beacon Sanibel Mixture

NATIONAL GARDEN BUREAU **GREEN THUMB AWARD**

Pepper Candy Cane Chocolate Cherry Tomato Sun Dipper

ROYAL HORTICULTURAL SOCIETY AWARD OF GARDEN MERIT

Alyssum Easter Bonnet Violet Aquilegia Swan Burgundy And White Aquilegia Swan Yellow Dianthus Amazon Neon Purple Dianthus Amazon Rose Magic Dianthus Dynasty Orchid Dianthus Ideal Select Rose Dianthus Ideal Select WhiteFire Dianthus Sweet Coral Dianthus Sweet Scarlet



Interspecific Impatiens Solarscape Magenta Bliss Medal of Excellence Industry's Choice, Reader's Choice

PANAMERICAN SEED / PROTECTION INFORMATION

U.S. UTILITY PATENTS

US 10,212,908

Vinca Titan™ Cranberry Vinca Titan™ Dark Red Vinca Titan™ Really Red

US 10,285,362

US 10,285,362
Impatiens Beacon® Bright Red
Impatiens Beacon® Coral
Impatiens Beacon® Lipstick
Impatiens Beacon® Orange
Impatiens Beacon® Rose
Impatiens Beacon® Salmon
Impatiens Beacon® Violet Shades
Impatiens Beacon® White Impatiens Beacon® White
Impatiens Beacon® Cape Pine Mixture
Impatiens Beacon® Formula Mixture Improved
Impatiens Beacon® Lindau Mixture Impatiens Beacon® Pearl Island Mixture Impatiens Beacon® Portland Mixture Impatiens Beacon® Sanibel Mixture

US 10,631,515 Pentas Glitterati[™] Purple Star Pentas Glitterati[™] Red Star

US 11,559,016

Vinca Valiant™ Magenta

US 10,750,692

French Marigold Fireball

French Marigold Strawberry Blonde

US 11,166,424

Inpatiens Beacon® Bright Red Impatiens Beacon® Coral Impatiens Beacon® Lipstick Impatiens Beacon® Orange Impatiens Beacon® Rose
Impatiens Beacon® Salmon Impatiens Beacon® Violet Shades
Impatiens Beacon® White
Impatiens Beacon® Cape Pine Mixture
Impatiens Beacon® Formula Mixture Improved Impatiens Beacon® Lindau Mixture
Impatiens Beacon® Pearl Island Mixture Impatiens Beacon® Portland Mixture
Impatiens Beacon® Sanibel Mixture

US 7,642,436

Petunia Sophistica® Antique Shades Petunia Sophistica® Blackberry Petunia Sophistica* Lime Bicolor
Petunia Sophistica* Lime Bicolor
Petunia Sophistica* Lime Green
Spreading Petunia Easy Wave* Berry Velour
Spreading Petunia Easy Wave* Red Velour
Spreading Petunia Easy Wave* Red Velour Spreading Petunia Tidal Wave® Red Velour Spreading Petunia Wave® Carmine Velour US 7,915,504

Alyssum Clear Crystal* Lavender Shades Alyssum Clear Crystal* Purple Shades Alyssum Clear Crystal* White Alyssum Clear Crystal* Mixture

US 7,982,110

Echinacea Artisan™ Collection Red Ombre Echinacea Artisan™ Collection Soft Orange Echinacea Artisan™ Collection Yellow Ombre Echinacea Cheyenne Spirit Echinacea PowWow® Wild Berry

