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
Quilota, 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

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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, BloomStudios™. 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.

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
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!
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!

<table>
<thead>
<tr>
<th>Series</th>
<th>Height</th>
<th>Spread</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shock Wave® Series</td>
<td>7-10 in. (18-25 cm)</td>
<td>20-30 in. (51-76 cm)</td>
</tr>
<tr>
<td>NEW E3 Easy Wave™ Series</td>
<td>6-12 in. (15-30 cm)</td>
<td>25-32 in. (64-81 cm)</td>
</tr>
<tr>
<td>Easy Wave® Series</td>
<td>6-12 in. (15-30 cm)</td>
<td>30-39 in. (76-99 cm)</td>
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<tr>
<td>Tidal Wave® Series</td>
<td>16-22 in. (41-56 cm)</td>
<td>30-60 in. (76-152 cm)</td>
</tr>
<tr>
<td>Original Wave® Series</td>
<td>5-7 in. (13-18 cm)</td>
<td>36-48 in. (91-122 cm)</td>
</tr>
</tbody>
</table>
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.

It’s Early, it’s Efficient, it’s the Evolution of Easy Wave… it’s E3!

**SPREADING PETUNIA**
*Petunia x hybrida*

**E3 Easy Wave™ Series F1**

- **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** 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.
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.

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

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

**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.
EASY WAVE / ANNUALS

Starfish Mixture
Formula Mixture
Beachcomber Mixture
Great Lakes Mixture
The Flag Mixture
South Beach Mixture
Opposites Attract Mixture
Plum Pudding Mixture
Rose Fusion

White
Silver
Yellow
Pink
Coral Reef
Pink Passion

Violet
Plum Vein
Rose Fusion
Neon Rose
Lavender Sky Blue
Blue

Rosy Dawn
Red
Berry Velour
Burgundy Velour
Red Velour
Burgundy Star

Find product & growing info at panamseed.com / EASY WAVE PETUNIA
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 bicover 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.
Use Shock Wave Petunia in awe-inspiring Fuseables® Combos like this!

Fuseables Healing Waters, see page 234.

Purple Tie Dye

Spark Mixture Improved

Volt Mixture Improved

NEW White
NEW Pink Vein
NEW Pink Shades
NEW Rose
NEW Denim

NEW Purple Tie Dye
NEW Coral Crush
NEW Red
NEW Deep Purple

Find product & growing info at panamseed.com / SHOCK WAVE PETUNIA 11
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-spreadening Wave varieties for every sunny setting: gardens, baskets, large colour bowls and more.

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.
- All-America Selections National Winner, Fleuroselect Gold Medal.

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.
- All-America Selections Classic.

Pink
- Timing is similar to Purple Classic.

Purple
- Begins to flower at 11 hours, and is 12 to 14 days earlier than Purple Classic.
- Blooms about 1 week later than Lavender, Misty Lilac and Rose. All-America Selections Classic.
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

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.

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 Gold Medal, Fleuroselect Novelty US 7,642,436, EU PAF

Hot Pink

Cherry
All-America Selections National Winner, Fleuroselect Quality Mark

Purple

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

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 hardness - 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 shows 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
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.
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.

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.
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.

Mixture Lavender, Pink, Purple, Raspberry, Sky Blue, White.

Serenita Rose in a 4.5-in./11-cm pot
Serenita Rose in a 6-in./15-cm pot

Sky Blue
Purple
Raspberry
Lavender

White
Pink
All-America Selections National Winner

Mixtures

Raspberry
Rose

Find product & growing info at panamseed.com / ANGELONIA
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 ageratums.
• 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.

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

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

**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 **Snapdragon**.  

**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.
ASTER  
Callistephus chinesis

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.

Blutopia®, Snowtopia® and Pinktopia

- F1 BACOPA  
Sutera cordata

• 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.

Use Blutopia Bacopa in stunning Fuseables Combos like this!

Fuseables Healing Waters, see page 234.

Pot 'N Patio Mixture Aster

Pot 'N Patio Pink Aster

Pot 'N Patio Scarlet Aster

Pot 'N Patio White Aster

Pot 'N Patio Blue Aster

Gryphon Begonia

Snowtopia Bacopa

Blutopia Bacopa

Pinktopia Bacopa
**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*

---

Find product & growing info at panamseed.com  /  BEGONIA  23
MEGAsize + MEGAcolour = 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.

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

Rose Green Leaf

Red Green Leaf

MEGAsize + MEGAcolour = MEGAsales!

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Rose Green Leaf

Red Green Leaf
Pink Bronze Leaf Improved

Rose Bronze Leaf

Rose Green Leaf

Pink Bronze Leaf Improved

Pink Green Leaf

Pink Green Leaf

Red Green Leaf

Red Bronze Leaf

ANNUALS

Find product & growing info at panamseed.com / BEGONIA 25
Big, bold begonias

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

TUBEROUS BEGONIA
Begonia x tuberosa
AmeriHybrid® Picotee Series F1

- Height: 14 to 20 in./36 to 51 cm
- Spread: 10 to 12 in./25 to 30 cm
- Flower size: 4 to 8 in./10 to 20 cm
- Seed supplied as: Pelleted
- Plug crop time: 7 to 8 weeks
- Transplant to finish: 11 to 15 weeks

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

- 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.
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.
**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® 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: 12 to 16 in./30 to 41 cm
- Flower size: 3 to 6 in./8 to 15 cm
- Seed supplied as: Pelleted
- Plug crop time: 7 to 8 weeks
- Transplant to finish: 9 to 13 weeks

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

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

Create colourful Fuseables Combos like this with Kabloom Calibrachoa!

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.
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 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.

**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.
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, bicolour foliage all season.  
• Versatile variety thrives in sun and shade.  
• Deep red leaves with golden-green edge.  
• Late flowering.

Dark Chocolate

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

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

*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.

**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 bicolour 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.
ANNUALS / PREMIUM SHADE COLEUS

Kong® Series
Solenostemon scutellarioides

**Kong Red** US PVP 200500015
**Kong Salmon Pink** US PVP 200900035
**Kong Lime Sprite**
**Kong Jr. Green Halo**
**Kong Jr. Lime Vein**
**Kong Jr. Rose**
**Kong Jr. Scarlet**

**PREMIUM SHADE COLEUS**

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

**Kong Jr.™ Series**

**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.
- Also works in indoor plant programs.
- 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.

- 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.

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- 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.

ANNUALS / PREMIUM SHADE COLEUS

Kong® Series
Solenostemon scutellarioides

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**Kong Salmon Pink** US PVP 200900035
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**Kong Jr. Lime Vein**
**Kong Jr. Rose**
**Kong Jr. Scarlet**

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**Empire Mixture**
Contains all 6 colours.
### Wizard Select Mixture Improved Coleus

**New**

**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.

- **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

**Solenostemon scutellarioides**

- **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**
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.**

**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 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.**
CYCLAMEN Cyclamen persicum

Dreamscape™ Series F1

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.
**Jolt Purple**

**Cherry**

**Pink Magic**

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**Jolt™ Series F₁**

_Dianthus barbatus interspecific_

- **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

- **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.

- **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.**
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.

**Dynasty Orchid** RHS Award of Garden Merit

**Dynasty Red**

**Dynasty Pink Magic**

**Dynasty Purple**

**Dynasty Rose Lace**

**Dynasty Mixture**

---

Find product & growing info at panamseed.com / DIANTHUS
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 bicolour 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.
DIANTHUS

*Dianthus chinensis x barbatus*

**Floral Lace™ Series F1**

*PRO LANDSCAPE PERFORMER*

- 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.
DAHLIA

Figaro™ Series

DAHLIA
Dahlia x hybrida

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.

DICHONDRA
Dichondra argentea

Silver Falls

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

Seed supplied as: Raw
Plug crop time: 5 weeks
Transplant to finish: 6 to 7 weeks

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

Emerald Falls

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

Seed supplied as: Multi-Seed Pellets
Plug crop time: 5 to 6 weeks
Transplant to finish: 7 to 8 weeks

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

DIGITALIS
See Perennials, page 139.

Dichondra Emerald Falls

Make a Plug & Play Combo they’ll fall for with Silver Falls Dichondra!
**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** Series

**Citrona Yellow Erysimum**
US PVP 200600168

**ERYSIMUM**
Erysimum species

**Glamer**

- Height: 10 to 12 in./25 to 30 cm
- Spread: 10 to 12 in./25 to 30 cm
- Seed supplied as: Raw
- Plug crop time: 4 weeks
- Transplant to finish: 7 to 9 weeks

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

**EUPHORBIA**
Euphorbia graminea

**Glamour**

- 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 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.

---

**Variety/Exposure**

<table>
<thead>
<tr>
<th>Variety/Exposure</th>
<th>Colour group</th>
<th>Height</th>
<th>Spread</th>
<th>USDA Zones</th>
<th>Containers</th>
<th>Plug crop time (weeks)</th>
<th>Transplant to finish (weeks)</th>
<th>Features</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LOW HABIT (2 to 8 in./5 to 20 cm)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Isolepis Live Wire 🌿</td>
<td>Green</td>
<td>6-8 in./15-20 cm</td>
<td>18-20 in./46-51 cm</td>
<td>8-10</td>
<td>306 pack, 4 in./10 cm, 6 in./15 cm*, Gallon</td>
<td>5</td>
<td>6-7</td>
<td>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.</td>
</tr>
<tr>
<td>Koeleria Coolio 🌿</td>
<td>Green</td>
<td>8-10 in./20-24 cm</td>
<td>8-10 in./20-24 cm</td>
<td>6-8</td>
<td>4 in./10 cm, 6 in./15 cm*, Gallon</td>
<td>6-7</td>
<td>6-7</td>
<td>Upright, blue-green grass is ideal for dry locations. Grows to 20 in./51 cm after the first season.</td>
</tr>
<tr>
<td>Carex Amazon Mist 🌿</td>
<td>Green</td>
<td>6-12 in./15-30 cm</td>
<td>14 in./36 cm</td>
<td>6-10</td>
<td>4 in./10 cm, 6 in./15 cm*, Gallon</td>
<td>6-7</td>
<td>9-10</td>
<td>Variegated light/medium green grass has twisting tips and an arching habit.</td>
</tr>
<tr>
<td>Carex Bronco 🌿</td>
<td>Brown</td>
<td>6-12 in./15-30 cm</td>
<td>14 in./36 cm</td>
<td>6-10</td>
<td>4 in./10 cm, 6 in./15 cm*, Gallon</td>
<td>6-7</td>
<td>8-9</td>
<td>Bronze-brown variety has an arching habit.</td>
</tr>
</tbody>
</table>

*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!

