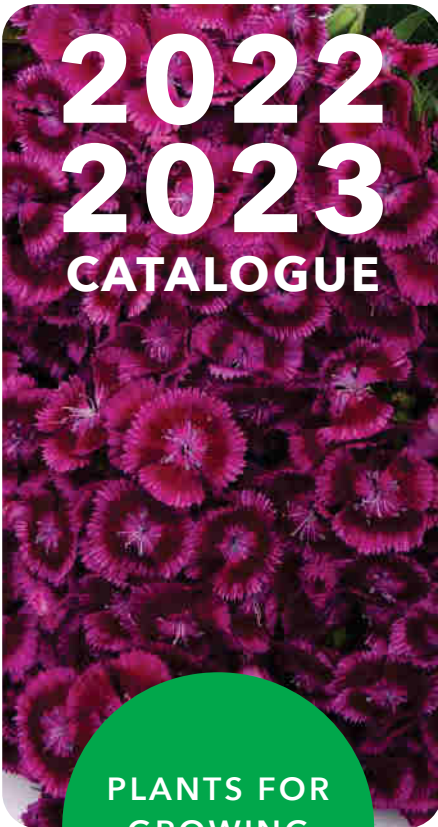


2022 2023 CATALOGUE

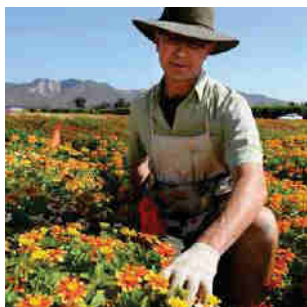
PLANTS FOR
GROWING
SUCCESS!



PanAmerican Seed®

ONLY THE BEST FROM PANAMERICAN SEED®

PanAmerican Seed® is your global partner for a wide range of high-quality seed products delivered to you on time for a successful growing season. We support you with the right products guaranteed to perform, the best customer service and tech support in the industry, the latest seed technology enhancements and controlled production to help you always grow your best.



QUALITY BREEDING

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.



CONTROLLED PRODUCTION

All of our seed production facilities are constantly monitored to maintain our seed quality. The seed is inspected all the way through our production process, being tested and retested, so we always have a full inventory of high-performance, high-quality seed available when and where you need it.



ENHANCED SEED TECHNOLOGY

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.



CUSTOMER SERVICE

You'll receive personalised, quality care from our Customer Service Representatives. They take the time to get to know our customers so they can provide the right solutions to help your business succeed.



TECHNICAL SUPPORT

Our technical support team has the expertise to provide 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.



EVOLVING OUR PRODUCTS

Our 2022 introductions expand our world-renowned collection of plants that provide you with growing solutions, like E3 Easy Wave™ Petunias, an evolution of our Wave program with benefits for grower production and sales.

SALES SUPPORT LOCATIONS

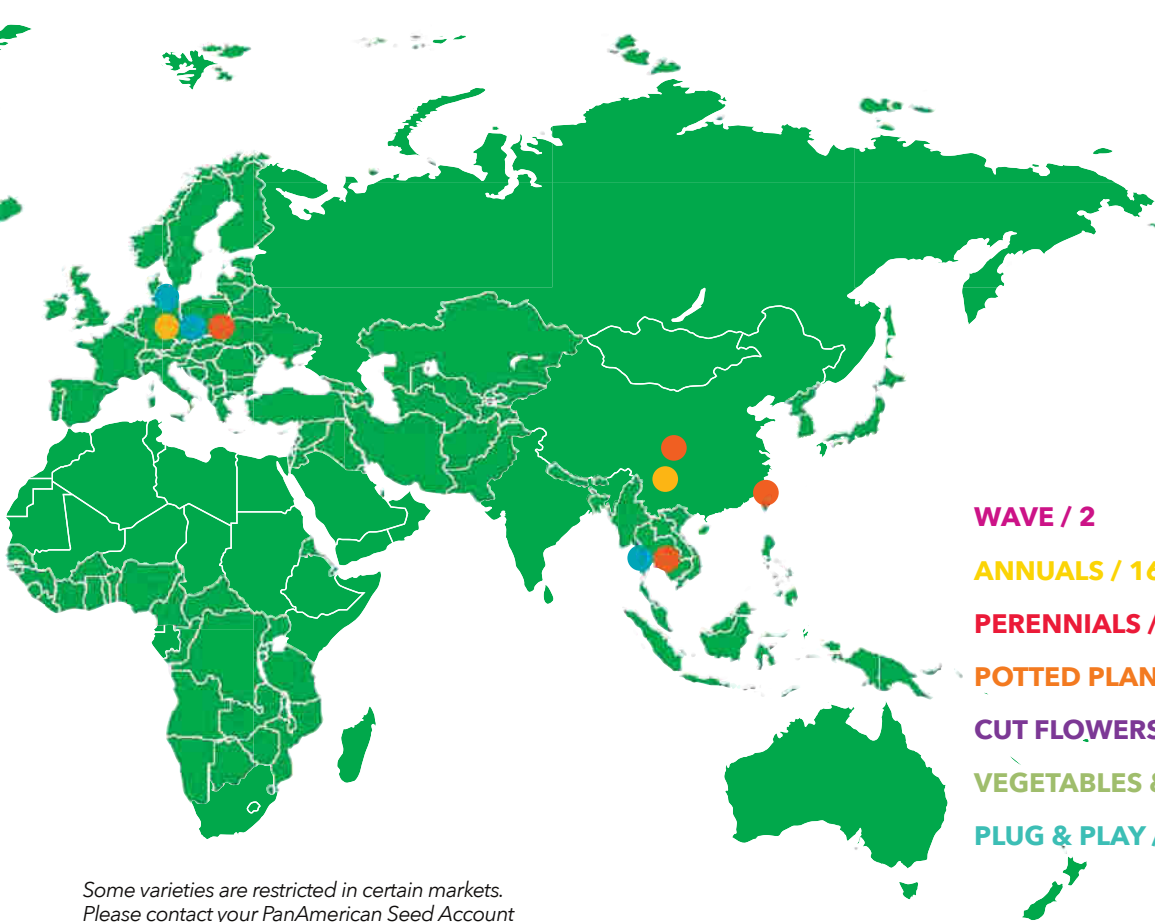
Venhuizen, Netherlands
 Illinois, USA
 Quillota, Chile
 Chiang Mai, Thailand
 Jiangsu Province, China
 Yunnan Province, China

BREEDING LOCATIONS

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

PRODUCTION LOCATIONS

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



WAVE / 2

ANNUALS / 16

PERENNIALS / 130

POTTED PLANTS / 158

CUT FLOWERS / 174

VEGETABLES & HERBS / 200

PLUG & PLAY / 230

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



EXPANDING OUR CONNECTIONS

We are also pleased to announce our new cut flower venture, BloomStudiosSM. Our focus is on innovative breeding and technical resources for the professional cut flower grower - we have a lot to offer!



DEVELOPING NEW SOLUTIONS

In addition, we are offering the Kitchen Minis[®] Collection, a new concept in vegetable growing. It includes edible potted tomato and pepper plants that will entice consumers to buy, eat and repeat these exciting indoor/outdoor tabletop varieties. No garden? No problem!



RELIABLY DELIVERED ON TIME

Reliable delivery is at the core of our business. Our dedicated team works on your orders to make the delivery as smooth as possible whether your shipment is domestic or international.



The varieties listed with this icon are plants that excel in professional landscape applications, no matter what challenges they face. Whether it's heat and humidity, drought or rain, these plants get the job done. Look for the Pro Landscape Performer icon for plants that will make you look good all season long.

Visit panamseed.com/landscape to find helpful plant lists and resources like:

- Find a Plant Supplier
- Plant Calculator
- Regional Plant Selector
- Build A Landscape Sell Sheet Tool

wave[®]





EARLY, EFFICIENT, EVOLUTIONARY. E3 EASY WAVE™ DEBUTS!

Continuing over 25 years of innovation and progress, we are announcing a brand-new Wave® series that will be ready at retail to kick off Easy Wave sales even earlier! **NEW E3 Easy Wave** petunias flower at 10 hours daylength and can be grown at lower PGR rates than Easy Wave. With a manageable, uniform plant structure and vigour, this new series is easier to produce, offers lower labour costs and provides beautiful plants that look better longer at retail. With the extraordinary performance that consumers expect from the Wave brand, E3 Easy Wave lives up to its reputation!





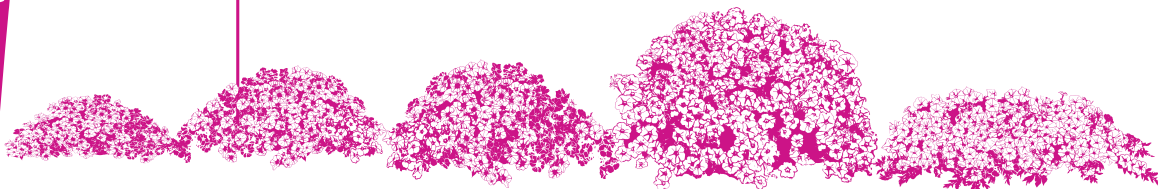
Shock Wave®



NEW E3 Easy Wave™

wave

PETUNIAS



Shock Wave® Series

Height: 7-10 in. (18-25 cm)
Spread: 20-30 in. (51-76 cm)

NEW E3 Easy Wave™ Series

Height: 6-12 in. (15-30 cm)
Spread: 25-32 in. (64-81 cm)

Easy Wave® Series

Height: 6-12 in. (15-30 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 and gardeners alike with a continually evolving and improving petunia program. With new colours, new series and new 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, including NEW E3 Easy Wave™, along with 1 pansy series, and boasts over 70 colours and mixes. Known for its wide selection of colours and 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!

This brand-new Wave® series flowers at 10 hours daylength, and it will be ready at retail to kick off Easy Wave sales even earlier! With a manageable, uniform plant structure and vigour, this new series offers simple 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.



NEW

Pink

It's **E**arly, it's **E**fficient, it's the **E**volution of Easy Wave... it's **E3!**

SPREADING PETUNIA ●

Petunia x hybrida

E3 Easy Wave™ Series F₁



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

- A new Wave brand series is now available 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, which means 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 sheer colour value!
- Mounding, spreading habit offers a three-dimensional landscape effect, creating impressive baskets and planters.
- Recommended in Wave branded packaging: 6-in./15-cm pots, premium quarts and gallons, 306 premium packs with handle, hanging baskets.



NEW

Blue



NEW

Blue



NEW

Coral



NEW

Pink



NEW

Pink Cosmo



NEW

Red, Blue, White



NEW

Red



NEW

White

New 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.

New 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.

New 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.

New 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.

New 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.

New 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.

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





NEW

Red



NEW

Sky Blue



NEW

White



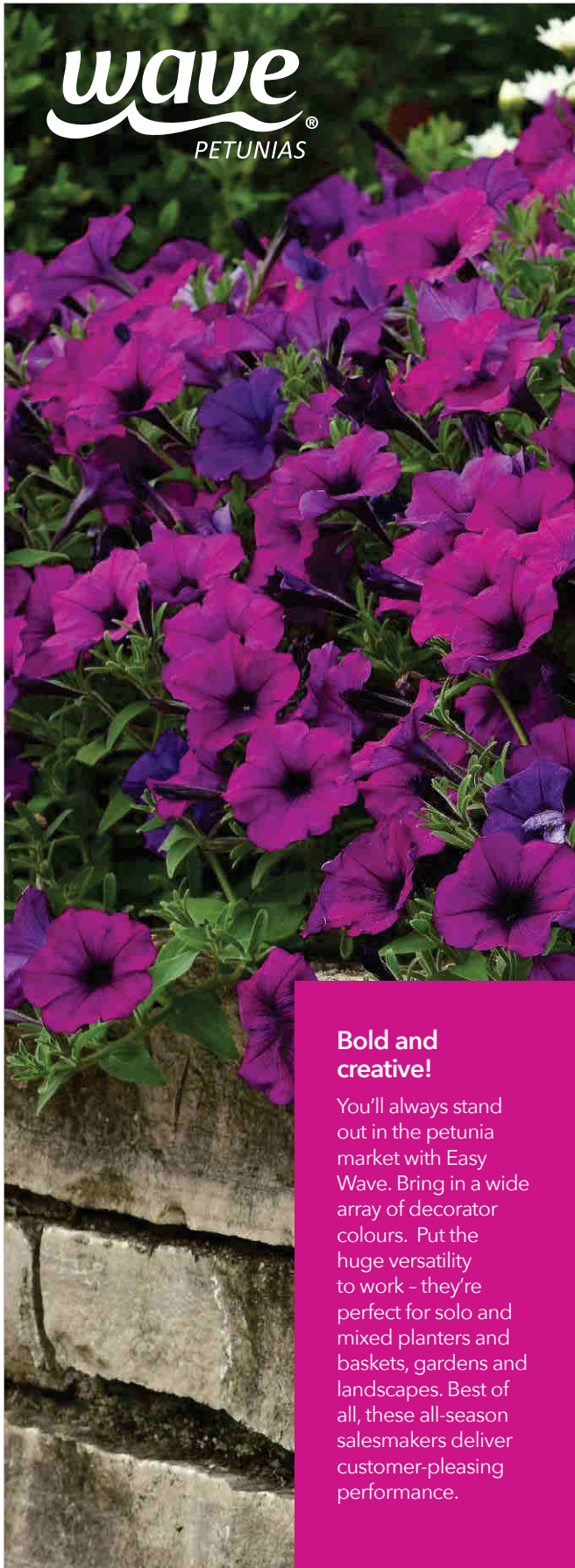
NEW

Pink Cosmo



NEW

Sky Blue



Easy Wave Violet

wave
PETUNIAS

Bold and creative!

You'll always stand out in the petunia market with Easy Wave. Bring in a wide array of decorator colours. Put the huge versatility to work - they're perfect for solo and mixed planters and baskets, gardens and landscapes. Best of all, these all-season salesmakers deliver customer-pleasing performance.

Grow great-looking Plug & Play® Combos like this with Easy Wave Petunia!



Plug & Play Combo Mad about Red, see page 238.

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. Lets you grow specialty mixes, too!
- More mounded with more controlled spread than Wave® varieties.
- Recommended in Wave branded packaging: 6-in./15-cm pots, premium quarts and gallons, 306 premium packs with handle, hanging baskets.

Blue Flowers have some light blue shading.

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.

Yellow Better branching with strong rooting compared to vegetative yellow varieties. Flower size is similar to Red.

Beachcomber Mixture Blue, Coral Reef, Pink Passion.

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

Great Lakes Mixture Blue, 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 Blue, Red, White.



Starfish Mixture



Formula Mixture



Beachcomber Mixture



Great Lakes Mixture



Rose Fusion



The Flag Mixture



South Beach Mixture



Opposites Attract Mixture



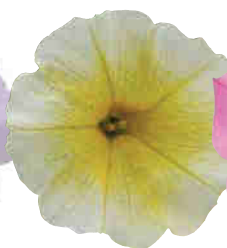
Plum Pudding Mixture



White



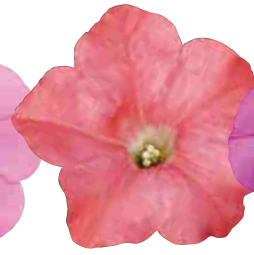
Silver



Yellow



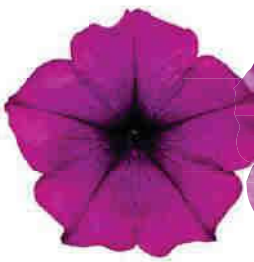
Pink



Coral Reef



Pink Passion



Violet



Plum Vein



Rose Fusion



Neon Rose



Lavender Sky Blue



Blue



Rosy Dawn



Red



Berry Velour
US 7,642,436; EU PAF



Burgundy Velour
US 7,642,436; EU PAF



Red Velour
US 7,642,436; EU PAF



Burgundy Star



wave
PETUNIAS

Packed with petite blooms!

You've never seen petunia hanging baskets like these - each Shock Wave plant is blanketed with masses of colour from the amazing number of petite, high-impact flowers.

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.
- 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 blue-purple 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 purple-blue 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.

New White Pure white variety requires 10.5 hours daylength for best flowering. Replaces Coconut. Plant vigour is slightly more compact than Red and fits the series well. Cold durable.

New Spark Mixture Improved Includes NEW White in place of Coconut, so the mix is more uniform in habit and vigour, making it easier to produce. Also includes Denim and Pink Shades.

New Volt Mixture Improved Includes NEW White in place of Coconut, so the mix is more uniform in habit and vigour, making it easier to produce. Also includes Denim and Red.

Plug & Play Combo Firecracker featuring Shock Wave Coral Crush, Deep Purple and Denim Petunias

Use Shock Wave Petunia in awe-inspiring Fuseables® Combos like this!



Fuseables Healing Waters, see page 234.



Purple Tie Dye



NEW

Spark Mixture Improved



NEW

Volt Mixture Improved



NEW

White



Pink Vein



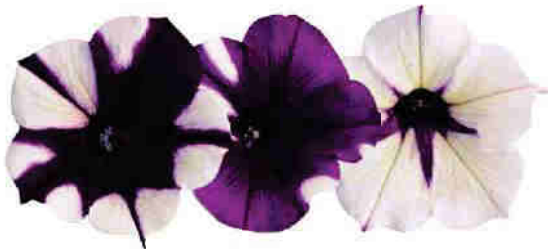
Pink Shades



Rose



Denim



Purple Tie Dye



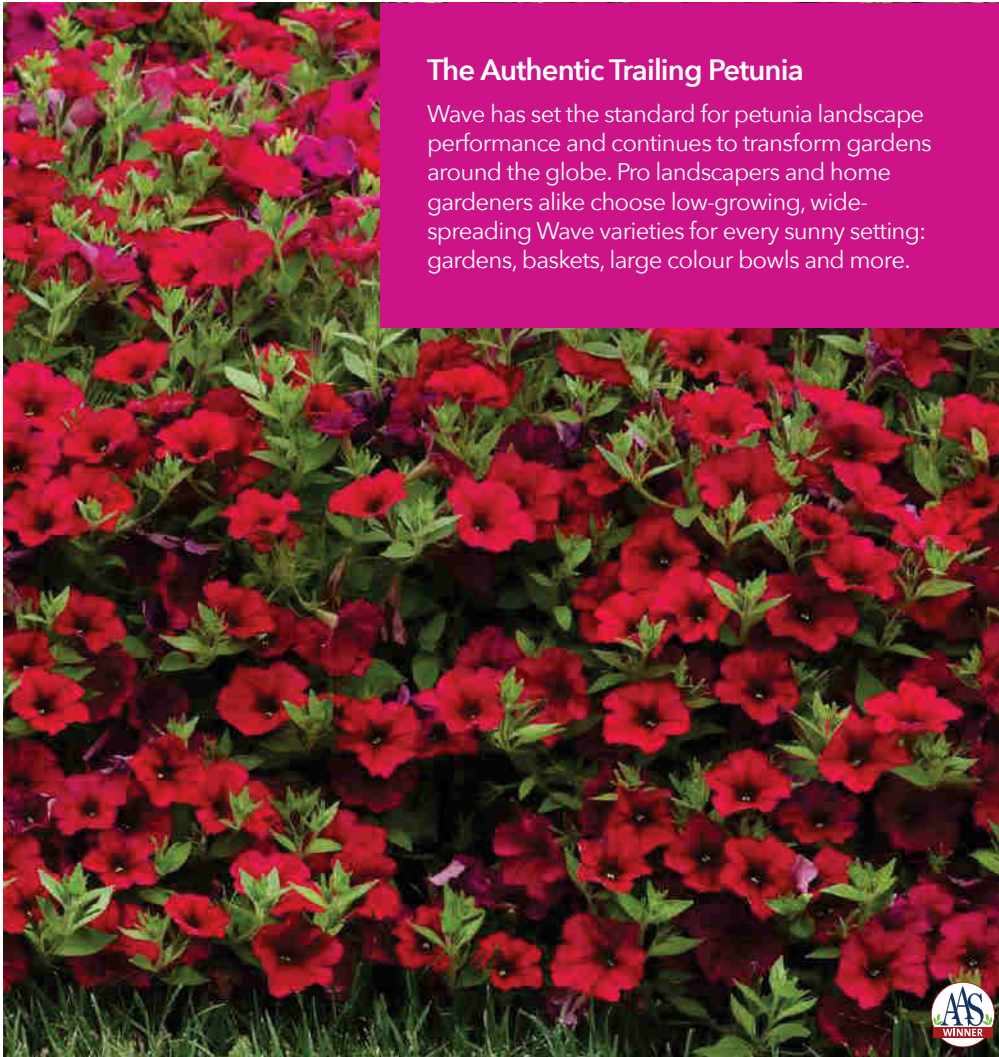
Coral Crush



Red



Deep Purple



The Authentic Trailing Petunia

Wave has set the standard for petunia landscape performance and continues to transform gardens around the globe. Pro landscapers and home gardeners alike choose low-growing, wide-spreading Wave varieties for every sunny setting: gardens, baskets, large colour bowls and more.

SPREADING PETUNIA continued

Wave® Series F1



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

Seed supplied as: Pelleted

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

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

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

Lavender Timing is similar to Misty Lilac. *All-America Selections National 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, Misty Lilac and Rose. *All-America Selections Classic.*

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



Purple

Carmine Velour

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

Misty Lilac



Pink

Lavender

All-America Selections National Winner, Fleuroselect Gold Medal

Purple Classic

All-America Selections Classic



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

Tidal Wave® Series F1



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.



Tidal Wave Silver & Cherry

Big, bold 3D colour!

Extend your season with this strong finisher. Tidal Wave is the “go-to” for pros and home gardeners looking for fast colour. Hedge, vine or impressive groundcover – Tidal Wave does it all! These fast-fill plants spread out across big spaces, and they crawl along and over walls and fences.



Silver
All-America Selections National Winner, Fleuroselect Quality Mark



Hot Pink



Cherry



Purple



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



COOL
wave[®]
PANSIES

Twice the spread...
double the colour!

Wow 'em with Cool Wave - hands down, it's the fastest-growing, longest-lasting, truly trailing pansy for Spring and Autumn.

Cool Wave Red Wing/Sunshine 'N Wine



Blue Skies



Raspberry

SPREADING PANSY ●
Viola x wittrockiana

Cool Wave® Series F1



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

Blueberry Swirl Cool nights/low PGRs deliver the deepest colour. High temperatures/PGR use show lighter colour and broader yellow eye.

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).

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 rosy-purple 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.

Cool Wave Pansy makes an awesome cool-season combo like this!



Plug & Play Ocean Breezes see page 237.



Berries 'N Cream Mixture
Medal of Excellence Editor's Choice



Pastel Mixture



Mixture



White
Medal of Excellence Editor's Choice



Lemon



Golden Yellow



Blue Skies



Morpho



Strawberry Swirl



Raspberry Swirl



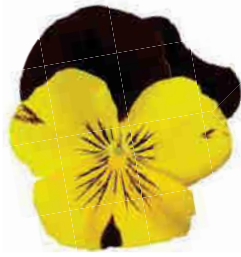
Purple



Raspberry



Fire



**Red Wing /
Sunshine 'N Wine**



Blueberry Swirl



Frost
Medal of Excellence Editor's Choice



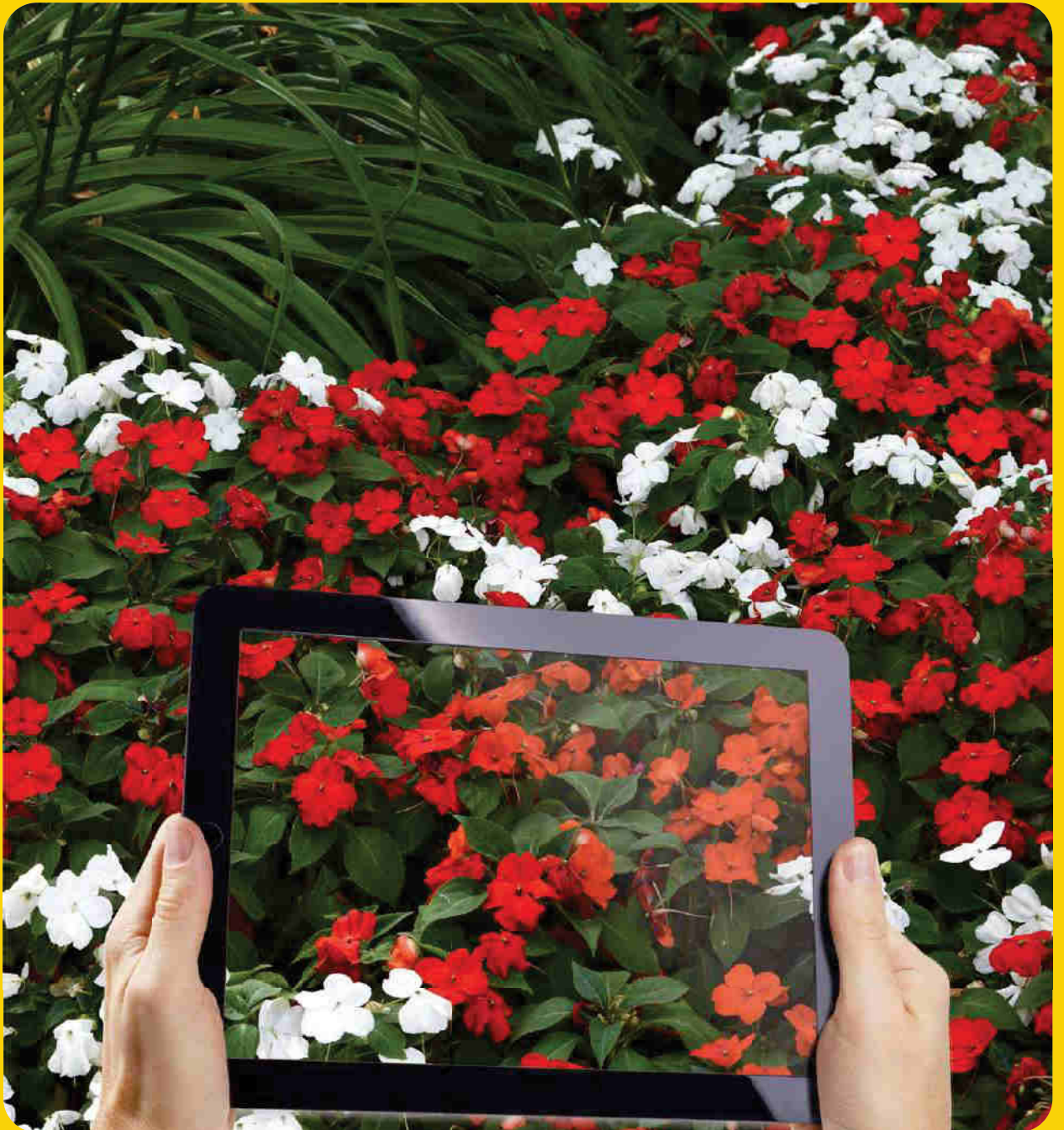
Violet Wing
Medal of Excellence Editor's Choice

ANNUALS

BEACON[®]
IMPATIENS



Fantastic
Foliage[®]
COLLECTION





COLOUR SOLUTIONS FOR SHADE GARDENS, LANDSCAPES AND CONTAINERS

PanAmerican Seed is your number-one supplier for **high-performance annuals** that bring reliable colour to sun and shade locations, backed by industry-leading **seed quality** and **consistent, deliverable** inventory. Bring *Impatiens walleriana* back into production with Beacon® *Impatiens*, the award-winning series that offers **high resistance** to the currently known and widely prevalent populations of *Plasmopara obducens*, which cause **Impatiens downy mildew**. Also look for the Fantastic Foliage® icon indicating a collection of plants that provide easy, **natural texture and interest** in landscapes, mixed planters and borders. We strive to bring you the best that seed can offer.





Serena Series



Rose

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.



Blue

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.

Try Serena Angelonia in delightful Plug & Play Combos like this!



Plug & Play Combo Seaside Delight, see page 245.



Mixture



Waterfall Mixture



Purple



White



Sky Blue



Purple



Raspberry



Lavender

Serenita® Series F1



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

Seed supplied as: Pelleted

Plug crop time: 5 to 6 weeks

Transplant to finish: 8 to 9 weeks

- Serenita has all the good looks, durability and easy production of Serena - with a few additional benefits.
- Excellent solution where shorter and more manageable material is needed.
- Peak performer in very hot/humid night temps like Florida, southeast Asia and similar southern climates.
- Great for high-density production.
- 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, Sky Blue, White.