US 9,301,465

Ornamental Pepper Hot Pops Purple

US 9,307,712

Ornamental Pepper Hot Pops Yellow

US 9,320,212

French Marigold Hot Pak™ Gold French Marigold Hot Pak™ Mixture

US 9,326,464

French Marigold Hot Pak^TM Harmony French Marigold Hot Pak™ Mixture

US 9,326,465

French Marigold Hot Pak™ Yellow French Marigold Hot Pak™ Mixture

US 9,326,466

French Marigold Hot Pak™ Spry French Marigold Hot Pak™ Mixture

US 9,326,467

French Marigold Hot Pak[™] Orange French Marigold Hot Pak[™] Mixture

US 9.326.468

French Marigold Hot Pak™ Flame French Marigold Hot Pak™ Mixture

US 9,451,748

Vinca Valiant™ Burgundy Vinca Valiant™ Mixture

US 9.451.749

Vinca Valiant™ Mixture

US 9,451,750

Vinca Valiant™ Orchid

US 9,451,751

Vinca Valiant™ Punch Vinca Valiant™ Mixture

US 9,451,752

Vinca Valiant[™] Lilac Vinca Valiant[™] Mixture

U.S. UTILITY PATENTS APPLIED FOR

Vinca Valiant[™] Apricot

U.S. PLANT VARIETY PROTECTIONS

Celosia Kosmo Pink - 200400022
Coleus, Premium Shade Kong* Red - 200500015
Coleus, Premium Shade Kong* Red - 200500017
Coleus, Premium Shade Kong* Salmon Pink - 200900035
Coreopsis SunKiss - 201700014
Cuphea Pink Shimmer - 201800290
Erysimum Citrona* Orange - 200600167
Erysimum Citrona* Yellow - 200600168
Exacum Sapphire - 201800031
French Marigold Bonanza™ Bolero - 201800074
French Marigold Flamenco - 202000034
Matthiola Katz Ruby - 201200438
Myosotis Mon Amie Blue - 200800070
Ornamental Oregano Kirigami - 201800057 Celosia Kosmo Pink - 200400022

Ornamental Oregano Kirigami - 201800057
Ornamental Pepper Black Pearl - 200500020
Salvia interspecific Big Blue - 201700218
Vinca Mediterranean XP Dark Red - 200900043
Vinca Mediterranean XP Boach 200900080 Vinca Mediterranean XP Peach - 200900080 Vinca Mediterranean XP Red - 200900081

Vinca Mediterranean XP Strawberry - 200900083 Vinca Mediterranean XP White - 200900053 Vinca Pacifica XP Burgundy Halo - 200700272 Vinca Pacifica XP Dark Red - 200600189 Vinca Pacifica XP Magenta Halo - 200500216 Vinca Pacifica XP Rose Halo - 200500218

Vinca Pacifica XP Rose Halo - 200500218

Vinca Pacifica XP Really Red - 200600190

Vinca Tattoo™ Black Cherry - 201800427

Vinca Tattoo™ Blueberry - 202100168

Vinca Tattoo™ Orange - 202200007

Vinca Tattoo™ Papaya - 201800424

Vinca Tattoo™ Raspberry - 201800426

Vinca Tattoo™ American Pie Mixture - 200600190

Vinca Tattoo™ American Pie Mixture - 202100168

Zinnia Double Zabara™ Cherry - 201600027

Vinca Tattoo™ American Pie Mixture - 202100168
Zinnia Double Zahara™ Cherry - 201600027
Zinnia Double Zahara™ Fire - 201600032
Zinnia Double Zahara™ Raspberry Ripple - 201800173
Zinnia Double Zahara™ Salmon - 201900097
Zinnia Double Zahara™ Yellow - 202000360
Zinnia Zahara* Cherry - 201600029
Zinnia Zahara* Cherry - 201600029
Zinnia Zahara* Raspberry - 201500215
Zinnia Zahara* Red - 201600030
Zinnia Zahara* Red - 201600030
Zinnia Zahara* Nitte - 201400297
Zinnia Zahara* Yellow - 201500214

EUROPEAN COMMUNITY PLANT BREEDER'S RIGHTS

Celosia Neo[™] Gold - 46508 Celosia Neo[™] Orange - 44055 Celosia Neo[™] Pink - 43694 Celosia Neo[™] Red - 46509 Celosia Neo[™] Rose - 43693 Coreopsis SunKiss - 46544 Echinacea PowWow* Wild Berry - 35233 Exacum Sapphire - 49015 Heuchera Melting Fire - 20557 Lavandula Avignon Early Blue - 57924 Lavandula Blue Spear - 57923 Lavandula Lavance Deep Purple - 48822 Salvia interspecific Big Blue - 49559

