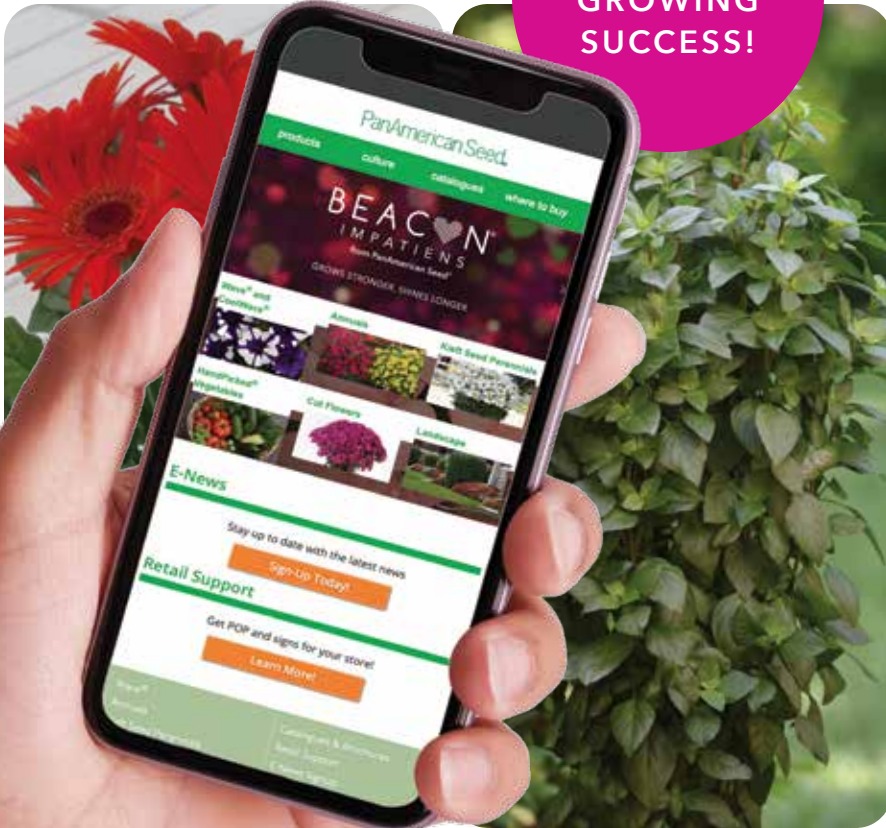


2022 NEW VARIETIES



PLANTS FOR
GROWING
SUCCESS!



wave
PETUNIAS

p.4



Moving forward with Wave®

Wave, the world's best-selling petunia, moves the market forward once again with the introduction of an all-new earlier, easy-to-produce series. Turn the page to find out more...

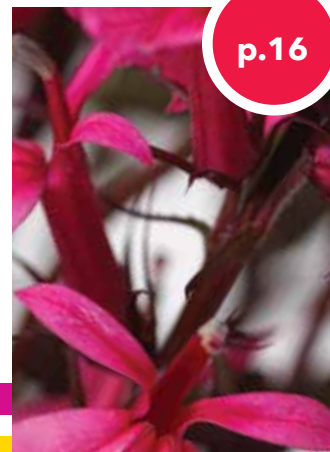
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ANNUALS



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PERENNIALS



NEW IN 2022



PanAmerican Seed® is your global partner for a wide range of **high-quality** seed products to help you have a **successful growing** season. Our regional customer service representatives are available when you need us, and we have technical support to help you always **grow your best**.

Our 2022 introductions include a number of exciting varieties that provide you with growing solutions, like E3 Easy Wave™ Petunias, an **Early, Efficient and Evolutionary** series that starts the Wave sales season **even earlier!** Beacon® Rose makes a bold new addition to the impatiens series with **high resistance to Impatiens downy mildew**. We are also pleased to announce our new cut flower venture, BloomStudiosSM. With a great new cut flower marigold for **Dia de los Muertos celebrations**, as well as two new Sweet™ Dianthus varieties, we have a lot to offer. Find out more at BloomStudios.com. Plus, the Kitchen Minis® Collection expands with two edible potted tomato plants that will entice consumers to **buy, eat and repeat** their purchase of these **indoor/outdoor tabletop varieties**.

Visit panamseed.com for more product information and growing culture on these and all our tried-and-true varieties to enhance your program and expand your business during these unique times. You can count on us to be there when and where you need us!



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Meet Our Cover Stars!

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 E3 Easy Wave™
 Blue Spreading Petunia
 White Lion Leucanthemum
 Beacon® Rose Impatiens
 ColorBloom™ Deep Orange with
 Dark Eye Gerbera
 'Everleaf Thai Towers' Basil
 Xochi Orange F1 Marigold
- BACK:**
 E3 Easy Wave™ Sky Blue
 Spreading Petunia

wave[®]
PETUNIAS



Wake up early season sales!

This brand-new Wave® series flowers at 10 hours daylength, and it will be ready at retail to kick off Easy Wave sales even earlier! With a manageable, uniform plant structure and vigour, this new series offers simple production to save on labour costs. The plants can be grown at lower PGR rates than Easy Wave, so we say it's 'Extra Easy' Wave! The plants look better longer at retail for even better sell-through and still provide the extraordinary performance that consumers expect!



NEW

Pink

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

SPREADING PETUNIA ●

Petunia x hybrida

E3 Easy Wave™ Series F1



Height: 6 to 12 in./15 to 30 cm
Spread: 25 to 32 in./64 to 81 cm
Flower size: 2.25 to 3 in./6 to 8 cm

Seed supplied as: Pelleted

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

- A new Wave brand series is now available to fulfill sales earlier in the season.
- All colours flower at or under 10 hours daylength.
- E3 Easy Wave offers simplified production, as it can be successfully grown at lower PGR rates than Easy Wave (except Blue).

- All E3 Easy Wave varieties have a similar, uniform plant structure and vigour, which means simplified plant management.
- Plant holding capabilities across the series mean better quality over a longer time period for an extended sales window.
- E3 Easy Wave fulfills the Wave brand promise of *easy spreading colour* with superior performance: a manageable spreading habit, long bloom time and sheer colour value!
- Mounding and spreading habit offers a three-dimensional landscape effect, creating impressive baskets and planters.
- Recommended in Wave branded packaging: 6-in./15-cm pots, premium quarts and gallons, 306 premium packs with handle, hanging baskets.