White



Rose



Pink All-America Selections National Winner



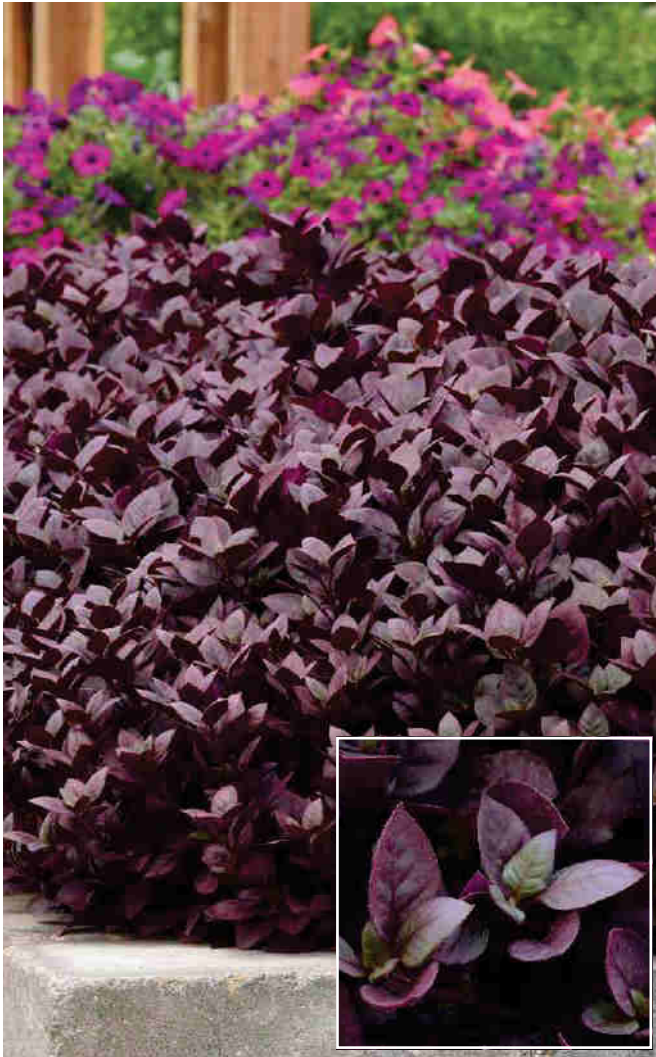
Mixture



Serenita Rose in a 4.5-in./11-cm pot



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



Purple Prince Alternanthera

ABUTILON ●●
Abutilon x hybridum

Bella™ Select Mixture

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

Seed supplied as: Raw

Plug crop time: 3 to 5 weeks
Transplant to finish: Spring 6 to 8 weeks, Autumn 8 to 10 weeks

- Compact variety for outdoor containers; also good in indoor plant programs.
- True dwarf variety germinates easily and needs little or no growth regulators.
- Well-branched plants bloom continuously, even in high heat.
- Large, 3-in./8-cm, bell-shaped blooms “look up” for a good show of colour; under cooler conditions, colours intensify.

AGERATUM ●
Ageratum houstonianum

High Tide™ Series F1

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

Seed supplied as: Pelleted

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

- Dense, mounded hedge of colour is taller and more vigorous than other landscape ageratum.
- Outlasts standard bedding types in gardens and mixed containers.
- Strong branching fills out packs and pots quickly.
- Self-cleaning and easy-care.
- Also well-suited to indoor plant programs.



Purple Knight Alternanthera



Bella Select Mixture



High Tide Blue & High Tide White Ageratum

ALTERNANTHERA ●●
Alternanthera brasiliana

Purple Prince



Height: 10 to 16 in./25 to 41 cm
Spread: 18 to 20 in./46 to 51 cm

Seed supplied as: Raw

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

- First compact seed alternanthera is an easy-to-grow alternative to vegetative varieties.
- Durable carpet of ruby/burgundy foliage is ready to take on any Summer condition, including drought and rain. Imagine this unique colour accent in large cityscapes and as a “spiller” in high-impact containers!
- 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.

ALTERNANTHERA ●
Alternanthera dentata

Purple Knight



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

Seed supplied as: Raw

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

- Economical, easy-to-produce plant is an ideal accent for mixed containers and excellent in the landscape as a vigorous bedding plant.
- Also well-suited to indoor plant programs.
- Very heat tolerant - thrives even in subtropical Summer conditions.
- Foliage colour is darkest in full sun.
- Height varies by location; taller in warmer conditions.

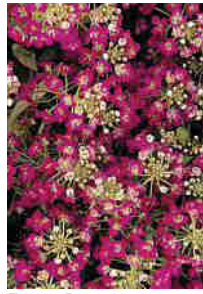
Mississippi Medallion Award



Easter Bonnet White



Easter Bonnet Deep Pink



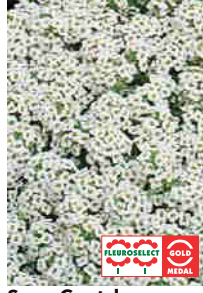
Easter Bonnet Deep Rose



Easter Bonnet Violet
Fleuroselect Quality Mark,
RHS Award of Garden Merit



Easter Bonnet Mixture



Snow Crystals
Fleuroselect Gold Medal



Clear Crystal Purple Shades
US 7,915,504



Clear Crystal Lavender Shades
US 7,915,504



Clear Crystal Mixture
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

Plug 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.

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 White Fleuroselect Novelty US 7,915,504
and **Clear Crystal Lavender Shades** US 7,915,504

Snow Crystals

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

Seed supplied as: Raw

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

- Large, pure white, scented flowers have outstanding sales appeal.
- Tetraploid genetics of Snow Crystals add heat tolerance and vigour.

ANEMANTHELE

See **ColorGrass**, page 47.

ANEMONE

See **Cut Flowers**, page 176.

ANGELONIA

See page 18.

ANTIRRHINUM

See **Snappedragon**.

AQUILEGIA

See **Perennials**, page 132.

ARABIS

See **Perennials**, page 135.

ARMERIA

See **Perennials**, page 136.

ASCLEPIAS

See **Cut Flowers**, page 176.

AURINIA

See **Perennials**, page 136.



Pot 'N Patio Mixture Aster



Snowtopia Bacopa



Pot 'N Patio Pink Aster



Pot 'N Patio Scarlet Aster



Blutopia Bacopa



Pinktopia Bacopa



Pot 'N Patio White Aster



Pot 'N Patio Blue Aster

Use Blutopia Bacopa in stunning Fuseables Combos like this!



Fuseables Healing Waters, see page 234.

ASTER ●
Callistephus chinensis

Pot 'N Patio Series

Height: 6 in./15 cm
Spread: 6 in./15 cm

Seed supplied as: Raw

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

- Dwarf plants flower just 90 days from sowing during the short days of Winter and early Spring without additional lighting.
- Performs well in patio pots, colour bowls and mixed containers, producing 2.5 to 3-in./5 to 8-cm, double blooms.
- Not recommended for landscape plantings.



Gryphon Begonia

F1 BACOPA ●●
Sutera cordata

Blutopia®, Snowtopia® and Pinktopia

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 colour is more bright green than both Blutopia and Snowtopia.

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

FOLIAGE BEGONIA ●●●
Begonia x hybrida

Gryphon

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.



Dragon Wing Pink



Dragon Wing Red

BEGONIA 
Begonia x hybrida

BabyWing® Series F1



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.

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

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 landscaping 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*



BabyWing Pink



BabyWing White Bronze Leaf



BabyWing Red



BabyWing White



BabyWing Pink



BabyWing White Bronze Leaf



BabyWing Bicolor



Megawatt Rose Bronze Leaf



Rose Green Leaf



Red Green Leaf



Megawatt is retail-ready in 6-in./15-cm pots and larger.

**MEGAsize +
MEGAcour =
MEGAsales!**

This fresh, high-energy begonia option has quickly proven itself in the marketplace with great timing benefits and ultimate garden power. These bigger-than-life hybrids offer amazing colour to early-bird gardeners.

Look to PanAmerican Seed for your complete interspecific program, starting with fastest-to-market **BabyWing** for day-neutral growing... **Megawatt** for big Spring sales... and main-season **Dragon Wing** to round out the season.

BEGONIA 
Begonia interspecific

Megawatt™ Series F1



Height: 20 to 28 in./51 to 71 cm
Spread: 16 to 24 in./41 to 61 cm

Seed supplied as: Pelleted

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

- Striking, non-stop flowers keep plants covered in huge colour from Spring through Autumn... even in heat and drought.
- Sturdy flower stems hold flowers above the foliage for superior show versus others.
- Shows well at retail and perfect for landscapes, baskets, big tubs and borders.

New Pink Bronze Leaf Improved Features darker bronze foliage and no green leaf off-types, with a more intense pink bloom colour and no shading.

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



NEW

Pink Bronze Leaf Improved



Rose Bronze Leaf



Rose Green Leaf



Pink Green Leaf



Red Green Leaf



NEW

Pink Bronze Leaf Improved



Red Bronze Leaf



AmeriHybrid Picotee Calypso



Flamenco



Lace Apricot



Lace Pink



Lace Red



Sunburst



White Pink



Sunburst

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, bicolor blooms.
- The Picotee Lace types are an inverted variety of a normal picotee; these blooms have light edges on dark-coloured petals.

Calypso White with a salmon-coral edge.

Flamenco White with a thick, red edge and speckles.

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.

White Pink White with a pink edge.



Peach



Pink



Yellow



White



Red

**AmeriHybrid®
Roseform Series F₁**

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

Seed supplied as: Pelleted

Plug crop time: 7 to 8 weeks

Transplant to finish:
 11 to 15 weeks

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



Rose



Salmon



AmeriHybrid Roseform Series



Apricot



Coral Salmon



White



Scarlet Red



Yellow



Mandarin Orange



Pink



AmeriHybrid Ruffled Series



World's largest blooms - up to 9 in./23 cm!

Flower size: 5-9 in./13-23 cm

TUBEROUS BEGONIA *continued*

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.



On Top Fandango



On Top Sun Glow



Sun Dancer Apricot



On Top Melon Lace



On Top Sunset Shades



Sun Dancer Pink



Sun Dancer Scarlet Orange



On Top Pink Halo



Sun Dancer White



Sun Dancer White Pink Picotee

On Top® Series F1

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

Seed supplied as: Pelleted

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

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

Fandango

White with a salmon-coral edge.

Melon Lace

Melon with a white edge.

Pink Halo

White with a deep pink edge.

Sun Glow

Golden yellow with a red edge.

Sunset Shades

Yellow with a red edge.

Sun Dancer™ Series F1

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

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

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.



Sun Dancer Red



Sun Dancer Yellow



Sun Dancer Salmon



Sun Dancer Yellow Red Picotee



Crave Strawberry Star

CALIBRACHOA ●
Calibrachoa x hybrida

Crave™ Strawberry Star F1

Height: 10 to 14 in./25 to 36 cm
Spread: 12 to 16 in./30 to 41 cm
Seed supplied as: Precision Multi-Pellets
Plug crop time: 5 to 8 weeks
Transplant to finish: 7 to 11 weeks

- The first star pattern in seed calibrachoa! Flower colour may shade slightly. Under warmer night conditions, the strawberry colour may become lighter, while maintaining a consistent star pattern.
- Plants have good vigour, with a uniformly branched and controlled habit.
- Seed form makes it easy to order and ready to ship, fits right into mechanized production and assures easy inventory management.
- Grows more vigorously than the Kabloom varieties.
- Requires 12-hour daylength for best flowering.

CAMPANULA
 See Cut Flowers, page 177.

CAPSICUM
 See Potted Plants, page 162.

CAREX
 See ColorGrass, pages 46 and 49.

CARTHAMUS
 See Cut Flowers, page 177.

CATHARANTHUS
 See Vinca.



Kabloom Pink



Kabloom Coral



Kabloom Cherry



Kabloom Yellow PP 26,516
 Medal of Excellence Industry's Choice,
 Medal of Excellence Reader's Choice



Kabloom Blue



Kabloom Denim



Kabloom Light Pink Blast



Kabloom Orange



Kabloom White



At 5 weeks, Kabloom Precision Multi-Pellets produce a fuller plug tray.



Kabloom Cherry, Orange and Yellow

Kabloom™ Series F1

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

Seed supplied as:
 Precision Multi-Pellets

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

- The first-of-its-kind Kabloom series includes a full range of colours and the convenience of Precision Multi-Pellets.
- The ideal input for grower choice premium quarts. Also well-suited to 4 to 6-in./10 to 15-cm pots, hanging baskets and mixed combos.
- Seed form makes it easy to order and ready to ship, fits right into mechanized production and assures easy inventory management.
- Bushy, trailing plants show off abundant, bright blooms in core solid colours.

Blue Clear, mid-blue with a small, yellow throat; darker blue than Denim. Moderate plant vigour. 10.5 hours daylength required.

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

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

11 hours daylength required.
Denim Flat, mounded plants produce flowers with darker blue tones under lower light and cooler conditions. The blooms age to silver-blue under higher light and warmer conditions. 11 hours daylength required. The most prostrate in the series, with a height of 6 to 10 in./15 to 25 cm.

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

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

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

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

Yellow More upright plant structure. 10 hours daylength required.



Denim

Create colourful Fuseables Combos like this with Kabloom Calibrachoa!



Fuseables Paradise Island, see page 235.

Ease and efficiency, at your fingertips!

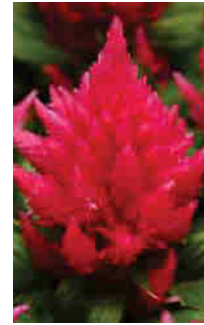
Kabloom, the first seed calibrachoa, lets you schedule based on your needs, not on cutting availability dates. You can still receive product when the weather holds up vegetative shipments. Best of all...grown side by side with vegetative varieties, it's impossible to tell the difference.



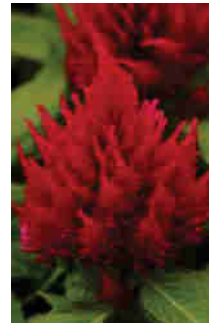
First Flame Purple



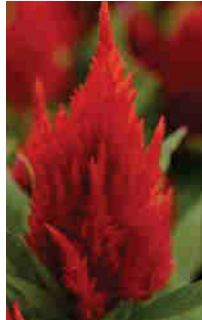
Ice Cream Yellow



Ice Cream Pink



Ice Cream Cherry



First Flame Scarlet



First Flame Yellow



First Flame Red



Ice Cream Orange



Ice Cream Salmon



Ice Cream Mixture



First Flame Mixture



Dracula

CELOSIA ●
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 eye-catching colour add drama to landscapes, gardens and containers.
- Good mid-height border plant. NOTE: Shorter growth in high light.

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.

CELOSIA ●
Celosia plumosa

First Flame™ Series



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

Spread: 10 to 16 in./25 to 41 cm

Seed supplied as: 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. Non-fading 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 well-branched plants are stunning in patio planters and gardens.
 - Produces large, tight flower heads in strong colours for striking sales appeal.
 - Versatile - great for bench-run pack and small pot programs.
- 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 (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.



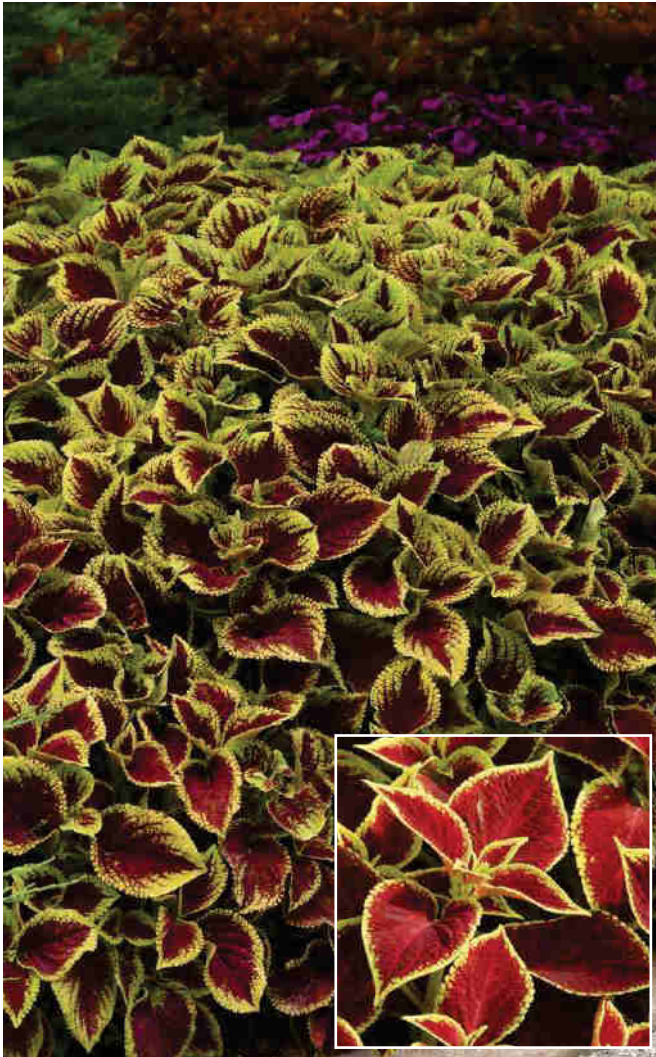
Sol Gekko Green and Sol Lizzard Leaf



Sol Gekko Green
Fleuroselect Gold Medal, Fleuroselect Novelty



Sol Lizzard Leaf
Fleuroselect Novelty



Crimson Gold



Chocolate Covered Cherry



Chocolate Mint



Dark Chocolate

PREMIUM SUN COLEUS

Solenostemon scutellarioides

Show-stopping 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-leaved 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.

Crimson Gold



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, bicolor 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



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.

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.



Mighty Mosaic

Pineapple Surprise



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 bicolor instead of chartreuse.
- Stable colour/pattern all season like similar vegetative varieties.
- Very late flowering for longer-lasting performance and holds very well in extreme weather.

Rose to Lime Magic

Height: 24 in./61 cm
Spread: 18 to 22 in./46 to 56 cm

- Unique variety changes colour as the season progresses - rose colour in leaves eventually dissolves, exposing green margins and cream centres.
- Bred to perform in full sun and full shade.
- Late to flower, allowing patterned foliage to shine all season long.
- Well-branched and vigorous in the landscape.



Watermelon



Pineapple Surprise



Rose to Lime Magic: Stage 1, 2 & 3



Kong Scarlet



Kong Mosaic



Kong Red US PVP 200500015



Kong Rose US PVP 200500017



Kong Empire Mixture



Kong Lime Sprite



Kong Salmon Pink US PVP 200900035



Kong Jr. Green Halo



Kong Jr. Lime Vein



Kong Jr. Rose



Kong Jr. Scarlet

PREMIUM SHADE COLEUS
Solenostemon scutellarioides



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.

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.



NEW

Wizard Select Mixture Improved Coleus



Wizard Mosaic Coleus



Wizard Rose Coleus



Wizard Jade Coleus



Wizard Sunset Coleus



Wizard Golden Coleus



Wizard Rose Coleus



Black Dragon Coleus



Wizard Scarlet Coleus



Wizard Coral Sunrise Coleus



Wizard Velvet Red Coleus

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® 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.

New Select Mixture Improved Less sensitive to downy mildew, with a more attractive colour combination and a better colour balance than the competition. Replaces Mixture. Includes Coral Sunrise, Jade, Mosaic, Scarlet, Sunset and Velvet Red.

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.



Mandarin Cosmos



Sonata Complete Mixture Cosmos



Sonata Red Shades Cosmos



Sonata White Cosmos
Fleuroselect Gold Medal



Sonata Pink Cosmos
Fleuroselect Quality Mark



Sonata Purple Shades Cosmos



Sonata Pink Blush Cosmos
Fleuroselect Quality Mark



Sonata Carmine Cosmos
Fleuroselect Quality Mark



Antiquity Cosmos
Fleuroselect Novelty



Tropic Flame Crossandra



Tropic Yellow Splash Crossandra



Dynamite Cuphea



Pink Shimmer Cuphea
US PVP 201800290

COSMOS ●
Cosmos bipinnatus

Sonata™ Series

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

Seed supplied as: Raw

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

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

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

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

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.

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.

CUPHEA ●
Cuphea ignea

Dynamite

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

Seed supplied as: Raw

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

- Well-suited to solo and mixed containers.
- Also works in indoor plant programs.

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

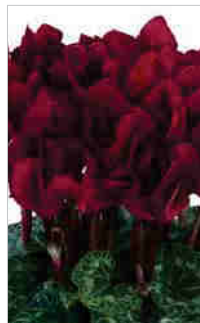
- Pink Shimmer can be easily sown for efficient plug production.
- Offers improved natural branching over other varieties.
- A profusion of petite flowers cover the delicate leaves all Summer long.
- Great for use in combinations of all kinds.
- This reblooming gem requires no deadheading and looks great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



Dreamscape Purple Cyclamen



Dreamscape Deep Rose Cyclamen



Dreamscape Deep Burgundy Cyclamen



Dreamscape Bright Red Cyclamen



Dreamscape Salmon Eye Cyclamen

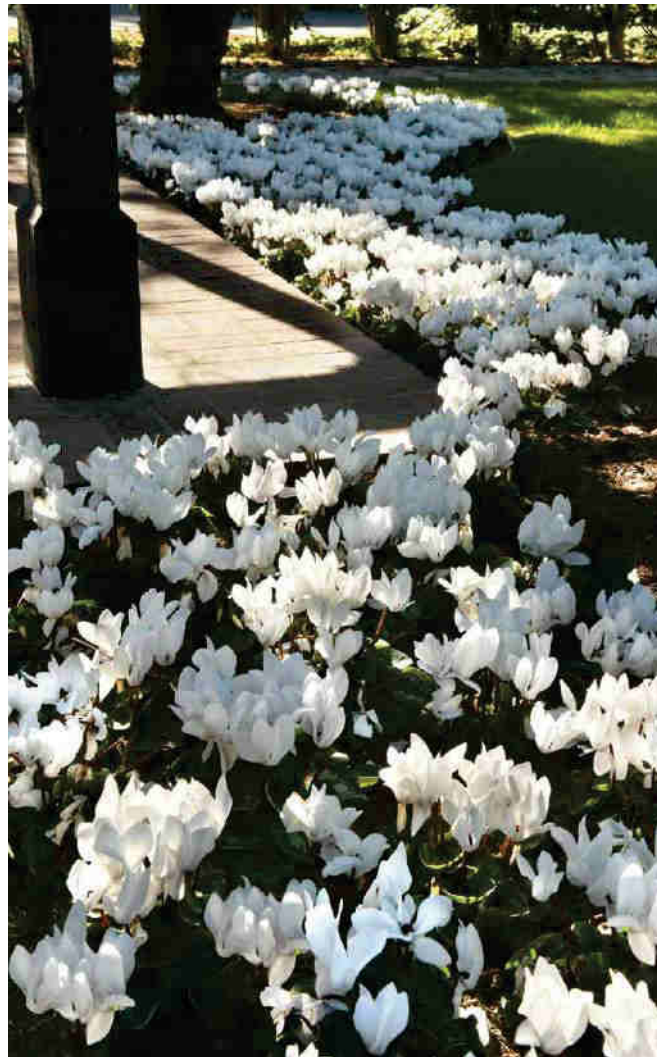


Dreamscape White Cyclamen

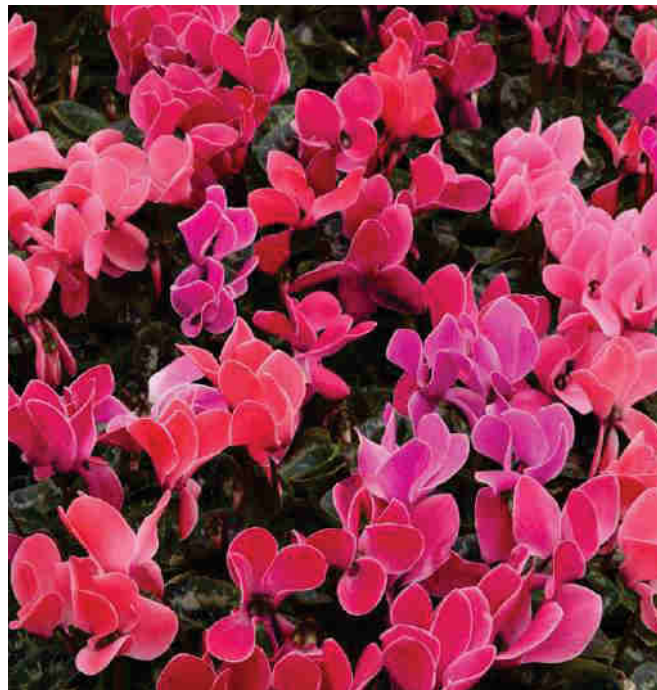


NEW

Dreamscape Mixture Cyclamen



Dreamscape White Cyclamen



Dreamscape Dark Flamed Mixture Cyclamen

CYCLAMEN ●●
Cyclamen persicum

Dreamscape™ Series F1



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

Seed supplied as: Raw

Plug crop time: 8 to 9 weeks

Transplant to finish:
19 to 20 weeks

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

Deep Burgundy Unique colour for the outdoor cyclamen market.

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

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

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

New Mixture An attractive mix of well-matched colours.



NEW
Jolt Purple



Pink Magic



Cherry



Pink All-America Selections National Winner

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 all-season 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.

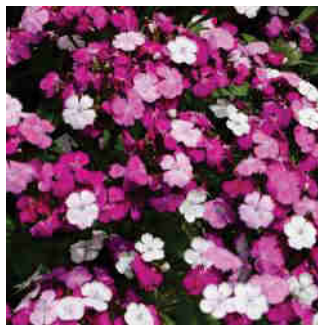
- Perfect for Summer premium grower choice quarts and gallons to command a higher price point.
- Strong dark green foliage.
- Performs as a semi-hardy annual in Zone 7 (0°F/-18°C minimum temperature) and milder.
- All-America Selections National Winner Jolt Pink continues to stir up consumer excitement with extra publicity and promotion. 2019 Louisiana State University Super Plant

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

New Purple Drive-by bright! Stunning Purple has a bloom size and landscape performance to match the rest of the series.



Dash Mixture



Dash Magician



Dash White



Dash Pink



Dash Violet



Dash Crimson



Dynasty White Blush

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 PGR 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.

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.

White Blush White with attractive rosy-pink blush that varies with environmental conditions.

CUT FLOWER DIANTHUS

Amazon Series, page 182.

Sweet Series, page 183.

PERENNIAL DIANTHUS

Rockin' Series, page 140.



Dynasty Pink Magic



Dynasty Orchid
RHS Award of Garden Merit



Dynasty Purple



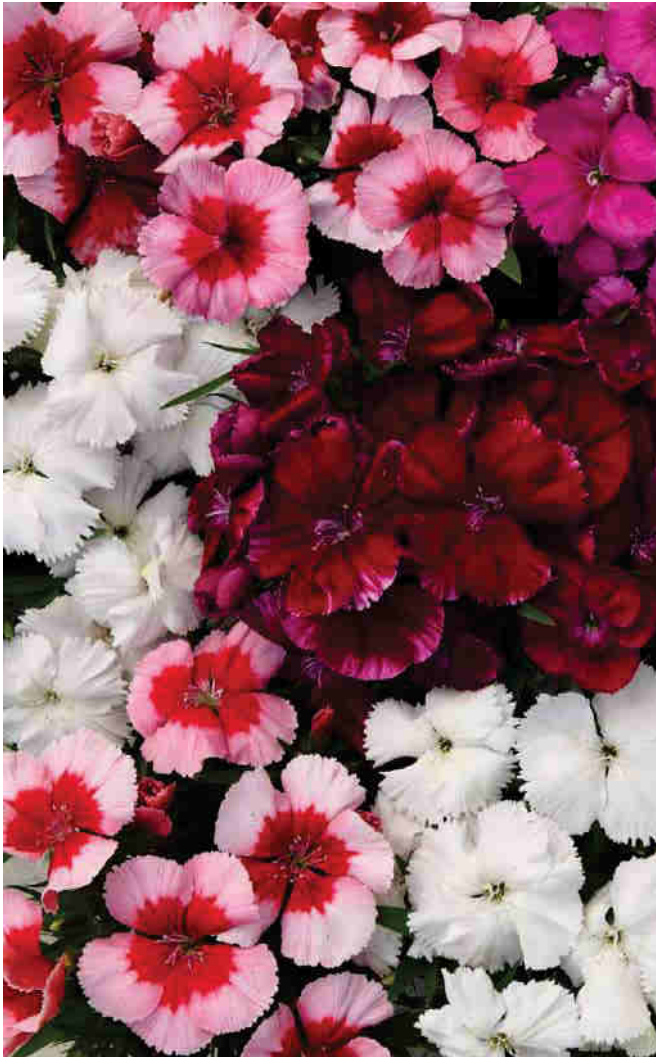
Dynasty Rose Lace



Dynasty Red



Dynasty Mixture



Coronet Mixture



White



Cherry Red



Strawberry



Rose

Crowned with huge flower power

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

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 cool-season annuals such as pansies.

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

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 bicolor and some have a darker coral picotee against a lighter background.

White Clean, clear white.

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



White and Cherry Red



White



L: Coronet Strawberry R: Competing Strawberry variety



Floral Lace Red



Floral Lace Purple



Floral Lace White



Floral Lace True Rose



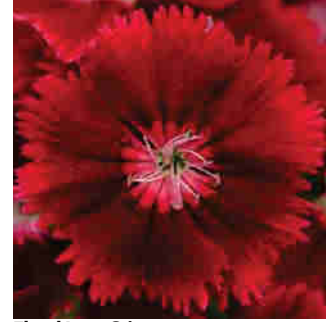
Floral Lace Picotee



Floral Lace Lilac



Floral Lace Cherry



Floral Lace Crimson

DIANTHUS ●

Dianthus chinensis x barbatus

Floral Lace™ Series F1



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

Seed supplied as: Raw, Pelleted

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

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

Ideal Select™ 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

- 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 Violet Picotee



Floral Lace Mixture



Ideal Select Rose Fleuroselect Quality Mark, RHS Award of Garden Merit



Ideal Select Violet All-America Selections National Winner (All-America Classic)



Ideal Select White



Ideal Select WhiteFire RHS Award of Garden Merit



Ideal Select Red



Ideal Select Raspberry



Ideal Select Mixture



Figaro Orange Shades Dahlia
Fleuroselect Quality Mark



Figaro Red Shades Dahlia
Fleuroselect Quality Mark



Figaro Violet Shades Dahlia
Fleuroselect Quality Mark



Figaro White Dahlia



Figaro Yellow Shades Dahlia
Fleuroselect Quality Mark



Figaro Mixture Dahlia

DAHLIA 
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% semi-double and fully double flowers.