---

#### Variety/Exposure

<table>
<thead>
<tr>
<th>Variety/Exposure</th>
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<th>Height</th>
<th>USDA Zones</th>
<th>Containers</th>
<th>Plug crop time (weeks)</th>
<th>Transplant to finish (weeks)</th>
<th>Features</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LOW HABIT (2 to 8 in./5 to 20 cm)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Luzula Luzula</td>
<td>L. nivea</td>
<td>Green</td>
<td>6-12 in./15-30 cm</td>
<td>18 in./46 cm</td>
<td>4-9</td>
<td>4 in./10 cm, 6 in./15 cm*, Gallon</td>
<td>4-7</td>
</tr>
<tr>
<td><strong>MEDIUM HABIT (8 to 18 in./20 to 46 cm)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Juncus Starhead</td>
<td>J. ensifolius</td>
<td>Green</td>
<td>8-10 in./20-25 cm</td>
<td>8-10 in./20-25 cm</td>
<td>4-10</td>
<td>4 in./10 cm, 6 in./15 cm*, Gallon</td>
<td>6-7</td>
</tr>
<tr>
<td>Anemanthele Sirocco</td>
<td>A. lessoniana</td>
<td>Green/Brown</td>
<td>12-14 in./30-36 cm</td>
<td>22-24 in./56-61 cm</td>
<td>7-10</td>
<td>4 in./10 cm, 6 in./15 cm*, Gallon</td>
<td>5-6</td>
</tr>
<tr>
<td>Festuca Festina</td>
<td>F. cinerea (F. glauca)</td>
<td>Green</td>
<td>12-18 in./30-46 cm</td>
<td>10-15 in./25-38 cm</td>
<td>4-10</td>
<td>4 in./10 cm, 6 in./15 cm*, Gallon</td>
<td>6-7</td>
</tr>
</tbody>
</table>

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

ColorGrass ornamental grasses bring patios and landscapes to life. They are available in a variety of colors and heights, making them suitable for different landscapes and design needs. Some of the popular species include Juncus Blue Dart, Juncus Twister, and Stipa Pony Tails.

### Variety/Exposure, 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)

<table>
<thead>
<tr>
<th>Variety/Exposure</th>
<th>Colour group</th>
<th>Height</th>
<th>Spread</th>
<th>USDA Zones</th>
<th>Containers</th>
<th>Plug crop time (weeks)</th>
<th>Transplant to finish (weeks)</th>
<th>Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Juncus Blue Dart</td>
<td>Green</td>
<td>14-16 in./36-41 cm</td>
<td>10-12 in./25-30 cm</td>
<td>4-10</td>
<td>4 in./10 cm, 6 in./15 cm*, Gallon</td>
<td>6-7</td>
<td>7-8</td>
<td>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.</td>
</tr>
<tr>
<td>Juncus Twister</td>
<td>Green</td>
<td>12-14 in./30-36 cm</td>
<td>12-14 in./30-36 cm</td>
<td>5-9</td>
<td>4 in./10 cm, 6 in./15 cm*, Gallon</td>
<td>7-8</td>
<td>6-7</td>
<td>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.</td>
</tr>
</tbody>
</table>

#### TALL HABIT (18 in./46 cm and taller)

<table>
<thead>
<tr>
<th>Variety/Exposure</th>
<th>Colour group</th>
<th>Height</th>
<th>Spread</th>
<th>USDA Zones</th>
<th>Containers</th>
<th>Plug crop time (weeks)</th>
<th>Transplant to finish (weeks)</th>
<th>Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stipa Pony Tails</td>
<td>Green</td>
<td>16-24 in./41-61 cm</td>
<td>24 in./61 cm</td>
<td>6-10</td>
<td>4 in./10 cm, 6 in./15 cm*, Gallon</td>
<td>5-6</td>
<td>7-10</td>
<td>Upright grass has fine, needlelike green foliage, with silky green flowers in July that mature to golden blonde.</td>
</tr>
</tbody>
</table>

*3 plants per pot
### Variety/Exposure

<table>
<thead>
<tr>
<th>Variety/Exposure</th>
<th>Colour group</th>
<th>Height Spread</th>
<th>USDA Zones</th>
<th>Containers</th>
<th>Plug crop time (weeks)</th>
<th>Transplant to finish (weeks)</th>
<th>Features</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TALL HABIT (18 in./46 cm and taller)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carex Phoenix Green C. comans (Leatherleaf Sedge)</td>
<td>Green</td>
<td>20-24 in./51-61 cm</td>
<td>16-20 in./41-51 cm</td>
<td>6-10</td>
<td>4 in./10 cm, 6 in./15 cm*, Gallon</td>
<td>5-7</td>
<td>6-7</td>
</tr>
<tr>
<td>Carex Red Rooster C. buchananii</td>
<td>Red</td>
<td>20-30 in./51-76 cm</td>
<td>12 in./30 cm</td>
<td>6-9</td>
<td>4 in./10 cm, 6 in./15 cm*, Gallon</td>
<td>6-7</td>
<td>8-9</td>
</tr>
<tr>
<td>Juncus Blue Arrows J. inflexus</td>
<td>Green</td>
<td>36 in./91 cm</td>
<td>12 in./30 cm</td>
<td>5-9</td>
<td>4 in./10 cm, 6 in./15 cm*, Gallon</td>
<td>6-7</td>
<td>6-7</td>
</tr>
<tr>
<td>Juncus Javelin J. pallidus</td>
<td>Green</td>
<td>48 in./122 cm</td>
<td>18-20 in./46-51 cm</td>
<td>8-10</td>
<td>4 in./10 cm, 6 in./15 cm*, Gallon</td>
<td>5-6</td>
<td>5-6</td>
</tr>
</tbody>
</table>
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.
**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*

Also see **Cut Flowers**, page 184.
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.

Helichrysum microphyllum (Plectostachys serphyllifolia)
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
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**

Iresine herbstii

**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 hybrid*

**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.

**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.
Beacon Series

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 Elfín, Beacon impatiens is easy to incorporate into production planning.
• Fast-filling, season-long colour for gardens and landscapes.

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

**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**

Find product & growing info at panamseed.com / IMPATIENS 55
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 = 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 Rose

XP Formula Mixture

XP Clear Mixture

XP Hot Mixture

Super Elfin XP Series

ANNUALS / SUPER ELFIN XP

Request your Product Information Guide for full culture details
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® 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.

**IMPATIENS continued**
**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.
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.

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**Riviera White** Fleuroselect Novelty

**Midnight Blue** Fleuroselect Quality Mark

**Sky Blue** Fleuroselect Quality Mark

**Marine Blue**

**Blue Eyes**

**Rose** Fleuroselect Quality Mark

**Lilac**

**Blue Splash**

**White**

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ANNUALS / RIVIERA

Request your Product Information Guide for full culture details

PanAmerican Seed.
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.
Marvel II Gold, Orange and Yellow

Marvel II™ Series F1

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.
**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.

**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.
**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**

**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:** 3 to 4 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:** 2.5 in./6 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.

**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.
HEAT-TOLERANT EXTRA-DWARF CRESTED FRENCH MARIGOLD

Hot Pak™ Series

**PRO LANDSCAPE PERFORMER**

**Height:** 6 to 7 in./15 to 18 cm  
**Spread:** 6 to 8 in./15 to 20 cm  
**Seed supplied as:**  
Coated, De-tailed  
**Plug crop time:** 3 weeks  
**Transplant to finish:** 3 to 4 weeks

- Extend the marigold season with the first French marigold series bred to bloom all 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.
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.
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.

Sundrops Mixture

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.

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.
• 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, moulded, slightly
  trailing plant has a tighter
  and fuller habit than standard
  vegetative varieties, so it
  holds better in shipping
  and on the retail bench.
• Heat and drought tolerant,
  with an eye-catching display of
  texture from Spring until Autumn.
• Also perfect for hanging
  baskets, or in borders and rock
  gardens; can also be dried for use
  in dried flower arrangements.
• Higher light and cooler
  night temperatures accent
  the purple bract colour.
ORNAMENTAL MILLET
Pennisetum glaucum

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

Copper Prince F1
Height: 24 to 36 in./61 to 91 cm
Spread: 18 to 24 in./46 to 61 cm
Seed supplied as: Raw
Plug crop time: 2 to 3 weeks
Transplant to finish: 4 to 5 weeks (green)

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

Jade Princess F1
Height: 24 to 30 in./61 to 76 cm
Spread: 18 to 24 in./46 to 61 cm
Seed supplied as: Raw
Plug crop time: 2 to 3 weeks
Transplant to finish: 4 to 5 weeks (green)

• Intense chartreuse foliage and rich brown, pollenless panicles have a controlled, mounded shape that is more compact than others in the assortment, so plants ship well.
• Economical grower option – seed can be direct-sown into finish containers, plants are well-suited to pot sizes up to gallons, and the crop finishes fast.
• Great tillering, leading to a bushy plant habit that’s perfect for large containers and landscapes.

NOTE: Jade Princess requires warmer temperatures (above 60°F/16°C) than other millets to perform well.

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.

**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

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.
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).
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.

**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.

ANNUALS / SPRING MATRIX

Request your Product Information Guide for full culture details
Clear Mixture  Daffodil Mixture  Blotch Mixture
Tricolor Mixture

Sangria  Blue Wing  Midnight Glow  Purple & White
White Lemon  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

Find product & growing info at panamseed.com / PANSY
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.
Panola® Yellow & Purple F<sub>1</sub>

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
PENTAS

Pentas lanceolata

Lucky Star® Series F1

Height: 12 to 16 in./30 to 41 cm
Spread: 12 to 14 in./30 to 36 cm
Seed supplied as: Pelleted
Plug crop time: 6 to 7 weeks
Transplant to finish: 7 to 8 weeks

• With the fastest follow-up blooming of any full colour series pentas on the market, Lucky Star maintains a consistent show of colour from retail through end-of-season.

• Follow-up blooms do not eclipse the prior flush, so plants stay compact, tight and ready for sale at retail with minimal work.

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

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.

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

Plug & Play Combo Star Bright, see page 244.

Lipstick
Violet
Deep Pink
Lavender
White
Dark Red
Pink

ANNUALS
LUCKY STAR / ANNUALS

Find product & growing info at panamseed.com / PENTAS 79
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.
NOTE: Fruit is hot.

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.
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.

Dreams Red Picotee, Rose Picotee and Burgundy Picotee Petunias
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.

**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® 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 Lime Bicolor, Antique Shades & Lime Green**

**Sophistica Lime Green**

**Sophistica Twilight**

**Sophistica Blackberry**

**Sophistica Antique Shades**

**Sophistica Blue Morn**

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

**Sophistica Black Cherry, US 7,642,436; EU PAF**

**Sophistica Blue Morn, US 7,642,436; EU PAF**

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

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

**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**

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

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.

Fuseables Pleasantly Blue, see page 233.
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**
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 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, shimmery colour in high light/warm night conditions.

Flag Mixture Midnight, Red, White.

Formula Mixture

7 to 9-day flowering window.
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**
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.

- **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.
Deep Rose
Simply Improved
White Improved
Yellow
Lilac
Pink
Sheer
Sugar
Spring
Summer
Rose Morn
Rose
Deep Rose
Red Morn
Red Picotee
Red
Burgundy Orchid
Burgundy Star
Plum
Plum Crazy
Orchid
Blue Vein
Sky Blue
Mid-Blue
Royal
Rose Star
Burgundy Star
Blue Star

Find product & growing info at panamseed.com / PETUNIA
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 bicolor picotee patterns.
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**

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

**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.

Plug & Play Combo Lemon Dream, see page 239.
Promise Mixture

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 bicolour blooms all season in mixed containers, gardens and planters.
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.

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.
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.

**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.
**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.

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**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.

**Southern Star White Ruellia**  
**Southern Star Pink Ruellia**  
**Southern Star Blue Ruellia**  
**Southern Star Pink Ruellia**  
**Toucan Scarlet Shades Purslane**  
**Toucan Fuchsia Purslane**
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.
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.

Happy Trails Pink

White

Yellow

Peppermint

Orange

Pink

Fuchsia

Deep Red

Rosita

Mixture

Find product & growing info at panamseed.com / PORTULACA 101
SALVIA INTERSPECIFIC
Salvia longispicata x farinacea

Big Blue

- 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

- 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.
**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.

**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.

**ANNUALS**
**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 bicolours in the series.

**Sunset** Retains its bright yellow colour in cool environments better than competing varieties.

Also available: **Mixture**

**Colors Available:***
- Burgundy Bicolor
- White
- Red Bicolor
- Pink
- Yellow
- Orange
- Red
- Purple
- Rose
- Coral Bicolor
- Appleblossom
- Plumblossom
- Burgundy
- Sunset

**PanAmerican Seed.**
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.

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**

**White** Yellow bee.

**Yellow**

May have pink buds and blush pink in lower light.