NEW

Blue



NEW

Blue



NEW

Coral



NEW

Pink



NEW

Pink Cosmo



NEW

Red



NEW

White

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

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

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

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

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

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

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



NEW

Red, Blue, White

wave
PETUNIAS®





NEW

Red



NEW

Sky Blue



NEW

White



NEW

Pink Cosmo



NEW

Sky Blue



NEW

White

Packed with petite blooms!

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

SPREADING PETUNIA continued

Shock Wave® Series F1



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

Seed supplied as: Pelleted

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

- Blooms in a 4 to 6-day window.
- Smaller blooms rebound faster from overhead watering and rain than other petunias - stays fresher-looking at retail and outdoors.
- Performs equally well in small spaces, baskets, containers and mixed combos.
- Mounded, spreading plants are similar in shape and just as easy to manage as Easy Wave petunia.
- Recommended in Wave branded packaging: 4-in./10-cm pots, premium quarts, 306 premium packs with handle, hanging baskets.

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

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

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

wave[®]
PETUNIAS



NEW

Spark Mixture Improved



NEW

Volt Mixture Improved

ANNUALS



High resistance to Impatiens downy mildew!

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



NEW

Rose

IMPATIENS ●●
Impatiens walleriana

Beacon® Series F1



Height: 15 to 20 in./38 to 51 cm
Spread: 12 to 14 in./30 to 36 cm
Flower size: 1.25 to 1.5 in./3 to 4 cm

Seed supplied as: Coated

Plug crop time: 4 to 5 weeks

Transplant to finish: 3 to 4 weeks

- Beacon impatiens exhibits high resistance to the currently known and widely prevalent populations of *Plasmopara obducens*, which cause Impatiens downy mildew.
- Beacon impatiens offers the opportunity to bring back into production a well-known, in-demand, easy-to-grow and versatile product for increased sales.

- Extensive trialing has proven that Beacon impatiens provides genetic high resistance to IDM. Beacon is not immune to IDM; there are scenarios where preventative IDM fungicides may be recommended.

- With a plant structure, flowering time, flower size and crop culture that is similar to Super Elfin, Beacon impatiens is easy to incorporate into production planning.
- Offers season-long colour, and it brings back fast-filling colour to gardens and landscapes.

New Rose Rose colour expands the series.

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

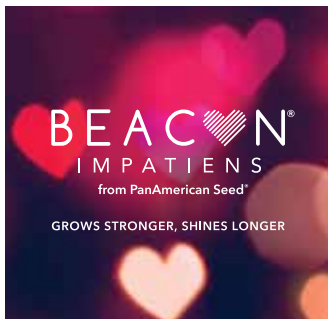
Also available in:

- Bright Red
- Coral
- Orange
- Salmon
- Violet Shades
- White
- Red White Mixture



NEW

Formula Mixture



Beacon Coral (L) outperforms a susceptible competing variety (R) at Venhuizen field trials in 2018.



NEW

Pink Bronze Leaf Improved

MEGAsize + MEGAcour = MEGAsales!

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

BEGONIA ●●

Begonia interspecific

Megawatt™ Series F1



PRO LANDSCAPE
PERFORMER

Height: 20 to 28 in./51 to 71 cm

Spread: 16 to 24 in./41 to 61 cm

Seed supplied as: Pelleted

Plug crop time: 7 to 8 weeks

Transplant to finish: 7 to 9 weeks

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

New Pink Bronze Leaf Improved

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

Also available in:

Pink Green Leaf

Red Bronze Leaf

Red Green Leaf

Rose Bronze Leaf

Rose Green Leaf

Shocking Summer Colour!

The most heat-tolerant interspecific dianthus, Jolt's electrifying colours make them sure standouts in landscapes and garden beds, as well as premium containers. These highly durable plants withstand hot conditions with few disease issues and continue to flower without setting seed for a really powerful garden performance!

INTERSPECIFIC DIANTHUS

Dianthus barbatus interspecific

Jolt™ Series F1



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

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

Flower size: 1 in./3 cm

Seed supplied as: Pelleted

Plug crop time: 4 to 5 weeks

Transplant to finish: Late

Spring through Autumn finish, 11 to 13 weeks; Winter finish, 14 to 18 weeks

- *Shocking Summer Colour* from the most heat-tolerant Interspecific Dianthus!
- Electrifying colours and all-season performance make Jolt stand out in landscapes and premium containers.
- Highly durable plants withstand hot conditions with few disease issues and continue to flower without setting seed.
- Grower-friendly, well-branched plants are easy to produce with less to no PGRs.
- Perfect for Summer premium grower choice quarts and gallons to command a higher price point.
- Strong dark green foliage.
- Performs as a semi-hardy annual in Zone 7 (0°F/-18°C minimum temperature) and milder.

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

Also available in:

Cherry

Pink (All-America Selections National Winner)

Pink Magic



NEW

Purple

PACK COLEUS ●●
Solenostemon scutellarioides

Wizard® Series

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

Seed supplied as: Raw

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

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

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

Also available in:

- Coral Sunrise**
- Golden Jade**
- Mosaic Rose**
- Scarlet**
- Sunset**
- Velvet Red**
- Mixture**



NEW

Madness Deep Rose Petunia



NEW

Mirage Deep Rose Petunia



NEW

Wizard Select Mixture Improved Coleus

PETUNIA ●
Petunia x hybrida

Madness® Series F1



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

Seed supplied as: Pelleted

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

Available in North America only.

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

New Deep Rose Features large flowers and a brilliant deep rose colour.

Mirage Series F1

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

Seed supplied as: Pelleted

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

Not available for sale in North America.

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

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



NEW

Sorbet Tiger Eye



NEW

Sorbet Tiger Eye

Send the best-looking violas to retail

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

VIOLA 
Viola cornuta

Sorbet® Series F1

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

Seed supplied as: Raw, Primed

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

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

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



NEW

Sorbet XP Rose Blotch



NEW

Sorbet XP Rose Blotch

Sorbet® XP Series F1



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

Seed supplied as: Raw, Primed

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

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

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

PERENNIALS

KieftSeed™



Spring Shasta grows in short days!

