



2014Catalogue

seed

KieftSeed

Kieft Seed

Perennial Favourites and More

Welcome to Kieft Seed, your complete lineup of unique seed perennials, cut flowers and pot crops. You can count on Kieft for innovative breeding and superior quality, backed by reliable, personalized service.

New for this catalogue: the exciting Lotti Arabis series and award-winning Sparkle White Gaura. We also added must-grow varieties to our popular Dalmatian Digitalis and Revolution Gerbera series.

Proven. Programmable. Perennial Combos.



Coreopsis Early Sunrise and
Delphinium Diamonds Blue

It's time for something different in mixed combos! All-perennial combos feature first-year-flowering, mid-season varieties, perfect for Summer sales. Each combo has been tested in a range of climates worldwide, so you can count on fast fill, peak performance and eye-catching colour.

Visit www.kieftseed.com for general guidelines on producing your perennial mixed combos and complete culture information on individual varieties.

premium perennial combos



Agastache Pink Pop, Dianthus Dash Pink and Lavender Ellagance Pink



Gaillardia Mesa Bright Bicolor and Anemanthele Sirocco



Dianthus Dynasty Red, Dianthus Dash White and Lavender Ellagance Purple



Juncus Blue Arrows, Stachys Byzantia Silver and Dichondra Silver Falls



Agastache Pink Pop, Dianthus Amazon Neon Cherry and Lavender Ellagance Purple



Coreopsis Early Sunrise and Lavender Ellagance Purple

You asked for "out of the box" combos...Kieft answered!

Growers and retailers around the globe were constantly looking to expand their combo programs with something beyond traditional annual mixed containers. We took up that challenge and got to work creating combos using only our seed perennials.

The criteria: each one had to work together in production, in growing habit and in aesthetic appeal.

The process: repeated trialing at multiple locations around the world.



Cor de Jong
Global Product Manager

The result: the perennial combos you see on these pages are proven to deliver elegant and textured Summer containers deserving of a premium price...every one supported by comprehensive growing tips.

The future: we're hard at work today developing even more proven, programmable perennial combos for you!



Scan or go to kieftseed.com/catalogs



Digitalis Dalmatian Peach and Purple



Acanthus mollis



Pink Pop Agastache



Red Sea Ageratum



Alma Alchemilla



Everest Blue Ageratum



Irish Silk Alchemilla

ACANTHUS 🌿

Acanthus mollis

Height: 40 in./1 m
Spread: 32 to 36 in./80 to 90 cm

Plug crop time: 8 to 10 weeks
Transplant to finish: 36 to 40 weeks

USDA Hardiness Zones: 6 to 10 (-10 to 30°F/-23 to -1°C minimum temperatures)

Supplied as raw seed.

Impressive plant produces large rose and white spikes over attractive classic foliage. Good for borders, patio planters, or as a specimen plant.

AGASTACHE 🌿

Agastache pallidiflora ssp. *neomexicana*

Pink Pop

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

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

USDA Hardiness Zones: 7 to 10 (0 to 30°F/-18 to -1°C minimum temperatures)

A First-Year-Flowering Perennial.
Supplied as raw seed.

Highly uniform, with excellent basal branching and compact habit. Requires no vernalization and has a short production period. Tender perennial has long-flowering, fragrant pink spikes. Recommended sowing time is March to May.

AGERATUM 🌿

Ageratum houstonianum

Everest Blue

Height: 26 in./65 cm
Spread: 8 to 12 in./20 to 30 cm

Plug crop time: 4 to 5 weeks
Transplant to finish: 12 to 15 weeks

Supplied as pelleted seed.

Low-energy crop is suitable for professional greenhouse and outdoor production; also works as a home garden cut flower. Delivers strong, true blue colour and season-long flowering in landscapes. Can be pinched to produce uniform, sturdy stems and a wider plant spread.

Red Sea

Height: 26 in./65 cm
Spread: 8 to 12 in./20 to 30 cm

Plug crop time: 4 to 5 weeks
Transplant to finish: 12 to 15 weeks

Supplied as pelleted seed.

First red Ageratum for cut flower use. Flowers open bright red and darken to purple-red. Low-energy crop is suitable for professional greenhouse and outdoor production. Best for April to October sales. Three-week flowering period with good vase life. Also good for backyard cut flower programs.

ALCHEMILLA 🌿

Alchemilla erythropoda

Alma

Height: 6 to 8 in./15 to 20 cm
Spread: 12 to 14 in./30 to 35 cm

Plug crop time: 8 to 10 weeks
Transplant to finish: 24 to 38 weeks

USDA Hardiness Zones: 3 to 8 (-40 to 10°F/-40 to -12°C minimum temperatures)

Supplied as TunedSeeds.

Compact, small-leaved, red-stemmed Alchemilla produces attractive blue-green foliage with yellow flowers in Spring. Combines good basal branching with a strong, sturdy habit. Flowers 2 to 3 weeks earlier than *Alchemilla mollis* for early Spring sales. Recommended sowing times are December to January or June to July.

ALCHEMILLA 🌿

Alchemilla mollis

Irish Silk

Height: 12 to 14 in./30 to 35 cm
Spread: 14 to 16 in./35 to 40 cm

Plug crop time: 8 to 10 weeks
Transplant to finish: 24 to 38 weeks

USDA Hardiness Zones: 3 to 8 (-40 to 10°F/-40 to -12°C minimum temperatures)

Supplied as raw seed.

Large, well-defined, very ornamental leaves of mid-green with trusses of small yellow flowers in Spring. Well-filled plants with dense foliage are ideally suited for borders or early-season mixed containers. Recommended sowing times are December to January or June to July.



Luna Alyssum



Madonna Anemone



Casablanca Ammi



Graceland Ammi *Fleuroselect Quality Award*

ALYSSUM ☀

Alyssum montanum
(*Madwort*)

Luna

Height: 4 to 6 in./10 to 15 cm
Spread: 8 to 12 in./20 to 30 cm
Plug crop time: 6 to 8
Transplant to finish: 10 to 12

USDA Hardiness Zones: 4 to 8 (-30 to 10°F/-34 to -12°C minimum temperatures)

A First-Year-Flowering Perennial.
Supplied as raw seed.

Compact alpine variety produces grey-green foliage and masses of bright yellow flowers. 1 to 2 weeks earlier than Mountain Gold when grown as a biennial. Can also be grown warm like an annual bedding plant. Sow July to August for Spring/Summer flowering the following year, or February to May if scheduled as a first-year-flowering perennial.

LOBULARIA MARITIMA

See **PanAmerican Seed**, page 21.

AMMI ☀

Ammi majus

Graceland

Height: 40 to 55 in./1 to 1.4 m
Spread: 8 to 10 in./20 to 25 cm
Plug crop time: 4 to 6 weeks
Transplant to finish: 8 to 10 weeks

Supplied as raw seed.

Produces more quality stems, an easier harvest and a better return per square foot/metre. Healthy, dark green foliage means less cleaning during harvest. The uniform growth prevents side shoots overgrowing the main umbel, resulting in a more manageable height.

AMMI ☀

Ammi visnaga

Casablanca

Height: 40 to 50 in./1 to 1.25 m
Spread: 8 to 10 in./20 to 25 cm
Plug crop time: 4 to 6 weeks
Transplant to finish: 10 to 12 weeks

Supplied as raw seed.

Strong, straight stems with no side shoots for easier harvest and better return per square foot/metre. Very uniform, low-energy crop can be grown indoors and outdoors. Larger, more mounded umbels than *Ammi majus*, with clear white flowers.

ANEMANTHELE

See **Grasses** in PanAmerican Seed, page 46.

ANEMONE ☀

Anemone sylvestris (Snowdrop Anemone)

Madonna

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

Plug crop time: 8 to 10 weeks
Transplant to finish: 26 to 38 weeks

USDA Hardiness Zones: 4 to 7 (-30 to 0°F/-34 to -18°C minimum temperatures)

Supplied as clean seed.

Large, white 'Snowdrop' flowers on strong stems that stand about 2 in./5cm above the plant. Very popular variety is a strong Spring seller. Sow May to June for Spring sales the following year.

ANTIRRHINUM

See **Snapdragon** in PanAmerican Seed, page 118.

songbird



Bluebird



Cardinal



Goldfinch



Robin



Nightingale



Dove RHS Award of Garden Merit

AQUILEGIA (COLUMBINE) 🌸
Aquilegia x hybrida

Songbird F1 Series

Height: 11 to 18 in./28 to 40 cm;
varies by variety

Spread: 10 to 14 in./25 to 35 cm

Plug crop time: 6 to 8 weeks

Transplant to finish: 22 to 28 weeks

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

A First-Year-Flowering Perennial.
Supplied as raw seed.

Popular series is easy and economical to grow - with true, non-fading colours in late Spring and early Summer.

- Well-adapted for 6-in./15-cm pot and garden use.
- Can be flowered in Spring from an Autumn sowing when grown in a cool greenhouse (night temperatures lower than 60°F/15°C) with no special vernalization treatment required.
- Easy-to-force, free-flowering, medium-compact plants have 1.5 to 3.5-in./4 to 9-cm blooms.

Bluebird: 11 in./28 cm tall.

Cardinal: 11 in./28 cm tall. Early-flowering and well-matched to Bluebird.

Dove: 18 in./45 cm tall.

Goldfinch: 18 in./45 cm tall.

Nightingale: 18 in./45 cm tall.

Robin: 18 in./45 cm tall. Very easy to force into flower.

Mixture (Not pictured)

Swan F1 Series

Height: 20 to 24 in./45 to 60 cm
Spread: 12 to 14 in./30 to 35 cm

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

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

A First-Year-Flowering Perennial.
Supplied as raw seed.

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/ 15°C) with no special vernalization 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.
- Taller than the Songbird varieties.

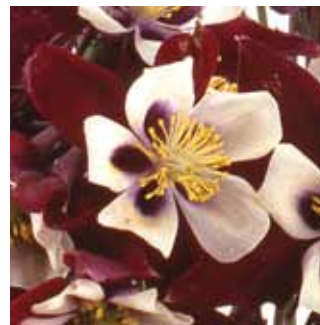
Pink And Yellow is slightly earlier than other Swan colours, flowering 2 to 3 weeks faster.



Mixture



Blue And White



Burgundy And White
RHS Award of Garden Merit



Lavender



Pink And Yellow



Red And White



Rose And White



Violet And White



White



Yellow *RHS Award of Garden Merit*



Clementine Mixture Fleuroselect Quality Award



Clementine Red



Clementine Rose
Fleuroselect Novelty



Clementine White



Barlow Mixture



Barlow Blue



Clementine Blue Fleuroselect Novelty



Clementine Dark Purple
Fleuroselect Novelty



Clementine Salmon Rose
Fleuroselect Novelty



Barlow Christa



Barlow Nora



Barlow Rose



Barlow White

AQUILEGIA (COLUMBINE) *Aquilegia vulgaris*

Barlow Series

Height: 28 to 30 in./70 to 80 cm

Spread: 16 to 20 in./40 to 50 cm

Plug crop time: 7 to 8 weeks

Transplant to finish: 30 to 40 weeks

USDA Hardiness Zones: 3 to 5 (-40 to -20°F/-40 to -29°C minimum temperatures)

Supplied as raw seed.

The first *Aquilegia vulgaris* series with fully double, spurless flowers, the highly uniform plants produce 3 to 5 stems in the first year and 5 to 10 stems in the second year.

Black (Not pictured)

Bordeaux (Not pictured)

Clementine Series

Height: 14 to 16 in./35 to 40 cm

Spread: 12 to 14 in./30 to 35 cm

Plug crop time: 7 to 8 weeks

Transplant to finish: 26 to 40 weeks

USDA Hardiness Zones: 3 to 8 (-40 to 10°F/-40 to -12°C minimum temperatures)

Supplied as TunedSeeds.

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. Sow June to July for Spring sales the following year.

Winky Single Series

Height: 12 to 14 in./30 to 35 cm
Spread: 12 to 14 in./30 to 35 cm

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

USDA Hardiness Zones: 3 to 8 (-40 to 10°F/-40 to -12°C minimum temperatures)

Supplied as raw seed.

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

Early Sky Blue blooms 1 to 2 weeks earlier than rest of series.

Winky Double Series

Height: 12 to 14 in./30 to 35 cm
Spread: 12 to 14 in./30 to 35 cm

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

USDA Hardiness Zones: 3 to 8 (-40 to 10°F/-40 to -12°C minimum temperatures)

Supplied as raw seed.

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.
- Mildew tolerance.
- Versatile uses.

Mixture (Not pictured)



Winky Single Mixture



Winky Single Blue-White



Winky Single Early Sky Blue
Fleuroselect Novelty



Winky Single Pink



Winky Single Purple-White



Winky Single Red-White
Fleuroselect Quality Award



Winky Single Rose-Rose
Fleuroselect Quality Award



Winky Single White



Winky Double Dark Blue-White



Winky Double Red-White
Fleuroselect Novelty



Winky Double Rose-White



Winky Double White-White
Fleuroselect Novelty



New Lotti Deep Rose Arabis



Spring Charm Arabis



Pinky Arabis



New Lotti White Arabis



Avalanche Arenaria

ARABIS 🌞
Arabis blepharophylla

Spring Charm

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

Plug crop time: 6 to 8 weeks
Transplant to finish: 24 to 36 weeks

USDA Hardiness Zones: 4 to 7 (-30 to 0°F/-34 to -18°C minimum temperatures)

Supplied as raw seed.

Wintergreen, bushy and compact plant has spikes of strong pink flowers over attractive foliage. Uniform, early flowering and well-suited to container production.

