

Grow fast with Benary's FastraX perennials









FastraX perennials, your Fast Track to Success

Producers throughout the world...

are using the FastraX assortment of perennials in their production to increase their profitability. Growers realize the value FastraX perennials have; fast, straight forward and most importantly profitable production. This annualized perennial program provides high seed quality, short crop times and programmable varieties to maximize production. Benary's broad assortment of FastraX perennials offer growers a diverse product range developed under stringent standards. The secret lies in Benary's strict selection criteria for the FastraX assortment: no vernalization required!

Increase your profit in the high margin perennial market!

Retailers are enthusiastic about...

FastraX's ability to extend the season. FastraX perennials provide a wide range of eye catching flower colors stimulating impulse sales. FastraX perennials thrive in different climate zones from full sun to full shade and provide a wide range of landscape uses as well as in container combinations.

Take the lead - Profit from FastraX perennials.



Jost, Jaster, Jastest...



- O Easy to produce annualized perennials Perennials that flower the first year without vernalization
- Short crop time Increased profits

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 Attractive appearance Increased sales opportunities





Noble Beauty all dressed in White

The newest ptarmica Achillea from Benary, 'Noblessa' truly lives up to its name. This noble beauty sets itself apart from the competition, sporting bright white, fully double flowers over deep green foliage. It does not require vernalization to flower, reducing crop times and energy costs for the grower.

Reaching heights of 12" (30 cm), 'Noblessa' provides a dainty appearance in the pot or the garden. The compact, rounded habit of 'Noblessa' does not require pinching or PGR's, which greatly reduces inputs for the grower.

'Noblessa' possesses an easy to grow nature and will thrive in a variety of conditions. This heat and drought tolerant beauty will also adapt to a variety of soil situations. Pair with Physostegia 'Crystal Peak White', Salvia 'Reference' and Impatiens 'Sweetie White' for a chic, white-themed garden.

Blooming Beauty from May until September



Technical Information

Life Cycle: Perennial

Garden Height: 12" (30 cm) **USDA Hardiness Zones:** 3-9

AHS Heat Zones: 9-2

Uses: Container plant, border plantings and landscape plant.

Natural flower time: May-September Flowering response: Long day plant

 $\label{eq:Germination: 10-15 days at temperatures of 65-70 °F (18-21 °C)} at light levels of 100-400 f.c. Keep soil uniformly moist and cover lightly with coarse vermiculite. Maintain pH of 5.8-6.2 and EC levels less than 0.75.}$

Plug Culture: During Stage II, reduce the soil moisture, but do not allow the plugs to dry out. Reduce the temperature to 62-65 °F (17-18 °C). Increase light levels to 500-1,000 f.c. and begin feeding weekly with 50-75 ppm nitrogen once cotyledons have fully expanded. Do not let soluble salt levels rise above 0.75. During Stages III and IV, increase fertilization levels to 100-130 ppm. Let dry thoroughly between irrigations. Increase light to 1,000-1,500 f.c. Feed with 100-150 ppm 14-0-14 weekly.

Crop time: Plugs: 4-6 weeks

Total crop time: 1.0 gallon: 16-20 weeks

Culture hints: Roots are very sensitive to wet substrates. Maintain good

drainage throughout production.



Achillea tomentosa 'Goldie'

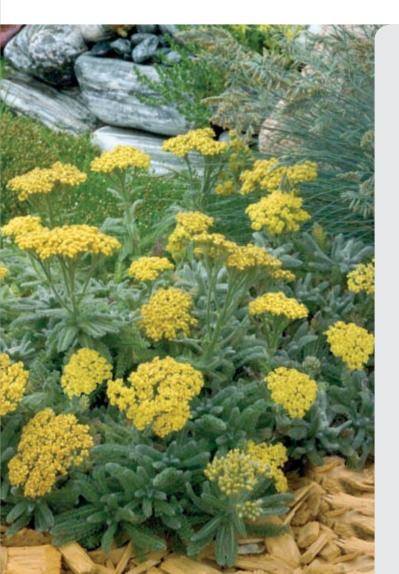
Wild and original

Let the Sunshine in

The newest FastraX Achillea from Benary, 'Goldie' offers growers an upgrade on old favorites. More compact than 'Aurea', and earlier to bloom, 'Goldie' provides quick crop times and economical production schedules. At 6-8" (15-20 cm), Goldie offers a compact habit that is perfectly suited for