White Lion brings an early sales opportunity in this key perennial class – it can be grown in natural short days! With high quality and reliable supply, this seed *Leucanthemum* is a must-have for early Spring.



NEW
White Lion *Leucanthemum*

LEUCANTHEMUM ●
Leucanthemum x superbum

New White Lion F1

Height: 8 to 10 in./20 to 25 cm
Spread: 8 to 12 in./20 to 30 cm
Flower size: 3 to 3.5 in./8 to 9 cm

USDA Hardiness Zones: 3b to 9a (-35 to 20°F/-37 to -7°C minimum temperatures)

A First-Year-Flowering Perennial.

Seed supplied as: Raw

Plug crop time: 5 to 6 weeks

Transplant to finish: annual, 9 to 12 weeks; overwintered, 18 to 26 weeks (18 in southern regions)

- The Spring Shasta! This unique compact seed *leucanthemum* can be grown in short days (10-hour daylength requirement) – perfect for early Spring sales!
- Ideal for an annual production schedule. No supplemental lighting needed, flowers under natural days.
- Perfect for overwintered production in natural short days, finished under natural short days, when it will bulk more uniformly. No supplemental light or Night Interruption needed.
- No other seed variety offers this early programming solution!



NEW
Starship Rose *Lobelia*

LOBELIA ●
Lobelia x speciosa

Starship™ Series F1

Height: 20 to 24 in./51 to 61 cm
Spread: 8 to 12 in./20 to 30 cm

USDA Hardiness Zones: 6a to 10b (-10 to 35°F/-23 to 2°C minimum temperatures)

A First-Year-Flowering Perennial.

Seed supplied as: Pelleted

Plug crop time (288 tray):

Scarlet, 7 to 9 weeks; all others, 8 to 10 weeks

Transplant to finish: 14 to 18 weeks

- Earlier flowering; improved branching; low stretch; uniform, controlled habit; and huge flower power assure a better-quality finished plant than the competition.
- **NEW** Rose matches Scarlet for timing and uniformity.
- Pretty Summer plant for beds and borders – prefers higher temperatures, humidity and moisture.
- Good germination and plug yield.
- Versatile series works well from 5-in./13-cm pots to higher-value 1 and 2-gallon containers.
- Performs well in both annual and perennial combos.
- Attracts hummingbirds and butterflies.

New Rose A bright rose colour.

Also available in:

- Blue**
- Burgundy**
- Deep Rose**
- Scarlet**
- Scarlet Bronze Leaf**

POTTED PLANTS



GERBERA 

Gerbera jamesonii

ColorBloom™ Series F1

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

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

Flower size: 3 to 4 in./8 to 10 cm

Seed supplied as: Coated

Plug crop time: 6 to 7 weeks

Transplant to finish: 6 to 10 weeks

- The ColorBloom series is specially designed for the quart/11-cm retail market.
- ColorBloom is the most uniform series on the market, with the best performance for consumers.
- The series is around 10 days faster to flower than competitors.
- More uniform with a shorter flower window.
- It has a higher amount of usable plants due to better seed quality.
- Offers a compact plant habit that requires less to no PGRs.
- Series holds its colour better and won't fade in high light.

New Bicolor Red White A unique bicolor for this quart/11-cm pot market segment! Fits the series for controlled plant habit and consumer performance; 5 days later to flower like Bicolor Orange Yellow and NEW Deep Orange with Dark Eye.

New Deep Orange with Dark Eye Features a good orange colour that doesn't fade under higher light conditions. Fits the series very well for plant habit and consumer performance; 5 days later to flower like NEW Bicolor Red White and Bicolor Orange Yellow. Adding this top-selling colour means we can now offer growers a complete gerbera program!

Also available in:

- Bicolor Orange Yellow**
- Cherry with Light Eye**
- Deep Rose with Light Eye**
- Red with Dark Eye**
- Red with Light Eye**
- White with Dark Eye**
- Yellow with Dark Eye**
- Mixture**

Stays tidy for smaller pots

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



ColorBloom Bicolor Red White



ColorBloom Deep Orange with Dark Eye



Revolution Orange with Light Eye Improved

Revolution™ Series F1

Height: 4 to 8 in./10 to 20 cm

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

Flower size: 3 to 4 in./8 to 10 cm

Seed supplied as: Coated

Plug crop time: 6 to 7 weeks

Transplant to finish: 8 to 10 weeks

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

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

Cover your whole gerbera program with PanAmerican Seed!

Revolution
15 varieties & 2 mixes
5-in./13-cm pots

Mega Revolution
12 varieties & 1 mix
6 in./15-cm pots

ColorBloom
9 varieties & 1 mix
Quart/11-cm pots



CUT FLOWERS



BloomStudiosSM

Get to know BloomStudios Cut Flowers...

For years, PanAmerican Seed has provided the highest quality seed to professional cut flower growers around the world. BloomStudios Cut Flowers is a new venture that grew from this to bring innovative breeding and technical resources to the professional cut flower market through the PanAmerican Seed distribution network.

BloomStudios - Igniting Imagination with Every StemSM



Strong stems stand up to shipping

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



NEW

Orange



NEW

Orange

MARIGOLD

Tagetes erecta

Xochi Orange F1

Planting Density: 80-100 plants/sq. meter (8-10 plants/sq. foot)

Cultivation Type: High Tunnel, Field

Usage: Focal, Secondary

Stem Length: 24 to 36 in./ 61 to 91 cm

Form Supplied As: Coated

A great option for Summer and Fall cut flower programs, Xochi delivers stronger stems and richer colours than competing varieties. Xochi means "flower" or "princess of flowers" and is a shortened version of Xochitl, an ancient Mayan word used in Spanish today, most commonly in Mexico. A popular cut flower for Dia de los Muertos and Halloween; good for use in bouquets and grower bunches.

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

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

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



NEW

Orange



NEW

Mona Lisa Mixture Improved Anemone

ANEMONE

Anemone coronaria

Mona Lisa® Series F1

Planting Density: 22 to 44 plants/sq. meter (2 to 4 plants/sq. foot.)

