

<b>Cultural Information for:</b>	Godetia Grace	Annual
<b>Common Name:</b>	Godetia or Clarkia	
<b>Botanical Name:</b>	Clarkia amoena	
<b>Seed Count:</b>	37,000 /ounce	1,300 /gram
<b>Optimum Germination Temperature:</b>	65°F / 18°C	
<b>Optimum Growing Temperature:</b>	50-55°F / 11-13°C	

## **Plug Stage - 4 weeks (288 / 12 x 24 tray)**

**Stage One** (Days 1–10) Single sow Godetia Grace into a 288 plug cell using a plug media with little or no starter charge. Lightly cover the seed with either media or vermiculite, and maintain a soil temperature of 65°F/18°C with even soil moisture.

**Stage Two** (Days 11-21) When green appears move trays to a cool, bright and well-ventilated greenhouse. To ensure strong development, supplemental lighting (from 08:00 to 17:00) can benefit the plugs. To prevent premature flowering and promote vegetative growth, provide short days (< 11 hours of light). Optimum temperature is 55-60°F/13-15°C. Soil fertility directly influences lateral branching. High soil fertility promotes soft growth and side branching, which is not desirable for single-stemmed production. If the plug media does not contain a starter charge, feed the plugs one time with 50-100 ppm of nitrogen, preferably from a well-balanced calcium nitrate based fertilizer. If the plug media contains a starter charge, additional fertilizer may not be necessary.

**NOTE:** Although Godetia does not require high nitrogen rates, it still is necessary to supply sufficient microelements; especially boron at 0.25 ppm to avoid tip abortion and upper leaf edge burn.

**Stage Three** (Days 21 -27) Maintain cool temperatures and use a negative DIF, if possible. Weekly sprays of B-9 at 2,500 ppm will help to control plant height, but temperature manipulation has proven to be the most effective tool. A second light feeding of 50-100 ppm of nitrogen can be applied if the plants look yellow and hungry.

**Stage Four** (Day 28) Plug flats are now ready for transplanting or shipping. Plugs should be planted immediately, especially if produced under long days, in order to maximize stem length during cut flower production.

## **Cut Flower Production**

**Soil preparation:** Select a sunny location with a well-drained sandy soil that is low in fertility and has a pH between 6.0 and 7.0. Work the bed to a depth of 6 inches/15 cm. Crop rotation is recommended to avoid problems with fusarium.

**Transplanting:** Godetia plugs are sensitive, so dislodge the plugs from the tray by pushing up from the bottom. Avoid pulling the plants out of the tray by hand, which may damage the stem. To prevent rot, avoid planting the plug below the soil line.

**Spacing:** For outdoor production, space the plants 9 x 10 inches/23 x 25 cm. apart, and at the same time pinch the tip for production of high quality cut flowers. For Greenhouse production, do not pinch and space 4 x 4 inches/10 cm x 10 cm. apart to promote single stems. For both greenhouse and field culture, support the plants with netting when the plants are 18 inches/45 cm. high. Also, be sure to raise the support netting as the plants grow.

**Fertilization:** Excessive fertilizer results in soft plants with and poor flower quality. Maintain soluble salts around 0.6 mmhos (2:1 dilution).

**Temperature:** Maintain night temperature at 45-50°F/7-10 °C, and day temperature between 50-55°F/11-13°C.

**Lighting:** Godetia Grace is a long day response plant, and is very sensitive to light, similar to a Poinsettia. Therefore, the use of ordinary mum lighting, (10 foot candles / 110 lux), is sufficient to induce flowering when producing Godetia under natural short day conditions. Use night interruption (22:00 – 02:00) or day length extension.

**Scheduling:** Godetia Grace is an **obligate long day plant** and requires long days (>14 hours) starting one week after transplanting until flower color shows. For natural season outdoors in warm areas, sow in Dec./Jan. for flowering in May/June. For outdoor production in cool areas where late frosts prevent early transplanting, sow in April in a large plug tray, (128 cell), and maintain short day conditions (< 11 hours of light) with black cloth. This will prevent early flower initiation and maximize the stem length outdoors.

*To flower Godetia Grace for Christmas, Valentines Day and Easter in the Greenhouse, please use the following schedule.*

Sow Date	Flowering Date	Number of weeks*
Aug. 25 / Sept. 1	December 10	15 weeks
Sept. 15 / Sept. 20	February 4	19 weeks
Oct. 6 / Oct. 10	March 15	21 weeks

*\*As day length and light quality is reduced, time to flower increases*

**Vase life:** The use of sugar-based preservatives greatly reduces the vase life of Godetia Grace. Ordinary tap water is the best option.

*“All information given is intended for general guidance only and may have to be adjusted to meet individual needs. Cultural details are based on North American conditions and Sakata cannot be held responsible for any crop damage related to the information given herein. Application of recommended growth regulators and chemicals are subject to local and state regulations. Always follow manufacturer's label instructions. Testing a few plants prior to treating the entire crop is best.”*