pot production, or for groundcovers. Large, golden flower clusters are held over silver-green foliage. 'Goldie' creates a dense mat of fern-like foliage that is perfect for landscape plantings. Summer-long flowering and heat tolerance make this a must have perennial for those hard to grow areas in the landscape. 'Goldie' is very easy to schedule and is a bench run crop for growers. This ensures that 'Goldie' will be in full bloom for retail throughout the summer. When established, 'Goldie' is drought tolerant and can tolerate a variety of soil conditions. Planted in rock gardens, mixed containers or used as a border 'Goldie' is as diverse as it is beautiful. With its soft foliage, short stems and bright yellow flower umbels 'Goldie' is a standout at retail or in the landscape.





Technical Information

Life Cycle: Perennial

Garden Height: 6-8" (15-20 cm) **USDA Hardiness Zones:** 3-8

AHS Heat Zones: 9-2

Uses: Container plant, container accent plant, ground cover or rock

gardens

Natural flower time: June-July Flowering response: Long day plant.

Germination: 10-15 days at temperatures of 65-70 °F (18-21 °C) in media with low EC levels and a pH range of 5.8-6.5. Light is required for

germination.

Plug Culture: During Stage II, reduce the soil moisture, but do not allow the plugs to dry out. Reduce the temperature to 62-65 °F (17-18 °C). Increase light to 500-1,000 f.c. and start feeding weekly with 50-75 ppm nitrogen once cotyledons have fully expanded. Do not let soluble salt levels rise above 0.75. During Stages III and IV, fertilization levels can be increased to 100-130 ppm. Let dry thoroughly between irrigations. Increase light to 1,000-1,500 f.c. (11-16 klux) Feed with 100-150 ppm

14-0-14 weekly.

Crop time: Plugs: 4-6 weeks
Total crop time: quart pot: 16-18 wks

Culture hints: Roots are very sensitive to wet substrates. Maintain good

drainage throughout production.

Armeria maritima 'Morning Star White'

Bright like the Morning Star

The new Armeria 'Morning Star White' is the perfect compliment to its sister variety 'Morning Star Deep Rose'. 'Morning Star White' provides a multitude of flowers, white flower color, long

lasting blooms and deep, green grass-like foliage.

At 6" (15 cm), 'Morning Star White' is dainty and petite, and is a perfect accent for rock gardens, container pots and perennial borders.



Technical Information

Life Cycle: Perennial

USDA Hardiness Zones: 4-8

AHS Heat Zones: 9-4

Uses: Evergreen perennial for beds, borders, and

mixed containers

Natural flower time: May-June Flowering response: Day neutral

Germination: 4-10 days at 68-70 °F (20-22 °C). Cover seeds lightly. Finish plugs at 65-68 °F (18-20 °C).

Growing on: Transplant into well-drained media. Grow on at 60-65 °F (15-18 °C) for optimum growth. Night temperatures below 55 °F (13 °C) significantly slow plant growth and increase crop times. Cool mature plants or large plugs for increased flowering.

Crop time: Plugs: 8 weeks;

Flowering pots: 20-22 weeks from sowing.



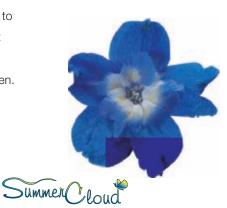
Delphinium grandiflorum 'Summer Cloud'

Spirit of Summer

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We are proud to introduce another color in the highly acclaimed Delphinium 'Summer' series. The new 'Summer Cloud' is like a beautiful painting, combining blue and white to create a beautiful bi-color flower, which is reminiscent of summer clouds over a blue sky. With its dainty flowers and lacy foliage, the Delphinium 'Summer' series appears to be very fragile, but do not let its appearance fool you. 'Summer Cloud' thrives in heat and humidity without stretching like other Delphiniums on the market. Early flowering combined with a well-branched habit make 'Summer Cloud' a must have in the garden. At 10-12" (25-30 cm) 'Summer Cloud' remains compact and matches the rest of the 'Summer' series.