Cultivation Type: Greenhouse, High Tunnel

Usage: Focal

Stem Length: 18 in./46 cm

Bloom Size: 4 to 4.5 in./10 to 11 cm

Form Supplied As: Raw

The large, bright blooms of Mona Lisa Anemone are a masterpiece in any bouquet. Mona Lisa varieties produce up to 18 flowers per plant and are best grown cool without the need for supplemental light. Low temperatures (8-12°C/46-54°F) promote optimum stem length.

Harvest Recommendation:

Harvest when flower buds are fully coloured and about 30-40% open/cupped stage. Avoid fully open flowers with pollen shed.

Post-Harvest Recommendation:

Anemones are sensitive to ethylene; recommend treating with an anti-ethylene product. Hydrate and store in cooler at 1-3°C (34-38°F) in commercial floral solution at recommended rates.

New Mixture Improved

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



NEW

Sweet Neon Purple Dianthus



NEW

Sweet Rose Magic Dianthus

Best in class makes the best bouquets

Sweet offers the best commercial *D. barbatus* series available. With no vernalisation needed for first-year-flowering, you can program for year-round production. Add to that the very uniform height and flowering, excellent retail holdability and 13 separate bright colours, and you've got one sweet series to grow and send to market!

DIANTHUS

Dianthus barbatus

Sweet™ Series F1

Planting Density: 64 plants/sq. meter (6 plants/sq. foot)

Cultivation Type: Greenhouse, High Tunnel

Usage: Filler, Secondary

Stem Length: 18 to 36 in./46 to 91 cm

Form Supplied As: Pelleted

Versatile and programmable series can be produced without vernalisation and is the best dianthus for cooler production seasons. A top-notch filler series that features large, long-lasting blooms on strong stems.

Harvest Recommendation: Harvest stems when 20-50% of florets are open.

Post-Harvest Recommendation:

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

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

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

Snaps second to none

We are the world's leading supplier of cut flower snaps, with an unsurpassed choice of top-producing varieties selected for stem and flower quality, photoperiodic response and earliness to flower. With selections streamlined into 4 flowering response groups - including our popular Potomac family - you'll find it a "snap" to build an all-year program of successful growing.



NEW
Dark Pink



NEW
Dark Pink

SNAPDRAGON
Antirrhinum majus

Potomac™ Series F1

Planting Density: 80-106 plants/sq. meter (8-10 plants/sq. foot)

Cultivation Type: Greenhouse, High Tunnel

Usage: Line

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

Form Supplied As: Raw

Potomac is a group 4 snapdragon best for long days, high light and temperatures greater than 16°C (60°F).

Harvest Recommendation:

Harvest stems when 5-6 flowers have opened. Keep snapdragons vertical after harvest to prevent stems from curling.

Post-Harvest Recommendation:

Snapdragons are sensitive to ethylene; it is recommended to treat with an ethylene-inhibiting product after harvest. Hydrate and store in a cooler at 2-5°C (36-41°F) in commercial floral holding solution at the manufacturer recommended rates. Always keep snapdragon stems vertical during storage.

Vase Life Recommendation:

7-10 days

New Dark Pink (Group 4) Brings a key colour in the dark pink/rose category in line with the newer breeding in the Potomac series; a great match to Pink. Replaces Rose with a more uniform flowering variety and improved bud taper.



BloomStudiosSM

| PRODUCTION GUIDE | | | |
|---------------------|------------|-------------|-------|
| Class/Variety | Greenhouse | High Tunnel | Field |
| ANEMONE | | | |
| Mona Lisa Series F1 | X | X | |
| DIANTHUS | | | |
| Sweet Series F1 | X | X | |
| MARIGOLD | | | |
| New Xochi Orange F1 | | X | X |
| SNAPDRAGON | | | |
| Potomac Series F1 | X | X | |

| FLORAL SELECTION GUIDE FOR BOUQUETS | | | | |
|-------------------------------------|-------|--------|------|-----------|
| Class/Variety | Focal | Filler | Line | Secondary |
| ANEMONE | | | | |
| Mona Lisa Series F1 | X | | | |
| DIANTHUS | | | | |
| Sweet Series F1 | | X | | X |
| MARIGOLD | | | | |
| New Xochi Orange F1 | X | | | X |
| SNAPDRAGON | | | | |
| Potomac Series F1 | | | X | |

EDIBLE POTTED VEGETABLES



NO GARDEN?
NO PROBLEM.



EDIBLE POTTED TOMATO ●●●

Solanum lycopersicum

New Cocoa F1

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

Seed supplied as: Raw

Tomato Class: Small-Fruited

Type: Cherry

Habit: Compact Determinate

Tomato Colour: Dark red

Fruit Characteristics: Round, small

Fruit Size: 0.5-1 in./1-3 cm long x
 0.5-1 in./1-3 cm wide

Days to maturity from transplant:
 70-84

Plug crop time (weeks): 2-3

Potting to sale (weeks): 10-12

Pot size: Quart-6 in./12-15 cm

- Plant benefits from being grown dry. Support fruit weight by inserting sticks close to the central stem at the time of flowering.
- Cocoa provides uniquely burgundy-coloured fruit that is deliciously sweet for your recipes! Smaller, more compact habit is perfect for quart and 4.5-in./11-cm programs.



NEW

Cocoa

New Red Velvet F1

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

Seed supplied as: Raw

Tomato Class: Small-Fruited

Type: Cherry

Habit: Compact Determinate

Tomato Colour: Red

Fruit Characteristics: Round, small

Fruit Size: 0.5-1 in./1-3 cm long x
 0.5-1 in./1-3 cm wide

Days to maturity from transplant:
 70-84

Plug crop time (weeks): 2-3

Potting to sale (weeks): 10-12

Pot size: Quart-6 in./12-15 cm

- Plant benefits from being grown dry. Support fruit weight by inserting sticks close to the central stem at the time of flowering.
- Red Velvet provides beautiful red-coloured fruit that is deliciously sweet for your recipes! Smaller, more compact habit is perfect for quart and 4.5-in./11-cm programs.



NEW

Red Velvet

Buy. Eat. Repeat!

