

**Cultural Information for:** Godetia Grace Annual  
**Common Name:** Godetia or Clarkia  
**Botanical Name:** Clarkia amoena  
**Seed Count:** 37,000 /ounce 1,300 /gram  
**Optimum Germination Temperature:** 65°F / 18°C  
**Optimum Growing Temperature:** 50-55°F / 11-13°C  
**Optimum pH:** 5.8 – 6.2  
**EC – Plug:** 0 – 0.3 mmhos/cm (1:2) / 0 – 0.8 (SME) / 0 - 1.0 (Pour Thru)  
**EC – Finishing:** 0.4 – 0.8 mmhos/cm (1:2) / 0.9 – 2.0 (SME) / 1.1 - 2.6 (Pour Thru)

### 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 (< 12 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 microelements at the full rate; 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) Plugs are now ready for transplanting or shipping. Plugs should be planted immediately to maximize stem length.

### Cut Flower Production

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

**Transplanting:** Godetia plugs are delicate, 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 stem rot (rhizoctonia), do not plant the plug below the soil line.

**Support:** Two layers of support are needed to support the crop. Raise the support wires/netting as the crop progresses.

**Pinching:** Pinch one week after transplanting and wait one week to start lighting (long day treatment).

### **Spacing:**

Location	Spacing	Treatment
Greenhouse - Single Stem	4 x 4" / 10 x 10 cm.	No treatment
Greenhouse – Pinched*	4 x 6" / 10 x 15 cm.	Pinch 1 week after transplant
Outdoor – Pinched	10 x 10" / 25 x 25 cm.	Pinch 1 week after transplant

*\*best for high light areas*

**Fertilization:** Excessive fertilizer results in soft plants with and poor flower quality.

**Temperature:** Maintain night temperature between 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 requires a minimum of 10-foot candles / 110 lux) to induce flowering during natural short-day conditions. Use night interruption (22:00 – 02:00) or day length extension to 16 hours.

**Scheduling:** Godetia Grace is an **obligate long day plant** and requires long days (>14 hours) starting one week after transplanting for single stem and two weeks after transplanting for pinched stems until flower color shows in the bud.

### **Northern Hemisphere Greenhouse Holiday Schedule**

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

*\*As natural light and temperature decrease, the time to flower increases*

### **Cool Equatorial Regions, Colombia / Ecuador**

Sow Date	Flowering Date	Number of weeks*
Year Round	Influenced by light and temp.	18 - 22 weeks

*\*includes 4 weeks for plug production*

**Disease:** Botrytis, fusarium pythium rhizoctonia, sclerotinia.

**Harvest:** When 3-6 flowers are open.

**Post-Harvest:** Use good quality tap water for the best vase life. Sucrose rates of more than 0.5% in the vase solution causes leaf yellowing and petal necrosis. Store in water at 34-36°F/1-2°C. Avoid cold dry storage. Sensitive to ethylene.

**Vase life:** The inflorescence can last up to 18 days with each flower lasting up to 6 days. Increasing bud count is key to a long vase life.

*“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.”*