Technical Information

Life Cycle: Perennial

Garden Height: 10-12" (25-30 cm) **USDA Hardiness Zones:** 3-7

AHS Heat Zones: 6-1

Uses: Bedding and border plants, pot and mixed containers.

Natural flower time: June-August **Flowering response:** Day neutral

Germination: 14-18 days at temperatures of 68-72 °F (20-22 °C), cover seed lightly and maintain constant humidity levels.

Plug culture: Stage II: gradually lower temperatures to 64-68 °F (17-20 °C). Stages III and IV: begin light fertilization at 50-75 ppm nitrate nitrogen. Use low rates of phosphorus during plug production.

Growing on: Transplant plugs 6-8 weeks after sowing. Begin fertilizing at 200 ppm nitrate nitrogen in a 2-1-2 ratio fertilizer mix. Avoid soluble salt buildups. Finish at 45-75 °F (7-24 °C).

Crop time: Plugs: 6-8 weeks; Total crop time: 4.5" (11 cm) pot: 16-20 weeks

Culture hints: Temperatures above 85 °F (29 °C) can cause flower abortion. Temperatures below 55 °F (13 °C) under short days will cause plants to form rosettes and delay flowering. Extended day length or night interruption with incandescent light will help avoid rosette formation.





Dianthus gratianopolitanus 'Flavora Rose Shades'

Sweet Surprise

With its sweet fragrance, FastraX advantages and rose color shades, the new Dianthus 'Flavora Rose Shades' lives up to its name. Dianthus originates from the Greek culture meaning "the divine flower" and 'Flavora' is truly that.

Flowering first year from seed without vernalization, 'Flavora Rose Shades' gives the grower uniform growth, compact habit, bench run production and summer long sales and beauty.

Reaching heights of 8" (20 cm), 'Flavora' is a wonderful addition to rock gardens, mixed containers or well traveled areas in the landscape where its scent can be enjoyed by all. Pair with Pentas 'Northern Lights™ Lavender' and Rudbeckia 'Prairie Sun' for a combination that is sure to bring in the butterflies and hummingbirds.





Technical Information

Life Cycle: Perennial

Garden Height: 6-8" (15-20 cm) **USDA Hardiness Zones:** 4-9

AHS Heat Zones: 9-1

Uses: Landscape, mixed container, pot plants

Natural flower time: May-July Flowering response: Day neutral

Germination: 10-12 days at 70-75 °F (21-24 °C). **Growing on:** Transplant plugs in late winter through

early spring.

Crop time: Plugs: 6 weeks;

Total crop time: quart pot: 14-18 weeks when grown

at 60-65 °F (15-18 °C)

The Sweet Smell Success

Eryngium planum 'White Glitter'

Glittering Star

The sister variety to 'Blue Glitter', the new 'White Glitter' adds elegance and a touch of class to cut flower arrangements or in the landscape. Reaching heights of 38-40" (95-100 cm), White Glitter has an abundance of white, pincushion-shaped flowers. Dense flower spikes allow 'White Glitter' versatility in both, the vase and the landscape.

'White Glitter' is extremely durable and thrives in hot, sunny locations with rich, fertile soil, but is tolerant to more demanding locations. With its bright white flowers and unique appearance, 'White Glitter' is a stunner in the vase for both fresh or dried cut flower production. With its natural appeal and great versatility in the landscape, 'White Glitter' also creates a beautiful display in perennial gardens.



Technical Information

Life Cycle: Perennial

Garden Height: 38-40" (95-100 cm)
USDA Hardiness Zones: 4-8
AHS Heat Zones: 12-1

Uses: Fresh and dried cut flower, landscape plantings.

Natural flower time: August-September

Flowering response: Long day.

Germination: 7-10 days at temperatures of 72-75 °F (22-24 °C)

under lights.

Plug culture: During Stage II, gradually lower temperatures to 70-72 °F (21-22 °C) and maintain moderate moisture levels. Apply fertilizer at 50-75 ppm weekly. During Stages III and IV, gradually reduce temperatures to 65-70 °F (18-21 °C). Increase fertility to 100-150 ppm once per week.