Silver Falls Dichondra

DICHONDRA 
Dichondra argentea

Silver Falls 
PRO LANDSCAPE PERFORMER

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.

Make a Plug & Play Combo they'll fall for with Silver Falls Dichondra!



Plug & Play Combo Peach Melba Parfait, see page 245.



Emerald Falls Dichondra

DICHONDRA 
Dichondra repens

Emerald Falls 
PRO LANDSCAPE PERFORMER

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

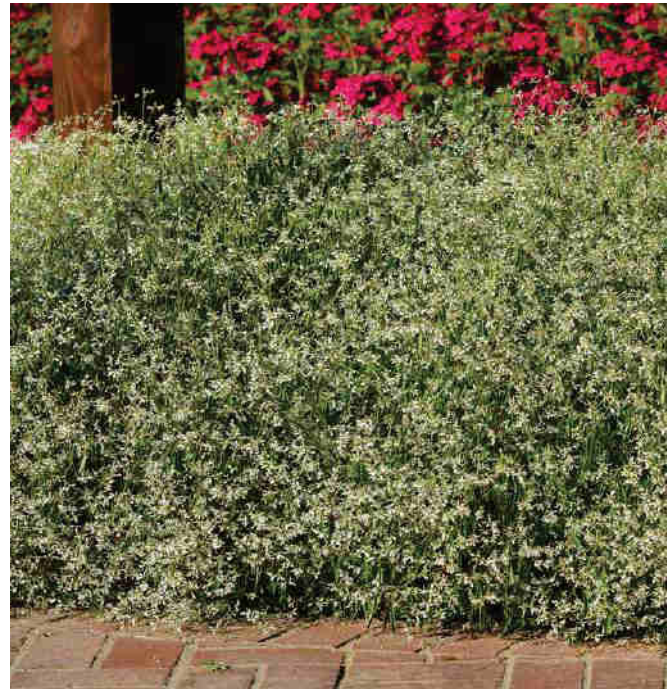
- Denser, tighter and shorter than Silver Falls, without pinching or PGRs.
- Medium green leaves are more rounded and held closer to the stem.
- Good for hanging baskets.
- Also performs well as a heat-tolerant, low-growing groundcover.

DIGITALIS
See **Perennials**, page 139.

Use Glitz Euphorbia to create hot Plug & Play Combos like this!



Wave Plug & Play Combo Fire N Nice, see page 241.



Glamour Euphorbia



Silverdust Dusty Miller

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.



Citrona Orange Erysimum
US PVP 200600167

EUPHORBIA ●
Euphorbia graminea

Glamour

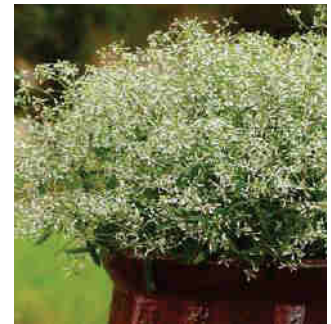


Height: 15 to 24 in./38 to 61 cm
Spread: 15 to 24 in./38 to 61 cm

Seed supplied as: Raw

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

- The best variety for in-ground performance.
- Early to flower, with the vigour to hold up to a 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.

FUSEABLES

See **Plug & Play Combos**

GALLARDIA

See **Perennials**, page 144.

GAURA

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.



Red Rooster Carex, Bronco Carex and Amazon Mist Carex

Create this sunny Plug & Play Combo with Sirocco Anemanthele!



Plug & Play Combo XXL Tuscan Sun, see page 249.



Live Wire Isolepis



Coolio Koeleria



Amazon Mist Carex



Bronco 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>I. cernua</i> (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 look like "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.
Koeleria Coolio ●●● <i>K. glauca</i>	Green	8-10 in./ 20-24 cm	8-10 in./ 20-24 cm	6-8	4 in./10 cm, 6 in./15 cm*, Gallon	6-7	6-7	Upright, blue-green grass is ideal for dry locations. Grows to 20 in./51 cm after the first season.
Carex Amazon Mist ● <i>C. comans</i> (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	Variiegated light/medium green grass has twisting tips and an arching habit.
Carex Bronco ● <i>C. comans</i> (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.

*3 plants per pot

All ColorGrass varieties are supplied as multi-seed pellets.

The Fantastic Foliage® Collection



These plants provide an easy, natural dimension for outdoor spaces. Subtle color 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!



Lucius Luzula



Sirocco Anemanthele



Festina Festuca



Lucius Luzula



Starhead Juncus



Sirocco Anemanthele



Festina Festuca



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)								
Luzula Lucius ●● <i>L. nivea</i>	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.
MEDIUM HABIT (8 to 18 in./20 to 46 cm)								
Juncus Starhead ●● <i>J. ensifolius</i>	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-leaved foliage and long-lasting, dark green star inflorescences.
Anemanthele Sirocco ●● <i>A. lessoniana</i>	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 - colour turns to shades of copper and pink under cool conditions, natural sunlight and maturity. Adds movement and texture to landscapes, gardens, mixed containers and baskets.
Festuca Festina ● <i>F. cinerea (F. glauca)</i>	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.

In addition to our ColorGrass Collection, PanAmerican Seed offers Juncus Fuseables Twisted Arrows (page 235).



ColorGrass ornamental grasses bring patios and landscapes to life.



Pony Tails Stipa with Emerald Falls and Silver Falls
Dichondra and New Day Clear Orange Gazania



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 ●●● <i>J. tenuis</i>	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 ●●● <i>J. effusus spiralis</i>	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 ● <i>S. tenuissima</i> (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 with Glitz Euphorbia and Red Geranium



Javelin Juncus



Phoenix Green Carex



Red Rooster Carex



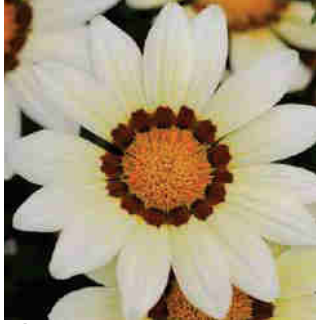
Blue Arrows Juncus



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 ● <i>C. comans</i> (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-leaved sedge has bright green foliage. Good heat tolerance. Easy-care for accent in landscapes, planters.
Carex Red Rooster ● <i>C. buchananii</i>	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 ● <i>J. inflexus</i>	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, but drought-tolerant when grown in-ground. Also makes a great indoor plant.
Juncus Javelin ● <i>J. pallidus</i>	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.



White



Rose Stripe



Yellow



Red Shades



Red Stripe



Pink Shades



Clear Orange



Bronze Shades



Tiger Mixture



Mixture



New Day Bright Mixture

GAZANIA ●
Gazania rigens

New Day® Series F1

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

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

Seed supplied as: Coated

Plug crop time: 4 to 5 weeks

Transplant to finish: 8 to 9 weeks

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

Bright Mixture Bronze Shades, Yellow, Clear Orange, Pink Shades.

Tiger Mixture Red Stripe and Rose Stripe.



Fireworks Gomphrena



QIS Carmine Gomphrena
Fleuroselect Quality Mark



Sunshine Mixture Gazania



QIS Orange Gomphrena



QIS Red Gomphrena

TETRAPLOID GAZANIA ●
Gazania rigens

Sunshine Mixture

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

Seed supplied as: Raw
Plug crop time: 4 to 5 weeks
Transplant to finish: 9 to 10 weeks

- Long-blooming mix includes cream, yellow, orange, pink and red shades, with some striped flowers.
- Upright plants are excellent for the bedding market as a landscape-performing garden plant, with larger flowers and robust growth.

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

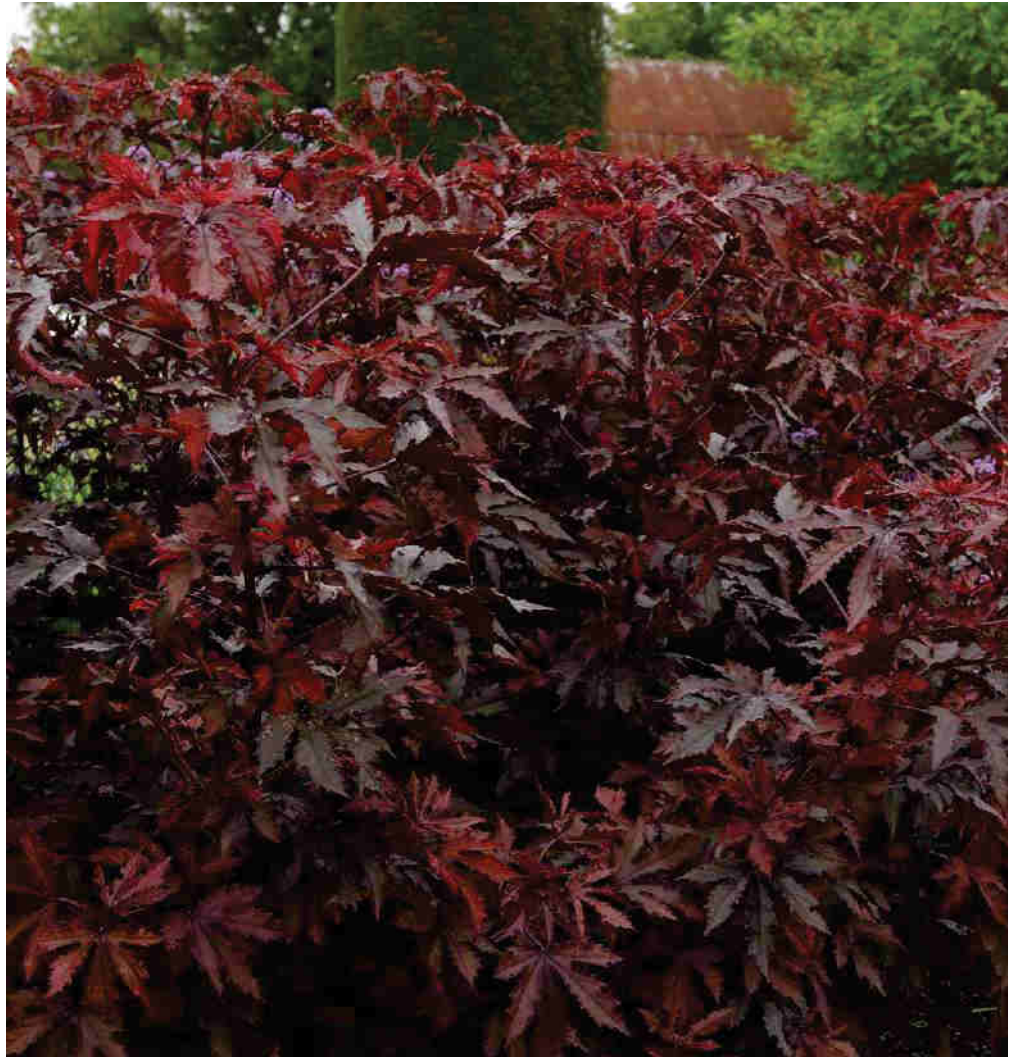
- More blooms per plant and unique "scaffolding" habit make Fireworks sparkle at retail, then explode with colour in landscapes and containers.
- Vigorous, "tough as nails" plants are drought tolerant, low maintenance.
- Attractive architectural element for landscapes; also excellent for mixed cut flower bouquets.
- Easy to produce - 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.



Silver Mist Helichrysum



Mahogany Splendor Hibiscus



Dakota Gold Helenium
US FVP 200600009

HELENIUM ●
Helenium amarum

Dakota Gold 

Height: 12 to 14 in./30 to 36 cm
Spread: 24 to 28 in./61 to 71 cm

Seed supplied as:
Multi-Seed Pellets

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

- Easy-care variety performs from hot and dry to cool and rainy.
 - Strong-growing and compact, mounded plants are covered with bright golden yellow blooms over fine-textured foliage.
 - Quick crop time.
 - Grow under long days for the best habit and vigour.
- North Texas Winner's Circle Award; Japan Flower Selections Certificate of Merit as Best Flower Award*

HELICHRYSUM ●
Helichrysum microphyllum
(*Plectostachys serpyllifolia*)

Silver Mist 

Height: 6 to 8 in./15 to 20 cm
Spread: 18 to 24 in./46 to 61 cm

Seed supplied as:
Multi-Seed Pellets

Plug crop time: 6 to 7 weeks
Transplant to finish: 8 to 9 weeks

- Accent plant for mixed containers and landscapes, as well as an indoor plant.
- Full, mounded and spreading plants branch well without pinching.
- Silver colour intensifies with more light; under lower light, foliage appears more green.

HEUCHERA
See **Perennials**, page 145.

HIBISCUS ●
Hibiscus acetosella

Mahogany Splendor 

 **PRO LANDSCAPE PERFORMER**

Height: 36 to 60 in./91 to 152 cm
Spread: 24 to 30 in./61 to 76 cm

Seed supplied as: Raw
Plug crop time: 2 to 3 weeks
Transplant to finish: 5 to 6 weeks

- Adds awesome colour and dramatic height to landscapes and containers.
 - Deep burgundy, maple-shaped leaves with serrated edges.
 - Drought and heat tolerant; combines well with other vigorous sun-loving plants in containers.
 - Can be grown directly in the water as a pond plant.
- NOTE:** Foliage will have green/rust tones in the greenhouse, but matures to burgundy in full sun outdoors.



Purple Lady Iresine

IREesine 
Iresine herbstii

Purple Lady 

Height: 6 to 8 in./15 to 20 cm
Spread: 36 to 48 in./91 to 122 cm

Seed supplied as: Raw

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

- Ideal for mixed containers, "solo" hanging baskets or planters, and as a groundcover.
- Also well-suited to indoor plant programs.
- Low and prostrate, spreading plant fills in nicely and cascades as branches get longer and heavier.
- Can withstand more sun in humid areas like Florida.

ISOTOMA (LAURENTIA) 
Isotoma hybrida

Gemini Blue F1

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

Seed supplied as: Pelleted

Plug crop time: 4 to 5 weeks
Transplant to finish: 9 to 10 weeks

- Vigorous, free-flowering variety delivers excellent garden performance, yet keeps a controlled, mounded habit in containers.
- Easy to grow - early and uniform.
- Works well in premium pack and 3.5 to 4-in./9 to 10-cm programs.
- Single, star-shaped blooms over finely cut foliage.



Gemini Blue Isotoma

COLORGRASS JUNCUS

Blue Arrows, see *ColorGrass*, page 49.

Blue Dart, see *ColorGrass*, page 48.

Javelin, *ColorGrass*, page 49.

Starhead, see *ColorGrass*, page 47.

Twister, see *ColorGrass*, page 48.

FUSEABLES PLUG & PLAY JUNCUS

Twisted Arrows, page 235.

KOELERIA
See *ColorGrass*, page 46.

LAVANDULA
See *Perennials*, page 147.

LIMONIUM (STATICE)

QIS Series,
See *Cut Flowers*, page 185.



Gemini Blue Isotoma



Beacon Series

High resistance to Impatiens downy mildew!

Bring *Impatiens walleriana* back into production without the risk of disease! Beacon impatiens offers **high resistance** to the currently known and widely prevalent populations of *Plasmopara obducens*, which cause **Impatiens downy mildew**. For lasting colour, you can rely on Beacon impatiens to thrive. Visit BeaconImpatiens.com for more information.



NEW

Rose
US PAF; US 10,285,362; EU PAF; PCT

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 currently known and widely prevalent populations of *Plasmopara obducens*, 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.



NEW

Rose US PAF; US 10,285,362; EU PAF; PCT



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



White US PAF; US 10,285,362; EU PAF; PCT
Medal of Excellence Industry's Choice,
Medal of Excellence Reader's Choice



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



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



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



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



Red White Mixture
US PAF; US 10,285,362; EU PAF; PCT
Medal of Excellence Industry's Choice,
Medal of Excellence Reader's Choice

Bright Red A warm-toned red on upright mounded, moderately vigorous plants with mid-green foliage. Plant vigour is slightly larger than Super Elfin XP Red, and the flower size is slightly smaller.

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

Orange A bright, clean orange on moderate-vigour, upright mounded plants with bright green foliage. Plant height, vigour and flower size are similar to Super Elfin Bright Orange.

New 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 burgundy-violet on moderate-vigour, upright mounded plants with mid-green foliage. More vigorous with the same flower size as Super Elfin XP Violet.

White Pure white flowers on moderately vigorous, upright mounded plants with mid-green foliage. Features more plant vigour with the same flower size as Super Elfin XP White.

New Formula Mixture Bright Red, Coral, Orange, NEW Rose, Salmon, Violet Shades and White.

Red White Mixture Bright Red, White.



NEW

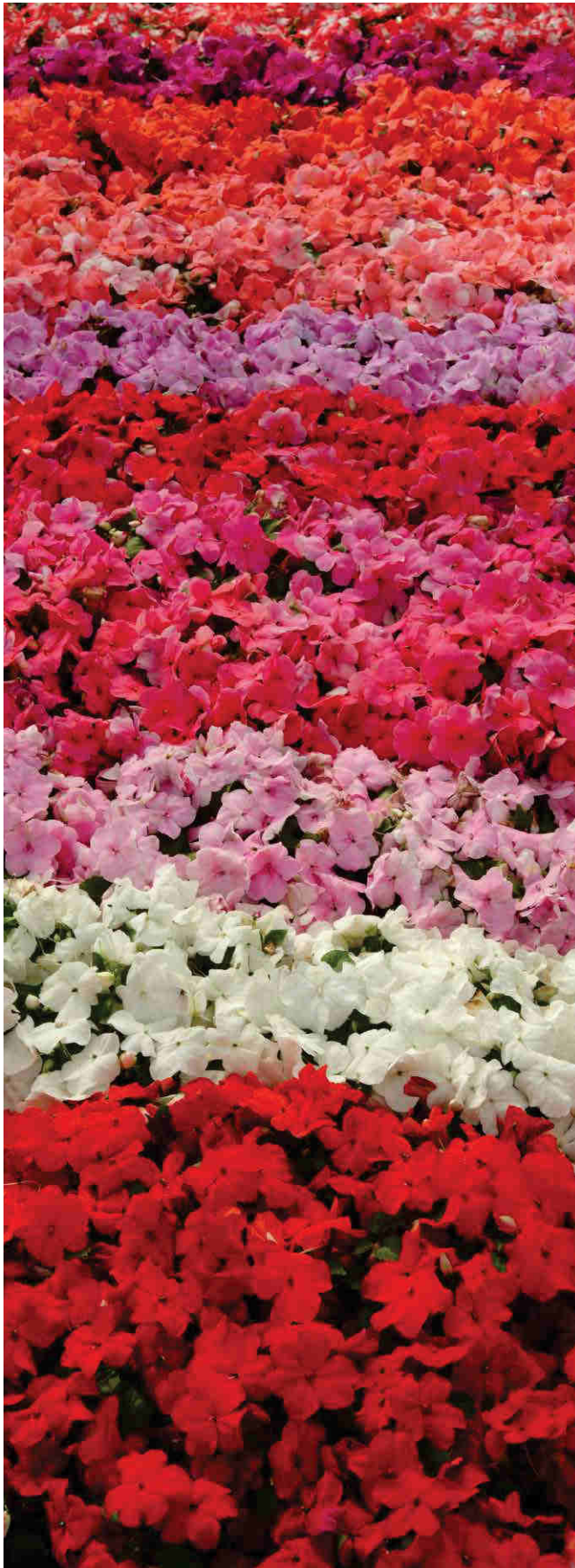
Formula Mixture



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



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



Super Elfin XP Series



XP Rose

XP = Precise, programmable, predictable!

Count on Super Elfin XP varieties for a tight bloom window, prolific flowering, exceptionally uniform habit and strong plant vigour.

The Super Elfin XP series delivers a 5 to 7-day flowering window across all colours so all plants ship at the same time and you always meet market dates.



XP Formula Mixture

IMPATIENS continued

Super Elfin® XP Series F1 ●●●●

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

Seed supplied as: Raw

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

- Bring in the best habit, vigour and timing uniformity across a broad colour range with Super Elfin XP.
- The broad colour range lets you mix and match any Super Elfin XP variety to achieve the most uniform impatiens crop.



XP Clear Mixture



XP Hot Mixture



XP White



XP Pink



XP Coral



XP Salmon Splash



XP Red



XP Salmon



XP Rose



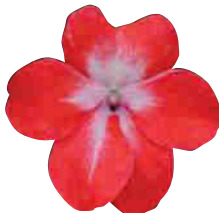
XP Violet Starburst



XP Blue Pearl



XP Lilac



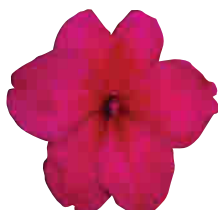
XP Red Starburst



XP Punch



XP Scarlet



XP Violet



Paradise Mixture



Mixture



Bright Orange



Lipstick



Ruby

Super Elfin® Series F1

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

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

Seed supplied as: Raw

Plug crop time: 4 to 5 weeks

Transplant to finish: 3 to 4 weeks



Dazzler Baby Shower Mixture



Grower Select Mixture



Merlot Mixture



Voodoo Too Mixture



Mixture

IMPATIENS *continued*

Dazzler® Series F1

Height: 10 to 14 in./25 to 36 cm
Spread: 13 to 15 in./33 to 38 cm

Seed supplied as: Coated

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

Available in North America only.

- The highest seed quality and extremely uniform growth with high yields makes Dazzler perfect for mechanized sowing.
- Healthy, uniform plants have controlled, manageable vigour; fill in quickly and are covered with 1.5-in./4-cm blooms.
- Well-matched across the series, all colours come into bloom together and flower freely right up until frost.
- Well-suited to pack, 4-in./10-cm pot and basket programs.



White



Salmon Splash



Salmon



Orange



Coral



Pink



Blue Pearl



Violet



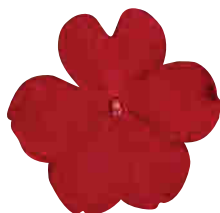
Rose



Scarlet



Red



Cranberry



Punch



Florida Pink Lisianthus



Regatta White



Regatta Sky Blue



Florida Blue Lisianthus



Regatta Lilac



Regatta Marine Blue



Regatta Sky Blue, Sapphire, Rose, Midnight Blue & Blue Splash 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 Purple, page 185.

Flare Series, page 185.

POTTED PLANT LISIANTHUS

Sapphire Series, page 172.

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.

Rapid Blue (Not pictured)

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

- Early blooming with green foliage.

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

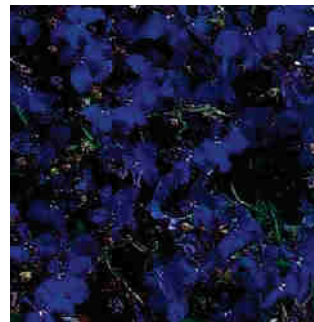
- Flowers up to 4 weeks earlier than other trailing varieties, perfect for selling in bloom during Spring.
- Vigorous plants flower profusely, cascading over the edge of hanging baskets, larger containers and colour bowls.

Regatta Rose *Fleuroselect Quality Mark, Fleuroselect Novelty*Regatta Blue Splash Lobelia *Fleuroselect Quality Mark*

Regatta Sapphire Lobelia



Regatta Mixture Lobelia



Regatta Midnight Blue Lobelia



Crystal Palace Lobelia



Riviera White *Fleuroselect Novelty*



Mixture

COMPACT LOBELIA *continued*

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 47.



Midnight Blue
Fleuroselect Quality Mark



Sky Blue
Fleuroselect Quality Mark



Marine Blue



Blue Eyes



Rose *Fleuroselect Quality Mark*



Lilac



Blue Splash



White



Mixture

AFRICAN (AMERICAN) MARIGOLD ●

Tagetes erecta

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 Beijing, China.



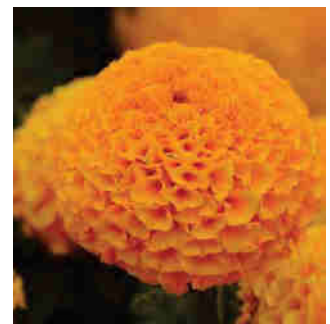
Taishan Series



Yellow



Gold



Orange



Marvel II Gold, Orange and Yellow



Marvel II Yellow



Marvel II Gold



Marvel II Orange



Vanilla



Marvel II 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.
- Also available: **Mixture**

Vanilla F1

Height: 16 in./41 cm
Spread: 10 in./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

- Fully double heads have tight centres that shed water and avoid turning brown longer.
- Each double, creamy white bloom is 2.5 to 3 in./6 to 8 cm across atop darker green foliage.
- Plants flower to match Marvel series timing - grow both to offer a full colour range.
- Well-suited to beds, borders and large mixed containers.



Mixture



Bonanza Series

FRENCH MARIGOLD ●
Tagetes patula

DWARF CRESTED FRENCH MARIGOLD

Bonanza™ Series



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

Seed supplied as:
Coated, De-tailed

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

- Double crested flowers are the largest of any in this type - 2 to 3 in./5 to 8 cm across - in a wide range of pure, intense colours.
- Fast to flower with a tight flowering window.
- Excellent garden performers under a wide range of conditions.



Flame



Gold



Harmony

All-around performance

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



Yellow



Deep Orange US PVP 201800517
Fleuroselect Novelty



Bolero US PVP 201800074



Bee



Fireball US 10,750,692; EU PAF



Strawberry Blonde US 10,750,692; EU PAF



Flamenco US PVP 202000034



Janie Deep Orange



Janie Bright Yellow



Gate Orange
Fleuroselect Quality Mark

DWARF CRESTED FRENCH
MARIGOLD continued

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.

**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.

FULLY DOUBLE
FRENCH MARIGOLD

Gate Orange

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

Seed supplied as: Raw, De-tailed

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

- A good choice for commercial landscapes, featuring round, fully double, 3-in./8-cm flowers that look like small African marigolds.
- Recommended as Summer pot annuals.



Orange US 9,326,467



Harmony US 9,326,464



Flame US 9,326,468



Hot Pak Mixture

HEAT TOLERANT EXTRA-DWARF
CRESTED FRENCH MARIGOLD

Hot Pak™ Series



Height: 6 to 7 in./15 to 18 cm
Spread: 6 to 8 in./15 to 20 cm

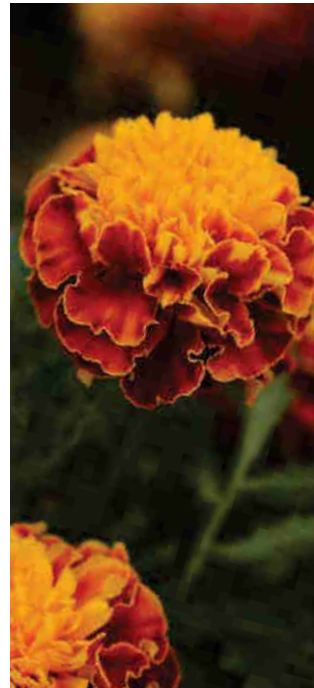
Seed supplied as:
Coated, De-tailed

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 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.



Fire



Spry US 9,326,466



Gold US 9,320,212



Yellow US 9,326,465



Durango Outback Mixture



Outback Mixture



Gold



Bee



Yellow



Orange



Bolero



Tangerine



Red



Flame



Outback Mixture

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.

Outback Mixture
Bolero, Red, Tangerine, Yellow.

MARIGOLD
Also see **Cut Flowers**, page 188.

MATRICARIA
See **Cut Flowers**, page 189.



Poetry Mixture Nemesia



Poetry White Nemesia



Poetry Pink Nemesia



Poetry Deep Pink 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 Blue Nemesia



Sundrops Mixture Nemesia
Fleuroselect Gold Medal

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



Kirigami Ornamental Oregano US PVP 201800057

ORNAMENTAL MINT ●●
Mentha requienii

Mini Mint

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.

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



Copper Prince



Jade Princess



Jester



Purple Baron



Purple Majesty All-America Selections National Winner

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.


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.

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 two-thirds the mature height.
- Young plants are green; stem and midrib begin to develop purple colour as they mature.
- Shows best colour in full sun.

MYOSOTIS

See **Perennials**, page 153.

OSTEOSPERMUM *Osteospermum ecklonis***Akila® Series F1****Height:** 10 to 14 in./25 to 36 cm
Spread: 14 to 20 in./36 to 51 cm**Seed supplied as:** Raw**Plug crop time:** 4 to 5 weeks
Transplant to finish: Spring 10 to 12 weeks, Autumn 7 to 9 weeks

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

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 CORN

See page 39.

ORNAMENTAL MINT

See page 67.

ORNAMENTAL OREGANO

See page 67.

ORNAMENTAL PEPPER

See page 81.

Also see **Potted Plants**, page 162.**Sunset Shades****Akila Sunset Shades****White Purple Eye****Purple****White****Lavender Shades****Grand Canyon Mixture****Mixture****Daisy White** All-America Selections
National Winner, Fleuroselect Gold Medal



Make your life easier

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

PANSY ●●●
Viola x wittrockiana

EXTRA-LARGE FLOWERED PANSY

Matrix® Series F1



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

Seed supplied as: Raw, Primed

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

- 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.

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

Red Wing Good branching and a mounding habit.

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 Series



White



Primrose



Lemon



Yellow



Orange



Rose



Light Blue



True Blue



Purple



White Blotch



Yellow Blotch



Rose Blotch



Solar Flare



Red Blotch



Ocean



Beaconsfield



Blue Blotch



Deep Blue Blotch



Denim



Midnight Glow



Yellow Purple Wing



Sunrise



Rose Wing



Red Wing



Morpheus



Lavender Shades



Matrix Series



Blotch Mixture

Clear Mixture



Citrus Mixture

Coastal Sunrise Mixture



Ocean Breeze Mixture



Mixture

Matrix mixtures

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

Clear Mixture Lemon, Light Blue, Orange, Purple, Rose, White, Yellow.

