

Gloxinia Brocade, Avanti, Multibells

Crop	Gloxinia
Series	Brocade, Avanti, Multibells
Botanical name	<i>Sinningia speciosa</i>
Plant type	Annual
Seed type	Raw & Pellet
Seed count	Brocade :25,000 seeds / gr, 2,500 pellets / gr Avanti, Multibells : 2,700 pellets / gr
Germination	22-24 °C – 10-14 days light favored
Growing	18-22 °C
Optimum pH	5.8-6.2

Plug Culture: 6 weeks (288 cell tray)

Stage 1 (days 1-8) Sow pelleted seed into a plug tray filled with sterile and well-drained media with good aeration. A slightly fertilized peat is recommended and works well. For optimum results maintain a temperature of 22-24°C. Cover only with a thin layer of coarse vermiculite to allow some light for germination. Trays can be covered with thin plastic, if necessary, to maintain moisture but to avoid overheating if covered do not expose trays to direct sunlight.

Stage 2 (days 9-21) Seedlings have now emerged and the cotyledons are present. Maintain air temperature between 20-22°C. Lower humidity to 60-70% and fertilize with 75-100 ppm nitrogen from a well-balanced calcium nitrate-based fertilizer around day 10. Gloxinia is sensitive to boron deficiency so maintain media pH between 5.8 and 6.2 and supply 0.25 pm boron when fertilizing.

Stage 3 (days 22-40) Gradually increase the fertilizer concentration to 100-150 ppm nitrogen for strong growth as the seedlings progress. The young foliage is sensitive to cold water which causes burning. To

avoid damage to the foliage when watering overhead, the water temperature must be above 10 °C. This is commonly known as “ring spot”. You should heat the water if this is a concern. During winter the young seedlings benefit from supplemental lighting for 16 hours. Under high light conditions seedlings benefit from a light shade of 40-50%.

Stage 4 (days 40-42) The seedlings should have 4 true leaves and are approaching transplant stage. Transplant on time to avoid root bound seedlings. Overgrown transplants make flowering prematurely with less flowers on smaller plants. Reduce fertilizer levels and lower the temperature to 18°C to tone the plants.

Transplanting to finish: 10-16 weeks

Media: Select sterile well-drained media with good aeration.

Potting: Brocade is best suited for 12.5 cm pots. To anchor the plants, plant the seedlings so that the first set of “large” leaves is level with the media. Use care not to break off smaller leaves as it may invite disease. Drench with a broad-spectrum fungicide after transplanting.

Spacing: Plants can remain pot tight for six to seven weeks after potting. Afterward, space the plants for finishing.

Temperature: Optimum day temperature is 22°C, with the night temperature no lower than 18°C. Temperatures below 15°C, delay flowering and increase production time.

Watering and Fertilization: Gloxinias perform best when they are kept evenly moist. Never allow plants to dry out and wilt which can cause stunting and delayed flowering. For the first weeks following transplant fertilize at 100 ppm nitrogen using a well-

balanced calcium nitrate based formulation. After plants are established apply 150 ppm nitrogen for best performance. Gloxinia is sensitive to boron deficiency, characterized by deep dark green foliage, crinkled leaves and tip abortion. Maintain the media pH between 5.8 and 6.2 and apply 0.25 ppm of boron when fertilizing.

Lighting: For best results avoid strong sunlight. For winter growing apply supplemental lighting for 10 hours.

Plant growth regulators: Plant growth regulators are not recommended. Growth can be controlled through fertilization, light and moisture.

Pests: cyclamen mites, thrips and loopers

Disease: tomato spotted wilt virus (TSWV)

Crop Schedule:

Brocade

10-12cm pots will flower in 20-24 weeks from sowing depending on the time of year and light levels. One plant per pot

Avanti, Multibells

11-12 cm pots will flower in 16-22 weeks from sowing depending on the time of year and light levels. One plant per pot

All information given is intended for general guidance only and may have to be adjusted to meet individual needs. Cultural details are based on Asian conditions such as in Japan and Sakata cannot be held responsible for any crop damage related to the information given herein. Always follow manufacturer's label instructions. Testing a few plants prior to treating the entire crop is best.