Growing on: Grow on at 60-70 °F (15-21 °C). Fertilize at 50-100 ppm nitrate nitrogen after initial transplant, increasing to 100-150 ppm once plants are well established.

Crop time: Plug time: 6 weeks

Total crop time: 22-24 weeks (under LD)

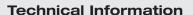




Geum coccineum 'Koi'

Sparkling Personality

The name 'Koi' really says it all! The many bright orange flowers of 'Koi' stand out over a compact mound of glossy green foliage. 'Koi's long blooming period is eye-catching at retail, promoting impulse sales and has high consumer satisfaction year-after-year in perennial flower beds, borders and mixed containers.



Life Cycle: Perennial

USDA Hardiness Zones: 5-7

AHS Heat Zones: 9-3

Uses: Pots, landscape perennial Natural flower time: May-July Flowering response: Day neutral

Germination: 10-15 days at 64-68 °F (18-20 °C). Light is required for germination. Keep relative humidity above 90 %.

Plug Culture: Maintain temperatures above 64 °F (18 °C) during Stages II and III. During Stage III, begin fertilizing on a weekly basis at 75 ppm nitrogen in a well-balanced mix. During Stage IV, gradually reduce temperatures to 58-62 °F (16-18 °C) and continue weekly fertilization.

Growing on: After plants have rooted out reduce growing temperatures to 54-59 °F (12-15 °C).

Crop time: Plugs, 8 weeks. 4.5-5" (12 cm) pots,

3-4 months after sowing.

Cultural Hints: Flowers the first year without cooling, but

may flower faster when vernalized.









Gypsophila repens 'Filou Rose & Filou White'

The Power of Two

This compact FastraX perennial is quick and easy to produce. It is a constant bloomer in a variety of conditions. It is well branched with a dense habit and is well suited for mixed containers as filler or as an overhanging plant. Also attractive in rock gardens and landscape borders.





Technical Information

Life Cycle: Perennial

Garden Height: 6" (15 cm)

USDA Hardiness Zones: 3-8

AHS Heat Zones: 9-3

Uses: Pots, landscape perennial, mixed combinations

Natural flower time: June-August **Flowering response:** Long day

Germination: 5-10 days at temperatures of 65-72 °F

(18-22 °C). Light is required for germination.

Growing on: Transplant plugs after 6 weeks. Grow on at 50-60 °F (10-15 °C) in a sand enriched medium.

Crop time: Plug time: 6 weeks; 4.5" (12 cm)

pot: 14-16 weeks (under LD)



Versatile,
Extravagant and
Highly Profitable

Physostegia virginiana 'Crystal Peak White'

Garden's First Lady

This Fleuroselect Gold Medal award winner is truly something special. Dense white flower spikes cover 'Crystal Peak White' throughout the summer, making this a versatile perennial for any garden setting.

At 16" (40 cm) tall, 'Crystal Peak White' is an excellent perennial for mass plantings, or as a filler in mixed combination planters. Bright white flower spikes do not fade or brown as they age, setting 'Crystal Peak White' apart from its competition. A dense, well-branched habit produces a multitude of flower spikes, creating a must-have at retail.



Technical Information

Life cycle: Perennial

Garden height: 16" (40 cm)
USDA Hardiness Zones: 2-9

AHS Heat Zones: 8-4

Uses: Pot plants, landscape perennial, cut flower, mixed containers

Natural flower time: July-September **Flowering response:** Long Day.

Germination: 20-30 days at 65-72 °F (18-22 °C) day temperatures and 55-62 °F (13-17 °C) night temperatures. Lowering night temperatures by 10 degrees will increase uniformity of germination. Cover seed lightly with vermiculite after sowing. Maintain a soil pH of 5.5-5.8 and EC levels of 0.75.

Plug culture: During Stage II, begin fertilization of 50-75 ppm of a calcium nitrate based formula. During Stages III and IV, gradually increase feed to 100-150 ppm calcium nitrate. Plants require LD for flower initiation.