ARABIS 🌞
Arabis caucasica

New Lotti Series

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

Plug crop time: 5 to 6 weeks
Transplant to finish: 24 to 28 weeks

USDA Hardiness Zones: 4 to 7 (-30 to 0°F/-34 to -18°C minimum temperatures)

Supplied as coated seed.

No more rangy, uncontrolled and unsalable plants, thanks to Lotti's uniform, well-branched and tight plant habit!

- Short harvest window - can harvest in 1 run without the need to pick and choose.
- Tight, floriferous plants look better at retail.
- Series includes a non-fading rose colour.
- Showy, mounded plants have big appeal for gardeners.

Pinky

Height: 4 to 6 in./10 to 15 cm
Spread: 6 to 9 in./15 to 23 cm

Plug crop time: 6 to 7 weeks
Transplant to finish: 24 to 28 weeks

USDA Hardiness Zones: 4 to 7 (-30 to 0°F/-34 to -18°C minimum temperatures)

Supplied as raw seed.

Early-flowering, compact and uniform variety with intense, bright, deep pink colour. Quality item for professional growers is recommended for 3.5 to 5-in./9 to 13-cm programs.

ARENARIA 🌞
Arenaria montana

Avalanche

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

Plug crop time: 8 to 10 weeks
Transplant to finish: 26 to 44 weeks

USDA Hardiness Zones: 4 to 8 (-30 to 10°F/-34 to -12°C minimum temperatures)

Supplied as raw seed.

Professional selection of popular perennial bedding variety makes a uniform and compact plant that is covered with a profusion of large, white blooms over a long flowering season. Suitable for pot and container production. Sow in June to July for late Spring and early Summer sales the following year.



New Ballerina Mixture Armeria



Sunnyola Barbarea



Silky Deep Red Asclepias



Silky Gold Asclepias
Fleuroselect Quality Award



Silky Scarlet Asclepias



Ballerina Lilac Armeria
Fleuroselect Novelty



Ballerina Red Armeria
Fleuroselect Gold Medal



Ballerina White Armeria
Fleuroselect Gold Medal



Joystick Lilac Shades Armeria
Fleuroselect Quality Award



Joystick Red Armeria
Fleuroselect Quality Award



Joystick White Armeria
Fleuroselect Quality Award

ARMERIA

Armeria pseudarmeria

Ballerina Series

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

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

USDA Hardiness Zones: 7 to 9
(0 to 20°F/-18 to -7°C minimum temperatures)

A First-Year-Flowering Perennial.
Supplied as clean seed.

High-quality, programmable perennial fits right into your early-season program – now in a bright mix!

- Compact and uniform plants produce cushion-shaped, grassy foliage and long, strong stems topped with globe-shaped blooms.
- Low maintenance and salt tolerant.
- Excellent first-year garden performance in beds, containers and mixed plantings.
- Suitable for 4-in./10-cm pot production.
- Recommended for sowing February to May or August to September.

Joystick Series

Height: 12 to 14 in./30 to 35 cm
Spread: 10 to 14 in./25 to 35 cm

Plug crop time: 6 to 7 weeks
Transplant to finish: 14 to 17 weeks

USDA Hardiness Zones: 7 to 9
(-0 to 20°F/-23 to -7°C minimum temperatures)

A First-Year-Flowering Perennial.
Supplied as cleaned seed.

Hardy perennial produces cushion-shaped, grassy foliage and long-stemmed globular blooms. Taller than Ballerina, the long-flowering plants are suitable for borders and backyard cut flower gardens.

Mixture (Not pictured)

ASCLEPIAS

Asclepias curassavica

Silky Series

Height: 24 to 28 in./60 to 70 cm
Spread: 8 to 10 in./20 to 25 cm

Plug crop time: 4 to 5 weeks
Transplant to finish: 11 to 12 weeks

Supplied as raw seed.

This high-quality cut flower is bred for greenhouse and outdoor Summer production and prefers a warm, rather dry location. Multi-purpose plants work well in gardens, landscapes, patio planters and as an annual cut flower. Produces beautiful flower umbels in intense colours on strong stems for an exotic look.

Mixture (Not pictured)

BARBAREA

Barbarea rupicola

Sunnyola

Height: 5 to 6 in./12 to 15 cm
Spread: 6 to 8 in./15 to 20 cm

Plug crop time: 6 to 7 weeks
Transplant to finish: 26 to 38 weeks

USDA Hardiness Zones: 6 to 8
(-10 to 10°F/-23 to -12°C minimum temperatures)

Supplied as raw seed.

Unique variety combines ornamental foliage, flowers and seed pods into one attractive Spring crop. Flowering is followed by a display of long, slender, green seed pods which fade to red-green. Recommended sowing time is July and August.



Medicis Mixture Bellis



Medicis Red Bellis



Medicis Rose Bellis



Medicis White Bellis



Red Beauty Bergenia



Bellissima Red Bellis



Bellissima Rose Bellis
Fleuroselect Quality Award



Bellissima Rose Bicolor Bellis
Fleuroselect Quality Award



Bellissima White Bellis
Fleuroselect Quality Award



Griffiti Bupleurum

BELLIS 🌻
Bellis perennis

Bellissima Series

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

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

USDA Hardiness Zone: 4 to 8 (-30 to 10°F/-34 to -12°C minimum temperatures)

Supplied as pelleted seed.

Needing no vernalization to flower, the robust, early-blooming plants are strong landscape performers in cool climates, displaying an abundance of large, fully double flowers. Best in packs to 5-in./13-cm pots.

Mixture (Not pictured)

Medicis Series

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

Plug crop time: 4 to 5 weeks
Transplant to finish: 14 weeks

Supplied as raw seed.

Pomponnette-type English daisies have large, fully double, quill-petaled flowers up to 1.25 in./3 cm across. Under cooler temperatures, flowers are more fully double. Best grown as a biennial bedding or pot plant for Spring displays.

BELLS OF IRELAND
See **Moluccella**, page 198.

BERGENIA 🌻 🌻
Bergenia cordifolia

Red Beauty

Height: 20 to 25 in./50 to 60 cm
Spread: 18 to 24 in./45 to 60 cm

Plug crop time: 8 to 10 weeks
Transplant to finish: 36 to 40 weeks

USDA Hardiness Zones: 3 to 5 (-40 to -20°F/-40 to -29°C minimum temperatures)

Supplied as raw seed.

Hardy perennial has ornamental, evergreen foliage and deep purplish-red flowers appearing in early Spring. Suitable for 4 to 5-in./10 to 12-cm pot production.

BUPLEURUM 🌻
Bupleurum rotundifolium

Griffiti

Height: Direct-sown: 36 to 40 in./90 cm to 1 m; from plug: 28 to 36 in./70 to 90 cm
Spread: 18 to 24 in./45 to 60 cm

Direct sowing to finish: 12 to 16 weeks

Supplied as raw seed.

Uniform greenish-yellow filler for fresh cut flower bouquets or as a border background plant. Graded seed ensures uniform germination, culture and harvest for programmable production cycles.



Campana Deep Blue Campanula



Campana Lilac Campanula



Advance Blue Campanula



Grenade Orange Carthamus



Grenade White Carthamus



Campana Pink Campanula



Campana White Campanula



Advance White Campanula



Amor Blue Catananche



Amor White Catananche

CAMPANULA
Campanula medium 🌞

Campana F1 Series

Height: 30 to 34 in./75 to 85 cm
Spread: 5 in./12 cm

Plug crop time: 7 to 8 weeks
Transplant to finish: 10 to 14 weeks

Supplied as pelleted seed.

Top-quality professional cut flower series is a low-energy crop, suitable for Summer or Winter production. Well-matched across the series for timing and habit, Campana delivers excellent uniformity. 100% top-flowering with strong stems and good foliage.

CAMPANULA
Campanula cochleariifolia 🌞

Advance Series

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

Plug crop time: 6 to 8 weeks
Transplant to finish: 11 to 14 weeks

USDA Hardiness Zone: 4 to 7 (-30 to 0°F/-34 to -18°C minimum temperatures)

A First-Year-Flowering Perennial.
Supplied as raw seed.

Outstanding in uniformity and early flowering, compact varieties are ideal for small pot programs, providing reliable, floriferous plants. Best in well-drained, sunny gardens. Recommended sowing time is February to May.

CAPSICUM
See **Ornamental Pepper** In PanAmerican Seed, page 93.

CAREX
See **Grasses** in PanAmerican Seed, page 46.

CARTHAMUS 🌞
Carthamus tinctorius

Grenade Series

Height: 32 to 40 in./80 cm to 1 m
Spread: 8 to 10 in./20 to 25 cm

Direct sowing to finish: 10 to 16 weeks

Supplied as coated seed.

Ideal for indoor and outdoor professional cut flower production, featuring round, thornless leaves and round flower buds. Uniform stem length across the series. Excellent for fresh and dried use; can also be used green when harvested young. Preferably grown as a direct-sown crop.

Zanzibar (Not pictured)

Height: 32 to 40 in./80 cm to 1 m
Spread: 8 to 10 in./20 to 25 cm

Direct sowing to finish: 10 to 16 weeks

Supplied as coated seed.

Deep orange to yellow-red flowers resembling thistles top stems of uniform length. Well-suited to indoor and outdoor professional cut flower programs; can be used fresh and dried. Preferably grown as a direct-sown crop.

CATANANCHE 🌞
Catananche caerulea

Amor Series

Height: 20 to 22 in./50 to 60 cm
Spread: 12 to 14 in./30 to 35 cm

Plug crop time: 6 to 8 weeks
Transplant to finish: 14 to 18 weeks

USDA Hardiness Zone: 4 to 7 (-30 to 0°F/-34 to -18°C minimum temperatures)

A First-Year-Flowering Perennial.
Supplied as raw seed.

Produces fine flowers on slender stems with narrow foliage. Good for borders or as fresh or dried cut flower. Best grown on a dry, sunny and chalky soil. Sow early for Spring flowering in the first year. Winter cover can be beneficial; needs good drainage to survive wet Winters.



Bombay Fire



Bombay Fidor European Community Plant
Variety Rights Number EU17179



Bombay Figo European Community Plant
Variety Rights Number EU16690

CELOSIA

Celosia cristata (Cockscomb) 🌻

Bombay Series

Height: 28 to 40 in./70 cm to 1 m
Spread: 5 in./13 cm

Plug crop time: 2 to 3 weeks
Transplant to finish: 10 to 14 weeks

Supplied as coated seed.

The professional cut flower grower's choice for economical, high-density production – the industry standard!

- High-quality greenhouse series offers short, programmable production period; high yields; strong stems and absence of off-shoot flowers.
 - Features round stems, flat combs, a wide range of appealing colours and truly uniform growth.
 - Large, triangular comb-shaped flower heads add an exclusive touch to any bouquet, alone or mixed.
 - 3 to 4-week shorter production period, better transportability, better stress resistance and longer vase life than the competition.
 - Includes Bombay Fire colours: narrow and small-leaved, of good length and well-matched for easy production planning.
- Candy, Sunshine and Bordeaux are well-matched.



Bombay Yellow Gold
Fleuroselect Gold Medal



Bombay Bordeaux



Bombay Candy



Bombay Firosa European Community Plant
Variety Rights Number EU16689



Bombay Cherry



Bombay Orange



Bombay Pink



Bombay Rose



Bombay Filemon



Bombay Fiora



Bombay Salmon



Bombay Sunshine



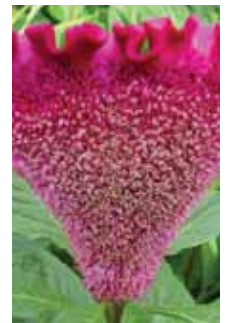
Bombay Velvet



Bombay Purple
Fleuroselect Gold Medal
European Community Plant
Variety Rights Number EU1458



Bombay Fisal



Bombay Fivio

Jura Salmon

Height: 32 to 40 in./80 cm to 1 m
Spread: 5 in./12 cm

Plug crop time: 2 to 3 weeks
Transplant to finish: 10 to 15 weeks

Supplied as coated seed.

High-quality greenhouse cut flower has a programmable cultivation period for year-round sales. Produces a high percentage of saleable stems. Uniform plant habit with strong round stems for easy harvesting and good shipability. Excellent vase life.

Spring Green

Height: 40 to 48 in./1 to 1.2 m
Spread: 5 in./12 cm

Plug crop time: 2 to 3 weeks
Transplant to finish: 12 to 16 weeks

Supplied as coated seed.

Easy to program for year-round sales, this high-quality, greenhouse cut flower yields a high percentage of saleable stems. Uniform plant habit with strong round stems for easy harvesting and good shipability.

CELOSIA

Celosia plumosa 🌻

Sunday Series

Height: 28 to 40 in./70 cm to 1 m
Spread: 5 in./12 cm

Plug crop time: 2 to 3 weeks
Transplant to finish: 12 to 16 weeks

Supplied as coated seed.

Popular plume-shape Celosia is now available for the first time as a professional cut flower, with sufficient stem length and strength for retail bouquets. Similar in production to the widely-used *Celosia cristata* varieties, the Sunday series has a short, programmable production time and a high yield percentage, making it ideal for high-density production. Excellent shipability and vase life. Perfect filler for mixed bouquets; also makes an eye-catching backyard cut flower.

Orange is one of the latest to flower in the series.

Wine Red is one of the latest to flower and the shortest in the series.

Mixture (Not pictured)



Sunday Bronze



Sunday Dark Pink



Sunday Orange



Sunday Red



Sunday Salmon



Sunday Wine Red



Jura Salmon



Spring Green



Purple



Lemon



Orange



Salmon



Red



Terracotta



White



Mixture

CELOSIA

Celosia spicata 🌞

Kosmo Series See **PanAmerican Seed**, page 30.