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.

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

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

Solstice Purple

Solstice Burgundy

Solstice Red

Solstice Mixture
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 bronze-green tone in full sun.

STATICE
See Limonium.

STIPA

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.
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-leaved 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 low water and soggy conditions.
- Excellent for mixed containers; also a long-lasting landscape option.

**Verde Series**
- **Height:** 72 to 96 in./183 to 244 cm
- **Seed supplied as:** Raw
- **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™**
- **Height:** 32 in./81 cm
- **Spread:** 24 in./61 cm
- **Seed supplied as:** Raw
- **Plug crop time:** 5 weeks
- **Transplant to finish:** 5 weeks

- 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.

**Susie White with Eye Thunbergia**

**Susie Yellow with Eye Thunbergia**

**Susie Orange with Eye Thunbergia**

**Susie Mixture Thunbergia**

**Matricaria**

**Thunbergia alata**
TORENIA  
*Torenia fournieri*

**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.
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

Santos Purple, page 157.
Robust and ready for anythingMother 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.

- 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.

**Titan Pure White**

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

**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
Valiant Apricot & Lilac

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.

*Mixed 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.
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!

Plug & Play Combo Ink’d, see page 245.
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
XP Magenta Halo
XP Cherry Red Halo
XP Raspberry
XP Burgundy
XP Burgundy Halo
XP Lilac
XP Deep Orchid
XP Orange
XP Dark Red
XP Really Red
XP Cranberry
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
- 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 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 Rose Halo**
- **XP Red** US PVP 200900081
- **Lilac**

Mediterranean XP Mixture

Request your Product Information Guide for full culture details.
**Quicktime™ Series F1**

*Viola cornuta*

**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  

- 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!

Find product & growing info at panamseed.com / **VIOLA** 117
Send the best-looking violas to retail
Grow, ship, sell and plant the best-looking violas for Spring and Autumn - Sorbet XP genetics deliver a uniform plant habit and the tightest bloom window.

Sorbet® XP Series F₁

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

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

XP Morfo  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.

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

Sorbet XP Delft Blue, Lemon Chiffon and XP Beaconsfield
ANNUALS / SORBET XP

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  XP Morpho  XP Raspberry  XP Purple Face

Autumn/warm temperature bloom colour

Spring/cool temperature bloom colour

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

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

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

**Lavender Pink**

**Violet Peak**

**Yellow Blue Jump Up**

**Lilac Ice**

**Icy Blue**

**Orchid Rose Beacon**

**Lavender Pink**

**Antique Shades**

**Fire**

**Ruby Gold Babyface**

**Midnight Glow**

**Black Delight**

**Lemon Chiffon**

**Carmine Rose**

**New Tiger Eye**

**Tiger Eye**

**New Tiger Eye**

**New Tiger Eye**
**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; stronger 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.
ANNUALS / ZAHARA

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

ZAHARA ZINNIA

Request your Product Information Guide for full culture details

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.

Sunburst Fleuroselect Gold Medal
Plug & Play Combo Yellow Tambourine, see page 246.

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

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 201600029

Raspberry US PVP 201500215

Red US PVP 201600030

Cherry US PVP 201600029

Mixture

Bonfire Mixture

Raspberry Lemonade Mixture
ANNUALS / DOUBLE ZAHARA

**ZINNIA**

**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.

**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.

**Double Zahara Yellow US PVPAF**

**Yellow US PVPAF**

**Salmon US PVP 201900087**

**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**

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

*Zinnia elegans*

(syn. *Zinnia violacea*)

**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).

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*ANNUALS / ZESTY*
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.

State Starbright Mixture Star Bright Mixture

- Star Orange
- Star Gold
- Star Orange
- Star White
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 Elagance 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

**AQUILEGIA**
A. × 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.

**Red Yellow**

**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.
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)

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 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)

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.
**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.

**ARUMIA**

Arumia saxatile

**AURINIA**

Aurinia saxatile  
**Gold Rush**

**Height:** 5 to 8 in./13 to 20 cm  
**Spread:** 5 to 8 in./13 to 20 cm  
**Flower size:** 0.5 to 3 in./1 to 8 cm  
**USDA Hardiness Zones:** 3a to 9a (-40 to 20°F/-40 to -7°C minimum temperatures)  
**Seed supplied as:** Raw  
**Plug crop time:** 6 to 7 weeks  
**Transplant to finish:** 26 to 32 weeks

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

**BELLIS**

Bellis perennis  
**Bellissima™ Series**

**Height:** 6 to 10 in./15 to 25 cm  
**Spread:** 5 to 8 in./13 to 20 cm  
**USDA Hardiness Zones:** 4a to 7b (-30 to 5°F/-34 to -15°C minimum temperatures)  
**Seed supplied as:** Pelleted  
**Plug crop time:** 5 weeks  
**Transplant to finish:** 8 to 14 weeks

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

**CAMPANULA**

Campanula carpatica  
**Rapido Series F1**

**Height:** 5 to 7 in./13 to 18 cm  
**Spread:** 5 to 8 in./13 to 20 cm  
**USDA Hardiness Zones:** 3a to 9b (-40 to 25°F/-40 to -4°C minimum temperatures)  
A First-Year-Flowering Perennial.

**Seed supplied as:** Pelleted  
**Plug crop time:** 7 to 10 weeks  
**Transplant to finish:** 9 to 12 weeks

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

**CAMPANULA** Also see page 161.
**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.

**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.
  - 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.

**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.

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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.
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: 16 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.

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: 6 to 7 weeks
Transplant to finish: 16 weeks
• True blue Delphinium has improved uniformity and colour, increased productivity and more stems per sq. ft./sq. m.

GERANIUM / 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!

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.

Peach
Rose
Crème
White
Purple
Dalmatian Mixture
DIANTHUS

Dianthus × 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

- **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!
- **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.
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.

ECHINACEA
Echinacea x hybrid

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.
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.
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.

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

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

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

White

Wild Berry All-America Selections National Winner  US 7,982,110; EU PBR 35233
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 long. Create more colourful landscapes and mixed containers with Mesa.

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.

Yellow

All-America Selections National Winner, Fleuroselect Gold Medal

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

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

Mesa Bright Bicolor adds colour and interest to perennial displays.

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

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

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

Mesa Bright Bicolor adds colour and interest to perennial displays.

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 long. Create more colourful landscapes and mixed containers with Mesa.

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

**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.

Pixie Splash Gypsophila

**Gypsophila cerastioides**

- 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

**Heuchera micrantha**

- **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.
- True tissue culture alternative.

Melting Fire Heuchera

**Heuchera x hybrida**

- **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.
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.
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

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 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.

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

Find product & growing info at panamseed.com / LAVANDULA 147
Use Blue Spear Lavandula to create unique Plug & Play Combos like this!

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).
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.

**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.

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.
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.
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:** 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:** 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!
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


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.
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).

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.
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.
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.

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.

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.
**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.

---

**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.
### 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)
- **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 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)
- **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)
- **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)
- **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)
- **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.

**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)
- **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.
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.
CELOSIA  🌾  🌾

**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.

**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.**

<table>
<thead>
<tr>
<th>Series</th>
<th>No. of Varieties</th>
<th>Recommend pot size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concertina Series</td>
<td>5 &amp; 1 mix</td>
<td>4-4.5 in./10-11 cm, Quart</td>
</tr>
<tr>
<td>Kosmo Series</td>
<td>6 &amp; 1 mix</td>
<td>4-4.5 in./10-11 cm, Quart</td>
</tr>
</tbody>
</table>
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.

<table>
<thead>
<tr>
<th>Series</th>
<th>No. of Varieties</th>
<th>Recommend pot size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Campanella</td>
<td>3</td>
<td>4-4.5 in./10-11 cm, Quart</td>
</tr>
</tbody>
</table>

Find product & growing info at panamseed.com / CAMPANULA 161
**ORNAMENTAL 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.

### Blaze

**Multicolor, Orange, Purple, Red, Yellow**

- 3-4 weeks to potting
- 12-13 weeks to sale
- 4.25 x 5 in./11-13 cm
- 0.5 x 1.5 in./1.5 x 4 cm
- 6 in./15 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 weeks to potting
- 7-13 weeks to Autumn finish
- 4-6 in./10-15 cm
- 2-2.5 in./5-6 cm
- 9-10 in./23-25 cm

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.

---

<table>
<thead>
<tr>
<th>Variety</th>
<th>Fruit colour</th>
<th>Plug crop time (weeks)</th>
<th>Potting to sale (weeks)</th>
<th>Pot size</th>
<th>Fruit size</th>
<th>Height</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acapulco™ Series</td>
<td>Multicolor, Orange, Purple, Red, Yellow</td>
<td>3-4</td>
<td>12-13</td>
<td>4.25 x 5 in./11-13 cm</td>
<td>0.5 x 1.5 in./1.5 x 4 cm</td>
<td>6 in./15 cm</td>
</tr>
<tr>
<td>Blaze</td>
<td>Yellow to red</td>
<td>4-5</td>
<td>7-13 for Autumn finish</td>
<td>Quart</td>
<td>0.75 x 2.25 in./2 x 6 cm</td>
<td>4-8 in./10-20 cm</td>
</tr>
<tr>
<td>Chilly Chili F1</td>
<td>Yellow-green to orange to dark red</td>
<td>4-5</td>
<td>7-13 for Autumn finish</td>
<td>4-6 in./10-15 cm</td>
<td>2-2.5 in./5-6 cm</td>
<td>9-10 in./23-25 cm</td>
</tr>
</tbody>
</table>
### Ornamental Peppers

<table>
<thead>
<tr>
<th>Variety</th>
<th>Fruit colour</th>
<th>Plug crop time (weeks)</th>
<th>Potting to sale (weeks)</th>
<th>Pot size</th>
<th>Fruit size</th>
<th>Height</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cupala</strong></td>
<td>Lime to red</td>
<td>3-4</td>
<td>11-12</td>
<td>4.5-6 in./10-12 cm</td>
<td>0.3 x 0.75 in./1 x 2.5 cm</td>
<td>4.5 in./12 cm</td>
</tr>
<tr>
<td><strong>Harlequin</strong></td>
<td>Multicolour</td>
<td>3-4</td>
<td>13-14</td>
<td>4.5-6 in./12-15 cm</td>
<td>0.5 x 0.75 in./1.5 x 2.5 cm</td>
<td>8 in./20 cm</td>
</tr>
<tr>
<td><strong>Hot Pops Series</strong></td>
<td>Purple, Yellow</td>
<td>4-5</td>
<td>7-13 for Autumn finish</td>
<td>Quart</td>
<td>0.4/1 cm round</td>
<td>4-5 in./10-13 cm</td>
</tr>
<tr>
<td><strong>Joker</strong></td>
<td>Red</td>
<td>3-4</td>
<td>11-12</td>
<td>2.75-4.5 in./7-12 cm</td>
<td>0.3 x 1.5 in./1 x 4 cm</td>
<td>4.5 in./12 cm</td>
</tr>
<tr>
<td><strong>Masquerade</strong></td>
<td>Purple and orange to red</td>
<td>4-5</td>
<td>7-12 for Autumn finish</td>
<td>Quart, 4-8 in./10-20 cm</td>
<td>0.3 x 1.5 in./1 x 4 cm</td>
<td>10-12 in./25-30 cm</td>
</tr>
</tbody>
</table>

**SALES PERIOD: JULY TO OCTOBER**

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.