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

Coastal Sunrise Mixture Ocean, Rose Blotch, Sunrise.

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



Frizzle Sizzle Yellow



Frizzle Sizzle Orange



Frizzle Sizzle Lemonberry



Frizzle Sizzle Yellow-Blue Swirl



Frizzle Sizzle Raspberry



Frizzle Sizzle Blue



Frizzle Sizzle Burgundy



Frizzle Sizzle Mixture

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

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

Mixture Also includes lavender shades (not available separately).



Frizzle Sizzle Burgundy Pansy with Clear Crystals White Alyssum



Spring Matrix Series

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. Spring Matrix is 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 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.

Ocean Can contain a small percentage of white with blotch.

Daffodil Mixture
 Deep Orange, Lemon, Yellow, White.

Tricolor Mixture
 Blue, Lemon, Purple.



White



Primrose



Lemon



Yellow



Deep Orange



Rose



Scarlet



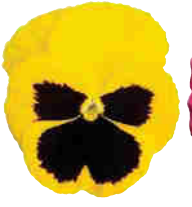
Blue



Purple



White Blotch



Yellow Blotch



Rose Blotch



Red Blotch



Ocean



Beaconsfield



Blue Blotch



Lavender Shades



Pink Shades



Purple & White



Sangria



Blue Wing



Midnight Glow



Clear Mixture



Daffodil Mixture



Blotch Mixture



Mixture



Tricolor Mixture



Panola XP True Blue

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.
- Both Panola XP and standard 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 early-blooming 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 Citrus Mixture



XP Clear Mixture



XP Mixture



XP White



XP Yellow



XP Deep Orange



XP Scarlet



XP True Blue



XP Purple



XP White Blotch



XP Yellow Blotch



XP Beaconsfield



XP Deep Blue Blotch



XP Marina



XP Rose Picotee



XP Fire



Panola Yellow & Purple

Panola® Yellow & Purple F1

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



Lucky Star Series



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 
Pentas lanceolata

Lucky Star® Series F1
 **PRO LANDSCAPE PERFORMER**

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 eclipse the prior flush, so plants stay compact, tight and ready for sale at retail with minimal work.
- Violet** Faster secondary, follow-up blooming and a darker color intensity than other violet pentas on the market.

Use Lucky Star Pentas to create star-studded Plug & Play Combos like this!



Plug & Play Combo Star Bright, see page 244.



Mixture



Lipstick



White



Dark Red



Pink



Violet



Deep Pink



Lavender



Glitterati Red Star US 10,631,515



Glitterati Purple Star US 10,631,515



Butterfly White



Butterfly Light Lavender



Butterfly Orchid



Butterfly Deep Pink



Butterfly Deep Rose



Butterfly Red



Butterfly Mixture

PENTAS continued

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 star pattern combines easily with other varieties, adding an exciting component for warm/hot season combinations.
- Finishes fast for speed to market, and follow-up blooming keeps the plants in full colour and looking good all season.

Red Star Distinctive, patented star pattern combines red and white and is great for Summer patio pots and combinations. Complements Glitterati Purple Star, which was introduced in 2018.

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.

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

Seed supplied as: Raw

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

- The first black-leaved 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.
 - Extremely 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 eye-catching 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.



Midnight Fire



Sedona Sun



Calico



Purple Flash



Sangria US 7,393,995; US 7,696,416



Black Pearl All-America Selections National Winner, Fleuroselect Quality Mark US PVP 200500020



Dreams Red Picotee, Rose Picotee and Burgundy Picotee Petunias

Timing is everything

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

PETUNIA ●
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

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*.

Pink Vein Not available in North America.

Patriot Mixture
Red, White, Midnight.

Waterfall Mixture
Sky Blue, Midnight, White.



White



Pink Vein



Appleblossom



Salmon



Rose Morn



Pink



Neon Rose



Rose



Burgundy



Red



Sky Blue



Midnight



Rose Picotee



Red Picotee



Burgundy Picotee



Waterfall Mixture



Patriot Mixture



Mixture



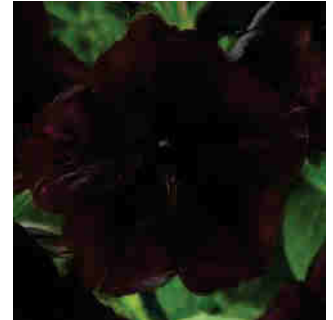
Sophistica Lime Bicolor, Antique Shades & Lime Green



Debonair Dusty Rose
US 7,642,436; EU PAF



Debonair Lime Green
US 7,642,436; EU PAF



Debonair Black Cherry
US 7,642,436; EU PAF



Sophistica Lime Green
US 7,642,436; EU PAF



Sophistica Lime Bicolor
US 7,642,436; EU PAF

The designer Debonair and Sophistica collections combine 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.

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

GRANDIFLORA
SINGLE PETUNIA

Sophistica® 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: 5 to 6 weeks

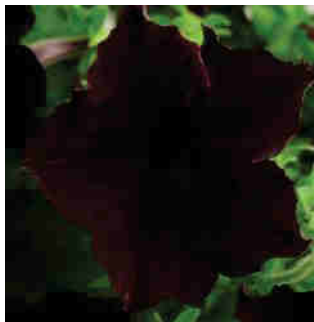
Blue Morn Blue margin with silver-white throat; throat will be less noticeable in cooler/greenhouse production, and more noticeable outside and in warm, high-light conditions.

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.

Twilight Blooms have smoky mauve top and green underside.



Sophistica Twilight
US 7,642,436; EU PAF



Sophistica Blackberry
US 7,642,436; EU PAF

MULTIFLORA SINGLE PETUNIA

Debonair™ 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: 5 to 6 weeks

- **Dusty Rose** Flowers become lighter in higher light/warmer conditions.



Sophistica Antique Shades
US 7,642,436; EU PAF



Sophistica Blue Morn



Peppermint Daddy



Red Daddy



Blue Daddy



Sugar Daddy



Daddy Mixture



Supercascade Pink



Supercascade Rose



Supercascade Burgundy

GRANDIFLORA
SINGLE PETUNIA

Daddy® 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

- 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.

Supercascade 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

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



Supercascade Red



Supercascade Blue



Supercascade White



Supercascade Mixture

Use Dreams and Daddy petunias to add striking hues to combos like this!



Fuseables Pleasantly Blue, see page 233.



Ez Rider Mixture



Ez Rider White



Ez Rider Deep Pink



Ez Rider Deep Salmon



Ez Rider Rose



Ez Rider Red



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, 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.

Ez Rider® Grandiflora Series F1

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

Seed supplied as: Pelleted

Plug crop time: 4 to 5 weeks

Transplant to finish: 5 to 6 weeks

• **Deep Pink** Colour is similar to Rose in low light; in higher light, colour is lighter than Rose.

Rose Colour is similar to Deep Pink in low light; in higher light, colour is deeper than Deep Pink.

Lo Rider™ Multiflora Series F1

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

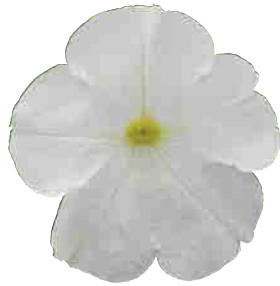
Seed supplied as: Pelleted

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.

Also available: **Mixture**



Lo Rider White



Lo Rider Pink



Lo Rider Rose



Lo Rider Violet



Lo Rider Red



Lo Rider Blue



Pretty Grand Flag Mixture



Pretty Grand Formula Mixture



Pretty Grand Midnight



Pretty Grand Purple



Pretty Grand White



Pretty Grand Coral

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 in beds and landscapes.

Pretty Grand™ Grandiflora Series F1

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

Seed supplied as: Pelleted

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

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



Pretty Grand Red



Pretty Grand Summer



Pretty Grand Rose



Pretty Grand Deep Pink



Pretty Grand Violet

Pretty Flora™ Floribunda 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 7 weeks

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

Flag Mixture Midnight, Red, White.
Formula Mixture
7 to 9-day flowering window.



Pretty Flora Formula Mixture



Pretty Flora Purple



Pretty Flora Pink



Pretty Flora Flag Mixture



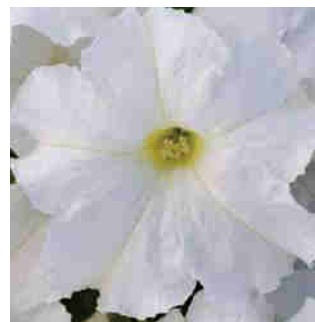
Pretty Flora Red



Pretty Flora Rose



Pretty Flora Pink Pearl



Pretty Flora White



Pretty Flora Coral



Pretty Flora Midnight



Mirage Mid-Blue



Deep Rose

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

Not 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.

New Deep Rose Adds an important colour that was missing from the series. Same timing as Mirage Rose; flowers are on the large side for the series.

Also available: **Mixture**



NEW
White Improved

Yellow

NEW
Salmon Improved

Pink

Chic

Rose Morn



Spring

Sugar

Summer

NEW
Plum

Velvet



Rose Star

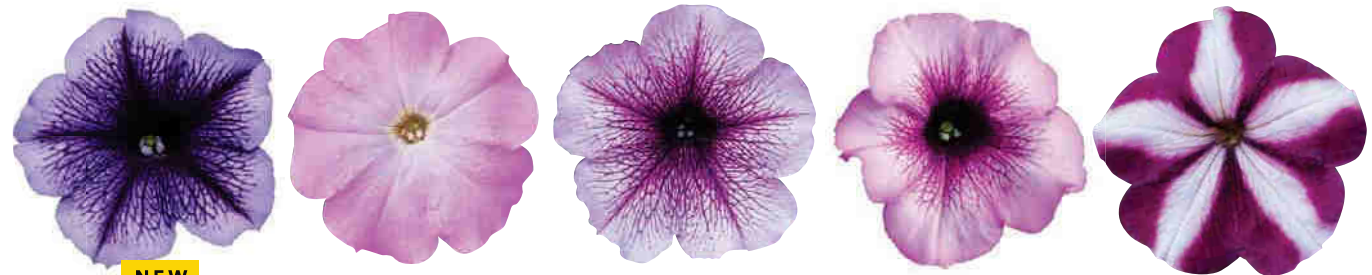
Rose

NEW
Deep Rose

Red Morn

Red

Red Picotee



NEW
Blue Vein

Lilac

Lavender

Plum Crystal

Burgundy Star



Purple

Blue Star

Light Blue

Mid-Blue

Blue



Madness Series



Red



Total Madness Mixture



Moonlight Madness Mixture



Waterfall Madness Mixture



Madness Merlot Mixture



Madness Old Glory Mixture



Clear Madness Mixture



Just 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

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, 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.

New Deep Rose

Features large flowers and a brilliant deep rose colour.

Clear Madness Mixture

Contains all clear colours except Yellow and Pink.

Just Madness Mixture

Six veined colours.

Madness Merlot Mixture

Carmine, Lavender, Pink, White.

Moonlight Madness Mixture

Lavender Glow, Yellow, Lilac.

Madness Old Glory Mixture

Red, White, Midnight.

Total Madness Mixture

Bright mix of 14 colours.

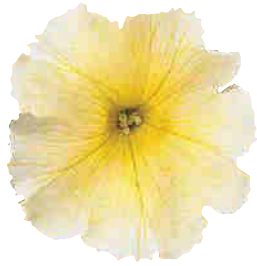
Waterfall Madness Mixture

Lilac, Magenta, Royal, White.



NEW

White Improved



Yellow



Lilac

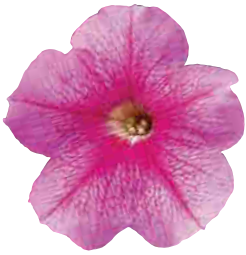


NEW

Simply Improved



Pink



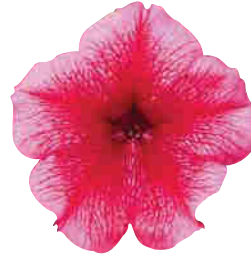
Sheer



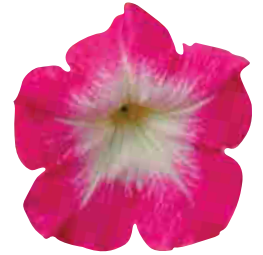
Sugar



Spring



Summer



Rose Morn



Rose



NEW

Deep Rose



Red Morn



Red Picotee



Red



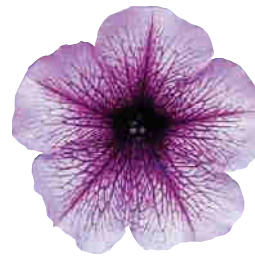
Burgundy



Plum



Plum Crazy



Orchid



NEW

Blue Vein



NEW

Sky Blue



NEW

Mid-Blue



Royal



NEW

Rose Star



Burgundy Star



NEW

Blue Star



Duo Mixture



Duo Red And White



Duo Rose And White



Duo Rose



Duo Salmon



Duo Satin Pink



Duo Blue



Duo Burgundy



Duo Lavender



Double Cascade Mixture



Double Cascade Blue



Double Cascade Burgundy



Bonanza Mixture



Double Cascade Orchid Mist



Double Cascade Valentine



Double Cascade Pink

DOUBLE PETUNIA ●

Petunia x hybrida

FLORIBUNDA
DOUBLE PETUNIA

Bonanza 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: 5 to 6 weeks

- Combines the beauty of double flowers and prolific flowering of multifloras.
- Formula blend has 2 to 2.5-in./5 to 6-cm blooms on mounded plants.
- A favourite among home gardeners.

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.

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.

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 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

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



Pirouette Red



Glorious Mixture



Pirouette Purple
All-America Selections National Winner



Pirouette Rose



Double Madness Rose And White



Satin Pink



Salmon



Rose



Burgundy



Red And White



Lavender



Blue



Mixture

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

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.



Scarlet



Crimson



Pink



White



Blue



Mixture



21st Century Scarlet

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.

Use 21st Century Phlox in dreamy Plug & Play Combos like this!



Plug & Play Combo Lemon Dream, see page 239.



Ethnie Light Blue



Ethnie Salmon



Ethnie White



Ethnie Purple Violet



Ethnie Dark Rose



Ethnie Scarlet



Ethnie Mixture



Grammy Pink & White *Fleuroselect Gold Medal*



Promise Mixture

PHLOX continued

Ethnie Series

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

Seed supplied as: Raw

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

- Genetically compact series is an excellent choice for pot and pack programs, delivering uniform habit and earliness.
- Crop time is just 10 to 12 weeks.
- No PGRs are needed in production.

Promise Mixture

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

Seed supplied as: Raw

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

- Very floriferous plants feature double and semi-double flowers held well above the foliage.
- Strong outdoor vigour assures long-lasting garden performance.
- Well-suited to large pack and pot production.

Grammy Pink & White F1

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

Seed supplied as: Primed

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

- The most compact F1 phlox.
- Excellent uniformity makes it very manageable in packs and pots.
- Vigorous, free-flowering plants produce one-of-a-kind bicolor blooms all season in mixed containers, gardens and planters.



Silver Crest Plectranthus

PLECTRANTHUS 
Plectranthus argentatus

Silver Crest 

Height: 8 to 10 in./20 to 25 cm
Spread: 18 to 24 in./46 to 61 cm

Seed supplied as: Raw

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

- Compact accent plant is an easy and economical choice for mixed containers, baskets and landscapes.
- Tolerant of heat and water stress.
- Silvery green, fuzzy foliage and small, blush white flowers on well-branched, trailing plants.

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.



Silver Shield Plectranthus

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.



Heritage Crème Primula



Primlet Yellow



Mixture



Purple



Golden Shades



Pink Shades



Rose with Edge



Rose



Sunrise



White



Lemon Shades



Scarlet Red Shades

PRIMULA continued

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.



Southern Star White Ruellia



Southern Star Pink Ruellia



Southern Star Blue Ruellia



Toucan Scarlet Shades Purslane

PURSLANE ●*Portulaca oleracea***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 seed-grown purslanes for mass-market baskets and containers.
- Requires little or no PGRs, no pinching.
- Colourful buds develop into 2-in./5-cm blooms.
- Heat loving and drought tolerant.

NOTE: We recommend to sow 4 seeds per cell.

PERENNIAL RUDBECKIA

See page 154.

RUELLIA ●*Ruellia brittoniana***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.



Toucan Fuchsia Purslane



Happy Hour Series



Coconut



Lemon



Orange



Banana



Rosita



Fuchsia



Peppermint



Deep Red



Tropical Mixture



Pink Passion Mixture



Mixture



Happy Hour (L) blooms earlier under shorter days than competing variety (R).

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.

Pink Passion Mixture
Rosita, Peppermint, Fuchsia.

Tropical Mixture
Deep Red, Orange, Banana.



Happy Trails Pink

TRAILING PORTULACA ●
Portulaca grandiflora

Happy Trails™ Series 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 series 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.
- Most vivid colour assortment available, including intense Deep Red and unique Rosita.
- Delivers brilliant colours and fantastic spread in the garden.



Rosita



White



Peppermint



Yellow



Orange



Pink



Fuchsia



Deep Red



Mixture



Big Blue US PVP 201700218



Big Blue US PVP 201700218

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.



Lancelot



Lancelot



Lighthouse Purple
Fleuroselect Novelty

SALVIA ●
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
Transplant to finish: 4 to 5 weeks

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

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.



Lighthouse Red

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 155.

Salvatore Blue, page 156.

SAXIFRAGA
See **Perennials,** page 157.

SCABIOSA
See **Perennials,** page 157.

SILENE
See **Perennials,** page 157.



Lighthouse Purple and Red



Vista White



Vista Salmon



Vista Red



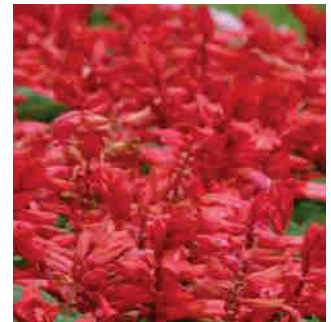
Vista Purple



Red Hot Sally II



Vista Red And White



Vista Rose



Vista Lavender



Vista Mixture



Snapshot Burgundy Bicolor



Burgundy Bicolor



White



Red Bicolor



Yellow



Pink

SNAPDRAGON ●
Antirrhinum majus

DWARF GARDEN
SNAPDRAGON

Snapshot™ Series F1



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

Seed supplied as: Raw

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

- Delivers a perfect balance of pack performance and landscape success.
- Bushy, compact plants are topped by closely spaced, full flower spikes.
- Uniform flowering, with a 7 to 10-day window for Spring and Autumn sales in packs and small pots.

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

Sunset Retains its bright yellow colour in cool environments better than competing varieties. Also available: **Mixture**



Orange



Red



Purple



Rose



Coral Bicolor



Appleblossom



Plumblossom



Burgundy



Sunset

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 excellent-quality, closely set blooms.
- Flowers well under long days.
- Useful as both a landscape series and as a garden cut flower.
- Group 3-4 flowering snapdragon.



Rocket White
All-America Selections National Winner



Rocket Lemon



Rocket Mixture



Rocket Pink



Rocket Cherry



Rocket Golden
All-America Selections National Winner



Rocket Bronze
All-America Selections National Winner

GARDEN SNAPDRAGON

Solstice™ Series F1

Height: 16 to 20 in./41 to 51 cm
Spread: 10 to 14 in./25 to 36 cm

Seed supplied as: Raw

Plug crop time: 5 to 6 weeks
Transplant to finish in gallon containers:

Northern Hemisphere:
October to early January sowing, 10 to 11 weeks;
September and mid-January sowing, 5 to 7 weeks
Southern Hemisphere: April to early July sowing, 10 to 11 weeks; March and mid-July sowing, 5 to 7 weeks

- Flowers earlier under shorter days than other intermediate varieties, making it ideal for Winter bedding where climate permits.
- "Knee-high" height - great for landscapes and cut flower gardens.
- Performs best with high light and cool nights (45 to 55°F/7 to 13°C).
- Group 1 Winter-flowering snapdragon.

Red Yellow bee.

White Yellow bee; flowers have a slight pink blush most noticeable in buds.

Yellow May have pink buds and blush pink in lower light.



Rocket Orchid
All-America Selections National Winner



Rocket Rose Shades *All-America Selections National Winner*



Rocket Red
All-America Selections National Winner



Solstice White



Solstice Pink



Solstice Rose



Solstice Orange Tricolor



Solstice Yellow



Solstice Lavender

CUT FLOWER SNAPDRAGON

Cool Series, page 198.

Early Potomac Series, page 196.

Maryland Series, page 194.

Monaco Series, page 195.

Potomac Series, page 196.

Purple Twist, page 198.



Solstice Purple



Solstice Burgundy



Solstice Red



Solstice Mixture



Hot Cakes White Stock



Vintage White Stock



Vintage Mixture Stock



Hot Cakes Hot Rose Stock



Vintage Yellow Stock



Vintage Copper Stock



Peek-A-Boo Spilanthes



Hot Cakes Pink Stock



Vintage Lavender Stock



Hot Cakes Purple Stock



Vintage Burgundy Stock



Hot Cakes Mixture Stock



Vintage Rose Stock



Vintage Red Stock

SPILANTHES ●
Acmella oleracea

Peek-A-Boo

Height: 12 to 15 in./30 to 38 cm
Spread: 24 to 30 in./61 to 76 cm

Seed supplied as: Coated

Plug crop time: 4 to 5 weeks

Transplant to finish: 7 to 8 weeks

- Unique accent plants show off intriguing, olive-shaped, 1-in./2.5-cm, golden yellow flowers with deep burgundy-red eyes on the long, pendulous stems.
- Foliage takes on a bronzy-green tone in full sun.

STATICE
See **Limonium**.

STIPA
See **ColorGrass**, page 48.

CUT FLOWER STOCK (MATTHIOLA)

Aida Series, page 189.

Column Stock, page 191.

Figaro Series, page 189.

Katz Series, page 192.

Katz Hi Double White, page 192.

Mathilda Series, page 190.

Opera Series, page 190.

SUNFLOWER
See **Potted Plants**, page 173.

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 grey-leaf, 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 Series

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

Seed supplied as: Raw

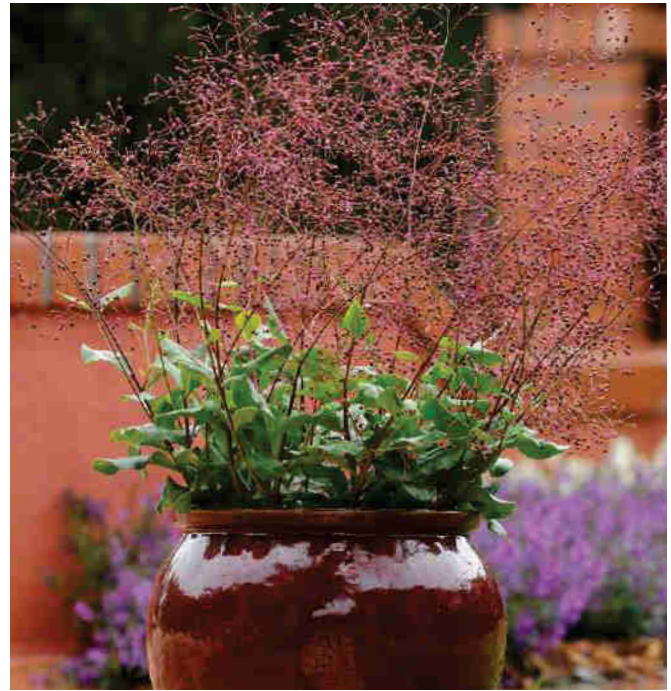
Plug crop time: 4 weeks

Transplant to finish: 7 to 8 weeks

- Dwarf series 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 outdoor performers.
- Prefers cool growing conditions; no vernalisation needed.



Limón Talinum



Verde Talinum



Susie Yellow with Eye Thunbergia



Susie White with Eye Thunbergia



Susie Orange with Eye Thunbergia

TALINUM ●
Talinum paniculatum

Limón 

Height: 28 to 32 in./71 to 81 cm
Spread: 16 to 18 in./41 to 46 cm

Seed supplied as: Raw

Plug crop time: 5 weeks

Transplant to finish: Foliage 4 to 5 weeks; add 2 weeks to flower

- Mounded, bright lime-green foliage with airy inflorescences covered in tiny rose-pink flowers.
- Handles stress well, including heat and drought.
- When exposed to stressful conditions, the foliage shows off an even more vibrant chartreuse colour.
- Ideal for containers, hanging baskets and in-ground plantings.
- Also works well as a fresh or dried cut flower.

Verde 

Height: 32 in./81 cm
Spread: 24 in./61 cm

Seed supplied as: Raw

Plug crop time: 5 weeks

Transplant to finish: Foliage 4 to 5 weeks; add 2 weeks to flower

- Dark green-leafed companion to Limón has small flowers that open hot pink and then form orange berries that ripen to dark red.
- Flexible flower spikes make it easy to grow and ship.
- Durable accent plant handles heat and stress well, including both low water and soggy conditions.
- Excellent for mixed containers; also a long-lasting landscape option.

TANACETUM
See **Matricaria**.

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" choices, plus 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.



Susie Mixture Thunbergia



Kauai Deep Blue



White



Lemon Drop



Rose



Magenta



Burgundy



Blue & White



Deep Blue



Mixture

TORENIA ●●
Torenia fourieri

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.

TRACHELIUM

See **Cut Flowers**, page 199.

VERBASCUM

See **Perennials**, page 157.



Quartz Blue



Quartz XP White



Quartz XP Silver



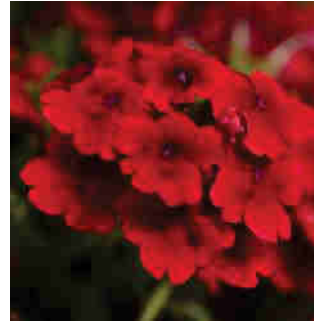
Quartz XP Pink



Quartz XP Red with Eye



Quartz XP Bordeaux



Quartz XP Scarlet



Quartz XP Violet with Eye

VERBENA ●
Verbena x hybrida

Quartz Blue

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

Seed supplied as: Raw, Primed

Plug crop time: 5 weeks

Transplant to finish: Spring 7 to 9 weeks, Summer 6 to 7 weeks

- Approximately 2 weeks later to flower than Quartz XP varieties.

Quartz XP Series

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

Seed supplied as: Raw, Primed

Plug crop time: 4 weeks

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

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

XP Purple Largest florets and slightly more vigour than others in the series.

XP Merlot Mixture Strong burgundy, red and purple shades.

PERENNIAL VERBENA

Buenos Aires, page 157.

Santos Purple, page 157.



Quartz XP Purple *Fleuroselect Novelty*



Quartz XP Merlot Mixture



Quartz XP Mixture



Titan Pure White



Titan (left) surpasses even Pacifica XP in bloom size.

**Robust and ready for anything
Mother Nature sends!**

Titan is up to 2 weeks faster to flower than open-pollinated vincas, with superior branching and 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



Mixture



Clear Mixture



Summer Breeze Mixture

VINCA ●
Catharanthus roseus

F1 UPRIGHT VINCA

Titan™ Series F1



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

Seed supplied as: Raw

Plug crop time: 5 weeks

Transplant to finish: 3 to 4 weeks

- 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./10-cm and 6-in./15-cm pots.

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

Bubble Gum Mixture
Blush, Icy Pink, Rose.

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

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



Pure White



Blush



Polka Dot



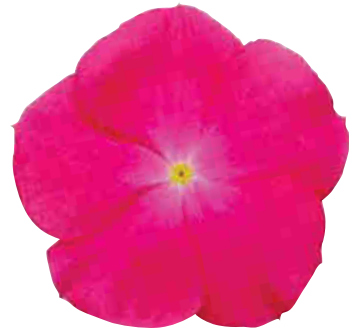
Apricot



Icy Pink



Punch



Rose



Rose Halo



Dark Red
US 10,212,908



Really Red
US 10,212,908



Burgundy



Lavender Blue Halo



Lilac



Valiant Apricot & Lilac



Pure White



Apricot US PAF



Orchid US 9,451,750



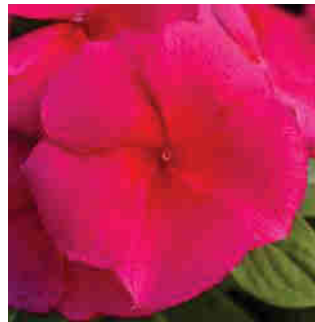
Lilac US 9,451,752



Punch US 9,451,751



Magenta US PAF



Punch US 9,451,751



Burgundy US 9,451,748



Mixture

F1 AERIAL PHYTOPHTHORA-RESISTANT UPRIGHT VINCA

Valiant™ Series F1



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 more vigorous than the competition AND it comes with disease resistance (IR*) to aerial Phytophthora under field conditions – a “Win-Win” for landscape programs.
- Makes well-branched, market-ready plants with large flowers that show off high-impact colour at point 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.

***Intermediate resistance (IR):** Plant varieties that restrict the growth and/or development of the specified pest and/or the damage it causes but may exhibit a greater range of symptoms or damage compared to high resistant varieties. Intermediate resistant plant varieties will still show less severe symptoms or damage than susceptible plant varieties when grown under similar environmental conditions and/or pest pressure. *Adopted by the ISF Vegetable and Ornamental Crops Section in May 2017.*



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



Raspberry US PVP 201800426
Medal of Excellence Industry's Choice



Tattoo Papaya & Black Cherry



Blueberry US PVP AF



Papaya US PVP 201800424
Medal of Excellence Industry's Choice



Tangerine US PVP 201800425
Medal of Excellence Industry's Choice



American Pie Mixture

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 well-branched 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.