Celway Series

Height: 40 to 48 in./1 to 1.2 m

Spread: 5 in./12 cm

Plug crop time: 2 to 4 weeks

Transplant to finish: 12 to 15 weeks

Supplied as coated seed.

One central spiky plume surrounded by several smaller spikes gives an impression of a well-filled bunch of spikes with extra side branches. Short programmable production time is comparable to Bombay series. Suitable for high-density production. Strong stems with small top leaves allow for good sleeving and shipability.

Enterprise Series

Height: 40 to 48 in./1 to 1.2 m
Spread: 5 in./12 cm

Plug crop time: 2 to 4 weeks
Transplant to finish: 12 to 15 weeks

Supplied as coated seed.

Longer central plume surrounded by smaller plumes, forming a slender spike about 6 to 8 in./15 to 20 cm long. Production time is about 10 days longer than Bombay, but substantially shorter than competitive varieties. Holds flower colour well.



Enterprise Dark Pink



Enterprise Wine Red



Punky Red *Fleuroselect Quality Award*

Punky Red

Height: 20 to 23 in./50 to 60 cm
Spread: 20 in./50 cm

Plug crop time: 2 to 4 weeks
Transplant to finish: 12 to 15 weeks

Supplied as coated seed.

Mid-height garden Celosia forms large clusters of deep red flower spikes for colour all through the Summer, especially in warm climates. Performs best in well-drained, fertile soil in full sun.

Spiky Series

Height: 16 in./40 cm
Spread: 8 to 12 in./20 to 30 cm

Plug crop time: 2 to 4 weeks
Transplant to finish: 12 to 15 weeks

Supplied as coated seed.

Once flowering, the upright, red-stemmed plants continue to develop by extending flower spikes into attractive forms with Summer-long colour. Outstanding in well-drained, sunny borders and patio planters; excellent landscape variety for warmer areas.



Spiky Pink *Fleuroselect Quality Award*



Spiky Purple

Startrek Series

Height: 40 to 48 in./1 to 1.2 m
Spread: 5 in./12 cm

Plug crop time: 2 to 4 weeks
Transplant to finish: 12 to 15 weeks

Supplied as coated seed.

Companions to the Enterprise series with the same culture and features, the Startrek varieties produce one central plume surrounded by several smaller plumes – the overall impression is that of a star-shaped cone.



Startrek Lilac



Startrek Rose Pink *Fleuroselect Quality Award*

BEDDING & POT CELOSIA
See **PanAmerican Seed**, pages 29-31.



Arista Chaenorrhinum



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



Rising Sun Coreopsis
Fleuroselect Gold Medal



Sunfire Coreopsis
Fleuroselect Quality Award

CHAENORRHINUM

Chaenorrhinum origanifolium

Arista

Height: 6 to 7 in./15 to 18 cm
Spread: 6 to 10 in./15 to 25 cm

Plug crop time: 6 to 8 weeks
Transplant to finish: 10 to 16 weeks

USDA Hardiness Zones: 7 to 9
(0 to 20°F/-18 to -7°C minimum temperatures)

A First-Year-Flowering Perennial.
Supplied as pelleted seed.

The darkest blue *Chaenorrhinum* on the market is less spreading and more compact, making it less breakable and more attractive at retail. Semi-cascading plants have good centre flowering and finely textured foliage. Recommended sowing time is February to May.

COREOPSIS

Coreopsis grandiflora

Early Sunrise

Height: 24 in./60 cm
Spread: 22 to 24 in./55 to 60 cm

Plug crop time: 5 weeks
Transplant to finish: 9 to 12 weeks

USDA Hardiness Zones: 4 to 9 (-30 to 20°F/-34 to -7°C minimum temperatures); can also be marketed as an annual in premium packs.

A First-Year-Flowering Perennial.
Supplied as raw seed.

Compact and uniform Early Sunrise can be sold in blooming packs. Produces golden yellow, semi-double flowers constantly all Summer. Fits annual production scheduling and is a great variety for parks and landscapes.

Rising Sun

Height: 18 to 30 in./45 to 75 cm
Spread: 24 to 26 in./60 to 65 cm

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

USDA Hardiness Zones: 4 to 9 (-30 to 20°F/-34 to -7°C minimum temperatures); can also be marketed as an annual in premium packs.

A First-Year-Flowering Perennial.
Supplied as raw seed.

Early to flower and naturally compact, blooming up to 1 week faster than Early Sunrise. More naturally compact in a pack or 4-in./10-cm pot, requiring less growth regulators. Produces a smaller, controllable habit in the garden the first year; after overwintering, plants are larger than Early Sunrise.

Sunfire

Height: 24 in./60 cm
Spread: 22 to 24 in./55 to 60 cm

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

USDA Hardiness Zones: 4 to 9 (-30 to 20°F/-34 to -7°C minimum temperatures); can also be marketed as an annual in premium packs.

A First-Year-Flowering Perennial.
Supplied as raw seed.

Well-matched to Rising Sun for habit and timing, and earlier to flower than Early Sunrise. Naturally compact in a pack or 4-in./10-cm pot, requiring less PGRs, or no PGRs in certain conditions.



Pink Feather Cortaderia



White Feather Cortaderia



Billy Buttons Craspedia

CORTADERIA ☀

Cortaderia selloana (Pampas Grass)

Pink Feather

Height: 80 in./2 m or more
Spread: 30 to 40 in./75 cm to 1 m

Plug crop time: 6 to 8 weeks
Transplant to finish: 36 to 48 weeks

USDA Hardiness Zones: 7 to 10 (0 to 30°F/-18 to -1°C minimum temperatures)

Supplied as clean seed.

The most dramatic of all ornamental grasses, impressive Pink Feather makes a massive clump of narrow leaves and produces huge, feathery pink plumes from August to October. Maintains Winter interest.

White Feather

Height: 80 in./2 m or more
Spread: 30 to 40 in./75 cm to 1 m

Plug crop time: 6 to 8 weeks
Transplant to finish: 36 to 40 weeks

USDA Hardiness Zones: 7 to 10 (0 to 30°F/-18 to -1°C minimum temperatures)

Supplied as clean seed.

Dramatic ornamental grass displays huge, feathery white plumes from August to October, over arching, green foliage. Good Winter-interest choice.

CORYNEPHORUS

See Grasses in **PanAmerican Seed**, page 47.

CRASPEDIA ☀

Craspedia globosa

Billy Buttons

Height: 16 to 20 in./40 to 50 cm
Spread: 10 to 12 in./25 to 30 cm

Plug crop time: 6 to 7 weeks
Transplant to finish: 17 to 18 weeks

Supplied as clean seed.

This hardy annual plant produces a basal rosette of long leaves and branchless flower stalks topped with bright yellow, globe-shaped flower clusters. Useful for a fresh and dried cut flower; can be cut over a long period.



Blue



Lavender



White

DELPHINIUM ☀️
Delphinium elatum

Guardian F1 Series

Height: 30 to 39 in./75 to 100 cm

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

Plug crop time: 6 to 7 weeks

Transplant to finish: 16 weeks

USDA Hardiness Zone: 4 to 7 (-30 to 0°F/-34 to -18°C minimum temperatures)

A First-Year-Flowering Perennial.
Supplied as raw seed.

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.
- 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.
- Suitable as a greenhouse cut flower or for garden cut flower production.

Mixture (Not pictured)



Blue Donna



Dasante Blue



Blue Pygmy

DELPHINIUM ☀

Delphinium x belladonna

Blue Donna

Height: 32 to 40 in./ 80 cm to 1 m.

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

Plug crop time: 5 to 6 weeks

Transplant to finish: 12 to 16 weeks

USDA Hardiness Zones: 5 to 9 (-20 to 20°F/-29 to -7°C minimum temperatures)

A First-Year-Flowering Perennial.
Supplied as raw seed.

True blue Delphinium has improved uniformity and colour, increased productivity and more stems per sq. ft./sq. m. Heat tolerant with low disease sensitivity. Can be grown as a hardy perennial, backyard cut flower or annual in professional indoor or outdoor production.

DELPHINIUM ☀

Delphinium elatum

Dasante Blue F1

Height: 28 to 34 in./70 to 85 cm

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

Plug crop time: 6 to 7 weeks

Transplant to finish: 11 to 13 weeks

USDA Hardiness Zones: 4 to 8 (-30 to 10°F/-34 to -12°C minimum temperatures)

A First-Year-Flowering Perennial.
Supplied as raw seed.

Answer the "Do you have anything blue?" question with this exciting compact perennial featuring vibrant, true blue flowers with light purple accents and white bees.

- Grower-friendly, uniform plants are more compact, more responsive to PGRs and naturally earlier than other *D. elatum* types.
- Easy-care, cool-season crop can be grown with little or no heat for energy savings.
- Plants ship well with more plants per rack in flower than any other delphinium for tremendous retail impact.
- Best for gallons with 3 plants per pot.
- Suitable for greenhouse, field or garden cut flower production.

DELPHINIUM ☀

Delphinium grandiflorum

Blue Pygmy

Height: 12 to 14 in./30 to 35 cm

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

Plug crop time: 6 to 7 weeks

Transplant to finish: 9 to 12 weeks

USDA Hardiness Zone: 4 to 7 (-30 to 0°F/-34 to -18°C minimum temperatures)

A First-Year-Flowering Perennial.
Supplied as raw seed.

Ideal for 4 to 5-in./10 to 12-cm programs, Blue Pygmy produces compact plants with large, deep blue, spurred flowers. Excellent basal branching assures a good plant habit. Sow in February for May to June flowering, or in May for July to August flowering.



Diamonds Blue Delphinium

Diamonds Blue F1

Height: 16 to 24 in./40 to 60 cm
Spread: 10 to 12 in./25 to 30 cm

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

USDA Hardiness Zones: 4 to 8 (-30 to 10°F/-34 to -12°C minimum temperatures)

A First-Year-Flowering Perennial.
Supplied as raw seed.

The first F1 spurless delphinium from seed, Diamonds Blue eliminates the need for tissue culture inputs and is supplied with up to 25% higher germination for more effective scheduling. Uniform plants can be shipped and sold at first colour. Ideal for gallons with 3 plants per pot. Suitable for greenhouse, field or garden cut flower production.

DELPHINIUM ☀️
Delphinium nudicaule

Redcap

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

Plug crop time: 6 to 8 weeks
Transplant to finish: 12 to 14 weeks

USDA Hardiness Zones: 6 to 9 (-10 to 20°F/-23 to -7°C minimum temperatures)

A First-Year-Flowering Perennial.
Supplied as raw seed.

Compact variety produces many stems of striking red flowers with strong red spurs, over shiny, deep green, indented leaves. Tender perennial is suitable for container production for Spring, Summer and Autumn. Recommended sowing time is February to May.



Redcap Delphinium



Arctic Fire Delphinium

DIANTHUS ☀️
Dianthus deltoides

Arctic Fire

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

Plug crop time: 6 to 8 weeks
Transplant to finish: 10 to 14 weeks

USDA Hardiness Zone: 4 to 7 (-30 to 0°F/-34 to -18°C minimum temperatures)

A First-Year-Flowering Perennial.
Supplied as raw seed.

Striking colour combination and excellent foliage quality. Starts to bloom abundantly 3 to 4 months after sowing. Recommended sowing time is February to May or July.

Shrimp

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

Plug crop time: 6 to 8 weeks
Transplant to finish: 8 to 11 weeks

USDA Hardiness Zone: 4 to 7 (-30 to 0°F/-34 to -18°C minimum temperatures)

A First-Year-Flowering Perennial.
Supplied as raw seed.

Starts to flower 3 months after sowing. Sturdy, spreading plants have an upright habit, flower 2 to 3 weeks earlier than Arctic Fire, and continue flowering for several months. Recommended sowing time is February to May or July.



Shrimp Dianthus



Dwarf Carillon Digitalis

DIGITALIS ☀️
Digitalis grandiflora

Dwarf Carillon

Height: 14 to 16 in./35 to 40 cm
Spread: 12 to 14 in./30 to 35 cm

Plug crop time: 6 to 8 weeks
Transplant to finish: 10 to 14 annual crop weeks

USDA Hardiness Zone: 4 to 7 (-30 to 0°F/-34 to -18°C minimum temperatures)

A First-Year-Flowering Perennial.
Supplied as raw seed.

Compact Foxglove's dense flower stems emerge from clear green, small-leaved foliage rosettes. Performs well in gardens too, preferring humus-rich soil in partial shade. Recommended sowing time is February to May or June to July.