The NEW Kitchen Minis collection includes potted vegetable plants consumers can grow inside on a sunny windowsill or counter without a garden! They can also be grown outside as tabletop patio varieties.

Easy-to-grow Kitchen Minis encourage consumers to harvest and enjoy their own homegrown vegetables, then when the plant is finished fruiting, buy a fresh plant to harvest from every few weeks!

The Kitchen Minis Collection includes:

Peppers

- Adobo
- Cosmo
- Fresh Bites Orange
- Fresh Bites Red
- Fresh Bites Yellow
- Hot Burrito
- Hot Fajita
- Hot Joker
- Hot Lemon
- Piñata
- Tamale
- Taquito

Tomatoes

- NEW Cocoa
- NEW Red Velvet
- Micro Tom
- Siam

VEGETABLES & HERBS



HandPicked®
VEGETABLES



Towering over other basil

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

BASIL

Ocimum basilicum

New 'Everleaf Thai Towers'

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

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

Seed supplied as: Raw

Herb Type: Thai

Plant Habit: Columnar, highly branched, late flowering, short internodes, upright, vigorous

Colour: Medium Green

Suited For: Extended harvest multiple cuts, hydroponic, pot, roots-on

Days to maturity from direct seed: 45-60

Days to maturity from transplant: 30-45

Production Method: Field, Hydroponic, In Ground, Container

- Flowers up to 10 to 12 weeks later than standard Thai basil with huge harvest potential.
- Well-branched variety with short internodes makes a beautiful, columnar plant that stays tidy for many uses, including in-ground, container gardens and hydroponics.
- Aromatic and vibrant licorice flavour complements any dish, especially Thai cuisine. Blends well when cooked in a curry or chop fresh on Pad Thai to experience full licorice aroma.
- Masses of medium-green leaves with occasional purple flecks and soft purple stems will brighten any retail display.



'Everleaf Thai Towers'



'Everleaf Thai Towers'



Everleaf Basil Collection L-R: Everleaf Emerald Towers, NEW 'Everleaf Thai Towers' and Everleaf Genovese

Stand out with unique foliage

Candy Cane Chocolate Cherry's variegated foliage stands out among all other vegetables at a young plant size. As the plant matures, green fruit with a unique white stripe changes to chocolate and cherry red. Be sure to add this stunning variety to your vegetable program.

PEPPER ●

Capsicum annuum

Candy Cane Chocolate Cherry F1

Height: 18 to 24 in./46 to 61 cm
Spread: 12 to 18 in./30 to 46 cm

Seed supplied as: Raw

Type: Sweet

Class: Mini bell

Habit: Medium

Fruit Colour: Green/white stripe to chocolate/red stripe

Fruit Size: 3.5-3.75 in./9-10 cm long x 2.5-2.75 in./6-7 cm wide, 3.5-4.5 oz. (99 to 128 g)

Days to maturity from transplant: (green) 55-60; (ripe) 70-75

Production Method: Field, In Ground, Container

- Mini bell pepper plant has unique, eye-catching variegated foliage.
- Early-maturing fruit ripens from green and white stripes to unique chocolate and cherry red stripes.
- Sweet flavour and crisp texture make it perfect for fresh eating at any stage of ripeness.
- Best in containers or in-ground, with or without support.



NEW
Pot-a-peño



NEW
Candy Cane Chocolate Cherry

Jalapeños in a basket!

Early-fruiting Pot-a-peño has a unique cascading habit that's perfect for a hanging basket or premium container. It's a great addition to any vegetable program!

New Pot-a-peño F1

Height: 12 to 15 in./30 to 38 cm
Spread: 18 to 20 in./46 to 51 cm

Seed supplied as: Raw

Type: Hot

Heat Level: 2 - mildly hot

Class: Jalapeño

Habit: Bush, cascading, medium

Fruit Colour: Green to red

Fruit Size: 3-4 in./8-10 cm long x 0.75-1.25 in./2-3 cm wide

Days to maturity from transplant: (green) 45-50; (ripe) 60-65

Production Method: Field, In Ground, Container

- Pot-a-peño's unique cascading habit is ideal for a hanging basket or container - a perfect addition to any patio or small-space garden.
- Early maturing means this will be one of the first peppers to fruit in the garden.
- Tons of jalapeño fruit grow under a dense canopy of small, dark green leaves.
- Harvest fruit green for a traditional spicy zip in any dish or allow to ripen to red for a sweet, spicy flavour.





NEW

Peppi Red



NEW

Peppi Yellow

New Peppi Series F1

Height: 36 to 48 in./91 to 122 cm
Spread: 24 to 36 in./61 to 91 cm

Seed supplied as: Raw

Type: Sweet

Class: Snack

Habit: Large, tall, vigorous

Growth: Indeterminate

Fruit Size: 3.5-4.5 in./9-11 cm long x 1.25-1.75 in./3-4 cm wide

Days to maturity from transplant: (green) 55-60; (ripe) 75-80

Production Method: Field, Protected Culture, In Ground

- These small, pointed fruits offer incredible sweetness and rich flavour.
- The fruit are often seedless and are great for snacking fresh off the plant.
- To produce seedless fruit, grow it in isolation from other (non-seedless) pepper varieties.
- If it is not isolated, it will produce larger, great-tasting fruit with just a few seeds.
- Best grown in-ground with support of stakes or a cage.

New Red Fruit ripens from green to red.

New Yellow Fruit ripens from green to yellow.



NEW

Peppi Cornissimo

Seedless sweet peppers

The Peppi pepper collection will grow seedless fruit under the right conditions! Grow plants in isolation from other, non-seedless peppers to produce seedless fruit that makes chopping quick and easy for recipes.

New Peppi Cornissimo F1

Height: 36 to 48 in./91 to 122 cm
Spread: 24 to 36 in./61 to 91 cm

Seed supplied as: Raw

Type: Sweet

Class: Corno

Habit: Large, tall, vigorous

Growth: Indeterminate

Fruit Colour: Green to red

Fruit Size: 6-7 in./15-18 cm long x 2.25-2.5 in./6 cm wide, 4-4.5 oz. (113 to 128 g)

Days to maturity from transplant: (green) 80-85; (ripe) 95-100

Production Method: Field, In Ground

- Extra-large corno-shaped fruit ripens from green to red, with outstanding thick walls, rich flavour and more sweetness than most large-fruited peppers.
- Fruit is often seedless, for less preparation time for chopping and cooking. Great on the grill or stuffed and baked in the oven.
- To produce seedless fruit, grow in isolation from other (non-seedless) pepper varieties. If not isolated, it will produce larger, great-tasting fruit with just a few seeds.
- Best grown in-ground with support of stakes or a cage.