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 Tattoo Blueberry, plus two Pacifica XP varieties, Really Red and White.

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!

Try Tattoo Vinca for an instant hit in Plug & Play Combos like this!



Plug & Play Combo Ink'd, see page 245.



Pacifica XP Series



XP Mixture



XP Bold Mixture

UPRIGHT VINCA continued

Pacifica XP 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

- 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 Cranberry, Really Red, Deep Orchid, Orange.



XP White



XP Polka Dot



XP Apricot



XP Icy Pink



XP Blush



XP Punch



XP Rose Halo
US PVP 200500218



XP Magenta Halo
US PVP 200500216



XP Cherry Red Halo



XP Raspberry



XP Burgundy



XP Burgundy Halo
*All-America Selections National Winner,
Fleuroselect Quality Mark, Fleuroselect
Novelty* US PVP 200700272



XP Lilac



XP Deep Orchid



XP Orange



XP Dark Red
US PVP 200600189



XP Really Red
US PVP 200600190



XP Cranberry



Mediterranean XP Burgundy Halo



XP Mixture



XP White US PVP 200900053



XP Peach US PVP 200900080



XP Dark Red US PVP 200900043



XP Strawberry US PVP 200900083



XP Hot Rose US PVP 200900084



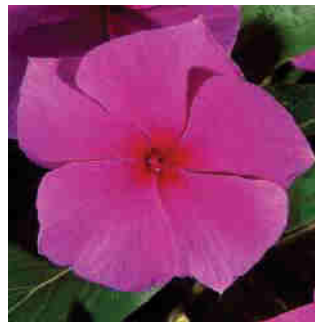
XP Burgundy Halo



XP Rose Halo



XP Red US PVP 200900081



Lilac

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.

Mediterranean Lilac

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



Mickey



White Blotch



Blue Purple Jump Up



Yellow Blue Jump Up



Lemon Jump Up



Yellow Violet Jump Up



Yellow Blotch



Blue

VIOLA ●●

Viola cornuta

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, free-flowering 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, overwinter-produced viola crops.
- Compact plants are covered in 1 to 1.5-in./3 to 4-cm blooms.
- A well-branched, full-bodied 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.

Shorter production time = cost savings

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



Yellow Blue, Purple Blue and Lemon Jump Up



L: Competing Yellow Jump Up, R: Quicktime Yellow Violet Jump Up flowering 2 weeks earlier in northern European trials in 2017.



Sorbet XP Citrus Mixture

Send the best-looking violas to retail

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

VIOLA continued

Sorbet® XP Series F1



Height: 6 to 8 in./15 to 20 cm
Spread: 6 to 8 in./15 to 20 cm
Flower size: 1 to 1.5 in./3 to 4 cm
Seed supplied as: Raw, Primed
Plug crop time: 4.5 to 5 weeks
Transplant to finish: Early Spring 6 to 8 weeks, Autumn 4 to 5 weeks

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



XP Beaconsfield

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

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

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

XP Red Blotch Best plant structure and timing of any red blotch variety for Autumn production; more branched and uniform plant and up to 1 week earlier in Autumn production than other red blotch varieties.

New 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.



Sorbet XP Delft Blue, Lemon Chiffon and XP Beaconsfield

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.

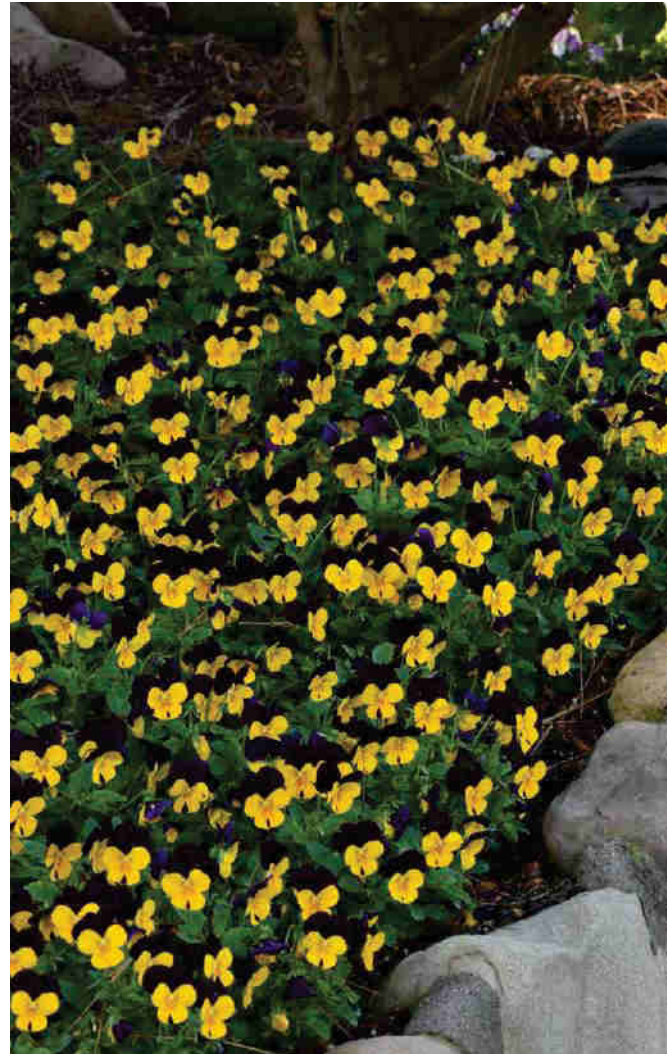
XP Blueberry Sundae Mixture XP True Blue, XP Delft Blue, XP White.

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, 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 Yellow Jump Up



XP White



XP Yellow



XP Pink Wing



XP Deep Orange



XP Beaconsfield



XP Purple



XP True Blue



XP Blackberry



XP White Blotch



XP Lemon Ice Blotch



XP Pink Halo



XP Primrose Blotch



XP Yellow Blotch



XP Blue Blotch



NEW XP Rose Blotch



XP Red Blotch



XP Yellow Pink Jump Up



XP Orange Jump Up



XP White Jump Up



XP Lemon Jump Up



XP Yellow Jump Up



XP Yellow Burgundy Jump Up



XP YTT



XP Marina



XP Delft Blue
Fleuroselect Gold Medal



XP Neptune



XP Denim Jump Up



XP Morpho
Autumn/warm temperature
bloom colour



XP Morpho
Spring/cool temperature
bloom colour



XP Raspberry



XP Purple Face



XP Blueberry Sundae Mixture



XP Mixture



XP Spring Select Mixture



XP Yellow Blotch



XP Autumn Select Mixture



XP Citrus Mixture



XP Harvest Mixture



XP Jump Up Mixture



NEW
Sorbet Tiger Eye



NEW
Tiger Eye



Lemon Chiffon



Lilac Ice



Icy Blue



Orchid Rose Beacon



Lavender Pink



Violet Beacon



Carmine Rose



NEW Tiger Eye



Yellow Blue Jump Up



Honeybee



Antique Shades



Fire



Ruby Gold Babyface



Midnight Glow



Black Delight

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 bicolor; bright and sunny for Spring production. 30% more vigorous and longer peduncles than other Sorbet varieties.

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

**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.



Purple Shades



Frizzle Sizzle Mini Tapestry



Yellow



Mixture



Zahara Starlight Rose All-America Selections National Winner, Fleuroselect Novelty



Sunburst Fleuroselect Gold Medal



ZINNIA ●
Zinnia marylandica

Zahara® Series



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 disease-resistant zinnia... more retail impact... flower power that lasts in the landscape.
- Less care needed at retail for faster turns, less dump and better sell-through.
- Outstanding performer in heat, drought.

Fire Colour intensifies outdoors.

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.

Bonfire Mixture Red, Fire, Yellow.

Raspberry Lemonade Mixture Raspberry, Yellow, Starlight Rose.

Use Zahara Zinnias to add a cheerful note to Plug & Play Combos like this!



Plug & Play Combo Yellow Tambourine, see page 246.



Zahara Yellow



White US PVP 201400297



Starlight Rose All-America Selections National Winner, Fleuroselect Novelty



Yellow US PVP 201500214



Sunburst Fleuroselect Gold Medal



Fire US PVP 201000090



Raspberry US PVP 201500215



Red US PVP 201600030



Cherry US PVP 201600029



Mixture



Bonfire Mixture



Raspberry Lemonade Mixture



Double Zahara Yellow US PVP/PAF

ZINNIAS continued

Double Zahara™ Series



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

Seed supplied as: Raw, Coated

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

- The only fully double, disease-resistant zinnia series 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.



Yellow US PVP/PAF



Salmon US PVP 201900097



Bright Orange Fleuroselect Novelty



White Fleuroselect Novelty



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



Raspberry Ripple US PVP 201800173



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



Brilliant Mixture



Mixture

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

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.

Yellow Large flower diameter, bright yellow colour and vigour that matches Salmon and Fire.

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

Brilliant Mixture Yellow, Cherry, Fire.

Mixture Cherry, Salmon, Yellow, Fire, White.



Bright Orange *Fleuroselect Novelty*



Salmon US PVP 201900097



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



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





Zesty Mixture



Purple

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
Flower size: 3 to 5 in./8 to 13 cm
Seed supplied as: Coated
Plug crop time: 3 to 4 weeks
Transplant to finish: 6 to 7 weeks

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

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

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

Purple Stunning and unique deep purple color.

Scarlet The most compact variety in the series.

White A true white color.

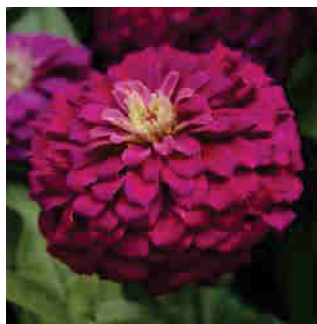
Mixture Includes all the colours of the series, plus yellow (not available separately).



Fuchsia



Pink



Purple



White



Scarlet



State Fair Mixture



Star Starbright Mixture

State Fair Mixture

Height: 36 to 48 in./91 to 122 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

- Tetraploid mix has very large flowers in bright scarlet, gold, lavender, purple, orange, pink, red and yellow.

ZINNIA ●

Zinnia angustifolia

Star Series

Height: 14 in./36 cm

Spread: 8 in./20 cm

Seed supplied as: Raw

Plug crop time: 4 to 5 weeks

Transplant to finish: 5 to 6 weeks

- Single, star-shaped flowers up to 2 in./5 cm across on plants with a looser, more informal look.
- Tolerates heat, humidity and drought.
- Vigorous enough to fill a bed, basket or mixed container quickly.
- Resistant to *Alternaria* and powdery mildew.



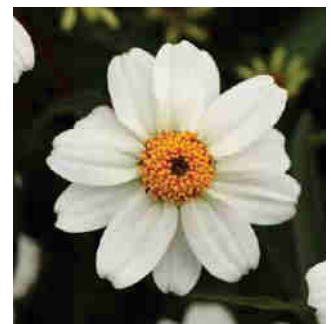
Star Orange



Star Gold



Star Orange



Star White

PERENNIALS

KieftSeed™





PERENNIALS FOR EVERY SEASON

Kieft Seed™ perennials from PanAmerican Seed cover a broad spectrum of colour and interest, providing high-performance options for **early Spring through Fall**. NEW White Lion Leucanthemum is ready for early **Spring sales** from overwintered production (comparable to vegetative varieties) and for Spring sales from an annual program, while Madonna Leucanthemum covers the **late Spring into Summer** sales under long day conditions. For **regionally focused** *Lavandula angustifolia* programs, we have four outstanding varieties available: Blue Spear, Avignon Early Blue, the Ellagance Series and Lavance Deep Purple. The Artisan™ Collection is the first F1 hybrid Echinacea **individual colour collection** from seed, offering consistent vigour and uniformity in two beautiful colours. You can count on us for strong bench-to-garden performance and reliable availability.





Earlybird Purple White



Red Yellow

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, new colours and colour combinations spark new interest in Aquilegia!
- This 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.



Blue White



Purple Yellow



Purple White



Red Yellow



Purple Blue



Red White



White



Yellow



Mixture



Red Yellow



Clementine Mixture
Fleuroselect Quality Mark



Clementine Blue



Clementine Salmon Rose



Clementine Rose



Clementine Red



Winky Double Dark Blue-White



Winky Double Red-White



Winky Double Rose-White



Winky Double Mixture



Winky Single Red-White
Fleuroselect Quality Mark



Winky Single Rose-Rose
Fleuroselect Quality Mark



Winky Single Blue-White



Winky Single White



Winky Single Mixture



Winky Single Purple-White

AQUILEGIA (COLUMBINE)

Aquilegia vulgaris

Clementine™ Series

Height: 14 to 16 in./36 to 41 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: Primed

Plug crop time: 7 to 8 weeks

Transplant to finish:

26 to 40 weeks

- Useful in both borders and landscapes.
- Spurless double flowers face upwards and resemble Clematis flowers.
- Best-suited for 5 to 6-in./13 to 15-cm pots, plants have good shelf life with high appeal in the store and in the garden.

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.



Swan White Aquilegia



Swan Lavender Aquilegia



Swan Pink And Yellow Aquilegia



Swan Red And White Aquilegia



Swan Blue And White Aquilegia



Swan Yellow Aquilegia
RHS Award of Garden Merit



Swan Violet And White Aquilegia



Swan Burgundy And White Aquilegia
RHS Award of Garden Merit

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.

ARABIS ●

Arabis blepharophylla

Barranca™ Series

Height: 6 to 8 in./15 to 20 cm
Spread: 7 to 8 in./18 to 20 cm
Flower size: 0.5 in./1 cm

USDA Hardiness Zones:

4a to 9a (-30 to 20°F/-34 to -7°C minimum temperatures)

Seed supplied as: Raw

Plug crop time: 6 to 8 weeks

Transplant to finish: 26 to 32 weeks

- The Barranca Series offers two colours in *A. blepharophylla*, producing a highly uniform crop that is short-stemmed with a lot of flower power.
- The series includes Deep Rose and Pink (violet pink), a unique colour in this floriferous, early-Spring flowering perennial.

Pink 3 to 5 days earlier than Deep Rose, with more clear green foliage.



Swan Mixture Aquilegia



Barranca Deep Rose Arabis



Barranca Pink Arabis
Fleuroselect Novelty



Ballerina Red Armeria
 Fleuroselect Gold Medal



Ballerina White Armeria
 Fleuroselect Gold Medal

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.



Bellissima Mixture Bellis



Ballerina Lilac Armeria



Gold Rush Aurinia

AURINIA ●
Aurinia saxatilis

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.



Bellissima White Bellis
 Fleuroselect Quality Mark



Rapido Blue Campanula

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)

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.



Bellissima Red Bellis



Bellissima Rose Bellis
 Fleuroselect Quality Mark



Rapido White Campanula

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.
- Versatile - suited to patio planters and gardens, as well as an indoor novelty potted plant.

CAMPANULA Also see page 161.



The early bird gets the...Sales!

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



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. For 2-gallon and larger containers in Summer, Early Sunrise is the optimal choice.

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.



Early Sunrise All-America Selections
National Winner, Fleuroselect Gold Medal



Sunfire Fleuroselect Quality Mark

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.

Strike gold when you use **Double the Sun** Coreopsis in Plug & Play Combos like this!



Plug & Play XXL Combo Golden Era, see page 248.



SunKiss US FVP 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.



Dasante Blue



Guardian Mixture



Guardian Lavender



Guardian White



Guardian Blue



Diamonds Blue



Blue Donna

What you want, when you want it

It's easy to program your crop to meet shipping dates with Guardian. It offers very uniform blooming, especially under short days. Plus, it's up to 6 weeks faster from transplant to bloom than O.P. types, for more turns in the greenhouse. For programmability and efficiency, Guardian is leading the charge.

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./metre 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, Diamonds Blue eliminates the need for tissue culture inputs and is 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**

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!



Peach



Rose



Crème



White



Purple



Dalmatian Mixture

DIGITALIS ●
Digitalis purpurea

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.



Rockin' Series



Pink Magic



Purple



Rose

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!



Red

DIANTHUS

Dianthus x barbatus interspecific

Rockin'™ Series F1

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

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

USDA Hardiness Zones:

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

A First-Year-Flowering Perennial.

Seed supplied as: Pelleted

Plug crop time: 4 to 6 weeks

Transplant to finish: 8 to 9 weeks

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

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

ANNUAL DIANTHUS

See page 40.

CUT FLOWER DIANTHUS

See page 182.



Red Ombre US 7,982,110



Soft Orange US 7,982,110



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

ECHINACEA ●
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.

The first F1 hybrid seed Echinacea collection is just better!

The Artisan™ Collection elevates seed Echinacea to offer consistency of plant structure for uniform and highly branched, full plants. It 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.



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



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

**More colours!
More flowers!
More sales!**

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

Create dramatic Plug & Play Combos like this with Cheyenne Spirit Echinacea!



Plug & Play XXL Combo Paris in Springtime, see page 249.



Cheyenne Spirit

ECHINACEA ●
Echinacea 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 in-colour or green plant sales for landscape or prairie-to-go uses.
- Broad and consistent palette includes shades of red, orange, purple, scarlet, cream, yellow and white.
- Long retail shelf life, heat and drought tolerance, and excellent Winter hardiness.

Create eye-catching Plug & Play Combos like this with PowWow Echinacea!



NEW Plug & Play XXL Combo Pink Pursuit, see page 248.

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, nonfading colour show!
- Colour-packed pair is well-matched 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.



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



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



White



Bright Bicolor



Peach



Red



Yellow All-America Selections National Winner, Fleuroselect Gold Medal

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



Create sun-filled Plug & Play Combos like this with Mesa Gaillardia!

NEW Plug & Play XXL Combo Sun Sea and Rosé, see page 248.



Mesa Bright Bicolor adds colour and interest to perennial displays.

GAILLARDIA ●
Gaillardia x grandiflora

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.

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 National Winner, Fleuroselect Gold Medal

GAURA 
Gaura lindheimeri

Sparkle White



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.



GYPSOPHILA 
Gypsophila cerastioides

Pixie Splash

Height: 3 to 5 in./8 to 13 cm
Spread: 4 to 7 in./10 to 18 cm

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

Seed supplied as: Primed

Plug crop time: 5 to 6 weeks
Transplant to finish:
26 to 40 weeks

- Early Spring perennial offers reliable seed quality and germination, uniform and compact habit, and short harvest window.
- Long-lasting on the shelf for minimum waste.



Palace Purple Heuchera



Pixie Splash Gypsophila

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.



Melting Fire Heuchera EU PBR 20557

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

- Uniform, excellent-quality plant is cost-effective and easy to grow as a plug.
- Strong garden performer has good weather tolerance.
- Large plants have strong curled leaves in intense purple-red.
- True tissue culture alternative.



Luna White Hibiscus



Luna Pink Swirl Hibiscus



Luna Rose Hibiscus



Luna Red Hibiscus



Luna White Hibiscus



Luna Mixture Hibiscus

HIBISCUS ●
Hibiscus moscheutos

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.

ANNUAL HIBISCUS See page 52.

IBERIS ●
Iberis sempervirens

Whiteout

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.



Whiteout Iberis



Whiteout Iberis



Avignon Early Blue EU PBRAF

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



Lavance Deep Purple EU PBR 48822

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.
- 1 to 2 weeks earlier than Lavance Purple.
- 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.



Ellagance Purple Fleuroselect Gold Medal

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.



Ellagance Snow

Try Ellagance Lavandula for a colour explosion in Plug & Play Combos like this!



Plug & Play XXL Combo Golden Era, see page 248.



Blue Spear EU PBRAF

Use Blue Spear Lavandula to create unique Plug & Play Combos like this!



NEW Plug & Play XXL Combo Date Knight, see page 249.



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*



Bandera Pink

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.

Purple 1 week later to flower than the rest of the series.

LAVANDULA ●
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)

Seed supplied as: Raw

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



Bandera Deep Purple *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



NEW
White Lion



NEW
White Lion

**Complete your seed shasta
Leucanthemum F1 package!**

Use NEW 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.



Week 10 - Madonna (left) and NEW White Lion (right)



Madonna Fleuroselect Gold Medal, Fleuroselect Novelty

LEUCANTHEMUM ●

Leucanthemum x superbum

New 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

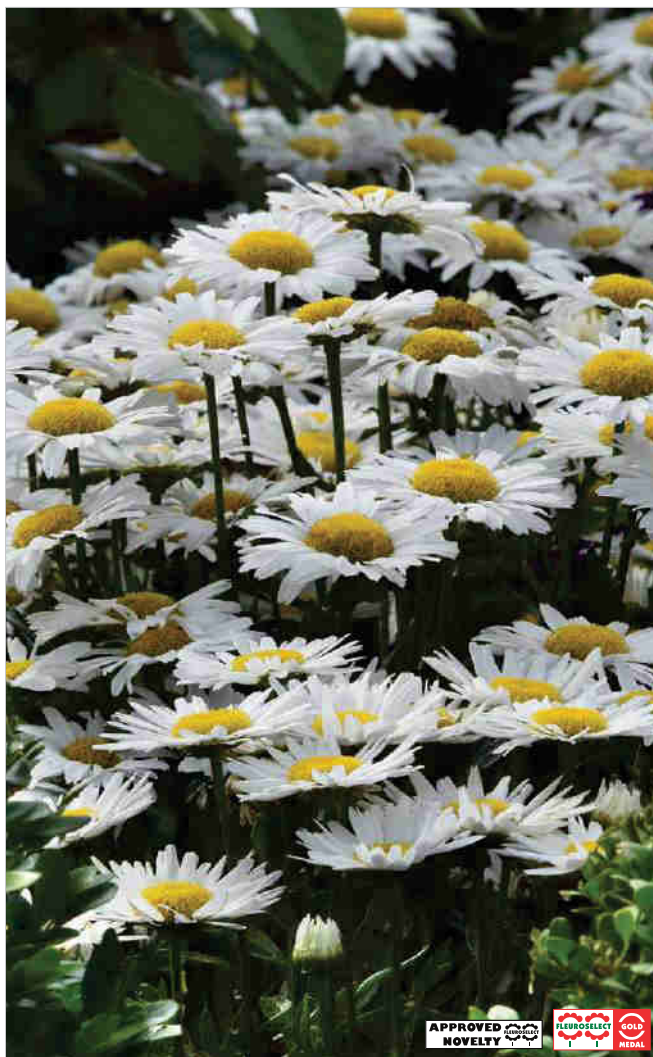
Height: 8 to 10 in./20 to 25 cm
Spread: 8 to 12 in./20 to 30 cm
Flower size: 2.5 to 3 in./6 to 8 cm

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.
- An alternative to vegetative varieties that doesn't require vernalisation and has no risk of bacterial infection.
- Compact, first-year-flowering F1 shasta with a critical daylength of 14.5 hours.
- 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



NEW
Starship Rose



Scarlet



Blue



Scarlet Bronze Leaf



Burgundy



Rose



Scarlet



Scarlet Bronze Leaf



Blue



Burgundy

LOBELIA 
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 higher-value 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.

New Rose A bright rose colour. Matches Scarlet for timing and uniformity. Replaces Deep Rose.

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 one week later to flower. Replaces Vulcan Red, which was 3 weeks later to flower than the series. Features an in-demand combination of deep bronze leaves with intense scarlet flower power.

ANNUAL LOBELIA See page 59.



Mon Amie Pink Myosotis



Mon Amie Blue Myosotis
US PVP 200800070

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

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 is 2 to 3 days earlier.

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

ORNAMENTAL OREGANO Kirigami See page 67.



Mon Amie Mixture Myosotis

PAPAVER ●
Papaver nudicaule

Champagne Bubbles Series F1

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 long-lasting garden performance compared to O.P. varieties.
- Many large, cup-shaped flowers top bushy, strong-stemmed plants.
- Performs well in hot-day, cool-night conditions.
- Good Winter item in Florida, California and similar climates.



Champagne Bubbles Yellow Papaver



Champagne Bubbles Orange Papaver



Champagne Bubbles Scarlet Papaver



Champagne Bubbles Pink Papaver



Champagne Bubbles Mixture Papaver



Champagne Bubbles White Papaver



Goldsturm Rudbeckia



Electric Blue Penstemon

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.

RUDBECKIA ●

Rudbeckia fulgida var. *sullivantii*

Goldsturm

Height: 24 to 28 in./61 to 71 cm

Spread: 14 to 18 in./36 to 46 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 Summer-flowering 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.



Patio Sky Blue Salvia
Fleuroselect Quality Mark



Patio Deep Blue Salvia
Fleuroselect Quality Mark

SALVIA ●
Salvia patens

Patio Series

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.
- Series includes the most appealing deep blue colour on your bench.

It's as tough as... STEEL!

A perennial first: Grow high-quality, affordable *Perovskia* from professional-grade 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.

PEROVSKIA ●
Perovskia atriplicifolia

Blue Steel

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.
- Combines the best Summer-blooming lavender-blue colour with outstanding late-season garden performance.
- 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.
- It's affordable to use multiple plugs in each pot and always finish with huge retail appeal.
- Pinch for optimal branching.
- Heat/drought tolerant, very hardy.



Blue Steel Perovskia



Opening the door to seed Salvia

With the largest spikes and the deepest blue colour, Salvatore Blue is an excellent alternative to vegetative Salvia. Plus, it offers a critical daylength of 10 hours for finishing in early Spring, which previously was only possible with vegetative varieties.



Salvatore Blue Fleuroselect Novelty



Salvatore Blue Fleuroselect Novelty



New Dimension Rose
Fleuroselect Novelty



New Dimension Blue

SALVIA ●
Salvia nemorosa

New Dimension™ Series

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

USDA Hardiness Zones:
4a to 8b (-30 to 15°F/-34 to -9°C minimum temperatures)
A First-Year-Flowering Perennial.

Seed supplied as: Raw, Coated
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 well-branched plants feature strong-coloured flowers that last in the landscape.
- Well-matched series finishes fast with no PGRs needed.
- Fits into annual production schedules.

Salvatore Blue

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

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

Seed supplied as: Raw, Coated
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.

SAXIFRAGA ●
Saxifraga x arendsii

Rocco Red

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

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

Seed supplied as: Pelleted

Plug crop time: 9 to 10 weeks
Transplant to finish:
28 to 36 weeks

- More uniform plant size, shorter stems and less colour variability than Highland Red.
- First professional-quality seed *S. x arendsii* on the market – an excellent conversion from vegetative varieties.
- Produces a vigorous, short-stemmed plant that fills the pot.

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, basal-branching plants have dense, dark green foliage and abundant, short-stemmed, clear blue flowers all season.

SCABIOSA ●
Scabiosa japonica var. alpina

Pink Diamonds

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:
13 to 15 weeks

- Good companion to Blue Note.
- Plants maintain a perfect, well-branched shape all season.
- Long-flowering with dense, rich dark green leaves.

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.

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

Height: 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.



Rocco Red Saxifraga



Starry Dreams Silene



Southern Charm Verbascum



Blue Note Scabiosa



Pink Diamonds Scabiosa
Fluoreselect Quality Mark

VERBENA ●
Verbena rigida

Santos Purple

Height: 12 in./30 cm
Spread: 48 in./122 cm

USDA Hardiness Zones: tender perennial; 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

- Kieft Seed offers the first high-yield primed seed form of Santos Purple – count on reliable availability, high germination and excellent plug yield for this popular variety.
- 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, well-branched plants bloom late Spring through Summer.
- High powdery mildew resistance.
- Good in baskets and combo planters, too.



Buenos Aires Verbena



Santos Purple Verbena

POTTED PLANTS





BRING NEW LIFE TO INDOOR SPACES

These **"Gateway to Gardening"** plant varieties are designed to attract today's young shopper and soon-to-be gardener. Growers and consumers alike benefit from our **outstanding genetic offerings** in a unique assortment of gift plants, indoor décor and outdoor patio tabletoppers. Here you'll find key potted plant classes, like celosia, gerbera, ornamental peppers and compact sunflowers, in **one comprehensive collection**. Items like ColorBloom™ Gerbera, the most uniform potted gerbera series for smaller pots on the market. First-time plant buyers will love the **exciting, non-fading colours** and **easy care** of this indoor/outdoor series.





Concertina Red, Yellow & Purple



Concertina Red Dark Leaf



Concertina Mixture



Concertina Pink



Concertina Red



Concertina Yellow



Concertina Purple



Kosmo Purple Red
Fleuroselect Novelty



Kosmo Mixture



Kosmo Yellow



Kosmo Pink
US PVP 200400022



Kosmo Salmon



Kosmo Cherry



Kosmo Orange

CELOSIA ●●
Celosia cristata

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

- 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 than the rest of the series.

Red Dark Leaf 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.

Mixture Pink and Red Dark Leaf in the mix are slightly more vigorous compared to the rest of the series.

CELOSIA ●
Celosia spicata

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

Transplant to finish: 9 to 11 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 retail shelf life and excellent potted performance.

Series	No. of Varieties	Recommend pot size
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



Campanella Lavender, Pink & Blue

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 one 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



Lavender



Pink



Blue



Blaze



Chilly Chili All-America Selections National Winner US 7,087,819 and 7,393,995



Acapulco Multicolor



Acapulco Orange



Acapulco Purple



Acapulco Red



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
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SALES PERIOD: JULY TO OCTOBER

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./17-20 cm	0.5 x 1.5 in./1.5 x 4 cm	6 in./15 cm
Blaze	Yellow to red	4-5	7-13 for Autumn finish	Quart	0.75 x 2.25 in./2 x 6 cm	4-8 in./10-20 cm

Compact determinate variety with distinctive, large fruit and excellent branching should be sold at first colour or with a few fruit changing to red - these eye-catching Autumn tones are sure to sell fast!
Perfect for quart and Mum Pals programs, plus Autumn mixed containers.
NOTE: Fruit has medium heat.