Dalmatian Peach

DIGITALIS 
Digitalis purpurea

Dalmatian F1 Series

Height: 16 to 20 in./40 to 50 cm
Spread: 12 to 14 in./30 to 35 cm

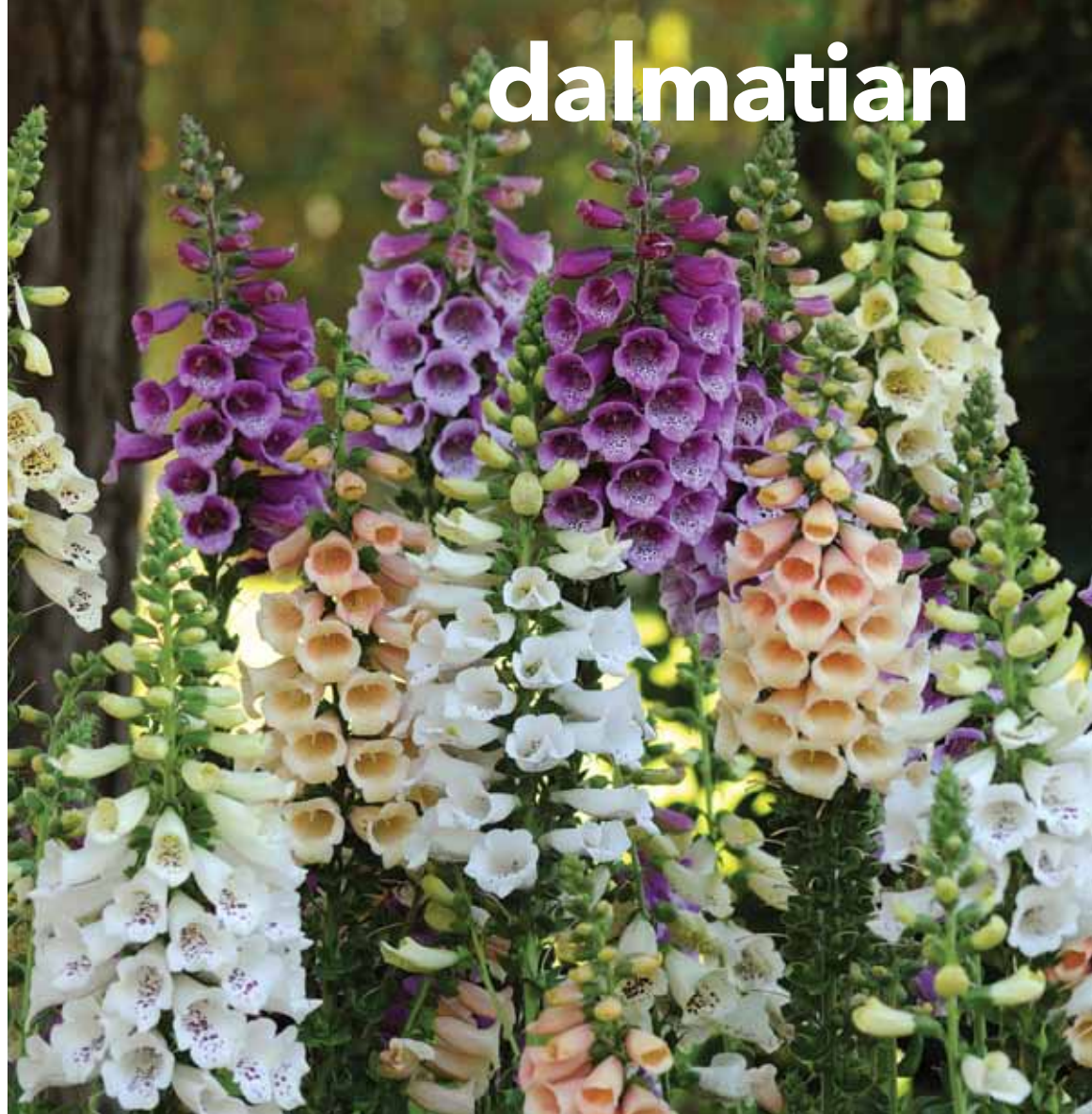
Plug crop time: 5 to 6 weeks
Transplant to finish: 10 to 14 weeks

USDA Hardiness Zones: 5 to 9 (-20 to 20°F/-29 to -7°C minimum temperatures)

A First-Year-Flowering Perennial. Supplied as SowEasy single pellets.

The fastest Digitalis on the market in striking colours customers love!

- Uniform in height and early flowering.
- Well-branched with excellent habit and compact foliage.
- Produces strong colours on good-quality spikes.
- Suitable for 1 and 2 gallons and up.
- Good end cap product at low input.



New Dalmatian Mixture



Dalmatian Crème



Dalmatian Rose



New Dalmatian Purple Improved



New Dalmatian White Improved

'cheyenne spirit'

ECHINACEA 🌻
Echinacea x hybrida
(Coneflower)

'Cheyenne Spirit'

Height:

18 to 24 in./45 to 60 cm first year; 22 to 30 in./55 to 75 cm second year

Spread:

10 to 16 in./25 to 40 cm first year; 14 to 20 in./35 to 50 cm second year

Plug crop time: 5 to 6 weeks

Transplant to finish: 13 to 17 weeks

USDA Hardiness Zones: 4 to 10 (-30 to 30°F/-34 to 1°C minimum temperatures)

A First-Year-Flowering Perennial.
Supplied as raw seed.

For the first time, this incredibly vibrant colour range is available as a segregating mix from seed! 'Cheyenne Spirit' offers the more economical way to bring these sought-after colours to market compared to traditional tissue-culture material.

- Broad and consistent palette includes shades of red, orange, purple, scarlet, cream, yellow and white.
- Exceptionally well-branched plants flower from a first-year sowing, with plenty of flower power.
- Plants are naturally shorter than those from tissue culture - easy to ship on racks.
- Long retail shelf life, drought tolerance and excellent Winter hardiness.

'cheyenne spirit'



'Cheyenne Spirit' All-America Selections Winner, Fleuroselect Gold Medal
U.S. Utility Patent 7,982,110



Keeping you current on culture.

Echinacea is a newer product for breeders and our industry has seen some truly dramatic introductions in the past few years. Kieft Seed is proud of our recent debut of the PowWow series, featuring the award-winning Wild Berry, followed by the unveiling of colour-filled 'Cheyenne Spirit', also an award winner.

Our global culture research team provides extensive support for this important new crop. These Echinacea varieties can be programmed from Spring to Autumn using our day length protocols. We partnered with Michigan State University to research photoperiods and share our findings with you in our



Sonali Padhye
Technical Services Manager

GrowerFacts. We also identified the optimum germination temperatures to assure the most uniform, synchronized germination. We continue to work with key commercial growers to fine-tune culture regimens related to overwintering.

We're committed to your growing success through our ongoing breeding and global culture research.



Scan or go to kiefertseed.com/cheyennespirit




Long retail shelf life



PowWow Wild Berry All-America Selections Winner
U.S. Patent No. 7,982,110; European Community Plant Variety Rights Applied For



PowWow White

ECHINACEA 
Echinacea purpurea
(Coneflower)

PowWow® Series

Height: 16 to 20 in./40 to 50 cm
first year; 22 to 24 in./55 to 60
cm second year

Spread: 12 to 16 in./30 to 40 cm

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

USDA Hardiness Zones: 4 to
10 (-30 to 30°F/-34 to -1°C
minimum temperatures)

A First-Year-Flowering Perennial.
Supplied as raw seed.

PowWow puts more flowers on
every plant than any other seed
Echinacea, for a terrific, non-
fading colour show!

- Can be grown for first-year
Spring sales or as a traditional
overwintered perennial.
- Very well-matched for habit
and timing, faster to flower and
genetically shorter than the
competition, making it easy to
grow and ship on racks.
- No PGRs needed to maintain
controlled height in quart or
gallon programs.
- Very drought-tolerant, easy-
care plants stay tidy at retail with
long holdability.

Wild Berry produces up to 2%
taller plants.





Magnus Echinacea



White Swan Echinacea



Stallone Erigeron



Goldrush Erysimum



Leuchtstern Echinacea



Citrona Yellow Erysimum U.S. PVP
Number 200600168, European Community Plant
Variety Rights Number EU21395



Citrona Orange Erysimum U.S. PVP
Number 200600167, European Community Plant
Variety Rights Number EU21394



Kilimanjaro Euphorbia

ECHINACEA 🌻

Echinacea purpurea
(Coneflower)

Leuchtstern

Height: 40 in./1 m
Spread: 12 to 16 in./30 to 40 cm
Plug crop time: 5 to 6 weeks
Transplant to finish: 13 to 17 weeks

USDA Hardiness Zones: 3 to 8 (-40 to 10°F/-40 to -12°C minimum temperatures)

Supplied as raw seed.

Produced for its attractive flower cone, this perennial cut flower produces purple blooms with an orange brown disc.

Magnus

Height: 24 to 30 in./60 to 75 cm
Spread: 24 in./60 cm
Plug crop time: 6 to 7 weeks
Transplant to finish: 15 to 18 weeks

USDA Hardiness Zones: 4 to 9 (-30 to 20°F/-34 to -7°C minimum temperatures)

Supplied as raw seed.

Single, 4.5-in./11-cm, daisylike flowers with dark green leaves. Tolerates heat, drought and windy conditions.

White Swan

Height: 24 to 30 in./60 to 75 cm
Spread: 18 to 24 in./45 to 60 cm

Plug crop time: 6 to 7 weeks
Transplant to finish: 15 to 18 weeks

USDA Hardiness Zones: 4 to 9 (-30 to 20°F/-34 to -7°C minimum temperatures)

Supplied as raw seed.

White, 4-in./10-cm flowers have yellow centres, over dark green, coarse and serrated leaves. Heat and drought tolerant.

ERIGERON 🌻

Erigeron karvinskianus

Stallone

Height: 6 to 8 in./15 to 20 cm
Spread: 12 to 14 in./30 to 35 cm

Plug crop time: 7 to 9 weeks
Transplant to finish: 10 to 14 weeks (LD)

USDA Hardiness Zones: 6 to 9 (-10 to 20°F/-23 to -7°C minimum temperatures)

A First-Year-Flowering Perennial.
Supplied as raw seed.

Attractive spreading plant with two-toned flowers that changes from white to rose. Durable and long-flowering variety is well-suited to hanging baskets, planters and borders; excellent for use as a groundcover.

ERYSIMUM 🌻

Erysimum perovskianum

Goldrush

Height: 10 to 14 in./25 to 35 cm
Spread: 8 to 12 in./20 to 30 cm

Plug crop time: 6 to 7 weeks
Transplant to finish: 10 to 14 weeks

USDA Hardiness Zones: 6 to 9 (-10 to 20°F/-23 to -7°C minimum temperatures)

A First-Year-Flowering Perennial.
Supplied as raw seed.

Rich-flowering, compact strain produces short, sturdy flower stems topped by large, fragrant flower heads. Uniform, compact and early-blooming. Recommended sowing time is February to April.

ERYSIMUM 🌻

Erysimum species

Citrona® Series

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

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

Supplied as raw seed.

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

EUPHORBIA 🌻

Euphorbia marginata

Kilimanjaro

Height: 36 in./90 cm (under long days)
Spread: 8 to 10 in./20 to 25 cm
Plug crop time: 4 to 5 weeks
Transplant to finish: 8 to 12 weeks

Supplied as raw seed.

Pure white bracts contrast well with the green foliage. Tall, strong stems have short side branches, just below the bracts. Can be direct sown in greenhouse or outdoor production, with very short harvesting period - 3 to 4 months from sow to flowering.

FESTUCA

See Grasses in **PanAmerican Seed**, page 47.

mesa



GAILLARDIA 🌻
Gaillardia x grandiflora

Mesa F1 Series

Height: 14 to 16 in./35 to 40 cm
Spread: 20 to 22 in./50 to 55 cm

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

USDA Hardiness Zones: 5 to 10 (-20 to 30°F/-29 to -1°C minimum temperatures)

A First-Year-Flowering Perennial. Supplied as clean seed.

The first F1 gaillardia from seed puts out lots of fast colour on "no-flop" plants.

- Strong, early-flowering, well-branched plants fill gallon containers quickly and maintain a controlled height without "flopping" over.
- Uniform habit and flowering time make Mesa easy to schedule and ship.
- Very drought tolerant once established, with intense, non-fading colour all season.
- Upright, well-branched plants perform well in landscapes and mixed containers.

New Peach is slightly earlier than rest of series and 2 to 4 in./5 to 10 cm shorter than Bright Bicolor and Yellow.

New Peach



Bright Bicolor



Yellow All-America Selections Winner, Fleuroselect Gold Medal

GAURA 🌞
Gaura lindheimeri

New Sparkle White

Height: 12 to 24 in./30 to 60 cm
Spread: 12 to 20 in./30 to 50 cm

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

USDA Hardiness Zones: 5b to 9 (-15 to 20°F/-23 to -7°C minimum temperatures)

A First-Year-Flowering Perennial.
Supplied as raw seed.

Early-blooming, naturally compact and free-flowering variety is easy to grow, with no pinching necessary. 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, floriferous enough to use as a bedding plant.

The Bride

Height: 32 to 40 in./80 to 100 cm
Spread: 12 to 16 in./30 to 40 cm

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

USDA Hardiness Zones: 6 to 9 (-10 to 20°F/-23 to -7°C minimum temperatures)

A First-Year-Flowering Perennial.
Supplied as raw seed.

Attractive, tall perennial produces spikes with large, graceful, clear white flowers. Uniform plant habit with strong basal branching. Heat resistant, low water needs. An adornment to any border, and ideal for backyard cut flower bouquets.