Tapered fruit in multicolours - appear purple and orange, then mature to red. Good for use in containers and gardens.

**NOTE:** Fruit is hot.
**Ornamental Peppers**

<table>
<thead>
<tr>
<th>Variety</th>
<th>Fruit colour</th>
<th>Plug crop time (weeks)</th>
<th>Potting to sale (weeks)</th>
<th>Pot size</th>
<th>Fruit size</th>
<th>Height</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Wicked</strong></td>
<td>Purple to red</td>
<td>4-5</td>
<td>7-13 for Autumn finish</td>
<td>Quart</td>
<td>1 x 2.75 in./3 x 7 cm</td>
<td>6-8 in./15-20 cm</td>
</tr>
</tbody>
</table>

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   |

SALES PERIOD: JULY TO OCTOBER
**Oriental Peppers**

<table>
<thead>
<tr>
<th>Variety</th>
<th>Fruit colour</th>
<th>Plug crop time (weeks)</th>
<th>Potting to sale (weeks)</th>
<th>Pot size</th>
<th>Fruit size</th>
<th>Height</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SALES PERIOD: JULY TO OCTOBER</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Samba</td>
<td>Dark Orange, Red, Yellow, Mixture</td>
<td>3-4</td>
<td>14-15</td>
<td>4.5 in./10-13 cm</td>
<td>0.75 x 1.5 in./2.5 x 4 cm</td>
<td>6 in./15 cm</td>
</tr>
<tr>
<td>Santos Orange</td>
<td>Orange</td>
<td>3-4</td>
<td>12-13</td>
<td>4-4.5 in./10-12 cm</td>
<td>0.3 x 2 in./1 x 5 cm</td>
<td>6 in./15 cm</td>
</tr>
<tr>
<td>Medusa</td>
<td>Ivory to yellow to orange to bright red</td>
<td>4-5</td>
<td>7-13 for Autumn finish</td>
<td>4 in./10 cm</td>
<td>2-2.5 in./5-6 cm</td>
<td>6-8 in./15-20 cm</td>
</tr>
</tbody>
</table>

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.

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

**Plug & Play Combo Firelighter, see page 247.**

---

PanAmerican Seed.

Find product & growing info at panamseed.com / ORNAMENTAL PEPPER 165
**Variety Colour Potting to sale (weeks) Pot size Height**

<table>
<thead>
<tr>
<th>Variety</th>
<th>Colour</th>
<th>Potting to sale (weeks)</th>
<th>Pot size</th>
<th>Height</th>
</tr>
</thead>
<tbody>
<tr>
<td>Princess Series</td>
<td>Deep Blue, White</td>
<td>10-12</td>
<td>4.5 in./10-13 cm</td>
<td>4.5-6 in./12-15 cm</td>
</tr>
<tr>
<td>Royal Dane Series</td>
<td>Deep Blue, Deep Rose, White</td>
<td>10-12</td>
<td>2.25-5 in./6-13 cm</td>
<td>4.5-6 in./12-15 cm</td>
</tr>
</tbody>
</table>

**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.

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

**Deep Rose with Light 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.
Revolution™ Series F1

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

Seed supplied as: Coated
Plug crop time: 6 to 7 weeks
Transplant to finish: 8 to 10 weeks

• When it comes to uniformity of flowering window across a complete colour range, Revolution is the leading standard-size pot gerbera.
• Industry-leading seed quality.
• Better second flush of flowers than the competition assures much longer bloom time for the consumer.
• Best for 5-in./13-cm pots.

Bicolor Red Lemon A unique bicolour in gerberas.

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

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 bicolour varieties.

Select Mixture Uniform mix of bold, bright colours.

PROGRAM STANDOUTS
Make sure you include these sure-fire sellers in your Revolution gerbera program!

Bicolor Red Lemon
Bicolor Red White
Bicolor Rose White
Bicolor Yellow Orange
Bright Rose with Light Eye
Golden Yellow with Dark Eye
New Orange with Light Eye
Eye Improved
Red with Light Eye
Red with Dark Eye
White with Light Eye
Select Mixture

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.
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
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.

<table>
<thead>
<tr>
<th>Series</th>
<th>No. of Varieties</th>
<th>Recommend pot size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mega Revolution</td>
<td>12 &amp; 1 mix</td>
<td>6 in./15 cm</td>
</tr>
<tr>
<td>Revolution</td>
<td>15 &amp; 2 mixes</td>
<td>5 in./13 cm</td>
</tr>
<tr>
<td>ColorBloom</td>
<td>9 &amp; 1 mix</td>
<td>Quart/11 cm</td>
</tr>
</tbody>
</table>

POTTED PLANTS / COLORBLOOM

**GERBERA**

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

Gerbera Jamesonii

PanAmerican Seed.
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.

Mixture

Yellow with Dark Eye
Red with Dark Eye
White with Dark Eye
Deep Orange Yellow
Cherry with Light Eye
Deep Rose with Light Eye
Bicolor Red White
NEW
Deep Orange with Dark Eye
NEW
Red with Light Eye

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

Find product & growing info at panamseed.com / GERBERA 171
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.

<table>
<thead>
<tr>
<th>Series</th>
<th>No. of Varieties</th>
<th>Recommend pot size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Splash Select Hypoestes</td>
<td>4</td>
<td>Cell Pack, 3 ppp: 4.4-5 in./10-12 cm, Quart</td>
</tr>
<tr>
<td>Sapphire Lisianthus</td>
<td>4</td>
<td>4.4-5 in./10-12 cm, Quart</td>
</tr>
</tbody>
</table>

Sapphire Pink Rim Lisianthus
Sapphire Blue Chip Lisianthus
Sapphire White Lisianthus
Sapphire Blue Lisianthus
Sapphire Blue Lisianthus
Splash Select White Hypoestes
Splash Select Red Hypoestes
Splash Select Pink Hypoestes
Splash Select Rose Hypoestes
Sapphire Pink Rim Lisianthus
Sapphire Blue Chip Lisianthus
Sapphire White Lisianthus
Sapphire Blue Lisianthus

Sapphire Blue Lisianthus
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.

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.

<table>
<thead>
<tr>
<th>Series</th>
<th>Recommend pot size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ballad</td>
<td>5 in./13 cm, Gallon</td>
</tr>
<tr>
<td>Choco Sun</td>
<td>5-6 in./13-15 cm, Gallon</td>
</tr>
<tr>
<td>Miss Sunshine F1</td>
<td>4.5-5 in./12-13 cm/Quart/11 cm</td>
</tr>
<tr>
<td>SunBuzz F1</td>
<td>5-6 in./13-15 cm, Gallon</td>
</tr>
</tbody>
</table>
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 Stem™
**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 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.
CAMERULA
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.
Vase Life: 5-8 days

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
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 EU PBR 46508
Deepest yellow colour available on the market. NOTE: More sensitive to fusarium wilt compared to the rest of the series.

Orange EU PBR 44055
Unique colour for the market will stir up interest for growers, retailers and florists.

Pink EU PBR 43694
Beautiful dark-stemmed variety, with slightly smaller bloom. 7-11 weeks transplant to finish.

Red EU PBR 46509
Slightly shorter stem length. 9-13 weeks transplant to finish.

Rose EU PBR 43693
The tallest of the series, with bigger flower heads. 9-13 weeks transplant to finish.

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
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.
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.
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.

**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.

---

PanAmerican Seed.  

Find product & growing info at panamseed.com / DELPHINIUM 181
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.

---

**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*

**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**

Additional colors:
- **Coral**
- **Scarlet**
- **Purple White Bicolor**
- **Magenta Bicolor**
- **Red**
- **Black Cherry**
- **New**

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

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
**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 LISIANTHUS**
*Eustoma grandiflorum*

**Flare Series F1**

Form Supplied As: Pelleted

Cultivation Type: Greenhouse, High Tunnel

Planting Density: 65 to 85 plants/sq. metre (6 to 8 plants/sq. foot).

Usage: Focal, Secondary

Stem Length: 36 to 45 in./91 to 114 cm

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

**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

**Can Can Purple**

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

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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 Series**

**QIS Pale Blue Limonium**

**QIS Apricot Limonium**

**QIS Rose Limonium**

**QIS Mixture Limonium**

**QIS Dark Blue Limonium**

**QIS Mixture Limonium**

**QIS White Limonium**

**QIS Yellow Limonium**

**Flare White Lisianthus**

**Flare Jade Lisianthus**

**Flare Yellow Lisianthus**

**Flare Deep Blue Lisianthus**

**Flare Deep Rose Lisianthus**

**Can Can Purple**

**Flare Deep Blue Lisianthus**

**Flare Deep Rose Lisianthus**

**Can Can 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
**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.

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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.
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.
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

Find product & growing info at panamseed.com / MATTHIOLA 189
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 is 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 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
TRADITIONAL FIELD-GROWN MATTHIOLA (STOCK)
*M. 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

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*Miracle Crimson*  
*White Goddess*  
*Purple Heart*  
*Lilac Lavender*  
*American Beauty*  
*Column Stock Avalanche*  
*Rose Pink*  
*Pacific Crimson*  
*Pink Sweetheart*  
*Miracle Gold*  
*Miracle Yellow*  
*Pacific Blue*  
*Miracle Mid-Blue*  
*Ball Pink*  
*Apricot*  
*Appleblossom*  
*Malaison Pink*
PROGRAMMABLE TUNNEL OR FIELD-GROWN MATTHIOLA (STOCK)

**Katz Hi Double White**

*Form Supplied As:* Raw  
*Cultivation Type:* High Tunnel, Field  
*Planting Density:* 26 plants/sq. metre (12 plants/sq. foot).  
*Usage:* Line  
*Stem Length:* 32 in./81 cm  

Katz Hi Double Matthiola will produce approximately 90% double-flowering plants. It requires less cold during bud formation, resulting in a more programmable series in warmer conditions.

*Harvest Recommendation:* Harvest when 3-5 florets have opened.

*Post-Harvest Recommendation:* Matthiola are sensitive to ethylene; it is recommended to treat with an ethylene-inhibiting product. Hydrate and store in a cooler at 1-3°C (34-38°F) in commercial floral holding solution at the manufacturer recommended rates.

*Vase Life:* 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 programmable series in warmer conditions.

*Harvest Recommendation:* Harvest when 3-5 florets have opened.

*Post-Harvest Recommendation:* Matthiola are sensitive to ethylene; it is recommended to treat with an ethylene-inhibiting product. Hydrate and store in a cooler at 1-3°C (34-38°F) in commercial floral holding solution at the manufacturer recommended rates.

*Vase Life:* 5-8 days

**Cherry Blossom**  
ASCFG 2013 Fresh Cut Flower of the Year!

**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.
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

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

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

<table>
<thead>
<tr>
<th>Series</th>
<th>Group</th>
<th>Days, Light &amp; Temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potomac</td>
<td>4</td>
<td>Long days • High light • Greater than 16°C (60°F)</td>
</tr>
<tr>
<td>Monaco</td>
<td>3</td>
<td>Moderate days • Moderate light • 10-13°C (50-55°F)</td>
</tr>
<tr>
<td>Maryland</td>
<td>2</td>
<td>Short days • Moderate light • 10-13°C (50-55°F)</td>
</tr>
<tr>
<td>Cool</td>
<td>1</td>
<td>Short days • Low light • 7-10°C (40-50°F)</td>
</tr>
</tbody>
</table>

December 21-22 (Winter Solstice) • September 22-23 (Autumn Equinox) • June 20-22 (Summer Solstice) • March 20-21 (Vernal Equinox)

\[
\begin{align*}
\text{Appleblossom (2)} & \\
\text{Ivory White (1,2)} & \\
\text{Lavender (1,2)} & \\
\text{Maryland Orange (1,2)} & \\
\text{Potomac 4} & \\
\text{Royal (1,2)} & \\
\text{True Pink (1,2)} & \\
\text{White (2)} & \\
\text{Plumblossom (2)} & \\
\text{Rose (1,2)} & \\
\text{Bright Yellow (2)} & \\
\text{Shell Pink (1,2)} & \\
\text{Flamingo (1,2)} & \\
\text{Dark Orange (2)} & \\
\text{Lavender (1,2)} & \\
\text{Red (1,2)} & \\
\text{Yosemite Pink (1,2)} &
\end{align*}
\]
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
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

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.