A true garden star!

DarkStar is resistant to late blight, a common disease of tomato plants, and it has been tested for all common seedborne diseases, ensuring high-quality seed for propagation. You can rely on DarkStar to light up your vegetable program!

TOMATO ●

Solanum lycopersicum

New DarkStar F1

Height: 60 to 84 in./152 to 213 cm
Spread: 36 to 48 in./91 to 122 cm

Seed supplied as: Raw

Tomato Class: Large-Fruited

Type: Beefsteak

Habit: Indeterminate

Tomato Colour: Purple

Fruit Characteristics: Oblate, ribbed

Fruit Size: 2-2.25 in./5-6 cm long x 3-3.25 in./8 cm wide, 8-10 oz. (227 to 283 g)

Disease Resistance: HR: LB, V

Days to maturity from transplant: 70-75

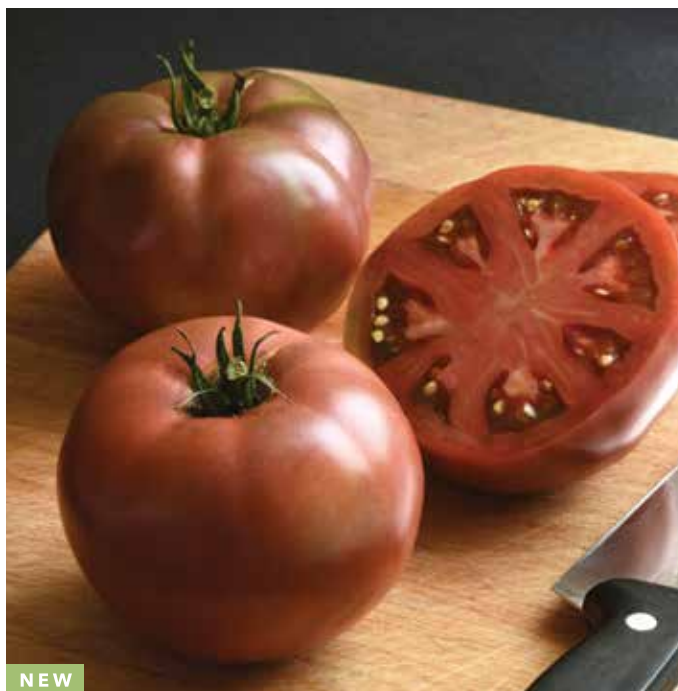
Production Method: Field, In Ground

- Upgrade your garden with heirloom tomato flavour *and* modern hybrid tomato performance.
- Early-maturing, rich, purple beefsteak fruit has higher yield potential and fewer blemishes than most heirlooms.
- Large, purple beefsteak fruit is perfect for eating fresh on a sandwich or try preserving in sauce.
- Offers high disease resistance to late blight, too.
- Best grown in the ground with support of a trellis or cage.



NEW

DarkStar



NEW

DarkStar



NEW

Bellatrix

New Bellatrix F1

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

Seed supplied as: Raw

Tomato Class: Roma/Paste

Type: Roma

Habit: Determinate

Tomato Colour: Red

Fruit Characteristics: Oval

Fruit Size: 2.75-3 in./7-8 cm long x 2-2.25 in./5-6 cm wide, 4.5-5 oz. (128 to 142 g)

Disease Resistance: HR: F2, F3, LB, TMV, ToMV

Days to maturity from transplant: 65-70

Production Method: Field, In Ground, Container

- Bellatrix has high resistance to late blight, a common disease of tomato plants in northern climates.
- It also has resistance to Fusarium, a common root zone disease.
- Red Roma/paste tomatoes ripen in a short period of time, allowing for a large harvest for cooking sauce or making salsa.
- Best grown in the ground or in a large container, with or without support of a trellis or cage.

New Loki F1

Height: 60 to 84 in./152 to 213 cm

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

Seed supplied as: Raw

Tomato Class: Large-Fruited

Type: Slicer

Habit: Indeterminate

Tomato Colour: Red

Fruit Characteristics: Medium, round

Fruit Size: 2.25-2.5 in./6 cm long x 3-3.25 in./8 cm wide, 6-8 oz. (170 to 227 g)

Disease Resistance: HR: F1, F2, LM, N, TMV, ToMV

Days to maturity from transplant: 70-75

Production Method: Field, Protected Culture, In Ground

- Huge tomato flavour and performance.
- Early-maturing, round, red slicer fruit has higher yield potential and fewer blemishes than most heirlooms.
- Leaf mold resistance is great for growing in high tunnels or areas with high humidity.
- Best grown in the ground.



Loki



Marzito

New Marzito F1

Height: 60 to 84 in./152 to 213 cm

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

Seed supplied as: Raw

Tomato Class: Small-Fruited

Type: Specialty Small-Fruited

Habit: Indeterminate

Tomato Colour: Red

Fruit Characteristics: Elongated, mini marzano

Fruit Size: 2-2.25 in./5-6 cm long x 0.5-0.75 in./1-2 cm wide

Disease Resistance: HR: F1, LM, N, TMV, ToMV

Days to maturity from transplant: 50-55

Production Method: Field, Protected Culture, In Ground

- Versatile and perfect for all occasions - eating fresh off the vine or cooking up in a quick sauce.
- The elongated shape is reminiscent of a small Roma tomato, which is great for cooking.
- The firm texture and sweet, rich flavour mean it can be eaten fresh like cherry and grape tomatoes.
- Great disease resistance, too! Resistant to leaf mold, Fusarium, nematodes and tobacco mosaic virus.
- Best grown in the ground with support of a trellis or cage.



| Class/Variety | Fresh Market | | | Home Garden | |
|------------------------------------|--------------|------------|-------------------|-------------|-----------|
| | Field | Hydroponic | Protected Culture | In Ground | Container |
| BASIL | | | | | |
| New 'Everleaf Thai Towers' | X | X | | X | X |
| PEPPER | | | | | |
| New Candy Cane Chocolate Cherry F1 | X | | | X | X |
| New Peppi Series F1 | X | | X | X | |
| New Peppi Cornissimo F1 | X | | | X | |
| New Pot-a-peño F1 | X | | | X | X |
| TOMATO | | | | | |
| New Bellatrix F1 | X | | | X | X |
| New DarkStar F1 | X | | | X | |
| New Loki F1 | X | | X | X | |
| New Marzito F1 | X | | X | X | |

SALES & CUSTOMER SERVICE HERE TO HELP!