GAULTHERIA 🌞
Gaultheria procumbens

Very Berry

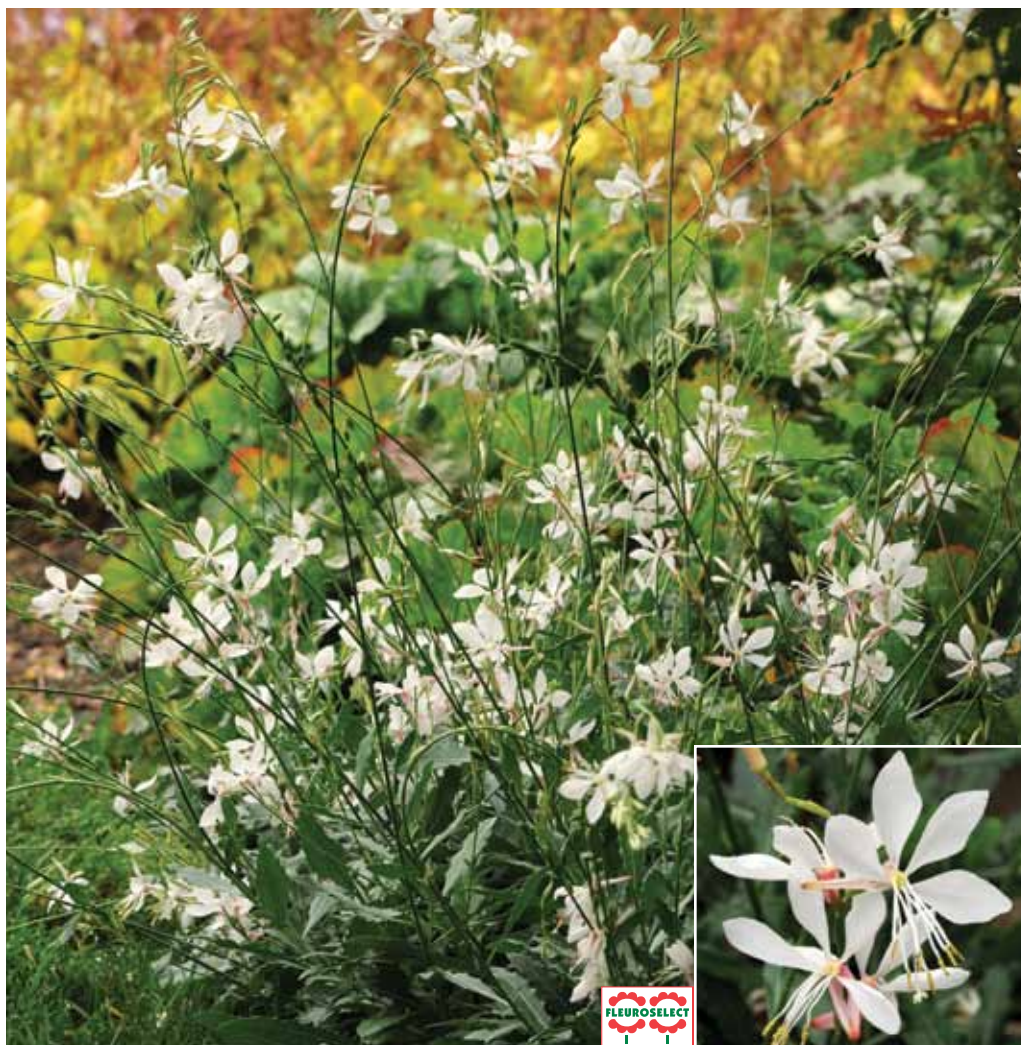
Height: 5 to 6 in./12 to 15 cm
Spread: 6 to 8 in./15 to 20 cm

Plug crop time: 8 to 12 weeks
Transplant to finish: 8 to 12 months

USDA Hardiness Zones: 6 to 9 (-10 to 20°F/-23 to -7°C minimum temperatures)

Supplied as TunedSeeds.

Compact and uniform, evergreen shrub displays white flowers in July/August, followed by large, ornamental red berries. An appealing and durable product for Autumn and Winter sales, indoor and outdoor use. High percentage of usable plants from plug.



New Sparkle White Gaura Fleuroselect Gold Medal



New Sparkle White Gaura



The Bride Gaura



Very Berry Gaultheria

revolution collection

F1 GERBERA 
Gerbera jamesonii

Revolution F1 Collection

The Revolution collection delivers quick crop time across all series. High uniformity enables consistent, fully programmable, high-density crops year round.

Revolution Series

Height: 12 to 16 in./30 to 40 cm

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

Flower Size: 2.5 to 3 in./6 to 8 cm

Plug crop time: 6 to 7 weeks

Transplant to finish: 8 to 10 weeks

Supplied as coated seed.

Revolution is the leading standard size pot gerbera series for uniformity of flowering window across the entire colour range. Industry-leading seed quality. Good for 4.5/quart to 5-in./11 to 13-cm programs.

New Golden Yellow with Dark Eye replaces Golden Yellow Shades.

New Scarlet Red with Dark Eye replaces both Scarlet with Dark Eye and Red Shades with Dark Eye.

New Classic Mixture has a broad range of bright and pastel colours and replaces Formula Mixture.

New Select Mixture is a uniform mix of bold, bright colours.

revolution collection



New Revolution Select Mixture



New Revolution Golden Yellow with Dark Eye



Revolution Light Salmon with Dark Eye Formerly Baby Pink



Revolution Neon Rose with Dark Eye



Revolution Pastel Orange with Dark Eye



Revolution Pastel Pink Shades with Dark Eye



Revolution Pink with Light Eye



Revolution Red with Dark Eye



Revolution Rose Shades



New Revolution Scarlet Red with Dark Eye



Revolution Spring Pastels



Revolution Terracotta



Revolution White



Revolution Yellow with Dark Eye



Revolution Yellow with Light Eye



New Revolution Classic Mixture

revolution collection



Mega Revolution Champagne



Mega Revolution Golden Yellow with Dark Eye



Mega Revolution Orange with Dark Eye



Mega Revolution Scarlet with Dark Eye



Mega Revolution White



New Mega Revolution Select Mixture



Mega Revolution Purple Shades



Mega Revolution Watermelon



Mega Revolution Yellow Shades



Mega Revolution Rose with Light Eye



New Mega Revolution Classic Mixture

Mega Revolution Series

Height: 12 to 16 in./30 to 40 cm

Spread: 8 in./20 cm

Flower Size: 3.5 to 4 in./9 to 10 cm

Plug crop time: 6 to 7 weeks

Transplant to finish: 8 to 10 weeks

Supplied as coated seed.

Mega Revolution produces vigorous, bushy plants with very large flowers, making it ideal for 6-in./15-cm and larger containers.

New Classic Mixture is a broad range of bright and pastel colours and replaces Formula Mixture.

New Select Mixture is a uniform mix of bright, bold colours.

revolution collection

Micro Revolution Irish Eyes Mixture

Height: 8 to 10 in./20 to 25 cm
Spread: 4 to 5 in./10 to 13 cm
Flower Size: 1 to 1.5 in./3 to 4 cm

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

Supplied as coated seed.

Very compact mix with 100% light green-eyed varieties provides a wide range of colours, including pastels and bicolours. Contains more than 50% double and semi-double flowers. Ideal for very small pot, 3-in./8-cm programs.



Micro Revolution Irish Eyes Mixture



New Midi Revolution Scarlet with Dark Eye

New Midi Revolution Scarlet with Dark Eye

Height: 10 to 12 in./25 to 30 cm
Spread: 4.5 to 5 in./11 to 13 cm
Flower Size: 2.5 in./6 cm

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

Supplied as coated seed.

Intermediate type falls between Revolution and Mini Revolution, with a slightly smaller flower and plant size than Revolution for easy high-density production. Good for 3.5 to 4.5-in./9 to 11-cm pots.



Mini Revolution Mixture

Mini Revolution Series

Height: 8 to 10 in./20 to 25 cm
Spread: 4 to 5 in./10 to 12 cm
Flower Size: 2 to 2.5 in./5 to 6 cm

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

Supplied as coated seed.

Genetically compact pot Gerbera is early to flower, with excellent plant habit and short stem length. Ideal for 3.5 to 4-in./9 to 10-cm pots.



Mini Revolution Orange with Light Eye



Mini Revolution Red with Dark Eye



Mini Revolution Red with Light Eye



Mini Revolution Rose



Mini Revolution White



Mini Revolution Yellow



Pixie Splash Gypsophila



Malachite Heuchera
Fleuroselect Novelty



QIS Carmine Gomphrena *Fleuroselect Quality Award*



QIS Orange Gomphrena



QIS Red Gomphrena



Double Shine Helianthus

GOMPHRENA 🌻 *Gomphrena haageana*

QIS Series

Height: 24 to 26 in./60 to 70 cm
Spread: 8 to 10 in./20 to 25 cm

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

Supplied as clean seed.

First-class professional cut flower series for greenhouse and outdoor production produces 1 to 1.5-in./2.5 to 3.5-cm flowers on stems with good uniform length. Suitable for fresh and dried use. Long vase life - more than 14 days without preservatives.

Mixture (Not pictured)

GYPSOPHILA 🌻 🌻 *Gypsophila cerastioides*

Pixie Splash

Height: 3 to 5 in./8 to 12 cm
Spread: 4 to 7 in./10 to 18 cm

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

USDA Hardiness Zones: 4 to 7 (-30 to 0°F/-34 to -18°C minimum temperatures)

Supplied as TunedSeeds.

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. Great for borders, hanging baskets and containers. Recommended sowing time July to August.

HELIANTHUS BEDDING & POT HELIANTHUS See **PanAmerican Seed**, page 52.

HELIANTHUS 🌻 *Helianthus annuus*

Double Shine F1

Height: 60 in./1.5 m
Greenhouse: 70 in./1.75 m
Spread: 8 to 10 in./20 to 25 cm

Plug crop time: 3 weeks
Transplant to finish: 9 to 10 weeks

Supplied as coated seed.

Fully double, 8-in./20-cm, golden yellow flowers on strong stems. Suitable for greenhouse or outdoor production, length will vary according to light and culture conditions. Preferable: 12 to 13-week production period when direct-sown in May/June.

HEUCHERA 🌻 🌻 *Heuchera hybrid*

Malachite

Height: 8 in./20 cm
Foliage: 8 in./20 cm
Flower: 18 in./45 cm
Spread: 12 to 14 in./30 to 35 cm

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

USDA Hardiness Zones: 5 to 8 (-20 to 10°F/-29 to -12°C minimum temperatures)

Supplied as pelleted seed.

Uniform, attractive seed Heuchera with excellent varietal quality is cost effective and easy to grow as a plug. Produces large, full plants with heavily curled, intense green leaves. Strong garden performer has good weather tolerance. Excellent for mixed combos.



Melting Fire Heuchera
Fleuroselect Novelty European Community
 Plant Variety Rights Number 20557

Melting Fire

Height

Foliage: 8 in./20 cm

Flower: 18 in./45 cm

Spread: 12 to 14 in./30 to 35 cm

Plug crop time: 8 to 10 weeks

Transplant to finish: 12 to 16 weeks

USDA Hardiness Zones: 5 to 8 (-20 to 10°F/-29 to -12°C minimum temperatures)

Supplied as pelleted seed.

Companion to Malachite is just as uniform, with the same excellent quality, cost-effective production, strong garden performance and good weather tolerance. Large plants display strong curled leaves in intense purple-red. True tissue culture alternative.



Palace Purple Heuchera



Luna Pink Swirl Hibiscus

HEUCHERA

Heuchera micrantha

Palace Purple

Height

Foliage: 10 in./25 cm

Flower: 20 in./50 cm

Spread: 14 to 16 in./35 to 40 cm

Plug crop time: 6 to 8 weeks

Transplant to finish: 10 to 12 weeks

USDA Hardiness Zones: 4 to 7 (-30 to 0°F/-34 to -18°C minimum temperatures)

Supplied as pelleted seed.

Compact variety has highly attractive ornamental foliage of strong bronze-purple, with small white flowers appearing later. The dark leaf colour offers outstanding contrast in borders and mixed containers. Excellent germination. *PPA Perennial Plant of the Year 1991*



Luna White Hibiscus

HIBISCUS

Hibiscus moscheutos

Luna F1 Series

Height: 2 to 3 ft./60 to 90 cm

Spread: 2 ft./60 cm

Plug crop time: 3 to 4 weeks

Transplant to finish: 10 to 13 weeks

USDA Hardiness Zone: 5 to 9 (-20 to 20°F/-29 to -7°C minimum temperatures)

A First-Year-Flowering Perennial. Supplied as raw seed.

Produces big, bushy, well-branched plants without pinching. Numerous 6 to 8-in./15 to 20-cm flowers. Ideal for large containers; can also be planted in the ground as a perennial. Very responsive to growth regulators. Reliable seed availability with a significantly high germination compared to other seed varieties.

Pink Swirl is slightly shorter and a few days earlier to flower than Red and Blush. Rose has the largest flowers in the series, similar to Red. Compact habit is similar to Pink Swirl. Flowers slightly earlier than others in the series. White flowers a few days earlier than Red and Blush, with vigour similar to Red.

Mixture (Not pictured)



Luna Red Hibiscus



Luna Rose Hibiscus



Snowflake Iberis



Candy Cane Lilac Iberis



Candy Cane Purple Iberis



Hidcote Blue Strain Lavandula



Candy Cane Red Iberis



Candy Cane Rose Iberis



Candy Cane White Iberis



Cheron Pink Incarvillea



Cheron White Incarvillea



Lavance Lavandula European Community Plant Variety Rights Number EU17706

IBERIS

Iberis sempervirens

Snowflake

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

Plug crop time: 6 to 8 weeks
Transplant to finish: 36 to 40 weeks

USDA Hardiness Zones: 3 to 8 (-40 to 10°F/-40 to -12°C minimum temperatures)

Supplied as raw seed.

Ideal for perennial overwintered production. Plants are blanketed with mid-sized, white flower clusters on uniform, neatly spreading plants with good foliage quality. Excellent in mass plantings and balcony tubs. Recommended for sowing in May and June.

IBERIS

Iberis umbellata

Candy Cane Series

Height: 13 to 14 in./30 to 35 cm
Spread: 8 to 10 in./20 to 25 cm

Direct sowing to finish: 10 to 14 weeks

Supplied as raw seed.

