



# Foxglove

Available in Plugs & Seed unless otherwise listed

## Cut Flower varieties 2009

[www.highsun.com.au](http://www.highsun.com.au)

Highsun Express

### Foxglove *D.purpurea* (*Digitalis*)

## Debutante F1

#### Indent Line - Single Colours

Digitalis leaps into the 21st Century with the introduction of Debutante. Debutante's is superior in performance from seed quality to overall appearance and strength. The first F1 hybrid on the market with high germination, uniform growth and flowering. Secondary spikes provide numerous high-quality, strong stems. Huge tubular florets are highlighted with speckled throats. More reliable first year flowering and heavy second year bloom. Garden height 1-1.5m. **4,500 Seeds/gram**



**3600 cream** - cream, dark burgundy dots, yellow throat



**3601 lavender** - lavender with lt burgundy dots with white halo



**3602 rose** - rose with burgundy dots with white/yellow halo



**3603 white** - white with lt burgundy dots yellow throat colour



**4292 mix**



# Foxglove Cut Flower Varieties 2009

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## Foxglove *D. purpurea* (*Digitalis*)

### Product Notes

#### FLOWERING

**Time Frame when plants are receptive to flower initiation:** 8 – 12 leaves are present.

**Flowering Type:** Facultative Long Day Plant (secondary) – long days enhance flowering.

**Specific Flowering Mechanism:** High light enhances flowering.

#### PLUG CULTURE

**Germination** – Optimum conditions for seedling development that begins the day the crop is sown until cotyledon expansion.

Expect radicle emergence in 3 – 4 days.

**Cover:** Do not cover seed.

**Media:** • pH: 5.8 – 6.2; • EC: 0.5 – 0.75

**Light:** Light is necessary for germination. If utilizing a chamber, providing a light source of 10 – 100 foot candles (100 – 1000 lux) will improve germination and reduce stretch.

**Temperature:** 18° – 21°C until cotyledon expansion.

**Moisture:** Medium (2) until radicle emergence. Then begin alternating between moisture levels moist (3) and medium (2). Allow media to approach level (2) before re-saturating to level (3). NOTE: Saturated media will discourage the roots from penetrating into the media.

**Humidity:** Days 1 – 6 maintain 90 – 95% or until radicle emergence and initial roots penetrate the media. On day 7, reduce to 40 – 70%.

**Dehumidify:** Provide horizontal airflow to aid in drying down the media through evapotranspiration, allowing better penetration of oxygen to the roots.

**Plug Bulking** – Optimum conditions during the vegetative period, beginning at cotyledon expansion, needed for the root to reach the edge of the plug cell.

**Media:** • pH: 5.8 – 6.2; • EC: <0.75

**Light:** Provide a light shade.

**Temperature:** 16° – 18°C

**Moisture:** Alternate between moisture levels moist (3) and medium (2).

Allow media to approach level (2) before re-saturating to level (3).

**Humidity:** 40 – 70%

**Dehumidify:** Provide horizontal airflow to aid in drying down the media through evapotranspiration, allowing better penetration of oxygen to the roots.

**Fertilizers:** Feed established seedlings at 75 – 150 ppm Nitrogen every

2 – 3 waterings with a calcium based fertilizer (13-2-13 or 14-4-14).

**Growth Regulators:** PGR's applied in the plug stage will produce a more compact plant that is easier to ship. Foxglove will respond to B-Nine (daminozide) at 2500 – 3500 ppm or Sumagic (uniconazole) at 3 ppm.

#### GROWING ON

**Transplant Ready:** 4 – 6 weeks from sow in a '288' tray.

**Finish Bulking/Flower Initiation** – Optimum conditions during the vegetative period, beginning at transplant, needed for the root to reach the edge of the container; AND to make the plant receptive to flower initiation.

In trials, plants grown in greenhouses with additional lights exhibited stretched habits and loose flower spikes. Crops grown cool in protected cold frames will produce compact plants with good lateral development

of secondary spikes.

**Media:** • pH: 5.8 – 6.2; • EC: 0.75 – 1.5

**Light:** Time to flower and the number of flowers produced increase proportionally with light levels. Though classified as a shade plant, *Digitalis* can handle high light conditions with adequate moisture and cool temperatures.

**Temperature:** 8° – 12°C nights are optimal though crop will tolerate a range of 4° – 16°C. Under short days, cool temperatures can benefit flowering response. 'Debutante' does not need a chilling period to set flower, however cooler temperatures will produce a higher quality plant with an increased number of flower stems.

**Moisture:** Alternate between moisture levels wet (4) and medium (2). Allow media to approach level (2) before re-saturating to level (4).

**Humidity:** 40 – 70%

**Dehumidify:** Provide horizontal airflow to aid in drying down the media through evapotranspiration, allowing better penetration of oxygen to the roots.

**Fertilizers:** Constant liquid feed at 100 – 150 ppm Nitrogen with an ammonium- based fertilizer (15-5-15 or 15-0-15). Increase feed with increasing light intensity and temperature. *Digitalis* can benefit from additional iron and calcium. Avoid ammonium levels >20%.

**Growth Regulators:** *Digitalis* responds to B-Nine (daminozide), A-Rest (ancymidol), Bonzi (paclobutrazol), or Sumagic (uniconazole). Apply before flower spike begins to elongate.

**Common Diseases:** Botrytis

**Common Pests:** Aphids

#### SCHEDULING

**Total crop time:** 20 – 24 weeks

**'288' Plug crop time:** 4 – 6 weeks

**Transplant to finish crop time:** Gallon crop: 16 – 20 weeks

#### PRODUCT USE

Large pots, containers, shade and sun plantings, mass plantings, home and commercial cut flower.

#### GARDEN SPECIFICATIONS

**Light:** Partial shade to full sun

**Garden Height:** 1 – 1.5 m

**Garden Width:** 60 – 75 cm

#### Sow Date:

January – June. See Highsun Express Plugs catalogue for Contract Order lead times.

#### Transplant Date:

**Cool Areas:** July – September.

**Warm Areas:** February – June.

#### Flower Date:

**Cool Areas:** November – January.

**Warm Areas:** May – September.

#### Harvest:

Harvest when 1/3 of florets on spike have opened.

Disclaimer: "Significant variations in seed, variety and crop performance, in results and in crop outcomes may occur depending upon geographic location, climate, soil type, soil conditions, cultural and management practices and other growth and development factors. Any cultural and descriptive information or other advice, recommendation, information, assistance or service provided by Highsun Express is intended as a general guide only and should not be relied upon and is provided without liability or responsibility (including for negligence) on the part of Highsun Express. It is recommended that in all cases a small scale trial production is undertaken in order to test local conditions and circumstances that may affect the crop."



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06 August 2009 2 of 2