Growing on: Transplant plugs after 7 weeks. Grow on at 60-65 $^{\circ}$ F (15-18 $^{\circ}$ C), in a humus medium.

Crop time: Plugs: 7 weeks; 4" (10 cm) pots: 12-14 weeks under LD conditions.

Culture hints: Physostegia are sensitive to high salt levels in production. Maintain ammonium levels of <10 ppm during germination.

Fragile Beauty
with Unsurpassed
Performance
Providen



Prunella grandiflora 'Bella Blue'

The Belle of the Garden

The newest addition to the Prunella program, 'Bella Blue' lives up to its name. Beautiful and dainty, 'Bella Blue' is covered with masses of violet-blue flowers throughout the summer. At 6-8" (15-20 cm) tall, 'Bella Blue' is an excellent addition to mixed combinations, and is also extremely showy in the landscape.

'Bella Blue' is very well branched and produces masses of flowers, making it ideal for pot production throughout the season. Short crop times and low inputs make this Prunella a grower favorite!







Technical Information

Life Cycle: Perennial

Garden Height: 6-8" (15-20 cm) **USDA Hardiness Zones:** 4-9

AHS Heat Zones: 8-1

Uses: Perennial borders, mixed containers, pot plant

Natural flower time: June-September Flowering response: Long Day

Germination: Sow seed in a well-drained media with a pH range of 6.2-6.8. Maintain temperatures of 68-72 °F (20-22 °C) and relative humidity levels above 95 %.

Plug Cluture: During Stage II, maintain Stage I temperatures and gradually lower humidity levels. Begin fertilizing with 50-75 ppm nitrogen in a well-balanced mix. Gradually lower temperatures to 60-65 °F (15-18 °C) during Stages III and IV. Increase fertilization levels to 100-150 ppm nitrogen. Maintain a soil pH of 6.4-6.8.

Growing on: Grow on at 58-68 °F (14-20 °C). Transplant plugs into containers with a well-drained media with a pH range of 6.4-6.8. Fertilize at 100-150 ppm nitrate nitrogen.

Crop time: Plug time: 6-8 weeks; quart pot: 16-22 weeks

Hints: Cooler temperatures will improve plant quality and reduce stretching. Yellow leaves during plant development are symptomatic of lower than optimum pH

levels.