Chilly Chili F1	Yellow-green to orange to dark red	4-5	7-13 for Autumn finish	4-6 in./10-15 cm	2-2.5 in./5-6 cm	9-10 in./23-25 cm
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Child-safe, non-pungent fruit - ideal for indoor and outdoor use in public and residential areas.
F1 vigour makes it excellent for containers and gardens.
Overall plant size is about 30% larger than Medusa, with similar crop time.



Hot Pops Yellow US 9,307,712



Hot Pops Purple US 9,301,465



Cupala



Harlequin



Joker



Masquerade

Ornamental Peppers						
Variety	Fruit colour	Plug crop time (weeks)	Potting to sale (weeks)	Pot size	Fruit size	Height
SALES PERIOD: JULY TO OCTOBER						
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
Harlequin	Multicolour	3-4	13-14	4.5-6 in./12-15 cm	0.5 x 0.75 in./1.5 x 2.5 cm	8 in./20 cm
Hot Pops Series	Purple, Yellow	4-5	7-13 for Autumn finish	Quart	0.4/1 cm round	4-5 in./10-13 cm
Pump up your Autumn potted plant sales with an unusual fruit form and multicolours! Small, round peppers show multiple colours simultaneously to make a high-impact display for outdoor and indoor decorating. Compact, heavily branched plants with determinate growth. Perfect for quart and Mum Pals programs, plus Autumn mixed containers. NOTE: Fruit is very hot on Hot Pops Purple, and medium hot on Hot Pops Yellow.						
Joker	Red	3-4	11-12	2.75-4.5 in./7-12 cm	0.3 x 1.5 in./1 x 4 cm	4.5 in./12 cm
Masquerade	Purple and orange to red	4-5	7-12 for Autumn finish	Quart, 4-8 in./10-20 cm	0.3 x 1.5 in./1 x 4 cm	10-12 in./25-30 cm
Tapered fruit in multicolours - appear purple and orange, then mature to red. Good for use in containers and gardens. NOTE: Fruit is hot.						



Wicked



Salsa XP Yellow-Red



Salsa XP Purple



Salsa XP Mixture



Salsa XP Yellow



Red Missile



Salsa XP Red



Salsa XP Deep Orange

Ornamental Peppers

Variety	Fruit colour	Plug crop time (weeks)	Potting to sale (weeks)	Pot size	Fruit size	Height
SALES PERIOD: JULY TO OCTOBER						
Wicked	Purple to red	4-5	7-13 for Autumn finish	Quart	1 x 2.75 in./3 x 7 cm	6-8 in./15-20 cm
Compact plants show extra-large fruit that will certainly capture retail attention! Determinate variety should be sold at first colour or with a few fruit changing to red. Perfect for quart and Mum Pals programs, plus Autumn mixed containers. NOTE: Fruit has mild heat.						
Red Missile	Cream to orange to bright red	4-5	7-11 for Autumn finish	Quart, 4-8 in./10-20 cm	2 in./5 cm	10-12 in./25-30 cm
Compact plants are good for containers and gardens. NOTE: Fruit is hot.						
Salsa XP	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 Dark Orange



Samba Red



Samba Yellow



Santos Orange



Medusa
US PVP 200000140; US 7,087,819 and 7,393,995

Create successful Plug & Play Combos like this with Blaze and Hot Pops Purple ornamental peppers!



Plug & Play Combo Firelighter, see page 247.

Ornamental Peppers

Variety	Fruit colour	Plug crop time (weeks)	Potting to sale (weeks)	Pot size	Fruit size	Height
SALES PERIOD: JULY TO OCTOBER						
Samba	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
Santos Orange	Orange	3-4	12-13	4-4.5 in./10-12 cm 3 ppp: 6.5-7.5 in./17-19 cm	0.3 x 2 in./1 x 5 cm	6 in./15 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

Child-safe, non-pungent fruit is colourful and twisted. Naturally dwarf, well-branched plants have dark foliage. A single plant can produce 40 to 50 fruits, displaying the entire colour range at once. Holds fruit well, allowing for great shelf life and long sales period.



Princess Deep Blue



Princess White



Royal Dane Deep Blue



Royal Dane Deep Rose



Royal Dane White

EXACUM ●

Exacum affine

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, Deep Rose, White	10-12	2.25-5 in./ 6-13 cm	4.5-6 in./ 12-15 cm



Scarlet Red with Light Eye



Bright Red



Bright Rose with Dark Eye



Deep Rose with Light Eye



Rose with Light Eye



Bright Orange with Light Eye



Orange with Light Eye



Orange with Dark Eye



Salmon Rose with Light Eye



Watermelon



Yellow with Dark Eye



White with Light Eye

GERBERA 
Gerbera jamesonii

Mega Revolution™ Series F1

Height: 6 to 10 in./15 to 25 cm
Spread: 12 to 14 in./30 to 36 cm
Flower size: 4 to 5 in./10 to 13 cm
Seed supplied as: Coated
Plug crop time: 6 to 7 weeks
Transplant to finish: 8 to 10 weeks

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

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.

Salmon Rose with Light Eye
High percentage of double-petalled blooms.

White with Light Eye
Cleaner white colour than the competition.

Yellow with Dark Eye
Best dark-eyed yellow gerbera on the market.

Select Mixture A selection of the best colours in the series.



Select Mixture



Bright Orange with Light Eye



Revolution Deep Pink with Light Eye



Bicolor Rose White

Hit your schedule every time

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

GERBERA continued

Revolution™ Series F1

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

Seed supplied as: Coated

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

- 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 bicolor in gerberas.

Deep Orange with Dark Eye More compact variety has a good, deep orange colour.

New Orange with Light Eye Improved Features a stronger, deep orange colour that doesn't fade under high light conditions; better flower quality, with more and wider petals; more compact flower stems with improved, uniform length, and a higher quantity of usable plants.

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.

Bicolor Mixture Available in North America only. Includes all four bicolor 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**
- New Orange with Light Eye Improved**
- Red with Light Eye**
- Red with Dark Eye**
- White with Light Eye**
- Select Mixture**



Bicolor Mixture



Select Mixture



Bicolor Yellow Orange



Red with Light Eye



Deep Pink with Light Eye



NEW Orange with Light Eye Improved



Pastel Orange



Bright Rose with Light Eye



Salmon Shades with Light Eye



Red with Dark Eye



Golden Yellow with Dark Eye



Yellow with Light Eye



Bicolor Red Lemon



White with Light Eye



Bicolor Red White



Deep Orange with Dark Eye



Bicolor Rose White



Bicolor Yellow Orange



ColorBloom Deep Rose with Light Eye

Series	No. of Varieties	Recommend pot size
Mega Revolution	12 & 1 mix	6 in./15 cm
Revolution	15 & 2 mixes	5 in./13 cm
ColorBloom	9 & 1 mix	Quart/11 cm



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

GERBERA 
Gerbera jamesonii

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.

New Bicolor Red White A unique bicolor 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 NEW Deep Orange with Dark Eye.

Cherry with Light Eye

Can show more red under higher light conditions.

New 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 NEW Bicolor Red White and Bicolor Orange Yellow. Adding this top-selling colour means we can now offer growers a complete gerbera program!

Red with Dark Eye

More uniform in colour and around one week earlier to flower than competing reds.

White with Dark Eye

Clear white and uniform in colour.

Yellow with Dark Eye

Slightly smaller flowers than the rest of the series.

Mixture Includes all varieties in the series. Note that Bicolor Orange Yellow is slightly later to flower than the rest of the varieties.



Mixture



NEW Bicolor Red White



NEW Deep Orange with Dark Eye



Red with Light Eye



Bicolor Orange Yellow



Cherry with Light Eye



Deep Rose with Light Eye



Yellow with Dark Eye



Red with Dark Eye



White with Dark Eye

Stays tidy for smaller pots

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



Yellow with Dark Eye, Bicolor Orange Yellow & Red with Light Eye



Sapphire Blue Lisianthus



Sapphire White Lisianthus



Sapphire Blue Lisianthus



Sapphire Blue Chip Lisianthus



Sapphire Pink Rim Lisianthus



Splash Select White Hypoestes



Splash Select Red Hypoestes



Splash Select Pink Hypoestes



Splash Select Rose Hypoestes

HYPOESTES ●
Hypoestes phyllostachya

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.

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: 4-4.5 in./10-12 cm, Quart
Sapphire Lisianthus	4	4-4.5 in./10-12 cm, Quart

More colour = repeat sales!

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



Choco Sun



Miss Sunshine



Ballad

SUNFLOWER ●

Helianthus annuus

Ballad F1 (Reintroduction)

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 well-suited 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-leaved plants are more manageable and programmable on the bench, and more appealing in the store.
- Delivers better seed uniformity and needs fewer PGRs than similar varieties.
- 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 F1	4.5-5 in./12-13 cm/Quart/11 cm
SunBuzz F1	5-6 in./13-15 cm, Gallon

CUT FLOWERS



BloomStudiosSM





GET TO KNOW BLOOMSTUDIOS CUT FLOWERS...

For years, PanAmerican Seed has provided the **highest quality seed** to professional cut flower growers around the world. BloomStudios Cut Flowers is a new venture that grew from this drive to bring **innovative breeding** and **technical resources** to the professional cut flower market through the reliable PanAmerican Seed distribution network. With exciting introductions like NEW Xochi™ Orange Marigold, BloomStudios and PanAmerican Seed bring **stronger stems, richer colours** and more **unique appeal** to cut flower bouquets and grower bunches throughout the world.

**BloomStudios - Igniting Imagination
with Every StemSM**





Mona Lisa Deep Blue Anemone



Mona Lisa Orchid Shades Anemone



Mona Lisa Wine White Bicolor Anemone



Silky Gold Asclepias
Fluoreselect Quality Mark



Mona Lisa Scarlet Eye Anemone



Mona Lisa Pink Anemone



Silky Deep Red Asclepias



Mona Lisa White Anemone



Mona Lisa Red Bicolor Anemone



NEW

Mona Lisa Mixture Improved Anemone

ANEMONE

Anemone 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: 5-7 days

New Mixture Improved

Reformulated for a better balance of all colours in the series, it now includes the recently improved Deep Blue and Orchid Shades, as well as Pink, Red Bicolor, Scarlet Eye, White and Wine White Bicolor.

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: Consumer floral preservative recommended to keep water clear. Vase life 8-10 days.



Campana Deep Blue Campanula

CAMPANULA

Campanula medium

Campana Series F1

Form Supplied As: Pelleted

Cultivation Type:

Greenhouse, High Tunnel

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: Commercial preservative is recommended. Vase life up to 10 days.

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

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: 5-8 days



Campana White Campanula



Campana Lilac Campanula



Campana Pink 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, high-density 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: 7-14 days



Grenade Orange Carthamus



Spring Green Celosia



Neo 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. meter/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: 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

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 shipability and 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: 7-14 days

Mixture Bright Pink, Cherry, Dark Pink, Gold, Orange, Purple.



Red



Dark Pink



Sunday Orange



Cherry



Gold



Yellow



Purple



Wine Red



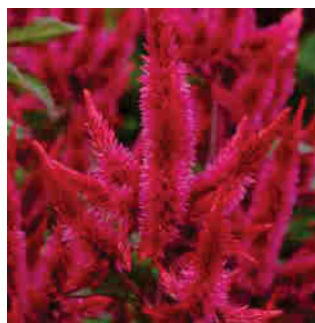
Mixture



Celway Salmon



White



Red



Purple



Terracotta



Orange



Salmon



Mixture

CELOSIA

Celosia spicata

Celway™ 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: 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.

Harvest Recommendation:

Harvest stems when more than half of the flowers are completely open.

Post-Harvest Recommendation:

Strip 50-75% foliage. Use distilled water; no need for hydration or holding solutions. Avoid cold storage if possible.

Vase Life: 7-14 days

Purple Purple has great field production.

Terracotta Terracotta has great field production.

White White has great field production.



Guardian Mixture



Guardian Lavender

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 Blue



Guardian White



Blue Donna



Amazon Neon Cherry



Neon Purple
RHS Award of Garden Merit



Neon Cherry



Rose Magic
RHS 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!

Rose Magic Blooms start white and age to pink, then to deep rose; all color show on individual flower heads.

Also available:

Neon Duo A mix of Neon Cherry and Neon Purple.



White



Pink Magic



NEW
Neon Purple



Pink



NEW
Sweet Rose Magic



Deep Pink Maxine



Purple



Coral
RHS Award of Garden Merit



Scarlet
RHS Award of Garden Merit

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.

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.

Deep Pink Maxine More intense color than Sweet Pink. A top-selling color in most markets.

New Neon Purple Bright purple colour really pops in bouquets. Similar to the colour of the very popular Amazon Neon Purple.

New Rose Magic New color option for the series! Flowers open white, change to pink, and then mature to a rich rose for a tricolor look on the stem. Similar to the pattern of the very popular Amazon Rose Magic.

White Pure white with no grey anthers.

Also available: **Mixture**



Purple White Bicolor



Magenta Bicolor



Red



Black Cherry



QIS Carmine Gomphrena
Fleuroselect Quality Mark



QIS Mixture Gomphrena



QIS Orange Gomphrena



QIS Red Gomphrena

GOMPHRENA
Gomphrena 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: 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 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: 14-16 days



Fireworks Gomphrena



Frosted Explosion Grass Panicum

GRASS PANICUM
Panicum 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 short-day 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.

First place winner, filler category at ProFlora 2019! ASCFG 2010 Dried Cut Flower of the Year!

Vase Life: 10-14 days



QIS Mixture 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: Vase life average 8 days. Stems may also be dried.

F1 DOUBLE-FLOWERED LISIANTHIUS

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

Flare Lisianthus, a group 2 series, has medium, double flowers, with a top-flowering 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°C (36-41°F) in a commercial floral holding solution at the manufacturer recommended rates.

Vase Life: 10-14 days



QIS Apricot Limonium



QIS Rose Limonium



QIS Pale Blue Limonium



QIS Dark Blue Limonium



QIS White Limonium



QIS Yellow Limonium



Flare Yellow Lisianthus

Can Can Purple 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

Can Can Lisianthus has medium, double flowers with a top-flowering habit ideal for use in bouquets. 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: 10-14 days



Flare White Lisianthus



Flare Jade Lisianthus



Flare Deep Blue Lisianthus



Flare Deep Rose Lisianthus



Can Can Purple



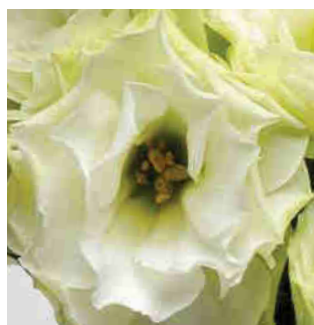
ABC 3 Rose



1 Misty Blue



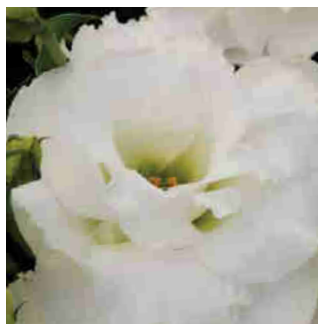
1 Yellow



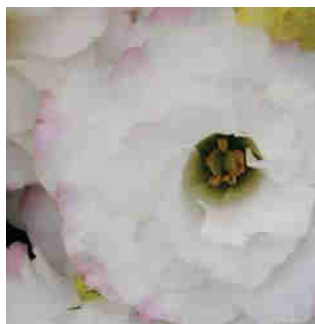
1 Green



1 Deep Rose



1 White



1 Rose Rim



1 Purple

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: 10-14 days



2 Blue Rim



3 White



2 Misty Pink



2 Yellow



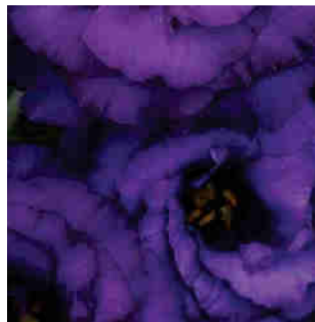
2 Lavender



2 Purple



2 Rose



2 Blue



2 Misty Blue



3 Purple



NEW
Orange



NEW
Orange

Strong stems stand up to shipping

Strong stems and rich colour make NEW Cut Flower Marigold Xochi Orange the best for bouquets and grower bunches. An excellent option for Summer and Fall cut flower programs, Xochi offers the uniformity, good shipability and durability to meet the increasing consumer demand for Dia de los Muertos and Halloween celebrations.



NEW
Xochi Orange

MARIGOLD
Tagetes erecta

New Xochi™ Orange F1

Form Supplied As: Coated

- Cultivation Type:** High Tunnel, Field
- Planting Density:** 80 to 100 plants/sq. metre (8 to 10 plants/sq. foot).
- Usage:** Focal, Secondary
- Stem Length:** 24 to 36 in./61 to 91 cm
- Bloom Size:** 3 to 4 in./8 to 10 cm

Xochi means "flower" or "princess of flowers" and is a shortened version of Xochitl, an ancient Aztec word used in Spanish today, most commonly in Mexico. Good for use in bouquets and grower bunches.

Harvest Recommendation: For shipping, harvest flowers when blooms are at 7 cm (2.75") in diameter. For local market, harvest stems when first flower is fully open.

Post-Harvest Recommendation: Take care when handling flowers to avoid snapping flower heads off of stems. Marigolds can be stored either wet or dry at 2-5°C (35-38°F). If storing wet, use a commercial floral holding solution.

Vase Life: Marigolds have an excellent vase life of 10+ days.



Vegmo Snowball Extra Matricaria



Vegmo Sunny Ball Matricaria



Aida White Matthiola



Vegmo Single Matricaria



Aida Apricot Matthiola



Aida Purple Matthiola

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: Vase life average 11 days.

Also available: Yellow

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: 5-8 days

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: 5-8 days



Figaro Lavender Matthiola



Figaro Light Rose Matthiola



Mathilda Lavender



Mathilda Pink



Mathilda Blue



Mathilda Rose



Mathilda White



Mathilda Yellow

NORTHERN GREENHOUSE SELECTABLE MATTHIOLA (STOCK) continued

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: 5-8 days

Lavender Intense lavender color.
Pink Slightly taller than White and Yellow.
Yellow Offers the best selectable yellow variety, with consistent, uniform color.



Opera Fedora



Tosca White



Tosca Yellow



Opera Francesca



Opera Debora



Tosca Blue Sea



Tosca Rose

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: 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 programable 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: 5-8 days



Miracle Crimson



White Goddess



Purple Heart



Lilac Lavender

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: 5-8 days



American Beauty



Column Stock Avalanche



Rose Pink



Pacific Crimson



Pink Sweetheart



Miracle Gold



Miracle Yellow



Pacific Blue



Miracle Mid-Blue



Ball Pink



Apricot



Appleblossom



Malmaison Pink



Katz Hi Double White

More usable stems

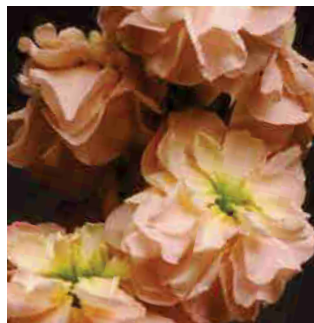
Katz Hi Double White provides greater than 90% yield of usable double-flowered stems, and this top-selling colour also has flower quality to match current Katz White.



Katz White



Katz Yellow



Katz Apricot



Katz Cherry Blossom

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 programable 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: 5-8 days

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% double-flowering plants. It requires less cold during bud formation, resulting in a more programable 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: 5-8 days

Cherry Blossom ASCFG 2013
Fresh Cut Flower of the Year!



Katz Pink



Katz Bright Rose



Katz Pink



Katz Crimson



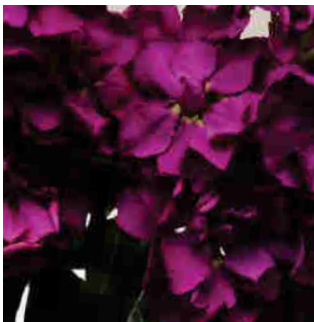
Katz Light Lavender



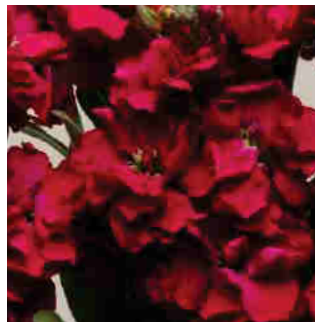
Katz Lavender Blue



Katz Blue



Katz Purple



Katz Ruby US PVP 201200438



The power of caring & sharing

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

PanAmerican Seed was honored to have Philip Katz as our Cut Flower Product Manager for 13 years. Philip spearheaded the drive to grow our business in this important

market into one that is now supplying commercial growers around the globe with outstanding, high-quality cut flower varieties. After a valiant battle, the disease took Philip from all of us. The debut of a new matthiola series was timely and let us honor Philip in a way he would have truly appreciated.



Maryland Orange (1,2)



Bright Yellow (2)



White (2)



Lavender (1,2)



Ivory White (1,2)



Appleblossom (2)



Shell Pink (1,2)



Yosemite Pink (1,2)

SERIES SELECTION FOR CREATING A HIGH-QUALITY YEAR-ROUND SNAPDRAGON PROGRAM

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)



True Pink (1,2)



Plumblossom (2)



Rose (1,2)



Flamingo (1,2)



Royal (1,2)



Dark Orange (2)



Orange (1,2)



Red (1,2)

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: 7-10 days



Monaco Rose (2,3)



Baltimore Rose (2,3)



Red (2,3)

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 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: 7-10 days



Violet (2,3)



Orange (2,3)



White (2,3)



Yellow (2,3)



Rose (2,3)



Early Potomac White (3)



Early Potomac Orange (3)



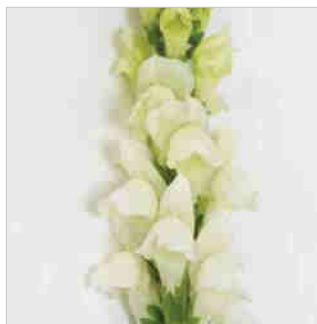
Early Potomac Pink (3)



Early Potomac Yellow (3)



Early Potomac Rose (3)



Potomac White (3,4)



Potomac Royal (3,4)



Potomac White (3,4)

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 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: 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: 7-10 days

New Dark Pink (Group 4)

Brings a key colour in the dark pink/rose category in line with the newer breeding in the Potomac series; a great match to Pink. Replaces Rose with a more uniform flowering variety and improved bud taper.

Snap 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.



Potomac Royal (3,4)



Potomac Yellow (3,4)



Potomac Ivory White (3,4)



NEW
Potomac Dark Pink (4)



Potomac Lavender (3,4)



Potomac Appleblossom (3,4)



Potomac Cherry Rose (3,4)



Potomac Red (3,4)



Potomac Dark Orange (3,4)



Potomac Crimson (3,4)



Potomac Pink (3,4)



Potomac Orange (3,4)



Cool Orange (1,2)



Cool White (1,2)



Cool Pink (1,2)



Purple Twist (2)



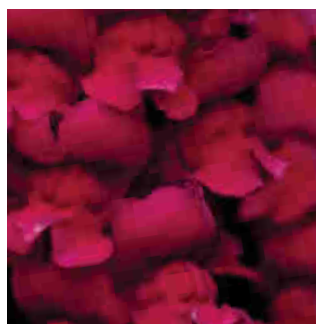
Cool Rose (1,2)



Cool Yellow (1,2)



Cool Orange Bicolor (1,2)



Cool Crimson (1,2)

SNAPDRAGON continued

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 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: 7-10 days

Purple Twist F₁

Form Supplied As: Raw

Cultivation Type: Greenhouse, High Tunnel
Planting Density: 65 to 80 plants/sq. metre (6 to 8 plants/sq. foot).

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

Purple Twist is a novelty snapdragon best suited to production with group 1 or 2.

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.

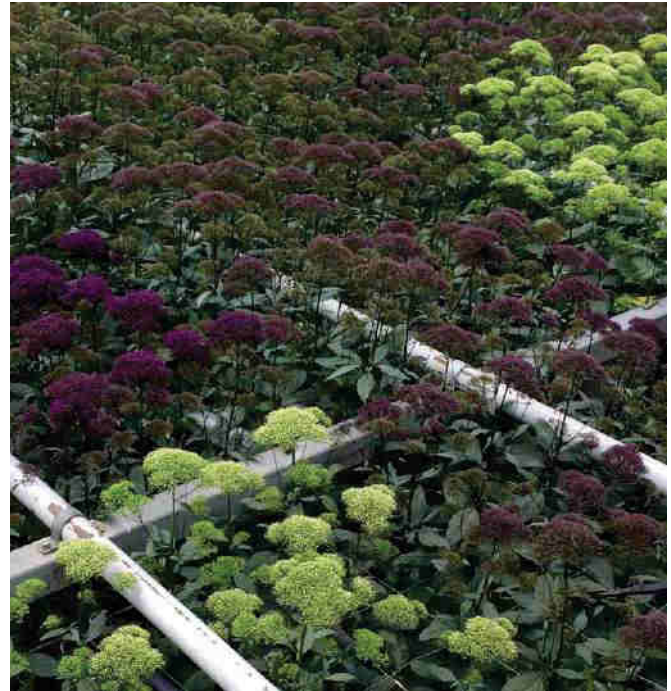
Vase Life: 7-10 days



Lake Michigan Purple



Lake Michigan White



Lake Series

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: Vase life average 11 days. Extended cold storage will decrease vase life.



Lake Michigan Blue



Lake Michigan Violet



Lake Forest Purple



We have a wide selection of cut flowers for decorating.

VEGETABLES & HERBS





NO GARDEN?
NO PROBLEM.

TABLETOP VEGGIES CONSUMERS CAN GROW INSIDE OR OUT!

Compact NEW Kitchen Minis tomato and pepper plants **match consumer interest** for indoor plants and the desire to have **fresh, homegrown vegetables**. The plants are ideally sold at retail with some ripe fruit - **'ready-to-harvest'**. Consumers take them home and place inside on a sunny counter or windowsill, or outside on a patio table. NEW Kitchen Minis will continue to **produce tasty vegetables** over 4 to 6 weeks, when they can be replaced with new Kitchen Minis.





NEW
Cocoa



NEW
Red Velvet



Siam



Micro Tom

TOMATO (INDOOR/OUTDOOR) ●

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						
Micro Tom	Red 0.5-0.75 in./1-2 cm long	CD	3	10-12	4-6 in./ 10-15 cm	Novelty variety produces an extremely dwarf plant covered with red fruit. Bite-size tomatoes have a sweet flavour for fresh eating. Try them sautéed and served over pasta, too!
New 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!
New 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.



Cosmo



Hot Burrito



Adobo

PEPPER (INDOOR/OUTDOOR) ●

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	Plant habit	Plug crop time (weeks)	Potting to sale (weeks)	Pot size	Comments
HOT						
Adobo))	Conical, light green to red 4.5 in./11 cm long x 1 in./3 cm wide	Large, upright	3-4	14-16	6-8 in./15-20 cm	Upright, conical peppers start out chartreuse green, then continue to mature in hues of yellow, orange and red, creating a colourful display on each plant. Wide fruit with thick walls will sweeten as it ripens and is great for roasting or stuffing with cheese for a mild, sweet-spicy dish.
Cosmo))	Blunt conical, purple to red 2 in./5 cm long x 0.75 in./2 cm wide	Bush, large	3-4	16-18	6-8 in./15-20 cm	Brilliant purple, snack-sized fruit turn red when fully mature. Use fresh or cooked to add a medium amount of spice to any dish.
Hot Burrito)	Blunt conical, light green to red 4 in./10 cm long x 0.75 in./2 cm wide	Medium, upright	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.

) = mild)) = mildly hot))) = medium hot)))) = hot))))) = extra hot



Hot Lemon



Hot Joker



Hot Fajita

Name	Fruit characteristics	Plant habit	Plug crop time (weeks)	Potting to sale (weeks)	Pot size	Comments
Hot Fajita)))	Medium chili, light green to red 4 in./10 cm long x 0.5 in./1 cm wide	Large, upright	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 Joker)	Medium chili, light green to red 4 in./10 cm long x 0.5 in./1 cm wide	Bush, medium	3-4	14-16	4-6 in./ 10-15 cm	These peppers are no joke! Lime-green, skinny, tapered fruit hangs down within a broad canopy and will ripen to bright red. When left on the plant, fruit will dry down to a deep red and is perfect for making paprika or pepper flakes.
Hot Lemon))))	Habanero, green to yellow 1 in./3 cm long x 0.5 in./1 cm wide	Bush, large	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



Taquito



Piñata



Fresh Bites Series

Name	Fruit characteristics	Plant habit	Plug crop time (weeks)	Potting to sale (weeks)	Pot size	Comments
Piñata)))))	Medium chili, light green to red 2.25 in./6 cm long x 0.3 in./1 cm wide	Bush, medium	3-4	14-16	6-8 in./15-20 cm	Get ready to party with lime-green and red fruit that pop out through dark green foliage! Thin-walled, medium-length peppers are spicy and perfect for crushed pepper flakes or chopped in a sauce.
Tamale)	Blunt conical, green to red 2 in./5 cm long x 0.75 in./2 cm wide	Bush, medium	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 chilli, green to red 1.5 in./4 cm long x 0.3 in./1 cm wide	Bush, compact, small	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 <i>Capsicum annuum</i>	Snack, green to orange, red and yellow 2.25 in./6 cm long x 1.25 in./3 cm wide	Large, upright	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.