**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.
Snaps second to none

PanAmerican Seed is the world leading supplier of F1 forcing snaps, with an unsurpassed choice of top-producing varieties selected for stem and flower quality, photoperiodic response and earliness to flower. With selections streamlined into 4 flowering response groups – including our popular Potomac family – you’ll find it a “snap” to build an all-year program of successful growing.
SNAPDRAGON continued

**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
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.

We have a wide selection of cut flowers for decorating.
VEGETABLES & HERBS
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.
## 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**

<table>
<thead>
<tr>
<th>Name</th>
<th>Fruit characteristics</th>
<th>Growth</th>
<th>Plug crop time (weeks)</th>
<th>Potting to sale (weeks)</th>
<th>Pot size</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CHERRY</strong></td>
<td></td>
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</tr>
<tr>
<td>Micro Tom</td>
<td>Red</td>
<td>CD</td>
<td>3</td>
<td>10-12</td>
<td>4-6 in./10-15 cm</td>
<td>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!</td>
</tr>
<tr>
<td></td>
<td>0.5-0.75 in./1-2 cm long</td>
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</tr>
<tr>
<td>New Cocoa F1</td>
<td>Dark red</td>
<td>CD</td>
<td>2-3</td>
<td>10-12</td>
<td>4-6 in./10-15 cm</td>
<td>Cocoa will brighten up your windowsill or patio table, and has a tidy plant habit. Cocoa provides uniquely burgundy-coloured fruit that is deliciously sweet for your recipes!</td>
</tr>
<tr>
<td></td>
<td>0.5-1 in./1-3 cm long x 0.5-1 in./1-3 cm wide</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>New Red Velvet F1</td>
<td>Red</td>
<td>CD</td>
<td>2-3</td>
<td>10-12</td>
<td>4-6 in./10-15 cm</td>
<td>Red Velvet will brighten up your windowsill or patio table, and has a tidy plant habit. Red Velvet provides beautiful red-coloured fruit that is deliciously sweet for your recipes!</td>
</tr>
<tr>
<td></td>
<td>0.5-1 in./1-3 cm long x 0.5-1 in./1-3 cm wide</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Siam F1</td>
<td>Bright red</td>
<td>CD</td>
<td>2-3</td>
<td>10-12</td>
<td>6-8 in./15-20 cm</td>
<td>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.</td>
</tr>
<tr>
<td></td>
<td>0.5-1 in./1-3 cm long x 0.5-1 in./1-3 cm wide</td>
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</table>

CD: compact, determinate.
### 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.

<table>
<thead>
<tr>
<th>Name</th>
<th>Fruit characteristics</th>
<th>Plant habit</th>
<th>Plug crop time (weeks)</th>
<th>Potting to sale (weeks)</th>
<th>Pot size</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HOT</strong></td>
<td></td>
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</tr>
<tr>
<td>Adobo</td>
<td>Conical, light green to red 4.5 in./11 cm long x 1 in./3 cm wide</td>
<td>Large, upright</td>
<td>3-4</td>
<td>14-16</td>
<td>6-8 in./15-20 cm</td>
<td>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.</td>
</tr>
<tr>
<td>Cosmo</td>
<td>Blunt conical, purple to red 2 in./5 cm long x 0.75 in./2 cm wide</td>
<td>Bush, large</td>
<td>3-4</td>
<td>16-18</td>
<td>6-8 in./15-20 cm</td>
<td>Brilliant purple, snack-sized fruit turn red when fully mature. Use fresh or cooked to add a medium amount of spice to any dish.</td>
</tr>
<tr>
<td>Hot Burrito</td>
<td>Blunt conical, light green to red 4 in./10 cm long x 0.75 in./2 cm wide</td>
<td>Medium, upright</td>
<td>3-4</td>
<td>14-16</td>
<td>6-8 in./15-20 cm</td>
<td>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.</td>
</tr>
</tbody>
</table>

= mild  = mildly hot  = medium hot  = hot  = extra hot
<table>
<thead>
<tr>
<th>Name</th>
<th>Fruit characteristics</th>
<th>Plant habit</th>
<th>Plug crop time (weeks)</th>
<th>Potting to sale (weeks)</th>
<th>Pot size</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hot Fajita</td>
<td>Medium chili, light green to red 4 in./10 cm long x 0.5 in./1 cm wide</td>
<td>Large, upright</td>
<td>3-4</td>
<td>14-16</td>
<td>6-8 in./15-20 cm</td>
<td>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.</td>
</tr>
<tr>
<td>Hot Joker</td>
<td>Medium chili, light green to red 4 in./10 cm long x 0.5 in./1 cm wide</td>
<td>Bush, medium</td>
<td>3-4</td>
<td>14-16</td>
<td>4-6 in./10-15 cm</td>
<td>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.</td>
</tr>
<tr>
<td>Hot Lemon</td>
<td>Habanero, green to yellow 1 in./3 cm long x 0.5 in./1 cm wide</td>
<td>Bush, large</td>
<td>3-4</td>
<td>15-17</td>
<td>6-8 in./15-20 cm</td>
<td>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!</td>
</tr>
<tr>
<td>Name</td>
<td>Fruit characteristics</td>
<td>Plant habit</td>
<td>Plug crop time (weeks)</td>
<td>Potting to sale (weeks)</td>
<td>Pot size</td>
<td>Comments</td>
</tr>
<tr>
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</tr>
<tr>
<td>Piñata</td>
<td>Medium chili, light green to red 2.25 in./6 cm long x 0.3 in./1 cm wide</td>
<td>Bush, medium</td>
<td>3-4</td>
<td>14-16</td>
<td>6-8 in./15-20 cm</td>
<td>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.</td>
</tr>
<tr>
<td>Tamale</td>
<td>Blunt conical, green to red 2 in./5 cm long x 0.75 in./2 cm wide</td>
<td>Bush, medium</td>
<td>3-4</td>
<td>14-16</td>
<td>4-6 in./10-15 cm</td>
<td>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.</td>
</tr>
<tr>
<td>Taquito</td>
<td>Small chilli, green to red 1.5 in./4 cm long x 0.3 in./1 cm wide</td>
<td>Bush, compact, small</td>
<td>3-4</td>
<td>15-17</td>
<td>3-4 in./8-10 cm</td>
<td>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.</td>
</tr>
<tr>
<td>Fresh Bites Series Capsicum annuum</td>
<td>Snack, green to orange, red and yellow 2.25 in./6 cm long x 1.25 in./3 cm wide</td>
<td>Large, upright</td>
<td>3-4</td>
<td>15-17</td>
<td>5-6.5 in./13-17 cm</td>
<td>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.</td>
</tr>
</tbody>
</table>

\[ = mild \quad || = mildly hot \quad |||| = medium hot \quad |||||| = hot \quad |||||||| = extra hot \]
VEGETABLES & HERBS
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
<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Fruit characteristics</th>
<th>Days to maturity from direct seed</th>
<th>Fruit size</th>
<th>Flower type</th>
<th>Disease resistance</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gherking</strong></td>
<td>European pickler</td>
<td>Medium green skin, highly spined</td>
<td>55-60</td>
<td>3-5 in./8-13 cm long</td>
<td>Gynoecious, parthenocarpic</td>
<td>HR: CMV-1, S</td>
<td>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. 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.</td>
</tr>
<tr>
<td><strong>Martini F1</strong></td>
<td>American slicer</td>
<td>White skin, slightly spined</td>
<td>55-60</td>
<td>5-6 in./13-15 cm long x 1.5-2 in./4-5 cm wide</td>
<td>Monoecious</td>
<td>IR: PM</td>
<td>Stands out from the competition for its non-yellowing, white exterior and earlier yields. Very tender, &quot;no peel&quot; 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.</td>
</tr>
<tr>
<td><strong>Patio Snacker F1</strong></td>
<td>American slicer</td>
<td>Medium green skin, moderately spined</td>
<td>50-55</td>
<td>6-8 in./15-20 cm long x 1.5-2 in./4-5 cm wide</td>
<td>Monoecious, parthenocarpic</td>
<td></td>
<td>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.</td>
</tr>
</tbody>
</table>

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.
<table>
<thead>
<tr>
<th>Name</th>
<th>Days to maturity from transplant</th>
<th>Fruit size</th>
<th>Fruit characteristics</th>
<th>Calyx colour</th>
<th>Plant habit</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asian Delite F1</td>
<td>50-55</td>
<td>5-7 in./13-18 cm long (baby size)</td>
<td>Bright purple, elongated</td>
<td>Green and Black</td>
<td>Upright, semi-spineless</td>
<td>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.</td>
</tr>
<tr>
<td>Fairy Tale F1</td>
<td>50-55</td>
<td>1-2 in./3-5 cm long (baby size)</td>
<td>Striped purple and white, elongated</td>
<td>Green</td>
<td>Upright, semi-spineless</td>
<td>Early-maturing, highly productive variety produces clusters of attractive white fruit with violet/purple stripes. Elongated tear-drop shaped fruit are sweet and non-bitter, with a tender skin and few seeds. Fruit can be harvested when very small or left on the plant until fully mature. Petite plant habit between 18 to 24 in. (46 to 61 cm) is perfect for growing in containers or small-space gardens, with or without support. All-America Selections National Winner.</td>
</tr>
<tr>
<td>Gretel F1</td>
<td>55-60</td>
<td>3-4 in./8-10 cm long (baby size)</td>
<td>White, elongated</td>
<td>Green</td>
<td>Upright, semi-spineless</td>
<td>Earliest white eggplant is highly productive, producing clusters of glossy mini-fruit that are tender and non-bitter. Indeterminate, 3-ft. (91-cm) plants can be grown in-ground or in large containers, with or without support. More productive and 5 to 7 days earlier to ripen than O.P. types. Slightly larger plant with slightly smaller fruit than Hansel. All-America Selections National Winner.</td>
</tr>
<tr>
<td>Hansel F1</td>
<td>50-55</td>
<td>2-3 in./5-8 cm long (baby size)</td>
<td>Black-purple, elongated</td>
<td>Green</td>
<td>Upright, semi-spineless</td>
<td>Early-maturing, highly productive variety produces clusters of glossy, black-purple eggplants. Non-bitter, tender fruit can be used in many culinary recipes. Like white Gretel, the petite, 3-ft. (91-cm) plants can be grown in-ground or in large containers, with or without support. All-America Selections National Winner.</td>
</tr>
<tr>
<td>Patio Baby F1</td>
<td>40-45</td>
<td>2-3 in./5-8 cm long (baby size)</td>
<td>Purple, mini egg</td>
<td>Green</td>
<td>Compact, spineless</td>
<td>Unique, high-yielding, compact variety produces baby-size eggplants very early, and continues producing throughout the season. Fits well into retail patio programs. Best in-ground and in containers. All-America Selections Regional Winner.</td>
</tr>
<tr>
<td>Name</td>
<td>Days to maturity from transplant</td>
<td>Fruit characteristics</td>
<td>Plant habit</td>
<td>Disease resistance</td>
<td>Comments</td>
<td></td>
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</tr>
<tr>
<td><strong>HOT</strong></td>
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<tr>
<td>Aji Rico F1</td>
<td>70-75 to full ripe, 50-55 to green</td>
<td>Conical, green to red 3.4 in./8.1-10 cm long x 1.25-1.75 in./3-4 cm wide</td>
<td>Extra large, vigorous</td>
<td></td>
<td>Unique, hybrid hot pepper has more vigour, higher yield and earlier ripening than O.P. heirlooms. Narrow, conical fruit with delicate citrus flavour and medium heat is crispy and thin-walled – perfect fresh or cooked, green or red. Best in-ground; large indeterminate plants benefit from a support. All-America Selections National Winner.</td>
<td></td>
</tr>
<tr>
<td>Cajun Belle</td>
<td>60-65 to full ripe, 45-50 to green</td>
<td>Mini bell, green to red 2.3 in./5-8 cm long x 2.3-3 in./5-8 cm wide</td>
<td>Medium</td>
<td></td>
<td>Produces bell peppers with mildly spicy taste just right for fresh eating and salsa. Harvest green or red. Best in-ground and in containers. All-America Selections National Winner.</td>
<td></td>
</tr>
<tr>
<td>Golden Cayenne</td>
<td>85-90 to full ripe, 70-75 to green</td>
<td>Cayenne, green to yellow 3.5 in./8-13 cm long x 0.5-0.75 in./1-2 cm wide</td>
<td>Bush, medium</td>
<td></td>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>Habanero Primero Red F1</td>
<td>75-80 to full ripe, 60-65 to green</td>
<td>Habanero, green to red 2.75-3.5 in./7.9-9 cm long x 1.25-1.5 in./3-4 cm wide</td>
<td>Large, vigorous</td>
<td>IR: TSWV</td>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>La Bomba II F1</td>
<td>65-70 to full ripe, 50-55 to green</td>
<td>Jalapeño, green to red 3.3-3.25 in./8 cm long x 1.1-1.15 in./3 cm wide</td>
<td>Tall</td>
<td>HR: BLS 1-3, TMV</td>
<td>Upgraded for superior disease resistance. Bears very large, high-quality jalapeños with little to no checking. Best in containers or in-ground.</td>
<td></td>
</tr>
</tbody>
</table>