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FastraX Assortment	Sowing period	Potting period	Flowering period	Heat Zone	Hardiness Zone
Achillea millefolium 'Colorado'	Jan-Feb	March-April	May-July	9-2	3-8
Achillea ptarmica 'Noblessa' NEW	Feb-April	March-May	May-July	9-2	3-9
Achillea tomentosa 'Goldie' NEW	Feb-April	March-May	May-July	9-2	3-8
Arabis caucasica 'Snowfix'	Oct-Nov	Dec-Jan	March-April	8-1	3-7
Armeria maritima 'Morning Star' series (NEW COLOR)	Jan-April	March-May	May-July	9-4	4-8
Asclepias tuberosa	Jan-Feb	March-April	July-August	10-2	4-9
Astilbe arendsii 'Astary'® series	Jan-March	March-May	May-July	8-2	4-8
Campanula carpatica 'Clips'® series	Jan-Feb	March-April	July-August	9-1	3-8
Campanula carpatica 'Pearl' series	Jan-Feb	March-April	June-August	9-1	3-8
Campanula poscharskyana	Jan-Feb	March-April	June-August	9-1	3-8
Centaurea montana	Jan-March	Feb-April	June-July	9-1	3-7
Centranthus ruber 'Rosyred', 'White'	Feb-March	March-April	June-July	9-2	5-8
Delphinium grandiflorum 'Blue Mirror'	Jan-Feb	March-April	May-July	6-1	3-7
Delphinium grandiflorum 'Summer' series (NEW COLOR)	Jan-Feb	March-April	May-July	6-1	3-7
Delphinium hybrida 'Benarys Pacific series'	Jan-Feb	March-April	July-August	6-1	3-7
Delphinium nudicaule 'Fox'	Feb-March	April-May	June-August	6-1	6-9
Dianthus gratianopolitanus 'Flavora Rose Shades' NEW	Feb-April	April-May	May-July	9-1	4-9
Erigeron karvinskianus 'Profusion'	Feb-April	April-May	May-July	8-4	6-9
Eryngium planum 'Glitter' series (NEW COLOR)	Jan-Feb	March-April	July-August	12-1	4-8
Erysimum suffruticosum 'Gold Dust'	Aug-Sept	Sept-Oct	Feb (forced)	9-2	4-7
Gaillardia x grandiflora 'Arizona Sun'	Jan-Feb	Feb-April	May-July	12-1	2-10
Geum coccineum 'Cooky', ApeX Seed	March-May	April-June	May-June	9-3	5-7
Geum coccineum 'Koi', ApeX Seed NEW	March-May	April-June	May-June	9-3	5-7
Gypsophila repens 'Filou Series' NEW	Feb-March	March-May	May-June	9-3	3-8
Helenium autumnale 'Helena' series	Feb-March	March-May	July-August	8-1	3-8
Heliopsis scabra 'Summer Sun'	Feb-March	March-May	June-July	9-1	3-9
Kniphofia uvaria 'Flamenco'	Feb-March	March-May	July-August	9-1	5-9
Lavandula angustifolia 'Vicenza Blue'	Jan-March	March-May	May-July	12-7	5-9
Lobelia fulgens 'Queen Victoria'	Jan-March	March-April	July-August	9-2	6-10
Lobelia speciosa 'Compliment' series	Jan-March	March-April	June-August	9-2	6-10
Lobelia speciosa 'Fan'® series	Jan-March	March-April	June-August	9-2	6-10
Lychnis (Silene) x haageana 'Lumina' series	Jan-March	Feb-April	May-July	7-1	5-7
Papaver alpinum 'Alpine Poppy Mix'	Jan-Feb	March-April	May-June	9-2	4-7
Papaver miyabeanum 'Pacino'®	Jan-Feb	March-April	May-June	9-2	3-7
Papaver nudicaule 'Garden Gnome', 'Partyfun'	Jan-Feb	March-April	May-June	9-2	3-7
Penstemon barbatus 'Rondo'	Jan-March	March-Mai	June-July	9-1	3-8
Physostegia virginiana 'Crown of Snow'	Jan-Feb	Feb-April	June-July	8-4	2-9
Physostegia virginiana 'Crystal Peak White' NEW	Jan-March	Feb-May	June-August	8-4	2-9
Prunella grandiflora 'Bella' series (NEW COLOR)	Jan-Feb	March-April	June-July	8-1	4-9
Salvia x superba 'Adora Blue'	Jan-March	March-April	May-June	12-1	4-7
Salvia x superba 'Dwarf Blue Queen', 'Rose Queen'	Jan-March	March-April	June-July	12-1	4-7
Scabiosa caucasica 'Fama'®, 'Compliment',	Feb-March	March-May	July-August	8-3	5-7
'Perfecta' 'Perfecta White'					
Scabiosa japonica var. Alpina 'Ritz Blue'	Feb-March	March-April	May-June	8-3	5-7
Sedum selskianum 'Spirit'	Jan-March	March-Mai	June-August	8-3	3-9
Sidalcea hybrida 'Partygirl', ApeX Seed	Jan-Feb	March-Mai	July-August	8-2	5-9
Silene uniflora 'Robin White-Breast'	Jan-Feb	Feb-April	May-June	9-3	4-8



Our motto is:

Passion for Breeding

To meet the needs of our every changing industry, a team of nearly 300 highly qualified staff work to achieve the highest standards of excellence in breeding, seed technology, production, customer service and delivery.

For 165 years, Benary's breeding activities have developed some of the leading annuals, perennials, potted flowering plants and cut flowers. Known world wide as a leader in Begonias, both tuberous and fibrous, Benary's wide assortment of more than 2000 items includes some of the industries most sought after varieties in Celosia, Pansies, Pentas, and Rudbeckia, to name just a few. Our long history as a family owned business has allowed us to live our passion for breeding and focus on the time honored traditions of beauty this industry has given.

Our professional quality products are offered to growers through a wide network of distributors and brokers around the world.