) = mild)) = mildly hot)))) = medium hot))))) = hot))))))) = extra hot

VEGETABLES & HERBS





**FRESH IDEAS™
WITH GREAT
TASTE**

Our novel, high-quality group of vegetables and herbs is carefully curated for growers who supply **fresh market farmers**, as well as **hobby gardeners**. The varieties offer fresh, **home-grown flavour** and **exceptional fruit quality**, along with earlier and **longer harvests**, and loads of **tasty produce**. Included are varieties like NEW Candy Cane Chocolate Cherry Sweet Pepper that offers unique, appealing **variegated foliage** and flavourful green fruit with a unique white stripe that changes to chocolate and cherry red as it ripens. Check out the full lineup at panamseed.com/HandPicked

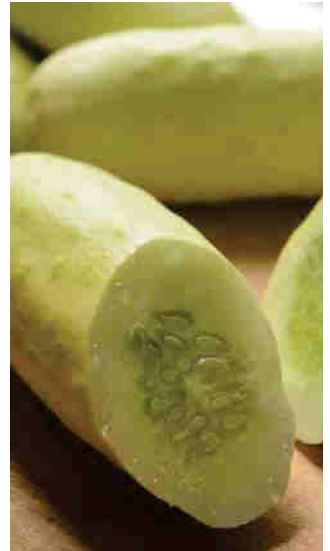




Gherking



Patio Snacker



Martini

CUCUMBER ●
Cucumis sativus

Seed supplied as: Raw

Name	Type	Fruit characteristics	Days to maturity from direct seed	Fruit size	Flower type	Disease resistance	Comments
Gherking	European pickler	Medium 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	Stands out from the competition for its 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



Asian Delite



Fairy Tale All-America Selections National Winner



Gretel All-America Selections National Winner



Hansel All-America Selections National Winner



Patio Baby All-America Selections Regional Winner

EGGPLANT ●
Solanum melongena

Seed supplied as: Raw

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. <i>All-America Selections National Winner.</i>
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. <i>All-America Selections National Winner.</i>
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. <i>All-America Selections National Winner.</i>
Patio Baby F1	40-45	2-3 in./5-8 cm long (baby size)	Purple, mini 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. <i>All-America Selections Regional Winner.</i>



Aji Rico All-America Selections National Winner



Cajun Belle All-America Selections National Winner



Golden Cayenne



La Bomba II Jalapeño



Habanero Primero Red

PEPPER ●

Seed supplied as: Raw

Name	Days to maturity from transplant	Fruit characteristics	Plant habit	Disease resistance	Comments
HOT					
Aji Rico F1 <i>Capsicum baccatum</i>)))	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. <i>All-America Selections National Winner.</i>
Cajun Belle <i>Capsicum annuum</i>)	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. <i>All-America Selections National Winner.</i>
Golden Cayenne <i>Capsicum annuum</i>)	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.
Habanero Primero Red F1 <i>Capsicum chinense</i>))))	75-80 to full ripe, 60-65 to green	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. Early flowering - can be sold in large pots with flowers and immature fruit. Best in containers or in-ground.
La Bomba II F1 <i>Capsicum annuum</i>)))	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.

) = 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



Pot-a-peño All-America Selections Regional Winner, Great Lakes, West/Northwest



Mad Hatter All-America Selections National Winner



Sweet Heat



Candy Cane Red



Candy Cane Chocolate Cherry

Name	Days to maturity from transplant	Fruit characteristics	Plant habit	Comments
HOT				
New Pot-a-peño F1 <i>Capsicum annuum</i>)	60-65 to full ripe, 45-50 to green	Jalapeño, green to red 3-4 in./8-10 cm long x 0.75-1.25 in./2-3 cm wide	Bush, cascading, medium	Pot-a-peño's unique cascading habit is perfect for a hanging basket or container - a perfect addition to any patio or small-space garden. 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. <i>All-America Selections Regional Winner, Great Lakes, West/Northwest.</i>
Sweet Heat F1 <i>Capsicum annuum</i>)	55-60 to full ripe, 40-45 to green	Snack, green to red 3.5-4 in./9-10 cm long x 1.25-1.75 in./3-4 cm wide	Compact	One of the earliest peppers to bear fruit! Compact, bushy plants let you ship or sell larger containers with developing fruit. Sweet and mildly spicy peppers can be harvested green or red. Best in containers or in-ground.
Mad Hatter F1 <i>Capsicum baccatum</i>)	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. <i>All-America Selections National Winner.</i>
SWEET				
New Candy Cane Chocolate Cherry F1 <i>Capsicum annuum</i>	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, eye-catching 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 <i>Capsicum annuum</i>	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.



NEW

Peppi Cornissimo



NEW

Peppi Yellow



NEW

Peppi Red



PeppiGrande Red



Snackabelle Red

Name	Days to maturity from transplant	Fruit characteristics	Plant habit	Disease resistance	Comments
SWEET continued					
New Peppi Cornissimo F1 <i>Capsicum annuum</i>	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. To produce seedless fruit, grow 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.
New Peppi Red and Yellow F1 <i>Capsicum annuum</i>	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	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 <i>Capsicum annuum</i>	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	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. 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 <i>Capsicum annuum</i>	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	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.



Artemis



Chocolate Sprinkles



Helix



Little Bing

TOMATO ●
Solanum lycopersicum
(Lycopersicon esculentum)

Seed supplied as: Raw

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.
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	Round, 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.

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



Midnight Snack All-America Selections National Winner



Orange Zinger



Sugar Rush



Tidy Treats

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 sunlight 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. <i>All-America Selections National Winner.</i>
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



Tumbler



Topsy Tom



Candyland Red (Fruit shown actual size) *All-America Selections National Winner*



NEW
Marzito

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.
CURRENT					
Candyland Red	55-60	Round, small, red 0.5 in./1 cm long x 0.5 in./ 1 cm wide	I		Stays compact and tidy, so it won't take over like the 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. <i>All-America Selections National Winner.</i>
SPECIALTY SMALL-FRUITED					
New Marzito F1	50-55	Elongated, mini marzano, red 2-2.25 in./5-6 cm long x 0.5-0.75 in./1-2 cm wide	I	HR: F1, LM, N, TMV, ToMV	A multi-purpose tomato! 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.



Heirloom Marriage Big Brandy



Heirloom Marriage Marzineria



Heirloom Marriage Genuwine



Heirloom Marriage Cherokee Carbon



Heirloom Marriage Perfect Flame

New twists on old garden favourites

We trialed hundreds of heirlooms for key traits like colour, flavour, quality, yield. Our favourites were selected...crossed...tested and evaluated. The result: Heirloom Marriage hybrid tomatoes, with much higher yields and earlier maturity than their parents, plus all of the great flavour and less fruit blemishes.

TOMATO ●
Solanum lycopersicum
(*Lycopersicon esculentum*)

Seed supplied as: Raw

Name	Days to maturity from transplant	Fruit characteristics	Growth	Comments
HEIRLOOM MARRIAGE™ 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.
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.
Marzineria F1	70-75	Roma, red 3-4 oz. (85 to 113 g)	I	Red Roma/paste tomato produces large yields of meaty fruit that are great for cooking. A cross of San Marzano and Cream Sausage. Best in-ground.
Perfect Flame F1	70-75	Saladette, orange 2-3 oz. (57 to 85 g)	I	Orange saladette tomato with sweet-tart fruitiness. Earliest-ripening Heirloom Marriage variety. A cross of Peron and Flamme. Best in-ground.

Growth: CD - Compact Determinate, CI - Compact Indeterminate, D - Determinate, I - Indeterminate, SD - Semi-determinate



NEW

DarkStar



NEW

Bellatrix



Little Napoli



Tidy Rose

Mix tomatoes, parsley and petunias in tempting Plug & Play Combos like this!



Plug & Play Combo Italian Bistro, see page 243.

Name	Days to maturity from transplant	Fruit characteristics	Growth	Disease resistance	Comments
BEEFSTEAK					
New DarkStar F1	70-75	Oblate, ribbed, purple 2-2.25 in./5-6 cm long x 3-3.25 in./8 cm wide, 8-10 oz. (227 to 283 g)	I	HR: LB, V	Upgrade your garden with heirloom tomato flavour <i>and</i> modern hybrid tomato performance. Early-maturing, rich, purple beefsteak fruit has higher yield potential and fewer blemishes than most heirlooms. Large, purple beefsteak fruit is perfect for eating fresh on a sandwich or try preserving in sauce. Offers high disease resistance to late blight, too. Best grown in the ground with support of a trellis or cage.
Tidy Rose F1	60-65	Deeply ribbed, pink 5-7 oz. (142 to 198 g)	CI		Popular Tidy Treats has a deep pink beefsteak companion – both remain compact like a determinate but produce like an indeterminate. Beautiful, ribbed fruit with rich heirloom flavour is perfect for any culinary use. Best in containers or in-ground, grown with support.
ROMA					
New Bellatrix F1	65-70	Oval, red 2.75-3 in./7-8 cm long x 2-2.25 in./5-6 cm wide, 4.5-5 oz. (128 to 142 g)	D	HR: F2, F3, LB, TMV, ToMV	Bellatrix has high resistance to late blight, a common disease of tomato plants. It also has resistance to Fusarium, a 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	Red 2-2.5 oz. (57 to 71 g)	CD	HR: F1, V	One of the only patio Romas, with disease resistance for better garden success. High yields for such a small plant – harvest enough at one time for a batch of salsa or sauce. Best in containers.

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,
 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



Sunrise Sauce



Homeslice



Stellar



Loki



Little Sicily

TOMATO ●
Lycopersicon esculentum

Seed supplied as: Raw

Name	Days to maturity from transplant	Fruit characteristics	Growth	Disease resistance	Comments
ROMA					
Sunrise Sauce F1	55-60	Orange 3-4 oz. (85 to 113 g)	D	HR: F1, V	The only professional non-heirloom orange Roma/paste/cooking tomato on the market. 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.
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.
New 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



Autumn Frost Squash



Butterbaby Squash



Honeynut Squash



EasyPick Gold II Zucchini



Lemon Sun Squash



Fresca Strawberry

SQUASH ●

Seed supplied as: Raw

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	Type	Exterior colour	Days to maturity from direct seed	Fruit size/ weight	Plant habit	Disease resistance	Comments
WINTER SQUASH							
Autumn Frost F1 <i>Cucurbita moschata</i>	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. Shelf life of up to 4 months after maturity allows 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.
Butterbaby <i>Cucurbita moschata</i>	Mini butternut	Tan	100-105	4-6 in./10-15 cm long x 3-4 in./8-10 cm wide, 8-24 oz./3.6-10.9 kg	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.
Honeynut <i>Cucurbita moschata</i>	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./3.6-7.3 kg	Restricted Vine		Produces exceptionally sweet, small fruit that are manageable to prepare. The first widely adaptable small-fruited butternut squash in a high-germinating, uniform strain. Higher yielding than traditional varieties. Best in-ground.
SUMMER SQUASH							
Easy Pick Gold II F1 <i>Cucurbita pepo</i>	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 <i>Cucurbita pepo</i>	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.

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



Everleaf Thai Towers



Everleaf Emerald Towers



Dolce Fresca
All-America Selections National Winner



Everleaf Genovese

Towering over other basil

The aromatic and vibrant licorice flavour of NEW Everleaf Thai Towers complements any dish, especially Thai cuisine. This well-branched Thai basil variety with short internodes makes a beautiful, tidy, towering plant that has huge harvest potential and brightens gardens or mixed containers.

HERBS ●

Seed supplied as: Raw

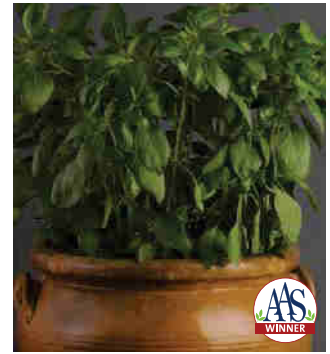
Name	Height	Spread	Days to maturity from transplant	Comments
BASIL				
Dolce Fresca <i>Ocimum basilicum</i>	12-14 in./ 30-36 cm	10-12 in./ 25-30 cm	28	Mid-size plant has a unique, bushy habit with shorter internodes that shows better at retail than traditional basil and holds its controlled size in the garden without getting tall and leggy. More usable leaf yields, with traditional sweet Genovese basil flavour. <i>All-America Selections National Winner</i>
Everleaf Emerald Towers <i>Ocimum basilicum</i>	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 <i>Ocimum basilicum</i>	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!
New Everleaf Thai Towers <i>Ocimum basilicum</i>	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 in-ground, 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 Basil



Purple Ruffles Basil *All-America Selections National Winner*



Sweet Dani Lemon Basil *All-America Selections National Winner*



Fernleaf Dill *All-America Selections National Winner*

Name	Height	Spread	Days to maturity from transplant	Comments
Newton <i>Ocimum basilicum</i>	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 <i>Ocimum basilicum</i>	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. <i>All-America Selections National Winner.</i>
Sweet Dani Lemon <i>Ocimum basilicum</i>	22-24 in./ 56-61 cm	18-24 in./ 46-61 cm	28	Flavourful and fragrant - up to 75% more total essential oils than standard lemon basil. Vigorous garden performer. <i>All-America Selections National Winner.</i>
DILL				
Fernleaf <i>Anethum graveolens</i>	12-15 in./ 30-38 cm	10-12 in./ 25-30 cm	28	Perfect for patio planters - dwarf, compact plants don't need staking and won't topple over. Can also be grown in-ground and used for traditional culinary purposes. Late flowering allows for a long harvest season and extended ornamental period. <i>All-America Selections National Winner.</i>



SimplyHerbs controlled seed input produces a healthy, uniform product for retail.



SimplyHerbs Basil and Try Basil grown with Precision Multi-Pellets in hydroponic production.

**SINGLE-SPECIES
MULTI-SEED PELLETS** ●

SimplyHerbs™ Series

SimplyHerbs Basil, Try Basil, Dill, Curled Parsley, Large-Leaf Italian Flat Leaf Parsley, Rosemary and Sage 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 in-ground and in containers.

Name	Seed supplied as	Seeds per pellet	Height	Spread	Days to harvest from transplant	USDA hardiness zones
Basil (Genovese) <i>Ocimum basilicum</i>	PMPL	6	24-30 in./61-76 cm	12-16 in./30-41 cm	28	
Try Basil <i>Ocimum basilicum</i>	PMPL*	8	24-30 in./61-76 cm	12-16 in./30-41 cm	28	
Dill <i>Anethum graveolens</i>	PMPL	6	12-24 in./30-61 cm	10-16 in./25-41 cm	28	
Oregano <i>Origanum vulgare</i>	MPL	9-14	12-30 in./30-76 cm	12-24 in./30-61 cm	28	5a-9b
Curled Parsley <i>Petroselinum crispum</i>	PMPL	6	15-18 in./38-46 cm	12-18 in./30-46 cm	28	5a-8b
Large-Leaf Italian Flat Leaf Parsley <i>Petroselinum crispum</i>	PMPL	6	15-18 in./38-46 cm	12-18 in./30-46 cm	28	5a-8b
Rosemary <i>Rosmarinus officinalis</i>	PMPL	7	12-24 in./30-61 cm	12-24 in./30-61 cm	42	7a-10b
Sage <i>Salvia officinalis</i>	PMPL	6	18-24 in./46-61 cm	14-24 in./36-61 cm	28	4a-8b
Thyme <i>Thymus vulgaris</i>	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™ Multi-Pellets assure high germination uniformity.
*Each pellet includes Genovese, serrated and dark red selections.



SimplyHerbs Basil



SimplyHerbs Try Basil



SimplyHerbs Dill



SimplyHerbs Oregano



SimplyHerbs Curled Parsley



SimplyHerbs Large-Leaf Italian Flat Leaf Parsley



SimplyHerbs Rosemary



SimplyHerbs Sage



SimplyHerbs Thyme



SimplySalad Arugula



Pro San Mixture



Pro Tatu Mixture



Wonder Wok Mixture

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 multi-species 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.

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.
Pro San Mixture	PMPL	6	8-12 in./20-30 cm	6-12 in./15-30 cm	2-4 weeks	A mix of Asian greens - mizuna and komatsuna - that were selected for late bolting and uniform growth. Bright purple and green shades. Cut at junior leaf stage 25-35 days from sowing or at full leaf stage 35-45 days from sowing. Cut leaves 2 in./5 cm above soil level and foliage will re-grow to junior leaf size approximately 10 days later.
Pro Tatu Mixture	PMPL	6	8-12 in./20-30 cm	6-12 in./15-30 cm	2-4 weeks	A mixture of Asian mustard and komatsuna greens that were selected for late bolting and uniform growth. Deep purple and bright green shades. Cut at a junior leaf stage 25-35 days from sowing or at full leaf stage 35-45 days from sowing. Cut leaves 2 in./5 cm above soil level and foliage will re-grow to junior leaf size approximately 10 days later.
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™ Multi-Pellets assure high germination uniformity.



SimplySalad Series



Arugula



Alfresco Mixture



Global Gourmet Mixture



Wonder Wok Mixture



Summer Picnic Mixture



Precision Multi-Pellet Standard Multi-Pellet

SimplySalad multi-pellets produce a well-balanced salad mix with one sowing.



Kale Storm Mixture



City Garden Mixture

VEGETABLES & HERBS / PRODUCTION GUIDE

Class/Variety	Page	Fresh Market			Home Garden	
		Field	Hydroponic	Protected Culture	In-ground	Container
AMERICAN SLICER CUCUMBER						
Martini F1	208	X			X	
Patio Snacker F1*	208				X	X
EUROPEAN PICKLER CUCUMBER						
Gherking	208	X		X	X	
EGGPLANT						
Asian Delite F1	209	X			X	X
Fairy Tale F1	209	X			X	X
Gretel F1	209	X			X	X
Hansel F1	209	X			X	X
Patio Baby F1	209	X			X	X
HOT PEPPER						
Aji Rico F1	210	X			X	
Cajun Belle	210	X			X	X
Golden Cayenne*	210				X	X
Habanero Primero Red F1	210	X			X	X
La Bomba II F1	210	X			X	X
Mad Hatter F1	211	X			X	
New Pot-a-peño F1	211				X	X
Sweet Heat F1*	211				X	X
SWEET PEPPER						
New Candy Cane Chocolate Cherry F1	211	X			X	X
Candy Cane Red F1	211	X			X	X
New Peppi Cornissimo F1	212	X		X	X	
New Peppi Red F1	212	X		X	X	
New Peppi Yellow F1	212	X		X	X	
PeppiGrande Red F1	212	X		X	X	
Snackabelle Red F1	212	X			X	X
SIMPLYSALAD®						
Alfresco Mixture	224		X		X	X
Arugula	224	X	X		X	X
City Garden Mixture	224		X		X	X
Global Gourmet Mixture	224		X		X	X
Kale Storm Mixture	224	X	X		X	X
Pro San Mixture	224		X		X	X
Pro Tatu Mixture	224		X		X	X
Summer Picnic Mixture	224		X		X	X
Wonder Wok Mixture	224		X		X	X

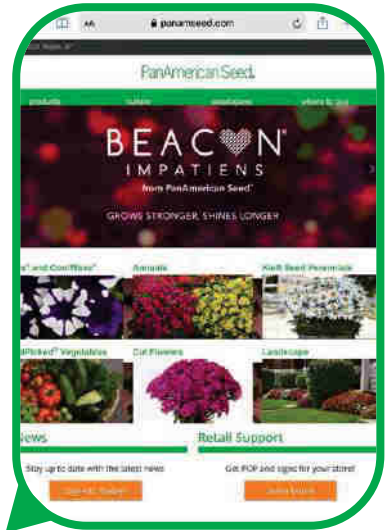
*Compact variety - best-suited to home garden use.

Class/Variety	Page	Fresh Market			Home Garden	
		Field	Hydroponic	Protected Culture	In-ground	Container
MINI BUTTERNUT SQUASH						
Butterbaby	219	X			X	
Honeynut	219	X			X	
PATTY PAN SQUASH						
Lemon Sun F1	219	X			X	
SPECIALTY ROUND SQUASH						
Autumn Frost F1	219	X			X	
ZUCCHINI SQUASH						
Easy Pick Gold II F1	219	X		X	X	X
STRAWBERRY						
Fresca*	219				X	X
BEEFSTEAK TOMATO						
New DarkStar F1	217	X			X	
Tidy Rose F1*	217				X	X
HEIRLOOM MARRIAGE™ TOMATO						
Big Brandy F1	216	X			X	
Cherokee Carbon F1	216	X			X	
Genuwine F1	216	X			X	
Marzinera F1	216	X			X	
Perfect Flame F1	216	X			X	
CHERRY TOMATO						
Artemis F1	213	X		X	X	
Chocolate Sprinkles F1	213	X		X	X	
Helix F1	213	X			X	
Little Bing F1*	213					X
Midnight Snack F1	214	X			X	
Orange Zinger F1	214	X			X	
Sugar Rush F1	214	X			X	
Tidy Treats F1*	214				X	X
Topsy Tom F1*	215					X
Tumbler F1*	215					X
CURRENT TOMATO						
Candyland Red	215	X			X	
ROMA TOMATO						
New Bellatrix F1	217	X			X	X
Little Napoli F1*	217					X
Sunrise Sauce F1	218	X			X	

VEGETABLES & HERBS / PRODUCTION GUIDE

Class/Variety	Page	Fresh Market			Home Garden	
		Field	Hydroponic	Protected Culture	In-ground	Container
SLICER TOMATO						
Homeslice F1	218	X			X	X
Little Sicily F1*	218					X
New Loki F1	218	X		X	X	
Stellar F1	218	X			X	
SPECIALTY SMALL-FRUITED TOMATO						
New Marzito F1	215	X		X	X	
SIMPLYHERBS™						
Basil	222	X	X		X	X
Try Basil	222	X	X		X	X
Dill	222	X	X		X	X
Curled Parsley	222	X	X		X	X
Large-Leaf Italian Flat Leaf Parsley	222	X	X		X	X
Oregano	222	X			X	X
Rosemary	222	X			X	X
Sage	222	X			X	X
Thyme	222	X			X	X
BASIL						
Dolce Fresca	220	X	X		X	X
Everleaf Emerald Towers	220	X	X		X	X
Everleaf Genovese	220	X			X	X
New Everleaf Thai Towers	220	X	X		X	X
Newton	221	X	X		X	X
Purple Ruffles	221	X			X	X
Sweet Dani Lemon	221	X			X	X
DILL						
Fernleaf	221	X	X		X	X

*Compact variety - best-suited to home garden use.

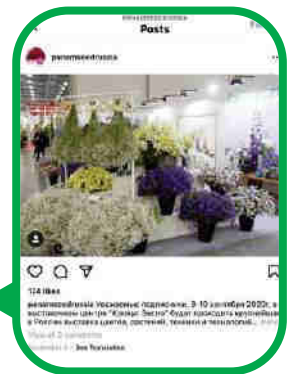


PanAmericanSeed®

KEEPING IN TOUCH



panamseed.com



With online tools on our website, the product information guide, culture documents and social media posts, we can provide up-to-the-minute product and growing information, as well as performance data, merchandising tips, trial data and consumer feedback. We've got the resources to keep you informed about our products anytime, anywhere.

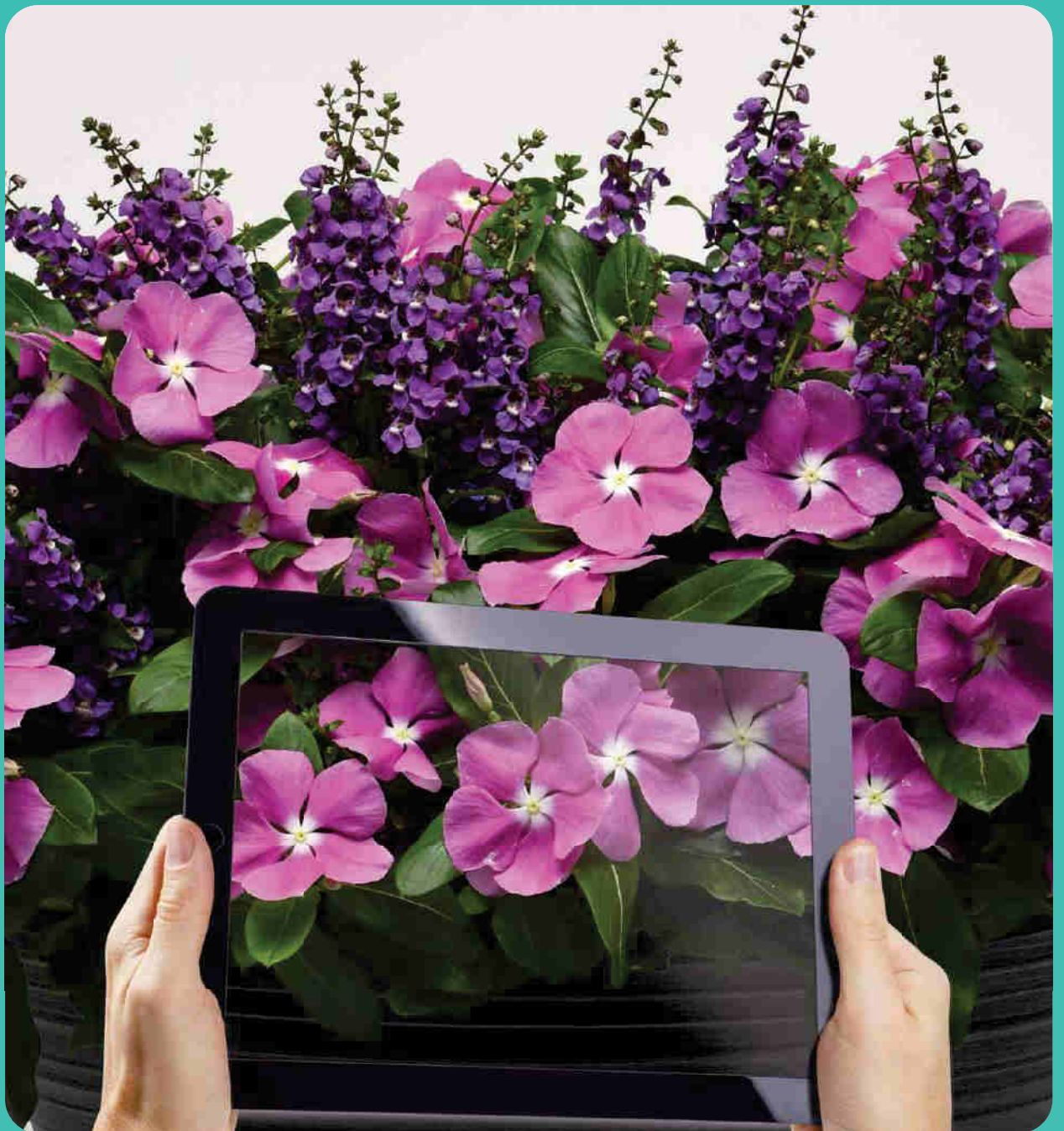
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PLUG & PLAY[®]
Your Instant Garden





TRIALED, PROVEN, EFFICIENT AND RELIABLE

This lineup of **easy, fresh and fun combos** that deliver combines premium annuals and perennials, ornamental peppers, vegetables and herbs for great **Spring, Summer and Fall sales.**

After internal and external trialing in multiple regions, this fully vetted collection of 80+ Plug & Play Combos serves up **grab 'n go gardens** that give today's consumer the **instant décor** they crave with the ease of growing they demand. This is how we fulfill the promise of **easy, economical production; big retail shows** and **gardener-satisfying results.**

Find all the program details at panamseed.com/PlugandPlay



PREMIUM COMBOS FROM EFFICIENT SINGLE-PELLET INPUTS

Our patented seed technology delivers amazing results every time in single and multi-species choices. It ensures that all varieties are present in each Precision Multi-Pellet a minimum of 90% of the time. One pellet into one plug into one 6 to 8-in. (15 to 20-cm) pot, and you're good to go!



Revolutionary Fuseables
Precision Multi-Pellets...



flow right through
your seeder...



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



to grow great-looking,
balanced combos that sell!

FUSEABLES®



FUSEABLES® PRECISION™ MULTI-PELLETS

Fuseables "easy-sow, easy-grow" Precision Multi-Pellets offer the **only combo program from a single pellet**. Our patented seed technology delivers **amazing results** every time in single and multi-species choices, resulting in **more consistent** and **better looking** mixes.



FUSEABLES BLUEBERRY LIME JAM

Sophistica Lime Green Petunia & Dreams Midnight Petunia



SPRING

FUSEABLES PLEASANTLY BLUE

Dreams Midnight Petunia & Daddy Blue Petunia



SPRING

FUSEABLES UTOPIA

Blutopia Bacopa & Snowtopia Bacopa



SPRING

WAVE FUSEABLES HEALING WATERS

Shock Wave Denim Petunia, Easy Wave Violet Petunia & Blutopia Bacopa



WAVE FUSEABLES SILK N SATIN

Shock Wave Pink Shades Petunia & Snowtopia Bacopa



FUSEABLES PARADISE ISLAND

Kabloom Yellow Calibrachoa, Blue Calibrachoa & Cherry Calibrachoa.



SPRING

FUSEABLES TWISTED ARROWS 

Blue Arrows Juncus & Juncus *effusus spiralis* (curly juncus)
 NOTE: Supplied as original Fuseables clay multi-pellets.



SPRING/SUMMER

FUSEABLES UNDER THE SUN 

Crimson Gold Coleus & Lime Delight Coleus - great for both sun and shade



SPRING/SUMMER

PLUG & PLAY[®] COMBOS

GROW YOUR BEST COMBOS FROM SEED-RAISED PLUGS!

