

# Enchantment Linaria

*Sweet-smelling flowers perform well in cool seasons*

■ This extremely fragrant plant features small, snapdragon-like flowers that continue to bloom in cool conditions making it a great Winter bedding plant.

■ Upright and well branched, **Enchantment** Linaria grows to heights of 14 to 16 in. (35 to 40 cm) tall.

■ An interspecific hybrid, **Enchantment** Linaria has better heat tolerance and gives longer season performance than other cool-season crops.

■ **Enchantment** Linaria is best suited to Spring and mid to late Autumn premium pack and 4-in. (10-cm) pot programs for bedding and mixed containers.

■ Contact your local distributor or call PanAmerican Seed at 800 231-4868 for ordering information on **Enchantment** Linaria.

*Linaria hybrida*

Approximate seed count (multi-pelleted): 18,857 S./oz. (660 S./g)

## Plug Production

**Enchantment** Linaria germinates very fast (2 to 3 days). Germinate under cool temperatures and remove from germination chamber immediately to avoid excessive seedling stretch.

## Media

Use a well-drained, disease-free, soilless medium with a pH of 5.5 to 6.2 and a medium initial nutrient charge (EC  $\leq$  0.75 mmhos/cm with a 1:2 extraction).

## Sowing

**Enchantment** Linaria is offered as multi-seeded pellets. Each multi-seeded pellet will generally yield 2 to 3 seedlings. Plug tray sizes from 406 to 288 cells. Cover the seed lightly with coarse vermiculite. Germination takes 2 to 3 days.

## Temperature

Germination: 65 to 68°F (18 to 20°C).

Cotyledon stage: 65 to 72°F (18 to 22°C)

True leaves: 65 to 70°F (18 to 21°C)

Hold plugs: 62 to 65°F (16 to 18°C)

## Light

Stage one: Light is not required, but significantly improves seedling quality since hypocotyls can elongate rapidly under dark condition.

After germination: 1,000 to 2,500 f.c. (10,000 to 3,000 Lux)

Seedling maturity: Up to 5,000 f.c. (54,000 Lux) if temperature can be controlled.

## Humidity

Maintain 95% relative humidity until radicles emerge.

## Soil Moisture

Keep soil moisture high until radicle emergence, then reduce moisture levels after the radicle penetrates the medium. Do not allow the seedlings to wilt.

## Fertilizing

**At radicle emergence:** 50 to 75 ppm N from 14-0-14 or 13-2-13, alternating with 20-10-20 type fertilizer.

**As cotyledons expand:** Increase to 100 to 150 ppm N.

## Growth Regulators

Stage 1 PGR is key to producing high quality plugs. Spray Bonzi 2 ppm right after radicle emergence to control rapid hypocotyl elongation. A second application of Bonzi 5ppm spray should be applied about 7 to 10 days later.

## Growing On To Finish

### Media

Use a well-drained, disease-free, soilless medium with a pH of 5.5 to 6.2 and a medium initial nutrient charge.

### Temperature

**Nights:** 50 to 60°F (10 to 16°C)

**Days:** 55 to 65°F (13 to 18°C)

When grown under cooler temperatures,

**Enchantment** Linaria has more intense flower color and fragrance.

### Light

Maintain light levels as high as possible while maintaining recommended temperatures.

### Irrigation

Avoid both excessive watering and drought. Do not allow plants to wilt.

### Fertilizer

150-200 ppm N once a week, alternating between 15-5-15 and 20-10-20 type fertilizers.

## Growth Regulators

### Best Treatment (Based on Trials in Elburn, IL):

Use a Bonzi 10 ppm spray one week after transplanting to control main shoot elongation while allowing secondary shoots to develop. Once secondary shoots reach about 1.5 in. (4 cm), spray with Bonzi at 20-30 ppm. Repeat Bonzi spray if necessary.

Bonzi spray will strengthen the stems and make the flower color more intense.

### Alternate Treatment:

A tank mix of B-Nine 2,500 ppm and ccc 300 to 500 ppm spray can significantly reduce plant height. However, the plant stems are not as strong as those with Bonzi treatment.

## Pinching

Pinching is not necessary to promoting branching. However, since *Linaria* grows rapidly, pinching can be done if PGRs are not applied on time, especially under warmer conditions. If the plants get too big prior to PGR application, pinching or shearing the main stems back will yield fuller plants without significant flower delay.

## Crop Scheduling

Sow to transplant (400-288 cell plug tray): 4 to 5 weeks

### Transplant to saleable pot:

| Container Size           | Plants Per Pot | Weeks From Transplant | Total Weeks |
|--------------------------|----------------|-----------------------|-------------|
| 306 pack                 | 1              | 5-6                   | 9-10        |
| 4-4.5-in. (10-11-cm pot) | 1              | 6-7                   | 10-11       |
| 6-6.5-in. (15-16-cm) pot | 3              | 6-7                   | 10-11       |
| Gallon                   | 3              | 6-7                   | 10-11       |

For Autumn sowing in warm climates, sow in mid to late Autumn when temperatures begin to moderate. Sowing in late Summer or early Autumn when temperatures are very high will make plants grow too quickly and the height will be difficult to control.

## Common Problems

**Insects:** Aphids

**Diseases:** No serious problems

## Garden Information

**Location:** Full sun

**Height:** 14 to 16 in. (35 to 40 cm)

**Spread:** 12 to 14 in. (30 to 35 cm)

**Spacing:** 8 in. (20 cm) apart

**Other:** Performs best in cooler growing seasons.

Will flower in winter in moderate climates.

# PanAmerican Seed™

[PanAmSeed.com](http://PanAmSeed.com)

PanAmerican Seed Co.  
622 Town Road  
West Chicago, Illinois USA 60185-2698  
630 231-1400  
Fax: 630 231-3609

PanAmerican Seed Europe BV  
Lavendelweg 10  
NL-1435 EW Rijsenhout, Holland  
+31 (0)297-383038  
Fax: +31 (0)297-383036

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