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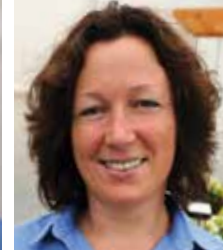
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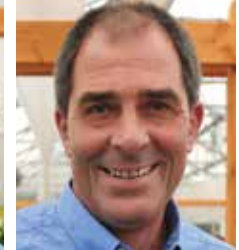
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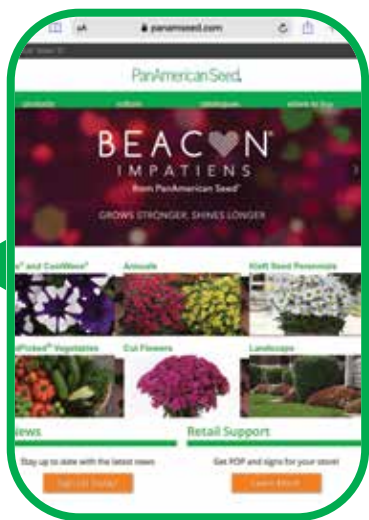


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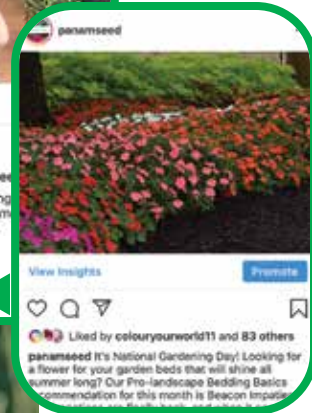
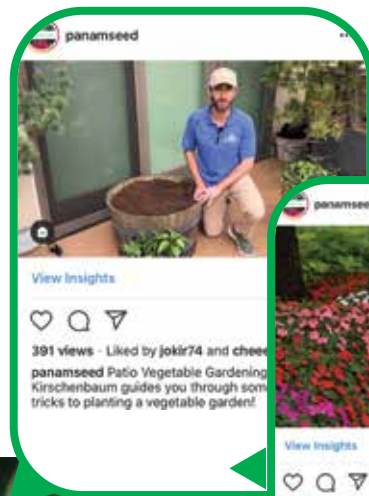
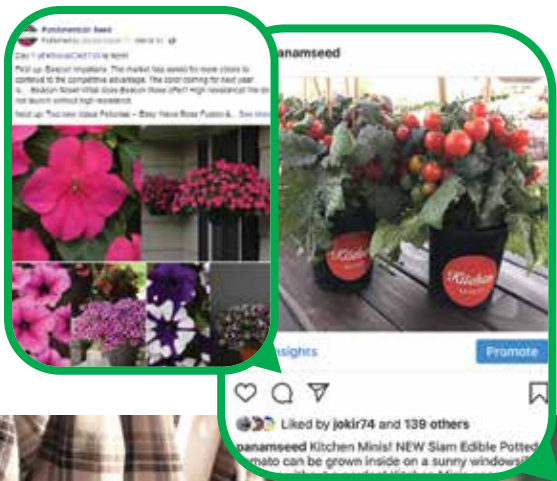
PanAmericanSeed®

KEEPING YOU IN TOUCH



panamseed.com

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



Keep up to date on:

- New Varieties
- Updated Culture
- How-to videos

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

ACCEPTANCE OF TERMS

These terms and conditions shall govern orders for Goods placed with Seller. Purchaser acknowledges that these terms and conditions and Seller's proposal, if any, constitute the entire agreement between Seller and Purchaser and supersede any prior agreements and representations.

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

PRICING

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

TERMS

All payments must be received before Goods are shipped unless otherwise agreed to in writing by Seller. Payment terms can be seen on your Order Confirmation or at the appropriate Terms & Conditions page at panamseed.com for North American, European and International credit-approved customers. A 2% per month finance charge (24% annual rate) will be added to all past due balances at the end of each month. Seller has no obligation to ship any Goods until payment in full is received.

MINIMUM ORDERS

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

FREIGHT & HANDLING CHARGES, INSPECTION, DAMAGED GOODS

(a) The freight and handling charge on Purchaser's invoice covers shipment of the Goods to Purchaser's destination. Seller will pay to return damaged goods, for replacement Goods or provide Purchaser with a credit for damaged Goods if the steps listed in Section (b) below are followed. PURCHASER WILL NOT REFUSE TO RETURN DAMAGED OR DEFECTIVE GOODS, OR THE RIGHT TO FILE A CLAIM IS LOST AND PURCHASER WILL STILL BE LIABLE FOR THE MATERIAL AND THE FREIGHT.
 (b) When Purchaser receives shipment, it shall immediately: 1) count all cartons; 2) inspect all cartons for external damage; 3) check for open or resealed cartons; 4) note any damages, shortages, open or resealed cartons on the delivery receipt; the carrier's representative must also sign the receipt; and 5) open all boxes immediately and inspect for damage, including, but not limited to, material shortages. PURCHASER MUST NOTIFY SELLER WITHIN TWO (2) BUSINESS DAYS IF A SHIPMENT IS DAMAGED by calling its Customer Service Representative to report the damage and receive details on what is needed to file a claim. The Goods shall be deemed accepted by the Purchaser on the earlier of (a) notice of acceptance to Seller, or (b) ten (10) days

after delivery. Any claims for shortage, non-delivery, damage or defect which would reasonably be discoverable in the course of such inspection shall be waived unless Purchaser notifies Seller in writing within ten (10) days after delivery of the goods to which the claim relates.