Fast-growing plants are well-suited to mass plantings, large beds and edgings, producing a striking colour display. The uniform habit means versatile Candy Cane can also be used as a cut flower, and produced as a pot plant for Mother's Day.

Mixture (Not pictured)

INCARVILLEA

Incarvillea sinensis

Cheron Series

Height: 10 to 20 in./25 to 50 cm
Spread: 6 to 8 in./15 to 20 cm

Plug crop time: 4 to 6 weeks
Transplant to finish: 7 to 8 weeks

Supplied as raw seed.

Unusual annual with a short crop time. Plants produce fernlike foliage and delicate, trumpet-shaped flowers that stand horizontal in 4 to 5-in./10 to 12-cm pots. The strong, sturdy plants flower freely all season, and are highly suited for borders and patios.

ISOTOMA

See **PanAmerican Seed**, page 61.

LAVANDULA

Lavandula angustifolia

Hidcote Blue Strain

Height: 12 to 20 in./30 to 50 cm
Spread: 12 to 14 in./30 to 35 cm

Plug crop time: 6 to 7 weeks
Transplant to finish: 14 to 16 weeks (24 to 38 weeks overwintered.)

USDA Hardiness Zones: 5 to 8 (-20 to 10°F/-29 to -12°C minimum temperatures)

Supplied as TunedSeeds.

Suitable for professional plug production, this highly uniform perennial lavender strain requires an overwintering period. Produces large, deep blue flower heads on relatively tall flower spikes over contrasting grey-green foliage. Flowers June to September.

Lavance

Height: 10 to 20 in./25 to 50 cm
Spread: 10 to 12 in./25 to 30 cm

Plug crop time: 5 to 6 weeks
Transplant to finish: 14 to 16 weeks (24 to 38 weeks overwintered.)

USDA Hardiness Zones: 5 to 8 (-20 to 10°F/-29 to -12°C minimum temperatures)

A First-Year-Flowering Perennial. Supplied as TunedSeeds.

The most intense spike and flower colour of all seed lavenders on a uniform, compact plant. Best for late Spring and Summer production, longer days and higher temperature. Can also be scheduled for a traditional overwintering (O.W.) production with potting in Weeks 28 to 32. NOTE: Lavance does not grow quickly in cool climates.



Ellagance Pink



Ellagance Snow *Fleuroselect Novelty*

Ellagance Series

Height: 12 to 14 in./30 to 35 cm
Spread: 10 to 12 in./25 to 30 cm

Plug crop time: 5 to 6 weeks

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

USDA Hardiness Zones: 5 to 8 (-20 to 10°F/-29 to -12°C minimum temperatures)

A First-Year-Flowering Perennial.
Supplied as TunedSeeds.

Ellagance stands out from other seed and vegetative lavenders for its excellent uniformity, colour range, earliness and spike quality!

- Excellent branching fills pots quickly and finishes with large, dense flower spikes and very strong stems.
- Spreading and upright plants have rich gray-green foliage.
- Winter hardy and cold-tolerant with good tolerance to foliar diseases 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.



Ellagance Sky *Fleuroselect Gold Medal*



Ellagance Ice
Fleuroselect Quality Award



Ellagance Purple
Fleuroselect Gold Medal



Mini Blue Lavandula

Mini Blue

Height: 10 to 20 in./25 to 50 cm

Spread: 12 to 14 in./30 to 35 cm

Plug crop time: 5 to 6 weeks

Transplant to finish: 10 to 14 weeks (24 to 36 weeks O.W.)

USDA Hardiness Zones: 5 to 8 (-20 to 10°F/-29 to -12°C minimum temperatures)

A First-Year-Flowering Perennial.
Supplied as TunedSeeds.

The showiest *L. angustifolia* for overwintered production!

- Compact, well-branched plants don't need trimming, ship well and won't lodge open in the garden.
- Highly uniform, high yielding, long flowering and very floriferous.
- Bred for large-scale, overwintered pot production but also works well in first-year-flowering programs.
- Strong-stemmed, spreading plants produce many eye-catching flower spikes over rich gray-green foliage.
- Winter hardy and cold tolerant, with good tolerance to foliage diseases.



Spanish Eyes Lavandula



Twins Cool White Lavatera
Fleuroselect Quality Award

LAVANDULA 🌞

Lavandula multifida

Spanish Eyes

Height: 16 to 25 in./40 to 70 cm

Spread: 20 to 30 in./50 to 75 cm

Plug crop time: 5 to 6 weeks

Transplant to finish: 10 to 12 weeks

USDA Hardiness Zones: 7 to 10
(0 to 30°F/-18 to -1°C minimum temperatures)

Supplied as raw seed.

Fast-growing annual/tender perennial all Summer, right 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.



Twins Hot Pink Lavatera *Fleuroselect Gold Medal*

LAVATERA 🌞 🌈

Lavatera trimestris

Twins Series

Height: 12 to 20 in./30 to 50 cm

Spread: 12 to 20 in./30 to 50 cm

Plug crop time: 3 to 5 weeks

Transplant to finish: 8 to 10 weeks

Supplied as raw seed.

Award-winning compact series delivers a short, 10 to 14-week crop time plus highly uniform habit and vigour. Blooms from May to September and stays healthy all season. Plants stay compact in containers, but reach full height and spread in garden beds.



Mixture

LIMONIUM (STATICE) ☀

Limonium sinuatum

Fortress Series

Height: 24 to 30 in./60 to 75 cm

Spread: 12 in./30 cm

Plug crop time: 4 to 5 weeks

Transplant to finish: 18 to 24

Supplied as raw seed.

Delivers excellent uniformity and timing. Suitable for greenhouse or field cut flower production, as well as home garden cut flowers. Popular for both fresh and preserved cut flower production, Fortress produces clusters of bright papery flowers on long, sturdy stems.



Apricot



Dark Blue



Heavenly Blue



Purple



White



Rose



Yellow



QIS Formula Mixture Limonium



QIS Apricot Limonium



QIS Dark Blue Limonium



QIS Lavender Limonium



QIS Pale Blue Limonium



QIS Rose Limonium



QIS Soft Pastel Shades Limonium



QIS White Limonium



QIS Yellow Limonium



Sunset Limonium



Delft Blue Lobelia

QIS Series

Height: 30 to 35 in./75 to 90 cm

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

Plug crop time: 4 to 5 weeks

Transplant to finish: 18 to 22 weeks

Supplied as raw seed.

Widely recognized by professional cut flower growers in the world, QIS ('Quality in Seed') is a considerable improvement over standard varieties in uniformity, colour, flower size and stem quality. Suitable for greenhouse and outdoor production, the plants produce clouds of tiny, non-shattering flowers, and deliver shipability and long vase life.

Sunset

Height: 30 in./75 cm

Spread: 12 in./30 cm

Plug crop time: 4 to 5 weeks

Transplant to finish: 18 to 24 weeks

Supplied as raw seed.

Very popular with cut flower growers for fresh and dried sales, Sunset produces flowers in warm tones of apricot, peach, orange and rose red.

LOBELIA

Lobelia valida

Delft Blue

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

Spread: 12 to 16 in./30 to 40 cm

Plug crop time: 8 to 10 weeks

Transplant to finish: 10 to 12 weeks

USDA Hardiness Zones: 7 to 9 (0 to 20°F/-18 to -7°C minimum temperatures)

Supplied as pelleted seed.

Half-hardy perennial Lobelia makes compact, sturdy and well-branched plants. Produces intense blue flowers with white eye atop green, tooth-edged, succulentlike foliage. This self-cleaning, long-flowering variety is weather-tolerant in both wet and dry conditions.



Gallery Mixture Lupinus



Gallery Blue Lupinus



Gallery Pink Lupinus



Gallery Red Lupinus



Gallery White Lupinus



Gallery Yellow Lupinus

LUPINUS 🌻 🌻

Lupinus polyphyllus

Gallery Series

Height: 16 to 20 in./40 to 50 cm

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

Plug crop time: 6 weeks

Transplant to finish: 10 to 12 weeks

USDA Hardiness Zones: 4 to 7 (-30 to 0°F/-34 to -18°C minimum temperatures)

A First-Year-Flowering Perennial.
Supplied as TunedSeeds.

Ideal Lupin series for professional 3.5 to 4-in./9 to 10-cm pot production. Full flower spikes are attractive at retail. Works well in patio planters.

LYSIMACHIA 🌻

Lysimachia atropurpurea

Beaujolais

Height: 16 to 20 in./40 to 50 cm

Spread: 14 to 16 in./35 to 40 cm

Plug crop time: 7 to 8 weeks

Transplant to finish: 16 to 20 weeks

USDA Hardiness Zones: 5 to 8 (-20 to 10°F/-29 to -12°C minimum temperatures)

A First-Year-Flowering Perennial.
Supplied as raw seed.

Upright-growing and sturdy, this hardy perennial displays ornamental, waxy green leaves and deep wine-red flower spikes. Great for gallon containers, Beaujolais works well in borders and landscapes; can also be used as backyard cut flower.



Beaujolais Lysimachia



**Vegmo Single
Matricaria**



**Aida Cherry Blossom
Matthiola**



Aida Blue Matthiola



Aida Blueberry Matthiola



Aida White Matthiola



**Vegmo Snowball Extra
Matricaria**



**Vegmo Sunny Ball Gold
Matricaria**



**Aida Deep Rose
Matthiola**



**Aida Lavender
Matthiola**



**Aida Light Plum
Matthiola**

MATRICARIA ☀

Tanacetum parthenium

Vegmo Series

Height: 28 to 36 in./70 to 90 cm

Plug crop time: 4 to 5 weeks

Transplant to finish: 7 to 12 weeks

Supplied as pelleted seed.

Excellent, fast, year-round crop that is ideal for use as a filler in bouquets, with a good post-harvest life. Double flowers are held above lacy, fragrant foliage, with nice stem quality plus good flower range and bud count.

Yellow (Not pictured)

MATTHIOLA (STOCK) ☀

Matthiola incana

BEDDING MATTHIOLA

See **PanAmerican Seed**, page 75.

NORTHERN GREENHOUSE
SELECTABLE CUT FLOWER
MATTHIOLA

Location: Greenhouse

Plug crop time: 5 to 6 weeks

Transplant to finish: 4 to 12 weeks

Supplied as raw seed.

Bred for specific seasonal performance, the Aida, Carmen and Figaro series team up with the Opera series to offer an outstanding lineup of greenhouse-grown selectable

Matthiola for year-round production. Aida, Carmen and Figaro are well-matched for timing and deliver very uniform plant performance. Transplanting for seasons earlier than listed will result in later flowering.

Greenhouse-grown Matthiola are distinguished from field-grown types by the softer green leaves. NOTE: Selectable Matthiola will produce approximately 50% double-flowering types, but it is easy to select out the single-flowered types at the young plant stage. Refer to the Product Information Guide for details.

Aida Series

(Spring-flowering, Group 2)

Stem length: 32 in./80 cm

Under northern European conditions, transplant Aida varieties in January/ April for flowering in April/June.

Apricot (Not pictured)



Figaro Lavender



Figaro Light Rose



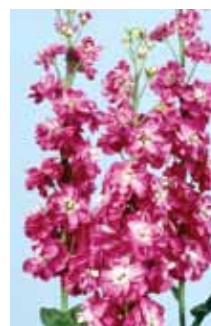
Carmen Purple



Carmen Yellow



Lucinda Cream



Lucinda Dark Rose



Lucinda Deep Blue

Figaro Series

(Winter-flowering, Group 1)

Stem length: 32 in./80 cm

Under northern European conditions, transplant Figaro varieties in January and February for flowering in April and May.

Carmen Series

(Summer-flowering, Group 3)

Stem length: 32 in./80 cm

Under northern European conditions, transplant Carmen varieties in March and April for flowering in June and July.

Lucinda Series

(Spring-flowering, Group 2)

Stem length: 27 to 30 in./65 to 75 cm

Strong-stemmed, mid-early type is also suitable for Autumn flowering.

EXTRA-EARLY-FLOWERING
TUNNEL AND FIELD-GROWN
CUT FLOWER MATTHIOLA
See **PanAmerican Seed**, page 76.



Lucinda Lavender



Lucinda Light Rose



Lucinda Purple Violet



Lucinda Red



Lucinda White



Lucinda Mixture



Opera Aida Matthiola



Opera Daphne Matthiola



Touchy Tina Mimosa



Opera Debora Matthiola



Opera Francesca Matthiola



Bells of Ireland Molucella



Bergamo Monarda Fleuroselect Gold Medal

Opera Series

Stem length: 32 in./80 cm

Bred for optimal performance in cooler greenhouse conditions and recommended for Autumn to late Spring-flowering. Production is possible year-round if cool Summer temperatures are maintained in the greenhouse.

Fedora Deep Rose (Not pictured)

Leonora (Not pictured)

MIMOSA

Mimosa pudica

Touchy Tina

Height: 4 to 6 in./10 to 15 cm

Spread: 16 to 36 in./40 to 90 cm; dependent on location and plant age

Plug crop time: 4 to 6 weeks

Transplant to finish: 4 to 6 weeks (sold green)

Supplied as cleaned seed.

Easy-to-grow "sensitive plant" plant produces fernlike green foliage which folds together when touched. Flowers are pink.

MOLUCELLA

Molucella laevis

Bells of Ireland

Height: 24 to 32 in./60 to 80 cm

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

Total crop time from direct sow: 14 to 19 weeks

Supplied as coated seed.

With its unusual spires of green, bell-formed blooms, Bells of Ireland can be used fresh or dried, and adds interest to mixed bouquets. Small, hand-shaped leaves on the flower spikes are removed after cutting for optimum ornamental value. NOTE: The seed coating aids in visibility during sowing and holds a Thiram fungicidal addition to protect young plants in early emergence stage.