\[\begin{array}{cccc}
\text{ mild} & \text{ mildly hot} & \text{ medium hot} & \text{ hot} & \text{ extra hot} \\
\end{array}\]

Disease terminology: HR = High Resistance, IR = Intermediate Resistance
Disease codes: BLS - Bacterial Leaf Spot, TMV - Tobacco Mosaic Virus, TSWV - Tomato Spotted Wilt Virus

**PEPPER** Seed supplied as: Raw
<table>
<thead>
<tr>
<th>Name</th>
<th>Days to maturity from transplant</th>
<th>Fruit characteristics</th>
<th>Plant habit</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HOT</strong></td>
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</tr>
<tr>
<td>New Pot-a-peño F1 <em>Capsicum annuum</em></td>
<td>60-65 to full ripe, 45-50 to green</td>
<td>Jalapeño, green to red 3-4 in./8-10 cm long x 0.75-1.25 in./2-3 cm wide</td>
<td>Bush, cascading, medium</td>
<td>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. All-America Selections Regional Winner, Great Lakes, West/Northwest.</td>
</tr>
<tr>
<td>Sweet Heat F1 <em>Capsicum annuum</em></td>
<td>55-60 to full ripe, 40-45 to green</td>
<td>Snack, green to red 3.5-4 in./9-10 cm long x 1.25-1.75 in./3-4 cm wide</td>
<td>Compact</td>
<td>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.</td>
</tr>
<tr>
<td>Mad Hatter F1 <em>Capsicum baccatum</em></td>
<td>85-90 to full ripe, 65-70 to green</td>
<td>Unique disc, green to red 2-3.5 in./5-9 cm long x 2-2.5 in./5-6 cm wide</td>
<td>Extra large, vigorous</td>
<td>Flat-disc peppers are crunchy and crisp, with a delicate floral scent and rich flavour that intensifies/sweetens as it matures. In hot, dry climates, a small number of fruit will have a touch of heat close to the seed cavity, but fruit wings are always sweet. Best in-ground with support. All-America Selections National Winner.</td>
</tr>
<tr>
<td><strong>SWEET</strong></td>
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</tr>
<tr>
<td>New Candy Cane Chocolate Cherry F1 <em>Capsicum annuum</em></td>
<td>70-75 to full ripe, 55-60 to green</td>
<td>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)</td>
<td>Medium</td>
<td>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.</td>
</tr>
<tr>
<td>Candy Cane Red F1 <em>Capsicum annuum</em></td>
<td>60-65 to full ripe, 40-45 to green</td>
<td>Snack, green/white stripe to red 3.5-4 in./9-10 cm long x 1.25-1.75 in./3-4 cm wide</td>
<td>Medium</td>
<td>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.</td>
</tr>
<tr>
<td>Name</td>
<td>Days to maturity from transplant</td>
<td>Fruit characteristics</td>
<td>Plant habit</td>
<td>Disease resistance</td>
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<td>-------------------------------</td>
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<tr>
<td><strong>SWEET continued</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>New</strong></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td><strong>Peppi Cornissimo F1</strong></td>
<td>95-100 to full ripe, 80-85 to green</td>
<td>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)</td>
<td>Large, tall, vigorous</td>
<td>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.</td>
</tr>
<tr>
<td><strong>New</strong></td>
<td>75-80 to full ripe, 55-60 to green</td>
<td>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</td>
<td>Large, tall, vigorous</td>
<td>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.</td>
</tr>
<tr>
<td><strong>PeppiGrande Red F1</strong></td>
<td>80-85 to full ripe, 60-65 to green</td>
<td>Corno, green to red 5-6 in./13-15 cm long x 1.5-2 in./4-5 cm wide</td>
<td>Large, tall, vigorous</td>
<td>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.</td>
</tr>
<tr>
<td><strong>Snackabelle Red F1</strong></td>
<td>70-75 to full ripe, 55-60 to green</td>
<td>Mini bell, green to red 2-2.25 in./5-6 cm long x 2-2.25 in./5-6 cm wide</td>
<td>Compact</td>
<td>HR: BLS 1-3, 7, 8, TMV</td>
</tr>
<tr>
<td>Name</td>
<td>Days to maturity from transplant</td>
<td>Fruit characteristics</td>
<td>Growth</td>
<td>Disease resistance</td>
</tr>
<tr>
<td>---------------</td>
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</tr>
<tr>
<td><strong>CHERRY</strong></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Artemis F1</td>
<td>50-55</td>
<td>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)</td>
<td>I</td>
<td>HR: LM, N, TMV, ToMV</td>
</tr>
<tr>
<td>Chocolate Sprinkles F1</td>
<td>50-55</td>
<td>Elongated, medium, dark red with green stripes 1.5 in./4 cm long x 1 in./3 cm wide</td>
<td>I</td>
<td>HR: F1, N</td>
</tr>
<tr>
<td>Helix F1</td>
<td>50-55</td>
<td>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)</td>
<td>I</td>
<td>HR: LB, N, TMV, ToMV</td>
</tr>
<tr>
<td>Little Bing F1</td>
<td>60-65</td>
<td>Round, medium, red 1 in./3 cm long</td>
<td>CD</td>
<td>HR: F2, V</td>
</tr>
</tbody>
</table>

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Growth: CD - Compact Determinate, C - Compact Indeterminate, D - Determinate, I - Indeterminate, SD - Semi-determinate
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<tr>
<th>Name</th>
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<th>Fruit characteristics</th>
<th>Growth</th>
<th>Disease resistance</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Midnight Snack F1</td>
<td>65-70</td>
<td>Round, medium, red with black overlay</td>
<td>I</td>
<td></td>
<td>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! Great in salads or eaten straight off the plant, Midnight Snack is a guilt-free treat any time of the day or night. Best in-ground, grown with support. All-America Selections National Winner.</td>
</tr>
<tr>
<td>Orange Zinger F1</td>
<td>60-65</td>
<td>Round, large, dark orange</td>
<td>I</td>
<td>HR: F1</td>
<td>The high-quality, crack-resistant, tasty, dark orange tomatoes have big tomato flavour with a balance of sweet and tangy. Best in-ground.</td>
</tr>
<tr>
<td>Sugar Rush F1</td>
<td>50-55</td>
<td>Elongated, medium, red 0.75-1.25 in./2-3 cm long x 0.5-1 in./1-3 cm wide</td>
<td>I</td>
<td>HR: F1</td>
<td>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.</td>
</tr>
<tr>
<td>Tidy Treats F1</td>
<td>50-55</td>
<td>Round, small, red 0.75-1 in./2-3 cm long</td>
<td>CI</td>
<td>HR: F1, V</td>
<td>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.</td>
</tr>
</tbody>
</table>

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
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<th>Growth</th>
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<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CHERRY</strong></td>
<td></td>
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<tr>
<td>Topsy Tom F1</td>
<td>50-55</td>
<td>Round, medium, red</td>
<td>SD</td>
<td></td>
<td>Perfect for “upside down” and traditional planters. Compact/mounded.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 in./3 cm long x 1.25 in./3 cm wide</td>
<td></td>
<td></td>
<td>Pliable stems ship well, hold abundant fruit, won’t break in wind.</td>
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<tr>
<td></td>
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<td></td>
<td></td>
<td>Continues to put out branches with many trusses of split-resistant, sweet fruit.</td>
</tr>
<tr>
<td>Tumbler F1</td>
<td>48-50</td>
<td>Round, medium, red</td>
<td>D</td>
<td></td>
<td>This superior variety for baskets and containers has a graceful, cascading habit.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.25 in./3 cm long</td>
<td></td>
<td></td>
<td>Prolific, extra-early plants produce up to 6 lbs./2.7 kg of very sweet cherry tomatoes.</td>
</tr>
<tr>
<td><strong>CURRANT</strong></td>
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</tr>
<tr>
<td>Candyland Red</td>
<td>55-60</td>
<td>Round, small, red</td>
<td>I</td>
<td></td>
<td>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. All-America Selections National Winner.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.5 in./1 cm long x 0.5 in./1 cm wide</td>
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</tr>
<tr>
<td><strong>SPECIALTY SMALL-FRUITED</strong></td>
<td></td>
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</tr>
<tr>
<td>New Marzito F1</td>
<td>50-55</td>
<td>Elongated, mini marzano, red</td>
<td>I</td>
<td>HR: F1, LM, N, TMV, ToMV</td>
<td>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.</td>
</tr>
</tbody>
</table>
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

<table>
<thead>
<tr>
<th>Name</th>
<th>Days to maturity from transplant</th>
<th>Fruit characteristics</th>
<th>Growth</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HEIRLOOM MARRIAGE™ COLLECTION</strong></td>
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</tr>
<tr>
<td><strong>Big Brandy F1</strong></td>
<td>75-80</td>
<td>Beefsteak, pink</td>
<td>I</td>
<td>Big, pink fruit with outstanding flavour is a cross of Big Dwarf and Brandywine. Best in-ground.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>12-15 oz. (340 to 425 g)</td>
<td></td>
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</tr>
<tr>
<td><strong>Cherokee Carbon F1</strong></td>
<td>75-80</td>
<td>Beefsteak, purple</td>
<td>I</td>
<td>Robust purple beefsteak with rich flavour. A cross of Cherokee Purple and Carbon. Best in-ground.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10-12 oz. (283 to 340 g)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Genuwine F1</strong></td>
<td>70-75</td>
<td>Slicer, red</td>
<td>I</td>
<td>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.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10.5-11.5 oz. (298 to 326 g)</td>
<td></td>
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</tr>
<tr>
<td><strong>Marzinera F1</strong></td>
<td>70-75</td>
<td>Roma, red</td>
<td>I</td>
<td>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.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3-4 oz. (85 to 113 g)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Perfect Flame F1</strong></td>
<td>70-75</td>
<td>Saladette, orange</td>
<td>I</td>
<td>Orange saladette tomato with sweet-tart fruitiness. Earliest-ripening Heirloom Marriage variety. A cross of Peron and Flamme. Best in-ground.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2-3 oz. (57 to 85 g)</td>
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</tbody>
</table>