Every Plug & Play seed combo is tested over and over to prove that it delivers unstoppable performance from bench to store to garden. Trialing in saleable sizes begins in our research greenhouses and in our outdoor Summer containers. But we don't stop there – every potential introduction heads out to commercial greenhouses and to gardens for real-life testing. It's only when our customers give the combos they've seen in action two thumbs up that they move into the lineup.

Good for growers: easy, economical production

- Superior, high-impact genetics plus recipe and culture support.
- Programmable finish times to hit store set dates.
- You're always in complete control of when to sow, grow and ship.

Good for retailers: big retail shows = big sales

- Ready-to-use designer blends.
- On-trend colours that sell.
- The perfect magnet for repeat shoppers!

Good for consumers: choices for Spring, Summer & Fall

- Easy, grab 'n go gardens appeal to today's shopper.
- Lots of instant, long-lasting, multicolour blooms.
- Balanced, attractive combos to enhance every décor.

Find recipes and planting information for all the Plug & Play Combos at panamseed.com.





With bright colours and early-season flowering, these combos featuring Cool Wave pansies are the first in stores to grab shopper attention.

OCEAN BREEZES

(A) Cool Wave Blue Skies Pansy, (B) Cool Wave Purple Pansy & (C) Cool Wave White Pansy



8 in./20cm



10 in./25cm



12 in./30cm



EARLY SPRING

ON A CLEAR DAY

(A) Cool Wave Purple Pansy, (B) Cool Wave White Pansy & (C) Cool Wave Golden Yellow Pansy



8 in./20cm



10 in./25cm



12 in./30cm



EARLY SPRING

PURPLE SUNSET

(A) Cool Wave Purple Pansy, (B) Cool Wave Golden Yellow Pansy & (C) Cool Wave Blue Skies Pansy



8 in./20cm



10 in./25cm



12 in./30cm



EARLY SPRING

YELLOW HEAVEN

(A) Cool Wave Lemon Pansy, (B) Cool Wave White Pansy & (C) Cool Wave Golden Yellow Pansy



8 in./20cm



10 in./25cm



12 in./30cm



EARLY SPRING

Grow all these early Spring combos cool for best finish. All varieties in each Plug & Play Combo must be transplanted at the same time in order to finish at the same time. Sow dates may vary. NOTE: Individual varieties sold separately.



These beautiful, balanced combos feature Wave petunias, the most-asked-for flower brand! They're perfect for main-season programs and supported by Wave marketing and merchandising.

VERY VALENTINE

(A) Easy Wave Pink Passion Petunia, (B) Easy Wave White Petunia & (C) Easy Wave Red Velour Petunia

8 in./20cm

10 in./25cm

12 in./30cm

SPRING

FLYING THE FLAG

(A) Easy Wave Red Velour Petunia, (B) Easy Wave White Petunia & (C) E3 Easy Wave Blue

8 in./20cm

10 in./25cm

12 in./30cm

SPRING

SUBTLE PERFECTION

(A) Easy Wave Pink Passion Petunia, (B) Easy Wave Silver Petunia & (C) Shock Wave Deep Purple Petunia

8 in./20cm

10 in./25cm

12 in./30cm

SPRING

MAD ABOUT RED

(A) Easy Wave Red Velour Petunia & (B) Easy Wave Yellow Petunia

8 in./20cm

10 in./25cm

12 in./30cm

SPRING

All varieties in each Plug & Play Combo must be transplanted at the same time in order to finish at the same time. Sow dates may vary. NOTE: Individual varieties sold separately.

LEMON DREAM

(A) Kabloom Yellow Calibrachoa, (B) Easy Wave Yellow Petunia & (C) 21st Century White Phlox



10 in./25cm



12 in./30cm



SPRING

DUSK TO DAWN

(A) Easy Wave Plum Vein Petunia & (B) Shock Wave Pink Vein Petunia



8 in./20cm



10 in./25cm



12 in./30cm



SPRING

LOVIN' IT

(A) Easy Wave Yellow Petunia, (B) Easy Wave Neon Rose Petunia & (C) E3 Easy Wave Blue



8 in./20cm



10 in./25cm



12 in./30cm



SPRING

ROYAL PASSION

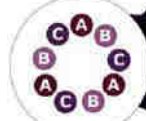
(A) Easy Wave Burgundy Velour Petunia, (B) Easy Wave Plum Vein Petunia & (C) E3 Easy Wave Blue



8 in./20cm



10 in./25cm



12 in./30cm



SPRING

FIRECRACKER

(A) Shock Wave Coral Crush Petunia, (B) Shock Wave Denim Petunia & (C) Shock Wave Deep Purple Petunia



8 in./20cm



10 in./25cm



12 in./30cm



SPRING

FLY ME TO THE MOON

(A) Easy Wave Burgundy Velour Petunia, (B) Easy Wave White Petunia & (C) Easy Wave Neon Rose Petunia



8 in./20cm



10 in./25cm



12 in./30cm



SPRING

ROSY KISSES

(A) Easy Wave Yellow Petunia, (B) Easy Wave Rosy Dawn Petunia & (C) Shock Wave Deep Purple Petunia



8 in./20cm



10 in./25cm



12 in./30cm



SPRING

SWEETHEART

(A) Easy Wave Red Velour Petunia & (B) Easy Wave Pink Passion Petunia



8 in./20cm



10 in./25cm



12 in./30cm



SPRING

SURFIN' SAFARI

(A) Shock Wave Coral Crush Petunia & (B) Shock Wave Denim Petunia



8 in./20cm



10 in./25cm



12 in./30cm



SPRING

All varieties in each Plug & Play Combo must be transplanted at the same time in order to finish at the same time. Sow times may vary.
NOTE: Individual varieties sold separately.

SEEING STARS

(A) Easy Wave Burgundy Star Petunia & (B) Easy Wave Neon Rose Petunia



SPRING

AFTER DARK

(A) Easy Wave Burgundy Velour Petunia & (B) Easy Wave Neon Rose Petunia



SPRING

CORAL LIGHTS

(A) Easy Wave Yellow Petunia, (B) Shock Wave Coral Crush Petunia & (C) Glitz Euphorbia



SPRING

FIRE N NICE

(A) Easy Wave Red Velour Petunia & (B) Glitz Euphorbia



SPRING

ROYAL SPARKLER

(A) Easy Wave Burgundy Velour Petunia, (B) Easy Wave Silver Petunia & (C) Glitz Euphorbia



SPRING

PUTTIN' ON THE PINK

(A) Easy Wave Neon Rose Petunia & (B) Glitz Euphorbia



SPRING

All varieties in each Plug & Play Combo must be transplanted at the same time in order to finish at the same time. Sow times may vary.
NOTE: Individual varieties sold separately.

EVENING IN RIO

(A) Easy Wave Violet Petunia & (B) Easy Wave Neon Rose Petunia



8 in./20cm



10 in./25cm



12 in./30cm



SPRING

BLUE HAWAII

(A) Easy Wave Rosy Dawn Petunia & (B) Shock Wave Denim Petunia



8 in./20cm



10 in./25cm



12 in./30cm



SPRING

OPPOSITES ATTRACT

(A) Easy Wave Coral Reef Petunia & (B) Easy Wave Violet Petunia



8 in./20cm



10 in./25cm



12 in./30cm



SPRING

O CANADA

(A) Easy Wave White Petunia & (B) Easy Wave Red Petunia



8 in./20cm



10 in./25cm



12 in./30cm



SPRING

THE FLAG

(A) Easy Wave White Petunia, (B) Easy Wave Blue Petunia & (C) Easy Wave Red Petunia



8 in./20cm



10 in./25cm



12 in./30cm



SPRING

BEACH PARTY

(A) Shock Wave Denim Petunia & (B) Shock Wave Pink Shades Petunia



8 in./20cm



10 in./25cm



12 in./30cm



SPRING

All varieties in each Plug & Play Combo must be transplanted at the same time in order to finish at the same time. Sow times may vary.
NOTE: Individual varieties sold separately.

Combine container and patio vegetables with easy-to-grow flowers like Wave petunias and French marigolds for practical and pretty combos that look great and taste even better!

ITALIAN BISTRO

(A) Little Napoli Tomato, (B) Curled Parsley SimplyHerbs™ & (C) Easy Wave Red Velour Petunia



12 in./30cm



SPRING/SUMMER

LUNCH DATE

(A) Patio Baby Eggplant, (B) Try Basil SimplyHerbs™ & (C) Bonanza Yellow French Marigold



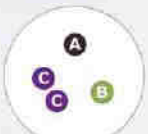
12 in./30cm



SPRING/SUMMER

FOODIE BLUES

(A) Patio Baby Eggplant, (B) Dolce Fresca Basil & (C) E3 Easy Wave Blue Petunia



12 in./30cm



SPRING/SUMMER

CANTINA HEAT

(A) Sweet Heat Pepper, (B) E3 Easy Wave Blue Petunia & (C) Bonanza Yellow French Marigold



12 in./30cm



SPRING/SUMMER

CHRISTMAS IN JULY

(A) Lucky Star White Pentas & (B) Lucky Star Dark Red Pentas



8 in./20cm



10 in./25cm



12 in./30cm



SUMMER

AIRBRUSH'D

(A) Tattoo Raspberry Vinca, (B) Titan Polka Dot Vinca & (C) Titan Rose Halo Vinca



8 in./20cm



10 in./25cm



12 in./30cm



SUMMER

SHINING STARS

(A) Lucky Star Lavender Pentas, (B) Lucky Star Deep Pink Pentas & (C) Lucky Star White Pentas



8 in./20cm



10 in./25cm



12 in./30cm



SUMMER

BERRY BURST

(A) Titan Really Red Vinca, (B) Tattoo Black Cherry Vinca & (C) Titan Rose Halo Vinca



8 in./20cm



10 in./25cm



12 in./30cm



SUMMER

STAR BRIGHT

(A) Lucky Star Dark Red Pentas, (B) Lucky Star Deep Pink Pentas & (C) Lucky Star Lavender Pentas



8 in./20cm



10 in./25cm



12 in./30cm



SUMMER

SUMMER SMOOTHIE

(A) Valiant Orchid Vinca, (B) Valiant Pure White Vinca & (C) Valiant Burgundy Vinca



8 in./20cm



10 in./25cm



12 in./30cm



SUMMER

All varieties in each Plug & Play Combo must be transplanted at the same time in order to finish at the same time. Sow times may vary.
NOTE: Individual varieties sold separately.

These combos featuring popular and unique seed items like Serena® and Serenita® angelonia, Zahara® zinnia and Purple Prince alternanthera make a big statement at retail and on home patios. These standouts deliver end-cap or front-of-store appeal, with several offering built-in Wave recognition.

SEASIDE DELIGHT

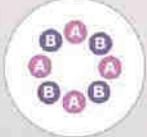
(A) Valiant Orchid Vinca & (B) Serena Blue Angelonia



8 in./20cm



10 in./25cm



12 in./30cm



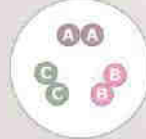
SUMMER

PEACH MELBA PARFAIT

(A) Valiant Apricot Vinca, (B) Serenita Pink Angelonia & (C) Silver Falls Dichondra



10 in./25cm



12 in./30cm



SUMMER

SUMMER CANDY

(A) Titan Really Red Vinca & (B) Serena White Angelonia



8 in./20cm



10 in./25cm



12 in./30cm



SUMMER

INK'D

(A) Tattoo Raspberry Vinca & (B) Serena Blue Angelonia



8 in./20cm



10 in./25cm



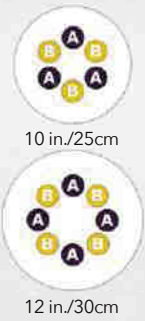
12 in./30cm



SUMMER

POPPIN' IN THE SUN

(A) Kabloom Blue Calibrachoa & (B) Kabloom Yellow Calibrachoa



SPRING

SUN JEWELS

(A) Zahara Yellow Zinnia, (B) Valiant Pure White Vinca & (C) Purple Prince Alternanthera



SUMMER

BERRY SPARKLER

(A) Serena Purple Angelonia, (B) Titan Punch Vinca & (C) Purple Flash Ornamental Pepper



SUMMER

YELLOW TAMBOURINE

(A) Serena Blue Angelonia, (B) Zahara Yellow Zinnia & (C) Purple Flash Ornamental Pepper



SUMMER

CHERRY JAM

(A) Chocolate Covered Cherry Premium Sun Coleus, (B) Valiant Punch Vinca & (C) Purple Prince Alternanthera



SUMMER

All varieties in each Plug & Play Combo must be transplanted at the same time in order to finish at the same time. Sow times may vary.
NOTE: Individual varieties sold separately.

Three bright ornamental pepper combos promise huge Summer through Autumn sales. These premium container combos love the heat and sun, and they deliver colour and interest from their early fruiting stage through Autumn.

HOCUS POCUS

(A) Santos Orange Ornamental Pepper & (B) Hot Pops Purple Ornamental Pepper



10 in./25cm



12 in./30cm

AMAZING COLOUR AT ALL STAGES

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



SUMMER/AUTUMN

COLOR CARNIVAL

(A) Wicked Ornamental Pepper & (B) Santos Orange Ornamental Pepper



10 in./25cm



12 in./30cm



SUMMER/AUTUMN

FIRELIGHTER

(A) Blaze Ornamental Pepper & (B) Hot Pops Purple Ornamental Pepper



10 in./25cm



12 in./30cm

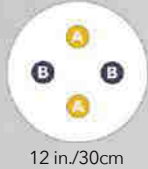


SUMMER/AUTUMN

Dramatic good looks and predictable colour make these combos perfect for larger containers! Combining first-year-flowering, mid-season perennials with annuals makes a big statement on home patios from Summer through Autumn.

GOLDEN ERA

(A) Double the Sun Coreopsis & (B) Blue Spear Lavandula



SUMMER/AUTUMN

SUN SEA AND ROSÉ

(A) PowWow Wild Berry Echinacea, (B) Mesa Peach Gaillardia & (C) Blue Spear Lavandula



SUMMER/AUTUMN

PINK PURSUIT

(A) PowWow White Echinacea, (B) Jolt Pink Magic Interspecific Dianthus, (C) Blue Spear Lavandula & (D) ColorGrass® Festina Festuca



SUMMER/AUTUMN

All varieties in each Plug & Play Combo must be transplanted at the same time to finish at the same time. Sow times will vary.
NOTE: Individual varieties sold separately

DATE KNIGHT

(A) PowWow White Echinacea, (B) Starship Scarlet Lobelia, (C) Blue Spear Lavandula & (D) ColorGrass® Festina Festuca



12 in./30cm



SUMMER/AUTUMN

TUSCAN SUN

(A) Starship Scarlet Lobelia, (B) Mesa Bright Bicolor Gaillardia & (C) ColorGrass® Sirocco Anemanthele



12 in./30cm



SUMMER/AUTUMN

PARIS IN SPRINGTIME

(A) Cheyenne Spirit Echinacea & (B) Starship Rose Lobelia



12 in./30cm



SUMMER/AUTUMN

VERY VESUVIUS

(A) Starship Scarlet Lobelia, (B) Sunfire Coreopsis & (C) Lavance Deep Purple Lavandula



12 in./30cm



SUMMER/AUTUMN

SALES & CUSTOMER SERVICE HERE TO HELP!

THE AMERICAS



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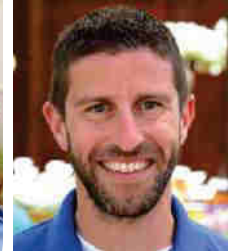
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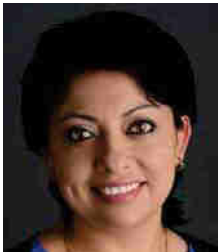
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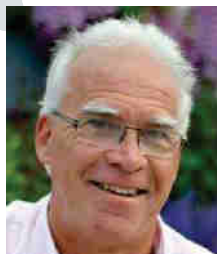
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USE THE POWER OF RECOGNITION

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.



NEW

Pot-a-peño Jalapeño Pepper All-America Selections Regional Winner, Great Lakes, West/Northwest



Sol™ Gekko Green (Fleuroselect Gold Medal, Fleuroselect Novelty) and **Lizzard Leaf** (Fleuroselect Novelty) **Foliage Celosia**



ALL-AMERICA SELECTIONS

- Angelonia Serenita Pink
- 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
- Basil Sweet Dani Lemon
- Dill Fernleaf
- 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
- Petunia Daddy Orchid
- Double Petunia Pirouette Purple
- 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

- Eggplant Patio Baby
- New** Pepper Pot-a-peño

FLEUROSELECT GOLD MEDAL

- Alyssum Snow Crystals
- Armeria Ballerina Red
- Armeria Ballerina White
- Celosia Bombay Purple
- 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
- Penstemon Carillo Red
- Spreading Petunia Tidal Wave Red Velour
- Spreading Petunia Wave Lavender
- Phlox Grammy Pink & White
- Viola Sorbet XP Delft Blue
- Zinnia Double Zahara Fire
- Zinnia Zahara Sunburst



Tidal Wave Red Velour Spreading Petunia *All-America Selections National Winner, Fleuroselect Gold Medal, Fleuroselect Novelty* US 7,642,436; EU PAF

**MEDAL OF EXCELLENCE
INDUSTRY'S CHOICE**

- Calibrachoa Kabloom Yellow
- Echinacea Artisan Collection Red Ombre
- Echinacea Artisan Collection Soft Orange
- Impatiens Beacon Bright Red
- Impatiens Beacon Coral
- Impatiens Beacon Orange
- Impatiens Beacon Red White Mixture
- Impatiens Beacon Salmon
- Impatiens Beacon Violet Shades
- Impatiens Beacon White
- Vinca Tattoo Black Cherry
- Vinca Tattoo Papaya
- Vinca Tattoo Raspberry
- Vinca Tattoo Tangerine

**MEDAL OF EXCELLENCE
READER'S CHOICE**

- Calibrachoa Kabloom Yellow
- Impatiens Beacon Bright Red
- Impatiens Beacon Coral
- Impatiens Beacon Orange
- Impatiens Beacon Red White Mixture
- Impatiens Beacon Salmon
- Impatiens Beacon Violet Shades
- Impatiens Beacon White

**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
PERFORMING VARIETY**

- Echinacea Cheyenne Spirit

FLEUROSELECT QUALITY MARK

- Alyssum Easter Bonnet Violet
- Aquilegia Clementine Mixture
- Aquilegia Winky Single Red-White
- Aquilegia Winky Single Rose-Rose
- Asclepias Silky Gold
- Bellis Bellissima Rose
- Bellis Bellissima Rose Bicolor
- Bellis Bellissima White
- Coreopsis Sunfire
- Cosmos Sonata Carmine
- Cosmos Sonata Pink
- Cosmos Sonata Pink Blush
- Dahlia Figaro Orange Shades
- Dahlia Figaro Red Shades
- Dahlia Figaro Violet Shades
- Dahlia Figaro Yellow Shades
- Dianthus Ideal Select Rose
- Gomphrena QIS Carmine
- Lavandula Ellagance Ice
- Lobelia Regatta Blue Splash
- Lobelia Regatta Rose
- Lobelia Riviera Midnight Blue
- Lobelia Riviera Rose
- Lobelia Riviera Sky Blue
- French Marigold Gate Orange
- Ornamental Pepper Black Pearl
- Spreading Petunia Tidal Wave Silver
- Phlox Promise Peach
- Phlox Promise Rose
- Phlox Promise White
- Salvia Patio Deep Blue
- Salvia Patio Sky Blue
- Scabiosa Pink Diamonds
- Vinca Pacifica XP Burgundy Halo

FLEUROSELECT NOVELTY

- Alyssum Clear Crystal White
- Arabis Barranca Pink
- Celosia Foliage, Sol Gekko Green
- Celosia Foliage, Sol Lizzard Leaf
- Coreopsis Double the Sun
- Cosmos Antiquity
- Digitalis Dalmatian Purple
- Lavandula Bandera Deep Purple
- Lavandula Bandera Deep Rose
- Leucantherum Madonna
- Lobelia Regatta Rose
- French Marigold Bonanza Deep Orange
- Ornamental Pepper Black Pearl
- Spreading Petunia Tidal Wave Red Velour
- Salvia New Dimension Rose
- Salvia Salvatore Blue
- Vinca Pacifica XP Burgundy Halo
- Zinnia Double Zahara Bright Orange
- Zinnia Double Zahara Cherry
- Zinnia Double Zahara Fire
- Zinnia Double Zahara White
- Zinnia Zahara Starlight Rose
- Zinnia Zahara Sunburst

**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



Beacon White Impatiens (L) • Beacon Bright Red Impatiens (M) • Beacon Salmon Impatiens (R)
Medal of Excellence Industry's Choice, Medal of Excellence Reader's Choice US PAF; US 10,285,362; EU PAF; PCT

U.S. UTILITY PATENTS

US 10,212,908

Vinca Titan™ Dark Red
Vinca Titan™ Really Red

US 10,285,362

Impatiens Beacon® Bright Red
Impatiens Beacon® Coral
Impatiens Beacon® Orange
Impatiens Beacon® Rose
Impatiens Beacon® Salmon
Impatiens Beacon® Violet Shades
Impatiens Beacon® White
Impatiens Beacon® Formula Mixture
Impatiens Beacon® Red White Mixture

US 10,631,515

Pentas Glitterati™ Purple Star
Pentas Glitterati™ Red Star

US 10,750,692

French Marigold Fireball
French Marigold Strawberry Blonde

US 7,087,819

Ornamental Pepper Chilly Chili
Ornamental Pepper Medusa

US 7,393,995

Ornamental Pepper Chilly Chili
Ornamental Pepper Medusa
Ornamental Pepper Sangria

US 7,642,436

Fuseables® Petunia Blueberry Lime Jam
Petunia Debonair™ Black Cherry
Petunia Debonair™ Dusty Rose
Petunia Debonair™ Lime Green
Petunia Sophistica® Antique Shades
Petunia Sophistica® Blackberry
Petunia Sophistica® Lime Bicolor
Petunia Sophistica® Lime Green
Petunia Sophistica® Twilight
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

US 7,696,416

Ornamental Pepper Sangria

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 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™ 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

Impatiens Beacon® Bright Red
Impatiens Beacon® Coral
Impatiens Beacon® Orange
Impatiens Beacon® Rose
Impatiens Beacon® Salmon
Impatiens Beacon® Violet Shades
Impatiens Beacon® White
Impatiens Beacon® Formula Mixture
Impatiens Beacon® Red White Mixture
Vinca Valiant™ Apricot
Vinca Valiant™ Magenta

U.S. PLANT PATENTS

PP 26,516

Calibrachoa Kabloom™ Yellow

U.S. PLANT VARIETY PROTECTIONS

Celosia Kosmo Pink - 200400022
Coleus, Premium Shade Kong® Red - 200500015
Coleus, Premium Shade Kong® Rose - 200500017
Coleus, Premium Shade Kong® Salmon Pink - 200900035
Coreopsis SunKiss - 201700014
Cuphea Pink Shimmer - 201800290
Erysimum Citrona® Orange - 200600167
Erysimum Citrona® Yellow - 200600168
French Marigold Bonanza™ Bolero - 201800074
French Marigold Bonanza™ Deep Orange - 201800517
French Marigold Flamenco - 202000034
Helenium Dakota Gold - 200600009
Matthiola Katz Ruby - 201200438
Myosotis Mon Amie Blue - 200800070
Ornamental Oregano Kirigami - 201800057
Ornamental Pepper Black Pearl - 200500020
Ornamental Pepper Medusa - 200000140
Salvia interspecific Big Blue - 201700218
Vinca Mediterranean XP Dark Red - 200900043
Vinca Mediterranean XP Hot Rose - 200900084
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 Really Red - 200600190
Vinca Pacifica XP Rose Halo - 200500218
Vinca Tattoo™ Black Cherry - 201800427
Vinca Tattoo™ Papaya - 201800424
Vinca Tattoo™ Rasperry - 201800426
Vinca Tattoo™ Tangerine - 201800425
Vinca Tattoo™ American Pie Mixture - 200600190
Zinnia Double Zahara™ Cherry - 201600027
Zinnia Double Zahara™ Fire - 201600032
Zinnia Double Zahara™ Raspberry Ripple - 201800173
Zinnia Double Zahara™ Salmon - 201900097
Zinnia Zahara® Cherry - 201600029
Zinnia Zahara® Fire - 201000090
Zinnia Zahara® Rasperry - 201500215
Zinnia Zahara® Red - 201600030
Zinnia Zahara® White - 201400297
Zinnia Zahara® Yellow - 201500214

U.S. PLANT VARIETY PROTECTIONS APPLIED FOR

Vinca Tattoo™ Blueberry
Vinca Tattoo™ American Pie Mixture
Zinnia Double Zahara™ Yellow

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
Heuchera Melting Fire - 20557
Lavandula Lavance Deep Purple - 48822

EUROPEAN COMMUNITY PLANT BREEDER'S RIGHTS APPLIED FOR

Lavandula Avignon Early Blue
Lavandula Blue Spear

EUROPEAN COMMUNITY UTILITY PATENTS APPLIED FOR

French Marigold Fireball
French Marigold Strawberry Blonde
Fuseables® Petunia Blueberry Lime Jam
Impatiens Beacon® Bright Red
Impatiens Beacon® Coral
Impatiens Beacon® Orange
Impatiens Beacon® Rose
Impatiens Beacon® Salmon
Impatiens Beacon® Violet Shades
Impatiens Beacon® White
Impatiens Beacon® Formula Mixture
Impatiens Beacon® Red White Mixture
Petunia Debonair™ Black Cherry
Petunia Debonair™ Dusty Rose
Petunia Debonair™ Lime Green
Petunia Sophistica® Antique Shades
Petunia Sophistica® Blackberry
Petunia Sophistica® Lime Bicolor
Petunia Sophistica® Lime Green
Petunia Sophistica® Twilight
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® Orange
Impatiens Beacon® Rose
Impatiens Beacon® Salmon
Impatiens Beacon® Violet Shades
Impatiens Beacon® White
Impatiens Beacon® Formula Mixture
Impatiens Beacon® Red White Mixture

INTERNATIONAL (PCT)

Impatiens Beacon® Bright Red
Impatiens Beacon® Coral
Impatiens Beacon® Orange
Impatiens Beacon® Rose
Impatiens Beacon® Salmon
Impatiens Beacon® Violet Shades
Impatiens Beacon® White
Impatiens Beacon® Formula Mixture
Impatiens Beacon® Red White Mixture

ACCEPTANCE OF TERMS

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

PRICING

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

TERMS

All payments must be received before Goods are shipped unless otherwise agreed to in writing by Seller. Payment terms can be seen on your Order Confirmation or at the appropriate Terms & Conditions page at panamseed.com for North American, European and International credit-approved customers. A 2% per month finance charge (24% annual rate) will be added to all past due balances at the end of each month. Seller has no obligation to ship any Goods until payment in full is received. 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 RIGHT TO FILE A CLAIM IS LOST AND PURCHASER WILL STILL BE LIABLE FOR THE MATERIAL AND THE FREIGHT. (b) When Purchaser receives shipment, it shall immediately: 1) count all cartons; 2) inspect all cartons for external damage; 3) check for open or resealed cartons; 4) note any damages, shortages, open or resealed cartons on the delivery receipt; the carrier's representative must also

sign the receipt; and 5) open all boxes immediately and inspect for damage, including, but not limited to, material shortages. PURCHASER MUST NOTIFY SELLER WITHIN TWO (2) BUSINESS DAYS IF A SHIPMENT IS DAMAGED by calling its Customer Service Representative to report the damage and receive details on what is needed to file a claim. The Goods shall be deemed accepted by the Purchaser on the earlier of (a) notice of acceptance to Seller, or (b) ten (10) days after delivery. Any claims for shortage, non-delivery, damage or defect which would reasonably be discoverable in the course of such inspection shall be waived unless Purchaser notifies Seller in writing within ten (10) days after delivery of the goods to which the claim relates.

PACKAGING FEES

All orders will be filled in bulk and/or predetermined packet sizes unless special packaging instructions are given. 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 shipment. Seller will not be liable for any delay in performing or for partial or complete failure to perform hereunder if such delay or failure is due to fire, explosion, flood, Act of God, force majeure, accident, war, intervention of governmental authorities, strikes, labor disputes, material shortages, transportation delays, any act or omission of Purchaser, its agents or employees or any party retained by, through or under the control of Purchaser, or any other cause similar or dissimilar which is beyond Seller's reasonable control.

INSURANCE

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

SHIPPING

Any shipment outside of 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 ARBITRATION RULES OF THE AMERICAN ARBITRATION ASSOCIATION, SAID ARBITRATION TO BE VENUED IN COOK OR DUPAGE COUNTIES, ILLINOIS.

GOVERNING LAW, JURISDICTION & VENUE

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

INDEMNITY

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

TRADEMARKS

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

SALE LIMITATIONS

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

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 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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MEET OUR COVER STARS!

- FRONT** Beacon Red and White Mix Impatiens
 Sweet Magenta Bicolor Dianthus
 NEW E3 Easy Wave Sky Blue Petunia
 NEW ColorBloom Bicolor Red White Gerbera
 NEW Candy Cane Chocolate Cherry Pepper
 Artisan Collection Soft Orange Echinacea
- BACK** NEW Potomac Dark Pink Snapdragon
 Marvel II Mix African Marigold

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 254.

- EU 10351, etc.: European Community Plant Variety Rights
- EU PBRF: 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 PVPF: U.S. Plant Variety Protections Applied For

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