MONARDA

Monarda hybrida

Bergamo

Height: 20 to 24 in./50 to 60 cm

Spread: 16 to 20 in./40 to 50 cm

Plug crop time: 6 to 7 weeks

Transplant to finish: 10 to 12 weeks

USDA Hardiness Zones: 6 to 8 (-10 to 10°F/-23 to -12°C minimum temperatures)

A First-Year-Flowering Perennial. Supplied as raw seed.

Unique, compact variety provides a long-lasting display in the garden, with rose-purple flowers in clusters around the stem. Much earlier flowering than other Monarda, blooming from June until first frost. Excellent mildew tolerance. Suitable for pot production or direct sowing.

MYOSOTIS

(FORGET-ME-NOT)

Myosotis sylvatica

Mon Amie Blue

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

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

Plug crop time: 4 weeks

Transplant to finish: 5 to 9 weeks

Supplied as raw seed.

Send your crop to market 3 to 6 months earlier than biannual Myosotis varieties as no vernalization 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*. Good for 306 premium packs and 4.5-in./11-cm pots.

NASTURTIIUM

See **PanAmerican Seed**, page 81.



Mon Amie Blue Myosotis
U.S. PVP Number 200800070



Moondance Papaver



Champagne Bubbles Orange Papaver



Champagne Bubbles Pink Papaver



Champagne Bubbles Scarlet Papaver



Blue Moon Nepeta



Pink Cat Nepeta
Fluorselect Quality Award



Navigator Penstemon
Fluorselect Quality Award



Champagne Bubbles White Papaver



Champagne Bubbles Yellow Papaver



Champagne Bubbles Mixture Papaver

NEPETA 🌞

Nepeta nervosa

Blue Moon Pink Cat

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

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

USDA Hardiness Zones: 4 to 7 (-30 to 0°F/-34 to -18°C minimum temperatures)

A First-Year-Flowering Perennial.
Supplied as raw seed.

Uniform strains produce large, dense flower spikes on full, bushy plants that flower early and then freely all season. Well-suited to container production. Gives a colourful display in well-drained soil and takes the heat. Recommended sowing time March to May.

NIEREMBERGIA
Robe Series see **PanAmerican Seed**, page 81.

PANSY

Promise Series see **PanAmerican Seed**, page 89.

PAPAVER (POPPY) 🌞

Papaver miyabeianum

Moondance

Height: 6 to 8 in./15 to 20 cm
Spread: 5 to 7 in./12 to 18 cm

Plug crop time: 6 to 8 weeks
Transplant to finish: 10 to 12 weeks

USDA Hardiness Zones: 4 to 7 (-30 to 0°F/-34 to -18°C minimum temperatures)

A First-Year-Flowering Perennial.
Supplied as raw seed.

Compact, easy-to-grow variety is best for container production. Produces lemon yellow flowers held just 4 in./10 cm over dense rosettes of light green, hairy foliage. The flowers develop later into beautiful, clear green seed pods. Can be produced as an annual.

PAPAVER (POPPY) 🌞

Papaver nudicaule

Champagne Bubbles F1 Series

Height: 15 in./38 cm
Spread: 6 in./15 cm

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

USDA Hardiness Zone: 6 to 8 (-10 to 10°F/-23 to -12°C minimum temperatures)

A First-Year-Flowering Perennial.
Supplied as TunedSeeds.

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, and is a good Winter item in Florida, California and comparable climates. Well-suited to 4 and 6-in./10 and 15-cm pots.

Citrus Mixture (Not pictured) contains Orange, Yellow, White.

PENSTEMON 🌞

Penstemon barbatus

Navigator

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

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

USDA Hardiness zones: 5 to 7 (-20 to 0°F/-29 to -18°C minimum temperatures)

A First-Year-Flowering Perennial.
Supplied as raw seed.

Extremely uniform and compact selection in Penstemon flowers 16 to 20 weeks after sowing. Plants have attractive, grey-green foliage and large, well-rounded flower spikes in a well-balanced mix of red, pink, rose, blue and purple shades. Useful for borders, beds and planters, this half-hardy first year-flowering perennial is well-suited to pot production and best grown as an annual.



Tubular Bells Red
Fleuroselect Novelty



Tubular Bells Rose
Fleuroselect Quality Award



Electric Blue



Tubular Bells Wine Red With White Throat
Fleuroselect Novelty



Carillo Purple
Fleuroselect Novelty



Carillo Rose
Fleuroselect Novelty



New Carillo Red Fleuroselect Gold Medal

PENSTEMON ☀️
Penstemon hartwegii

Tubular Bells Series

Height: 14 to 16 in./35 to 40 cm
Spread: 10 to 14 in./25 to 35 cm

Plug crop time: 6 to 8 weeks
Transplant to finish: 13 to 16 weeks

USDA Hardiness Zones: 7 to 10
(0 to 30°F/-18 to -1°C minimum temperatures)

A First-Year-Flowering Perennial.
Supplied as raw seed.

First series of this type available in separate colours produces self-cleaning plants with good garden performance and long flowering period. Heat-tolerant, North American prairie plant is upright, robust and strong-stemmed. Large flowers in early Summer.

Mixture (Not pictured)

PENSTEMON ☀️
Penstemon heterophyllus

Electric Blue

Height: 18 in./45 cm
Spread: 24 in./60 cm

Plug crop time: 4 to 5 weeks
Transplant to finish: 12 to 13 weeks

USDA Hardiness Zones: 6 to 8
(-10 to 10°F/-23 to -12°C minimum temperatures)

A First-Year-Flowering Perennial.
Supplied as raw seed.

A good performer in warm climates, producing multiple stems with branched spikes holding intense blue flowers. No vernalization is required for flowering. Allow 16 to 18 weeks to flower in a 4-in./10-cm pot.

PENSTEMON ☀️
Penstemon x mexicali

Carillo Series

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

Plug crop time: 6 to 8 weeks
Transplant to finish: Purple and Red 12 to 14 weeks, Rose 13 to 15 weeks

USDA Hardiness Zones: 5 to 7
(-20 to 0°F/-29 to -18°C minimum temperatures)

A First-Year-Flowering Perennial.
Supplied as raw seed.

North American prairie plant now comes in three colours, for an even more saleable series!

- Heat and drought-tolerant.
- Well-branched plants are the most compact of any seed or vegetative varieties, with shiny foliage and clear, strong flower colours.
- Good shelf life; easy-care and long-flowering in landscapes and containers.
- Flowers in early Summer.
- Suited to high-density programs for 4-in./10-cm pots and larger.

New Red was awarded Fleuroselect Gold Medal for breakthrough colour and uniformity.



Violet Dusk Penstemon



Taiga Perovskia



Bambino Blue Polemonium

PENSTEMON ☀️
Penstemon smallii

Violet Dusk

Height: 24 in./60 cm
Spread: 18 in./45 cm

Plug crop time: 4 to 5 weeks
Transplant to finish: 12 to 15 weeks

USDA Hardiness Zones: 6 to 8 (-10 to 0°F/-23 to -12°C minimum temperatures)

A First-Year-Flowering Perennial. Supplied as TunedSeeds.

Branched spikes are covered with many tubular, fade-resistant lavender blooms. Adapted to warm climates, plants prefer dry conditions and light watering. No vernalization is required for flowering. Suitable for 4-in./10-cm pots.

ORNAMENTAL PEPPER
See **PanAmerican Seed**, page 93.

PEROVSKIA ☀️
Perovskia atriplicifolia

Taiga

Height: 40 to 48 in./1 to 1.2 m
Spread: 12 to 16 in./30 to 40 cm

Plug crop time: 7 to 9 weeks
Transplant to finish: 14 to 16 weeks

USDA Hardiness Zones: 4 to 7 (-30 to 0°F/-34 to -18°C minimum temperatures)

A First-Year-Flowering Perennial. Supplied as TunedSeeds.

Attractive, bushy plants have long, feathery, deep sky blue flower spikes and contrasting silvery-green foliage. First year-flowering for late season sales in large pots at 16 to 20-in./40 to 50-cm plant height. Heat and drought-tolerant. *PPA Perennial Plant of the Year 1995* for *P. atriplicifolia*

PHLOX
See **PanAmerican Seed**, page 112.

POLEMONIUM ☀️☀️
Polemonium caeruleum

Bambino Blue

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

Plug crop time: 8 to 10 weeks
Transplant to finish: 10 to 14 weeks

USDA Hardiness Zones: 4 to 8 (-30 to 10°F/-34 to -12°C minimum temperatures)

A First-Year-Flowering Perennial. Supplied as raw seed.

Bred for professional container production. Outstanding for earliness and compact, uniform habit, plants have multiple short stems with large blue flower clusters. Performs well in the garden in fertile, well-drained soil. Recommended sowing time is March to May.

POPPY
See **Papaver**.

PRIMULA
Primula acaulis
See **PanAmerican Seed**, page 116.



Noverna Deep Blue Primula



Bells White Pulsatilla



Bells Red Pulsatilla



Bells Violet Pulsatilla



Goldsturm Rudbeckia

PRIMULA 🌻

Primula capitata ssp. *mooreana*

Noverna Deep Blue

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

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

Plug crop time: 8 to 10 weeks

Transplant to finish: 10 to 12 weeks

USDA Hardiness Zones: 4 to 7 (-30 to 0°F/-34 to -18°C minimum temperatures)

A First Year-Flowering Perennial.
Supplied as raw seed.

Needs no cold period and flowers abundantly when grown as an annual bedding plant. Produces round clusters of deep blue flowers on powdery white stems, over a rosette of clear green leaves. Excellent, weather-tolerant garden performer, flowering richly from Summer well into Autumn. Recommended sowing time is March to May.

PULSATILLA 🌻

Pulsatilla vulgaris

Bells Series

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

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

Plug crop time: 8 to 10 weeks

Transplant to finish: 30 to 40 weeks

USDA Hardiness Zones: 5 to 7 (-20 to 0°F/-29 to -18°C minimum temperatures)

Supplied as raw seed.

Softly hairy garden plant produces upward-facing, trumpet-shaped, yellow-centred flowers, followed by feathery seed heads. Sow in March and April for Spring sales the following year. NOTE: Pulsatilla is a cold-germinator and pre-cooling is recommended.

RUDBECKIA 🌻

Rudbeckia fulgida var. *sullivantii*

Goldsturm

Height: 24 to 28 in./60 to 70 cm

Spread: 14 to 18 in./35 to 45 cm

Plug crop time: 6 to 8 weeks

Transplant to finish: 20 to 24 weeks

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

Supplied as TunedSeeds.

Premium, late Summer-flowering perennial is considered "best in class" for landscapes, also makes a nice cut flower. Upright plants produce a large, single, scentless bloom on every stem, over tight, dark green foliage. Recommended sowing time January to March.



Goldsturm



Irish Eyes

RUDBECKIA 🌻

Rudbeckia hirta

Irish Eyes

Height: 24 to 36 in./60 to 90 cm

Spread: 14 to 18 in./35 to 45 cm

Plug crop time: 6 to 7 weeks

Transplant to finish: 12 to 14 weeks

USDA Hardiness Zones: 7 to 9 (0 to 20°F/-18 to -7°C minimum temperatures)

Supplied as raw seed.

Tender perennial bears large, sunshine yellow flowers with distinct green eye on robust, tall and well-branched plants with contrasting dark green foliage. First-year-flowering variety has a short culture period; grow as an annual.

Moreno

Height: 12 to 20 in./30 to 50 cm

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

Plug crop time: 6 to 7 weeks

Transplant to finish: 10 to 12 weeks

USDA Hardiness Zones: 7 to 9 (0 to 20°F/-18 to -7°C minimum temperatures)

Supplied as raw seed.

Vigorous in the garden, producing abundant, large, mahogany-red flowers with golden orange tips. Heat-tolerant, compact and basal branching with a spreading habit. Ideal for landscapes, beds and containers. Tender perennial can also be marketed as an annual.



Moreno *Fleuroselect Novelty*



Crispy Sagina



Saga Blue Salvia



Purple Volcano Salvia



Marble Arch Mixture Salvia



Patio Deep Blue Salvia
Fleuroselect Quality Award



Patio Sky Blue Salvia
Fleuroselect Quality Award



Hot Trumpets Salvia

SAGINA 🌞
Sagina subulata

Crispy

Height: 4 to 6 in./10 to 15 cm
Spread: 8 to 14 in./20 to 35 cm

Plug crop time: 6 to 7 weeks
Transplant to finish: 9 to 10 weeks

USDA Hardiness Zones: 4 to 7 (-30 to 0°F/-34 to -18°C minimum temperatures)

A First Year-Flowering Perennial.
Supplied as raw seed.

Carpet-forming perennial is covered with masses of small, starlike, white flowers. Suitable for annual production. Prefers a well-drained, moderately fertile garden location.

SALVIA 🌞
Salvia splendens

See **PanAmerican Seed**, page 117.

SALVIA 🌞
Salvia farinacea

Saga Blue

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

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

Supplied as raw seed.

Attractive bedding plant produces intense deep blue flower spikes on compact plants with a very well-branched habit and excellent garden vigour. Late Spring and Summer-flowering with good heat tolerance.

SALVIA 🌞
Salvia horminum

Marble Arch Mixture

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

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

Supplied as raw seed.

Extremely uniform mix for landscapes, borders and patio planters. Broad upper flower bracts with tiny flowers in intense deep blue, rose and white. Good uniformity in timing, habit, height and flowering window between the colours. Strong weather tolerance.