PACKAGING FEES

All orders will be filled in bulk and/or predetermined packet sizes unless special packaging instructions are given. If special packaging is requested, a packaging fee will apply and additional time may be required to complete the order. Purchaser shall contact Customer Service if it requires additional details.

CUSTOM SEED TREATMENTS

If a custom treatment is requested, a \$25 (U.S. Dollars) fee per batch will apply and additional time may be needed to complete the order.

PHYTOSANITARY CERTIFICATES CHARGE

Depending on the Goods ordered by Purchaser, and the location of the Purchaser, Phytosanitary Certificates may be required to comply with government regulations. If the shipment requires Phytosanitary Certificates, an additional cost will be charged.

DELIVERY DATES

Please indicate the required ship date when the order is being placed. No orders can be accepted without a requested ship date. All shipping and delivery dates provided by the Seller are approximate.

DELAYS, SHORTAGES & SUBSTITUTIONS

Seller shall not be responsible for delays in delivery or for losses resulting from such delays. Seller reserves the right to make partial shipment. Seller will not be liable for any delay in performing or for partial or complete failure to perform hereunder if such delay or failure is due to fire, explosion, flood, Act of God, force majeure, accident, war, intervention of governmental authorities, strikes, labor disputes, material shortages, transportation delays, any act or omission of Purchaser, its agents or employees or any party retained by, through or under the control of Purchaser, or any other cause similar or dissimilar which is beyond Seller's reasonable control.

INSURANCE

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

SHIPPING

Any shipment outside of North America will be charged normal carrier rates.

RETURNS

No Goods may be returned without first obtaining written authorization. Authorized returns will only be considered if they are in original, unopened Seller packages. All returns are subject to a 15% service charge.
 No credit or replacement will be given for Goods returned after nine (9) months from the ship date.

Upon receiving authorization, returns can be shipped to:

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

SEED COUNT

All seed counts given are approximate quantities due to variation based on a lot by lot comparison. Seed counts may also vary widely between colors and series.

NOTICE REGARDING SEED-BORNE DISEASES

Seller makes no representation regarding the freedom from seed-borne diseases of the seed sold and disclaims any liability relating to such diseases, whether previously known to exist or not identified until such seed is grown.

RESERVATION OF OWNERSHIP

In the event of bankruptcy, products delivered by the Seller remain the property of Seller until the Purchaser has paid the purchase price amount. This reservation of ownership is also extended to claims that Seller may obtain towards Purchaser on account of the Purchaser's failure to meet their obligations to Sale.

LIMITATION OF WARRANTY

Seller warrants, to the extent required by law, that Goods conform to the description appearing in Seller's catalog and on container labels, within recognized tolerances. THE FOREGOING WARRANTIES ARE IN LIEU OF AND EXCLUDE ALL OTHER WARRANTIES NOT EXPRESSLY SET FORTH HEREIN, WHETHER EXPRESSED OR IMPLIED BY OPERATION OF LAW OR OTHERWISE, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, TITLE AND NON-INFRINGEMENT.

LIMITATION OF REMEDY

PURCHASER'S SOLE AND EXCLUSIVE REMEDY SHALL BE REFUND OF THE PURCHASE PRICE. SELLER'S LIABILITY, WHETHER FOR BREACH OF CONTRACT, BREACH OF WARRANTY, NEGLIGENCE, PRODUCTS LIABILITY OR ANY OTHER THEORY OF LIABILITY, IS LIMITED TO THE AMOUNT OF THE PURCHASE PRICE. PURCHASER AGREES THAT IN NO EVENT, REGARDLESS OF THE FORM OF LEGAL ACTION OR THE THEORY OF RECOVERY, WILL SELLER BE LIABLE FOR CONSEQUENTIAL, INCIDENTAL, SPECIAL, INDIRECT OR PUNITIVE DAMAGES INCLUDING, BUT NOT LIMITED TO, LOSS OF PROFITS OR REVENUES.

USE RESTRICTION

Merchandise is not intended for sale to large-scale commercial growers of herbs or vegetables. Use, transfer and/or acquisition of merchandise constitutes acceptance of a limited right to use the merchandise solely to grow a single crop for food, feed, processing or ornamental purposes. No other use is permitted. Any transfer of merchandise must be accompanied by this use restriction.

MANDATORY ARBITRATION

ANY CLAIM WHICH PURCHASER MAY HAVE AGAINST SELLER ARISING OUT OF OR RELATING TO THE SALE OF THE GOODS HEREUNDER MUST BE BROUGHT, IF AT ALL, WITHIN TWELVE (12) MONTHS OF THE DELIVERY OF THE GOODS WHICH ARE THE SUBJECT OF THE CLAIM AND SHALL BE SETTLED BY BINDING ARBITRATION IN ACCORDANCE WITH THE COMMERCIAL ARBITRATION RULES OF THE AMERICAN ARBITRATION ASSOCIATION, SAID ARBITRATION TO BE VENUED IN COOK OR DUPAGE COUNTIES, ILLINOIS.

GOVERNING LAW, JURISDICTION & VENUE

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

OR FEDERAL COURTS LOCATED IN DUPAGE OR COOK COUNTIES, ILLINOIS, AND PURCHASER SUBMITS TO THE JURISDICTION OF AND VENUE IN SAID COURTS.

INDEMNITY

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

TRADEMARKS

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

SALE LIMITATIONS

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

FOREIGN CORRUPT PRACTICES ACT. EACH PARTY REPRESENTS AND WARRANTS TO THE OTHER PARTY THAT IT WILL TAKE NO ACTION IN RELATION TO THIS TRANSACTION THAT WOULD BE IN VIOLATION OF THE APPLICABLE LAWS AND REGULATIONS OF ANY COUNTRY AND THE UNITED STATES OF AMERICA. NO PAYMENTS OF MONEY OR ANYTHING OF VALUE WILL BE OFFERED, PROMISED OR PAID, DIRECTLY OR INDIRECTLY, TO ANY OFFICIALS TO INFLUENCE THE ACTS OF SUCH OFFICIALS TO INDUCE THEM TO USE THEIR INFLUENCE WITH A GOVERNMENT OR AN INSTRUMENTALITY THEREOF, OR TO OBTAIN AN IMPROPER ADVANTAGE.

IMAGES

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