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<tbody>
<tr>
<td><strong>BEEFSTEAK</strong></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>New DarkStar F1</td>
<td>70-75</td>
<td>Oblate, ribbed, purple</td>
<td>I</td>
<td>HR: LB, V</td>
<td>Upgrade your garden with heirloom tomato flavour and 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.</td>
</tr>
<tr>
<td>Tidy Rose F1</td>
<td>60-65</td>
<td>Deeply ribbed, pink</td>
<td>CI</td>
<td></td>
<td>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 grown in the ground with support.</td>
</tr>
<tr>
<td><strong>ROMA</strong></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>New Bellatrix F1</td>
<td>65-70</td>
<td>Oval, red</td>
<td>D</td>
<td>HR: F2, F3, LB, TMV, ToMV</td>
<td>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.</td>
</tr>
<tr>
<td>Little Napoli F1</td>
<td>60-65</td>
<td>Red</td>
<td>CD</td>
<td>HR: F1, V</td>
<td>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.</td>
</tr>
</tbody>
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<th>Comments</th>
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<tr>
<td><strong>ROMA</strong></td>
<td></td>
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<td></td>
</tr>
<tr>
<td><strong>Sunrise Sauce F1</strong></td>
<td>55-60</td>
<td>Orange 3-4 oz. (85 to 113 g)</td>
<td>D</td>
<td>HR: F1, V</td>
<td>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.</td>
</tr>
<tr>
<td><strong>SLICER</strong></td>
<td></td>
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<tr>
<td><strong>Homeslice F1</strong></td>
<td>60-65</td>
<td>Round, red 5-6 oz. (142 to 170 g)</td>
<td>D</td>
<td>HR: F1, V</td>
<td>Vigorous, compact variety produces very early and bountiful yields of exceptional slicers. Perfect for patio containers and small gardens.</td>
</tr>
<tr>
<td><strong>Little Sicily F1</strong></td>
<td>60-65</td>
<td>Round, small, red 3-4 oz. (85 to 113 g)</td>
<td>CD</td>
<td></td>
<td>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.</td>
</tr>
<tr>
<td><strong>New Loki F1</strong></td>
<td>70-75</td>
<td>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)</td>
<td>I</td>
<td>HR: F1, F2, LM, N, TMV, ToMV</td>
<td>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.</td>
</tr>
<tr>
<td><strong>Stellar F1</strong></td>
<td>70-75</td>
<td>Round, red 5-7 oz. (142 to 198 g)</td>
<td>D</td>
<td>HR: F2, LB, V, IR: EB, SLS</td>
<td>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.</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Exterior colour</th>
<th>Days to maturity from direct seed</th>
<th>Fruit size/weight</th>
<th>Plant habit</th>
<th>Disease resistance</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>WINTER SQUASH</strong></td>
<td></td>
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</tr>
<tr>
<td>Autumn Frost F1</td>
<td>Specialty</td>
<td>Dark tan</td>
<td>100-105</td>
<td>5-7 in./13-18 cm</td>
<td>Medium</td>
<td>IR: PM</td>
<td>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.</td>
</tr>
<tr>
<td>Cucurbita moschata</td>
<td>Round</td>
<td></td>
<td></td>
<td>long x 5-6 in./ 13-15 cm wide</td>
<td>Vine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Butterbaby Squash</td>
<td>Mini butternut</td>
<td>Tan</td>
<td>100-105</td>
<td>4-6 in./10-15 cm</td>
<td>Restricted</td>
<td>IR: PM</td>
<td>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.</td>
</tr>
<tr>
<td>Cucurbita moschata</td>
<td></td>
<td></td>
<td></td>
<td>long x 3-4 in./ 8-10 cm wide</td>
<td>Vine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Honeynut Squash</td>
<td>Mini butternut</td>
<td>Dark tan</td>
<td>105-110</td>
<td>4-5 in./10-13 cm</td>
<td>Restricted</td>
<td>Vine</td>
<td>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.</td>
</tr>
<tr>
<td>Cucurbita moschata</td>
<td></td>
<td></td>
<td></td>
<td>long x 2.5-4 in./ 6-10 cm wide</td>
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<td></td>
<td></td>
<td>8-16 oz./3.6-10.9 kg</td>
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<tr>
<td><strong>SUMMER SQUASH</strong></td>
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<tr>
<td>Easy Pick Gold II F1</td>
<td>Zucchini</td>
<td>Gold</td>
<td>45-50</td>
<td>1-10 in./3-25 cm long</td>
<td>Bush</td>
<td>IR: PRSV, WMV, ZYMV</td>
<td>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.</td>
</tr>
<tr>
<td>Cucurbita pepo</td>
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</tr>
<tr>
<td>Lemon Sun F1</td>
<td>Patty Pan</td>
<td>Yellow</td>
<td>40-45</td>
<td>1-3 in./3-8 cm long x 1-5 in./3-13 cm wide</td>
<td>Bush</td>
<td></td>
<td>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.</td>
</tr>
<tr>
<td>Cucurbita pepo</td>
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</tr>
</tbody>
</table>

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Disease codes: PRSV - Papaya Ringspot Virus, PM - Powdery Mildew, WMV - Watermelon Mosaic Virus, ZYMV - Zucchini Yellow Mosaic Virus
<table>
<thead>
<tr>
<th>Name</th>
<th>Height</th>
<th>Spread</th>
<th>Days to maturity from transplant</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BASIL</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dolce Fresca</td>
<td>12-14 in./ 30-36 cm</td>
<td>10-12 in./ 25-30 cm</td>
<td>28</td>
<td>Mid-size plant has a unique, bushy habit with shorter internodes that shows better at retail than traditional basils and holds its controlled size in the garden without getting tall and leggy. More usable leaf yields, with traditional sweet Genovese basil flavour. All-America Selections National Winner.</td>
</tr>
<tr>
<td>Everleaf Emerald Towers</td>
<td>24-36 in./ 61-91 cm</td>
<td>8-12 in./ 20-30 cm</td>
<td>30-45</td>
<td>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.</td>
</tr>
<tr>
<td>Everleaf Genovese</td>
<td>18-24 in./ 46-61 cm</td>
<td>12-18 in./ 30-46 cm</td>
<td>30-45</td>
<td>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!</td>
</tr>
<tr>
<td>New Everleaf Thai Towers</td>
<td>24-36 in./ 61-91 cm</td>
<td>8-12 in./ 20-30 cm</td>
<td>30-45</td>
<td>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 chow 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.</td>
</tr>
<tr>
<td>Name</td>
<td>Height</td>
<td>Spread</td>
<td>Days to Maturity from Transplant</td>
<td>Comments</td>
</tr>
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<td>--------------------</td>
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</tr>
<tr>
<td>Newton</td>
<td>12-20 in. / 30-51 cm</td>
<td>10-16 in. / 25-41 cm</td>
<td>21-30</td>
<td>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.</td>
</tr>
<tr>
<td>Purple Ruffles</td>
<td>18-24 in. / 46-61 cm</td>
<td>18-24 in. / 46-61 cm</td>
<td>28</td>
<td>Ornamental variety has fragrant, ruffled, deep purple leaves with mild anise flavour. All-America Selections National Winner.</td>
</tr>
<tr>
<td>Sweet Dani Lemon</td>
<td>22-24 in. / 56-61 cm</td>
<td>18-24 in. / 46-61 cm</td>
<td>28</td>
<td>Flavourful and fragrant - up to 75% more total essential oils than standard lemon basils. Vigorous garden performer. All-America Selections National Winner.</td>
</tr>
</tbody>
</table>

**DILL**

<table>
<thead>
<tr>
<th>Name</th>
<th>Height</th>
<th>Spread</th>
<th>Days to Maturity from Transplant</th>
<th>Comments</th>
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<tbody>
<tr>
<td>Fernleaf</td>
<td>12-15 in. / 30-38 cm</td>
<td>10-12 in. / 25-30 cm</td>
<td>28</td>
<td>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. All-America Selections National Winner.</td>
</tr>
</tbody>
</table>
## Name | Seed supplied as | Seeds per pellet | Height | Spread | Days to harvest from transplant | USDA hardiness zones
--- | --- | --- | --- | --- | --- | ---
Basil (Genovese) *Ocimum basilicum* | PMPL | 6 | 24-30 in./61-76 cm | 12-16 in./30-41 cm | 28 | 5a-9b
Try Basil *Ocimum basilicum* | PMPL* | 8 | 24-30 in./61-76 cm | 12-16 in./30-41 cm | 28 | 5a-9b
Dill *Anethum graveolens* | PMPL | 6 | 12-24 in./30-61 cm | 10-16 in./25-41 cm | 28 | 5a-9b
Oregano *Origanum vulgare* | MPL | 9-14 | 12-30 in./30-76 cm | 12-24 in./30-61 cm | 28 | 5a-8b
Curled Parsley *Petroselinum crispum* | PMPL | 6 | 15-18 in./38-46 cm | 12-18 in./30-46 cm | 28 | 5a-8b
Large-Leaf Italian Flat Leaf Parsley *Petroselinum crispum* | PMPL | 6 | 15-18 in./38-46 cm | 12-18 in./30-46 cm | 28 | 5a-8b
Rosemary *Rosmarinus officinalis* | PMPL | 7 | 12-24 in./30-61 cm | 12-24 in./30-61 cm | 42 | 7a-10b
Sage *Salvia officinalis* | PMPL | 6 | 18-24 in./46-61 cm | 14-24 in./36-61 cm | 28 | 4a-8b
Thyme *Thymus vulgaris* | MPL | 8-14 | 12-18 in./30-46 cm | 12-18 in./30-46 cm | 42 | 5a-9b

**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.

---

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 Oregano
SimplyHerbs Rosemary
SimplyHerbs Try Basil
SimplyHerbs Curled Parsley
SimplyHerbs Sage
SimplyHerbs Dill
SimplyHerbs Large-Leaf Italian Flat Leaf Parsley
SimplyHerbs Thyme