SALVIA 🌞
Salvia lyrata

Purple Volcano

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

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

USDA Hardiness Zones: 6 to 8 (-10 to 10°F/-23 to -12°C minimum temperatures)

A First Year-Flowering Perennial.
Supplied as raw seed.

Displays bronze-purple foliage year-round, with white-tipped purple flower spikes all Summer. Leaf colour intensifies to deep purple during late Summer and Autumn. Heat-tolerant. Recommended sowing time is March to June or August to September.

SALVIA 🌞
Salvia patens

Patio Series

Height: 12 to 14 in./30 to 40 cm
Spread: 8 to 12 in./20 to 30 cm

Plug crop time: 5 to 6 weeks
Transplant to finish: 7 to 11 weeks

USDA Hardiness Zones: to 8 to 10 (10 to 30°F/-12 to -1°C minimum temperature)

Supplied as raw seed.

With its excellent branching plant habit, Patio is more compact and richer flowering than similar strains. First-year flowering series 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 roemeriana

Hot Trumpets

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

Plug crop time: 6 to 8 weeks
Transplant to finish: 8 to 12 weeks

USDA Hardiness Zones: 7 to 10 (0 to 30°F/-18 to -1°C minimum temperatures)

A First Year-Flowering Perennial.
Supplied as raw seed.

Tender perennial displays masses of scarlet flowers on well-branched stems over deep green leaves. Very early to bloom, flowers all season. Compact, uniform plant works well in small to large container production. Recommended sowing time April to May.

new dimension



Blue Fleuroselect Novelty

SALVIA ☀

Salvia nemorosa (superba)

New Dimension Series

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

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

Plug crop time: 5 to 6 weeks

Transplant to finish: Rose 8 to 10 weeks, Blue 9 to 11 weeks

USDA Hardiness Zones: 4 to 8 (-30 to 10°F/-34 to -12°C minimum temperatures)

A First-Year-Flowering Perennial. Supplied as coated seed.

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.
- Suited to 4-in./10-cm to 2-gallon containers.



Blue Fleuroselect Novelty



Rose Fleuroselect Novelty



Sprite Orange Sanvitalia *Fleuroselect Quality Award*



Sprite Yellow Sanvitalia



Sprite Vanilla Sanvitalia *Fleuroselect Novelty*



Purple Robe Saxifraga



Blue Note Scabiosa *European Community Plant Variety Rights Number EU27547.*



Pink Diamonds Scabiosa

SANVITALIA

Sanvitalia procumbens

Sprite Series

Height: 4 in./10 cm

Spread: 10 to 14 in./25 to 35 cm

Plug crop time: 4 weeks

Transplant to finish: 9 to 11 weeks

Supplied as raw seed.

Trailing annual produces a profusion of tiny, semi-double, sunflowerlike flowers with green centres. Low-maintenance, long-flowering plants work well in beds and baskets - Sprite can take the heat, making it an ideal Summer groundcover.

SAXIFRAGA

Saxifraga x arendsii

Purple Robe

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

Spread: 4 to 6 in./10 to 15 cm

Plug crop time: 8 to 10 weeks

Transplant to finish: 40 to 44 weeks

USDA Hardiness Zones: 4 to 7 (-30 to 0°F/-34 to -18°C minimum temperatures)
Supplied as raw seed.

Early-flowering, compact and mounded variety delivers masses of intense purple, star-shaped flowers from March to July, on a uniform plant habit. Good groundcover for borders or filler for perennial containers. Prefers a sunny location that is not too wet.

SCABIOSA

Scabiosa columbaria

Blue Note

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

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

Plug crop time: 6 to 8 weeks

Transplant to finish: 12 to 14 weeks

USDA Hardiness Zones: 5 to 9 (-20 to 20°F/-29 to -7°C minimum temperatures)

A First-Year-Flowering Perennial. Supplied as raw seed.

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. Can be grown as an annual for Summer or overwintered for early Spring sales. Good companion to Pink Diamonds.

SCABIOSA

Scabiosa japonica var. *alpina*

Pink Diamonds

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

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

Plug crop time: 6 to 8 weeks

Transplant to finish: 13 to 15 weeks

USDA Hardiness Zones: 5 to 9 (-20 to 20°F/-29 to -7°C minimum temperatures)

A First-Year-Flowering Perennial. Supplied as raw seed.

Highly uniform, genetically compact plants need no PGRs to produce basal-branching, short-stemmed plants that maintain their perfect shape all season. Dense, dark green leaves are topped with an abundance of long-lasting, soft pink blooms. Can be produced as an annual crop.



Starry Dreams Silene *Fleuroselect Novelty*

SILENE 🌞
Silene alpestris

Starry Dreams

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

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

USDA Hardiness Zones: 5 to 8 (-20 to 10°F/-29 to -12°C minimum temperatures)

A First-Year-Flowering Perennial.
Supplied as raw seed.

Starry Dreams has 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. Useful in borders and patio planters.

SILENE 🌞
Silene maritima

Icecups

Height: 5 to 7 in./13 to 18 cm
Spread: 6 to 8 in./15 to 20 cm

Plug crop time: 6 to 8 weeks
Transplant to finish: 9 to 11 weeks (LD)

USDA Hardiness Zones: 4 to 7 (-30 to 0°F/-34 to -18°C minimum temperatures)

A First-Year-Flowering Perennial.
Supplied as raw seed.

Highly ornamental, with attractive seed pods producing pure white, bell-shaped, upright flowers over full-branching foliage. Richly flowering from May to July, the heat-tolerant plants prefer a semi-shaded location. Works well in annual programs.



Icecups Silene



Yellow Stone Sisyrinchium

SISYRINCHIUM 🌞
Sisyrinchium californicum

Yellow Stone

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

Plug crop time: 7 to 9 weeks
Transplant to finish: 12 to 14 weeks

USDA Hardiness Zones: 7 to 10 (0 to 30°F/-18 to -1°C minimum temperatures)

A First-Year-Flowering Perennial.
Supplied as raw seed.

Clean and attractive, sun-loving plant produces large, yellow, star-shaped flowers all Summer long, over compact foliage that resembles an Iris. Uniform and sturdy habit. Well-suited to annual production.



Stachys byzantina

STACHYS 🌞
Stachys byzantina
(*lanata*, *olympica*)

Height: 16 in./40 cm
Spread: 20 to 24 in./50 to 60 cm

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

USDA Hardiness Zones: 5 to 7 (-20 to 0°F/-29 to -18°C minimum temperatures)

Supplied as raw seed.

Strong border plant for larger plantings features evergreen silvery grey leaves with a woolly texture and deep rose flowers. Grow as an annual; mainly used for the foliage.

STATICE
See **Limonium**.

SUNFLOWER
See **Helianthus**.



Golden Dawn Thymophylla



Silverado Tiarella



Lake Forest White Trachelium



Lake Forest Pink Trachelium



Lake Forest Purple Trachelium

THYMOPHYLLA 🌞
Thymophylla tenuiloba

Golden Dawn

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

Plug crop time: 5 weeks
Transplant to finish: 9 to 12 weeks

Supplied as raw seed.

Long-flowering, spreading plant is covered with daisylike, golden yellow flowers on fine, ferny foliage. Heat and humidity-lover is an excellent performer in hanging baskets, patio planters and garden beds.

TIARELLA 🌞
Tiarella wherryi

Silverado

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

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

USDA Hardiness Zones: 4 to 8 (-30 to 10°F/-34 to -12°C minimum temperatures)

A First-Year-Flowering Perennial. Supplied as TunedSeeds.

Eye-catching variety displays delicate, creamy white blooms with a tinge of pink, on densely set flower spikes over silky green foliage with contrasting veins. Long-flowering in semi-shade areas. First-year-flowering variety; grow as an annual. Great for shade or semi-shade.

TRACHELIUM 🌞 🌞
Trachelium caeruleum

CUT FLOWER TRACHELIUM

Lake Collection

Stem length: 30 to 42 in./75 to 105 cm

Plug crop time: 7 to 9 weeks
Transplant to finish: 10 to 18 weeks

Supplied as pelleted seed.

Three distinct series for simplified ordering and production to fill year-round orders. Long-day flowering varieties need 16 to 18 hours of daylength to flower and to produce the large central umbel with smaller side umbels or "satellites." Excellent vase life and good shipability. Foliage is medium green unless noted. Suitable for greenhouse, field or garden cut flower production.

Lake Forest Series (Winter-Flowering)

Bred to flower more easily under conditions of shortening daylength. Long days (16 to 18 hours) are still needed to flower, but due to breeding, flowers are initiated more easily, uniformly and quickly. Transplant in Autumn to early Winter for flowering in mid-Winter to early Spring.

Purple has dark green foliage. Fastest to flower in the series.



Lake Louise Blue



Lake Louise White



Lake Michigan Blue



Lake Louise Purple



Lake Michigan White



Lake Michigan Violet



Lake Michigan Purple

Lake Louise Series (Summer-Flowering)

Latest to flower, this Group 4 series has the greatest tolerance for high heat and high light of the Lake Collection. Transplant in late Spring through Summer for Summer through early Autumn flowering.

Purple has dark foliage.

Lake Michigan Series (Spring & Autumn-Flowering)

The greatest potential for year-round production in mild climates. Mid-season flowering (transitional Group 3), for mid-Winter to early Spring transplants to yield late Spring to early Summer flowers. May also be transplanted late Summer to early Autumn for Autumn to early Winter flowering.

Purple has dark green foliage and stems.

Violet has dark reddish foliage and stems.



Southern Charm Verbascum



Temptress Purple Verbascum



Temptress White Verbascum

TROPAEOLUM

Whirlybird Mixture Nasturtium
see PanAmerican Seed, page 77.

VERBASCUM

Verbascum x hybrida

Southern Charm

Height: 24 to 30 in./60 to 75 cm

Spread: 12 to 18 in./30 to 45 cm

Plug crop time: 4 to 5 weeks

Transplant to finish: 12 to 13 weeks

USDA Hardiness Zones: 5 to 8 (-20 to 10°F/-29 to -12°C minimum temperatures)

A First-Year-Flowering Perennial.

Supplied as pelleted seed.

Blend of creamy yellow, soft lavender and peachy rose shades, each marked with a fuzzy purple "bee." Florets are arranged in pairs; as the first dies, the second blooms, doubling the life of the flower spike. Plants bloom in Spring, go dormant under high temperatures and rebloom in Autumn. Best sold green in 4.5-in./11-cm pots or in bloom in 1 to 2-gallon containers (8 to 10-in./20 to 25-cm standard pots). No vernalization needed for flowering.

VERBASCUM

Verbascum phoeniceum

Temptress Series

Height: 24 to 28 in./60 to 70 cm

Spread: 12 to 16 in./30 to 40 cm

Plug crop time: 7 to 8 weeks

Transplant to finish: 11 to 13 weeks

USDA Hardiness Zones: 5 to 7 (-20 to 0°F/-29 to -18°C minimum temperatures)

A First-Year-Flowering Perennial.
Supplied as SowEasy single pellets.

Flat, deep green foliage rosette is topped with multiple, slender flower spikes that hold 0.75-in./2-cm blooms. Plant remains attractive even after flowering, with numerous tiny seedpods along the stems. First-year-flowering for annual production, or sow in August to September for overwintering.

Purple has a smaller rosette than White.



Buenos Aires Verbena

VERBENA ☀️

Verbena bonariensis

Buenos Aires

Height: 40 to 50 in./1 to 1.5 m

Spread: 12 to 16 in./30 to 40 cm

Plug crop time: 6 to 7 weeks

Transplant to finish: 16 to 18 weeks

USDA Hardiness Zones: 7 to 9 (0 to 25°F/-17 to -3°C minimum temperature)

Supplied as TunedSeeds.

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. Displays long-lasting, bright lilac-violet flowers.



Blue Bouquet Veronica

VERONICA ☀️

Veronica spicata

Blue Bouquet

Height: 12 in./30 cm

Spread: 12 in./30 cm

Plug crop time: 5 to 6 weeks

Transplant to finish: 14 to 16 weeks

USDA Hardiness Zones: 5 to 8 (-20 to 10°F/-29 to -12°C minimum temperatures)

A First-Year-Flowering Perennial.

Supplied as pelleted seed.

Versatile perennial bedding plant makes an excellent choice for landscapes, and also works well as a cut flower and a pot crop. Tapered blue spikes with many small florets top deep green foliage. Higher soil moisture and soil fertility levels have promoted increased stem length.

VIOLA

See **PanAmerican Seed**, pages 142-143.



New Cool Wave® Purple and Golden Yellow Pansy (see page 4)



New Mighty Mosaic Coleus
(see page 33)



New Trumpet Pink Snapdragon
(see page 126)



New Fuseables Precision Multi-Pellets (see page 12)



New Akila® White Improved Osteospermum (see page 82)



New 'Homeslice' Compact Slicer Tomato (see page 155)

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New Sophistica® Lime Bicolor Improved Petunia (See page 97)



New Premium Perennial Combos
(see page 157)



New Dalmatian Mix Digitalis
(see page 177)



New Revolution Select Mix Gerbera
(see page 184)



New Sparkle White Gaura
(see page 183)

Circle of Life EcoIndex

Reduce inputs to save money and grow sustainably. Look for the EcoIndex symbols on varieties throughout the catalogue.

Reduce Energy



Identifies products growers can finish successfully with a proven cool-grown, low-energy input program

Reduce Water



Identifies products that deliver superior performance in a landscape/consumer setting under a restricted watering regime

Reduce Chemicals



Identifies products which reduce or eliminate the need for costly and often hazardous chemicals

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Beyond the Book

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