EUROPEAN COMMUNITY UTILITY PATENTS APPLIED FOR

French Marigold Fireball French Marigold Filedali French Marigold Strawberry Blonde Impatiens Beacon® Bright Red Impatiens Beacon® Coral Impatiens Beacon® Lipstick Impatiens Beacon® Orange Impatiens Beacon® Rose
Impatiens Beacon® Salmon
Impatiens Beacon® Violet Shades Impatiens Beacon® White Impatiens Beacon® Cape Pine Mixture Impatiens Beacon® Formula Mixture Improved Impatiens Beacon® Lindau Mixture Impatiens Beacon* Pearl Island Mixture Impatiens Beacon* Portland Mixture Impatiens Beacon* Sanibel Mixture Petunia Sophistica* Antique Shades Petunia Sophistica® Blackberry Petunia Sophistica® Lime Bicolor Petunia Sophistica® Lime Green Spreading Petunia Easy Wave® Berry Velour Spreading Petunia Easy Wave Burgundy Velour Spreading Petunia Easy Wave Red Velour Spreading Petunia Tidal Wave® Red Velour Spreading Petunia Wave® Carmine Velour

CANADA UTILITY PATENTS APPLIED FOR

Impatiens Beacon® Bright Red Impatiens Beacon® Coral Impatiens Beacon® Lipstick Impatiens Beacon® Orange Impatiens Beacon® Rose Impatiens Beacon® Salmon Impatiens Beacon Simon Impatiens Beacon Violet Shades Impatiens Beacon White Impatiens Beacon Cape Pine Mixture Impatiens Beacon Formula Mixture Improved Impatiens Beacon® Lindau Mixture
Impatiens Beacon® Pearl Island Mixture Impatiens Beacon® Portland Mixture Impatiens Beacon® Sanibel Mixture

TERMS & CONDITIONS OF SALE / PANAMERICAN SEED

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 in 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, and acceptance to accept 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.

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 ir full is received. PanAmerican Seed Company is a division of Ball Horticultural Company, an Illinois corporation in the USA. PanAmerican Seed Europe B.V. is a Dutch company owned 100% by Ball Horticultural B.V., which is 100% owned by Ball Horticultural Company.

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. Bulk quantities of items within a series cannot be combined to reach the minimum amount. Special packaging requests can be for any quantity as long as the minimum bulk requirement is met.

ORDER CHANGES

While order changes can be accommodated, there could be an impact to the delivery date. Please contact your customer service representative to discuss the implications of any order changes prior to submission.

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 RIGHTTO 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. Special packaging requests must be at or above the Minimum Order requirements. 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 shipments. 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 the United States will be charged normal carrier rates.

RETURNS

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

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

Upon receiving authorization, returns can be shipped to: PanAmerican Seed Attn: Returns 622 Town Road West Chicago, Illinois USA 60185-2698

SEED COUNT

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

NOTICE REGARDING **SEED-BORNE DISEASES**

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

RESERVATION OF OWNERSHIP

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

LIMITATION OF WARRANTY

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

LIMITATION OF REMEDY

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

USE RESTRICTION

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

MANDATORY ARBITRATION

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

® denotes a U.S. registered trademark and ™ denotes a trademark of Ball Horticultural Company, unless otherwise indicated.

SALE LIMITATIONS

EXPORT CONTROLPANAMERCIAN SEED PRODUCTS ARE NOT AVAILABLE FOR SALE IN AND MAY NOT BE RESOLD INTO AND MAY NOT BE RESOLD INTO AUSTRALIA, NEW ZEALAND, KOREA, BRAZIL AND SOUTH AFRICA. THE COMPANY'S PRODUCTS MAY NOT BE SOLD, DIWERTED, 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