Find product & growing info at panamseed.com / SIMPLYHERBS 223
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<tr>
<th>Name</th>
<th>Seed supplied as</th>
<th>Seeds per pellet</th>
<th>Height</th>
<th>Spread</th>
<th>Days to maturity from transplant</th>
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<tr>
<td><strong>Alfresco Mixture</strong></td>
<td>MPL</td>
<td>10-12</td>
<td>12 in./30 cm</td>
<td>12 in./30 cm</td>
<td>2-4 weeks</td>
<td>Red and green leaf lettuces with arugula, endive and radicchio.</td>
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<tr>
<td><strong>Arugula</strong></td>
<td>PMPL</td>
<td>6</td>
<td>12-18 in./30-46 cm</td>
<td>12-18 in./30-46 cm</td>
<td>2-4 weeks</td>
<td>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.</td>
</tr>
<tr>
<td><strong>City Garden Mixture</strong></td>
<td>MPL</td>
<td>7-9</td>
<td>12 in./30 cm</td>
<td>12 in./30 cm</td>
<td>2-4 weeks</td>
<td>Red and green lettuces.</td>
</tr>
<tr>
<td><strong>Global Gourmet Mixture</strong></td>
<td>MPL</td>
<td>10-12</td>
<td>12 in./30 cm</td>
<td>12 in./30 cm</td>
<td>2-4 weeks</td>
<td>Red and green leaf lettuces with spicy Asian greens.</td>
</tr>
<tr>
<td><strong>Kale Storm Mixture</strong></td>
<td>PMPL</td>
<td>8</td>
<td>12-24 in./30-61 cm</td>
<td>12-24 in./30-61 cm</td>
<td>2-4 weeks</td>
<td>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.</td>
</tr>
<tr>
<td><strong>Pro San Mixture</strong></td>
<td>PMPL</td>
<td>6</td>
<td>8-12 in./20-30 cm</td>
<td>6-12 in./15-30 cm</td>
<td>2-4 weeks</td>
<td>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.</td>
</tr>
<tr>
<td><strong>Pro Tatu Mixture</strong></td>
<td>PMPL</td>
<td>6</td>
<td>8-12 in./20-30 cm</td>
<td>6-12 in./15-30 cm</td>
<td>2-4 weeks</td>
<td>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.</td>
</tr>
<tr>
<td><strong>Summer Picnic Mixture</strong></td>
<td>MPL</td>
<td>10-12</td>
<td>12 in./30 cm</td>
<td>12 in./30 cm</td>
<td>2-4 weeks</td>
<td>A season extender! Heat-tolerant, late-bolting mix of red and green lettuces.</td>
</tr>
<tr>
<td><strong>Wonder Wok Mixture</strong></td>
<td>MPL</td>
<td>10-12</td>
<td>12 in./30 cm</td>
<td>12 in./30 cm</td>
<td>2-4 weeks</td>
<td>Mix of Asian greens including mustards, kale and bok choy.</td>
</tr>
</tbody>
</table>

**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.

**MULTI-SPECIES & SINGLE-SPECIES**

**MULTI-PELLETS**

**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.**

**VEGETABLES & HERBS / HANDPICKED**

**SIMPLYSALAD**

Request your Product Information Guide for full culture details.
SimplySalad Series

Arugula

Alfresco Mixture

Global Gourmet Mixture

Wonder Wok Mixture

Summer Picnic Mixture

Kale Storm Mixture

City Garden Mixture

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

Precision Multi-Pellet

Standard Multi-Pellet

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<td>Martini F1</td>
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<td>Patio Snacker F1*</td>
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*Compact variety – best-suited to home garden use.
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<td><strong>Large-Leaf Italian Flat Leaf Parsley</strong></td>
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<td><strong>Oregano</strong></td>
<td>222</td>
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<tr>
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<tr>
<td><strong>Sage</strong></td>
<td>222</td>
<td>X</td>
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<td><strong>Thyme</strong></td>
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<td>BASIL</td>
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<tr>
<td><strong>Dolce Fresca</strong></td>
<td>220</td>
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<td>X</td>
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<tr>
<td><strong>Everleaf Emerald Towers</strong></td>
<td>220</td>
<td>X</td>
<td>X</td>
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<tr>
<td><strong>Everleaf Genovese</strong></td>
<td>220</td>
<td>X</td>
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<tr>
<td><strong>New</strong> <strong>Everleaf Thai Towers</strong></td>
<td>220</td>
<td>X</td>
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<td><strong>Newton</strong></td>
<td>221</td>
<td>X</td>
<td>X</td>
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<td><strong>Purple Ruffles</strong></td>
<td>221</td>
<td>X</td>
<td></td>
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<td><strong>Sweet Dani Lemon</strong></td>
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<tr>
<td>DILL</td>
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<td></td>
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<tr>
<td><strong>Fernleaf</strong></td>
<td>221</td>
<td>X</td>
<td>X</td>
</tr>
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</table>

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

Keep up to date on:
New Varieties  •  Updated Culture  •  How-to Videos

Share your experiences and boost your own social media presence with us!
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!

FUSEABLES®

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® 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

FUSEABLES PLEASANTLY BLUE
Dreams Midnight Petunia & Daddy Blue Petunia

FUSEABLES UTOPIA
Blutopia Bacopa & Snowtopia Bacopa

Find product & growing info at panamseed.com / FUSEABLES 233
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 UNDER THE SUN**
Crimson Gold Coleus & Lime Delight Coleus - great for both sun and shade

**FUSEABLES PARADISE ISLAND**
Kabloom Yellow Calibrachoa, Blue Calibrachoa & Cherry Calibrachoa.

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

**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

**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

**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

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

### 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

### 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

### MAD ABOUT RED
(A) Easy Wave Red Velour Petunia & (B) Easy Wave Yellow Petunia

- 8 in./20cm
- 10 in./25cm
- 12 in./30cm

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

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

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

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

Find product & growing info at panamseed.com / WAVE PLUG & PLAY
FIREFRACKER
(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

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

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

8 in./20cm
10 in./25cm
12 in./30cm

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

FIREWATER
(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

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
8 in./20cm
10 in./25cm
12 in./30cm

AFTER DARK
(A) Easy Wave Burgundy Velour Petunia & (B) Easy Wave Neon Rose Petunia
8 in./20cm
10 in./25cm
12 in./30cm

CORAL LIGHTS
(A) Easy Wave Yellow Petunia, (B) Shock Wave Coral Crush Petunia & (C) Glitz Euphorbia
10 in./25cm
12 in./30cm

FIRE N NICE
(A) Easy Wave Red Velour Petunia & (B) Glitz Euphorbia
10 in./25cm
12 in./30cm

ROYAL SPARKLER
(A) Easy Wave Burgundy Velour Petunia, (B) Easy Wave Silver Petunia & (C) Glitz Euphorbia
10 in./25cm
12 in./30cm

PUTTIN’ ON THE PINK
(A) Easy Wave Neon Rose Petunia & (B) Glitz Euphorbia
10 in./25cm
12 in./30cm

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.

Find product & growing info at panamseed.com / WAVE PLUG & PLAY 241
**EVENING IN RIO**
(A) Easy Wave Violet Petunia & (B) Easy Wave Neon Rose Petunia

- **8 in./20cm**
- **10 in./25cm**
- **12 in./30cm**

**OPPOSITES ATTRACT**
(A) Easy Wave Coral Reef Petunia & (B) Easy Wave Violet Petunia

- **8 in./20cm**
- **10 in./25cm**
- **12 in./30cm**

**O CANADA**
(A) Easy Wave White Petunia & (B) Easy Wave Red Petunia

- **8 in./20cm**
- **10 in./25cm**
- **12 in./30cm**

**BEACH PARTY**
(A) Shock Wave Denim Petunia & (B) Shock Wave Pink Shades Petunia

- **8 in./20cm**
- **10 in./25cm**
- **12 in./30cm**

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

**LUNCH DATE**

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

12 in./30cm

**FOODIE BLUES**

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

12 in./30cm

**CANTINA HEAT**

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

12 in./30cm
CHRISTMAS IN JULY
(A) Lucky Star White Pentas & (B) Lucky Star Dark Red Pentas

8 in./20cm
10 in./25cm
12 in./30cm

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

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

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

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

8 in./20cm
10 in./25cm
12 in./30cm

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

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

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

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

- 8 in./20cm
- 10 in./25cm
- 12 in./30cm

**INK’D**
(A) Tattoo Raspberry Vinca & (B) Serena Blue Angelonia

- 8 in./20cm
- 10 in./25cm
- 12 in./30cm

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.
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

**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.

**COLOR CARNIVAL**
(A) Wicked Ornamental Pepper &
(B) Santos Orange Ornamental Pepper

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

12 in./30cm

**SUN SEA AND ROSÉ**
(A) PowWow Wild Berry Echinacea, (B) Mesa Peach Gaillardia & (C) Blue Spear Lavandula

12 in./30cm

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

12 in./30cm

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

PARIS IN SPRINGTIME
(A) Cheyenne Spirit Echinacea & (B) Starship Rose Lobelia
12 in./30cm

TUSCAN SUN
(A) Starship Scarlet Lobelia, (B) Mesa Bright Bicolor Gaillardia & (C) ColorGrass® Sirocco Anemanthele
12 in./30cm

VERY VESUVIUS
(A) Starship Scarlet Lobelia, (B) Sunfire Coreopsis & (C) Lavance Deep Purple Lavandula
12 in./30cm
SALES & CUSTOMER SERVICE
HERE TO HELP!

THE AMERICAS

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Find product & growing info at panamseed.com / SALES & CUSTOMER SERVICE 251
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.

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
Eggplant Patio Baby
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
Zinnia Double Zahara Cherry
Zinnia Double Zahara Fire
Zinnia Zahara Sunburst

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

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

Sol™ Gekko Green (Fleuroselect Gold Medal, Fleuroselect Novelty) and Lizard Leaf (Fleuroselect Novelty/Foliage Celosia)
**MEDAL OF EXCELLENCE INDUSTRY’S CHOICE**
Calibrachoa Kabloom Yellow
Calibrachoa Artisan Collection Red Ombre
Calibrachoa Artisan Collection Soft Orange
Impatiens Beacon Bright Red
Impatiens Beacon Coral
Impatiens Beacon Orange
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
Leucanthemum 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
## 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 XP 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

**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™ Spicy  
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™ Orchard

**US 9,451,751**  
Vinca Valiant™ Punch  
Vinca Valiant™ Mixture

**US 9,451,752**  
Vinca Valiant™ Lilac  
Vinca Valiant™ Mixture

## U.S. PLANT PATENTS

**PP 26,516**  
Calibrachoa Kablooom™ 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 Sun-Kiss® - 201700014  
Cuphea Pink Shimmer - 201800290  
Erysimum Citrona® Orange - 200600167

**Echinacea PowWow®** Yellow - 200600168  
French Marigold Bonanza™ Bolero - 201800074

**French Marigold Bonanza™ Deep Orange** - 201800517  
French Marigold Flamenco - 202000034  
Helensium Dakota Gold - 200600099

Matthiola Katz Ruby - 201200438  
Myosotis Mon Amie Blue - 200800070

**Ornamental Pepper Debonair** Lime Green  
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 Salmon** - 200900083  
Vinca Mediterranean XP White - 200900053

**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™ Raspberry - 201800426

**Vinca Tattoo™ Tangerine** - 201800425  
Vinca Tattoo™ American Pie Mixture - 200600190

**Zinnia Zahara® Raspberry** - 201500215  
**Zinnia Zahara® Red** - 201600030

**Zinnia Zahara® White** - 201600297  
**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** - 46599

**Celosia Neo™ Rose** - 43693

Coreopsis SunKiss® - 46544

Echinacea PowWow™ Wild Berry - 35233

Heuchera Melting Fire - 201400297

Lavandula Lavance Deep Purple - 48822

## EUROPEAN COMMUNITY PLANT UTILITY PATENTS APPLIED FOR

- Lavandula Avignon Early Blue
- Lavandula Blue Spear

## 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
- Impatiens Beacon® 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

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Attn: Returns
622 Town Road
West Chicago, Illinois USA 60185-2698

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All seed counts given are approximate quantities due to variation based on a lot by lot comparison. Seed counts may also vary between colors, series, lots, and conditions. Any dispute not subject to mandatory arbitration shall be resolved by arbitration in accordance with the AMERICAN ARBITRATION ASSOCIATION. ALL ARBITRATION TO BE VENUED IN COOK OR DUPAGE COUNTIES, ILLINOIS.

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