FOREIGN CORRUPT PRACTICES ACT

EACH PARTY REPRESENTS AND WARRANTS TO THE OTHER PARTY THAT IT WILL TAKE NO ACTION IN RELATION TO THIS TRANSACTION THAT WOULD BE IN VIOLATION OF THE APPLICABLE LAWS AND REGULATIONS OF ANY COUNTRY AND THE UNITED STATES OF AMERICA. NO PAYMENTS OF MONEY OR ANYTHING OF VALUE WILL BE OR ANY HING OF VALUE WILL BE OFFERED, PROMISED OR PAID, DIRECTLY OR INDIRECTLY, TO ANY OFFICIALS TO INFLUENCE THE ACTS OF SUCH OFFICIALS TO INDUCE THEM TO USE THEIR INFLUENCE WITH A GOVERNMENT OR AN INSTRUMENTALITY THEREOF, OR TO OBTAIN AN IMPROPER ADVANTAGE.

IMAGES

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PLANT PROTECTION

Many PanAmerican Seed and Kieft Seed varieties are protected by U.S. Patents and/or Plant Breeders' Rights in Europe and elsewhere. Find the complete protection information list on page 244.

EU 10351, etc.: European Community Plant Variety Rights

 $\textbf{EU PBRAF:} \ \textbf{European Community Plant Variety Rights Applied For}$

EU PAF: European Utility Patents Applied For

PCT: International Patent Applied For

US 7,915,504, etc.: U.S. Utility Patents **PPAF, US PAF:** U.S. Patents Applied For

US PVP 9500027, etc.: U.S. Plant Variety Protections **US PVPAF:** U.S. Plant Variety Protections Applied For



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GLOBAL CUSTOMER SERVICE STANDARDS

Empowering our customers through exceptional customer service



CUSTOMER FIRST PHILOSOPHY

- An exceptional customer experience is our top priority.
- We understand that our customers' needs are not one-size-fits-all and we are **committed to providing individualised 1:1 service** to each and every customer.



INDIVIDUALISED 1:1 SERVICE

- Each of our customers is assigned a dedicated PanAmerican Seed Global Customer Service Representative to support their business needs.
- PanAmerican Seed Global Customer Service Representatives are driven to develop real working relationships with both customers and external sales representatives acting in their interest.
- In a world full of customer service bots and automated answering services, the PanAmerican Seed Global Customer Service team maintains the core belief that world-class service only comes from the human touch. Our customer works every step of the way with an individual who is trained to facilitate successful outcomes on their behalf. Expect real people dedicated to real solutions.
- We are proudly selective. Only the most dynamic and adaptive individuals are hired for our customer service team. Once on our team, they are extensively trained to be experts in our products, processes, regulations, policies and customer needs.



TRANSPARENT COMMUNICATION

- Upon receiving a customer service inquiry, the dedicated PanAmerican Seed Global Customer Service Representative will provide a response within 24 hours.
- If a customer's dedicated representative is out of the office at any point during the time of an inquiry, instructions about who to contact in their absence will be included in an auto-response.
- Communications from dedicated PanAmerican Seed Global Customer Service Representatives will always be transparent. By sharing what we know, when we know it, we'll help our customers set realistic expectations about when to anticipate final outcomes on inquiries.



ORDER FULFILLMENT

- All order fulfillments from start to finish are overseen by our Global Customer Service Representatives.
- Customers **will be advised on the status** of the items in their orders as soon as the information is available.

GLOBAL CUSTOMER SERVICE STANDARDS / PANAMERICAN SEED



ACCURATE INVENTORY STATUS

- Using all the tools available to us, we inform customers of the availability of an item to ship on their requested ship date. Should an item be unavailable, an estimated availability date will be provided.
- If a customer does not wish to wait until the next date of product availability, our Global Customer Service Representatives can suggest an ideal alternative product to meet our customer's individual needs.



EXPORT

- Working in partnership with each customer, we assess and comply with the requirement for shipping based on their specified country.
- Each dedicated Global Customer Service Representative manages order shipments and keeps a detailed account of their customers' order requirements, such as shipment documentation, additional declarations and testing requirements. Any requirements that involve an action performed by the customer will always be clearly communicated.
- The Global Customer Service team is informed on the inspection dates of **products**, as well as where to locate the original and final inspection reports.



RETURN POLICY

Refer to our terms and conditions for full details.







PanAmerican Seed_®

