GLOXINIAS

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For spectacular beauty, gloxinias rate highly having huge, velvet, bell-like flowers. Native to Brazil, there is a wide variety of colors from which to choose ranging from brilliant crimson, dark red, deep purple and blues in many shades to white, pink, bicolors and some with spots called tigrinas. Additionally, flower forms vary, coming in upright, nodding, single, double and miniature. Miniatures make excellent terrarium specimens which will not outgrow their homes. Commercially, gloxinias make marketable plants throughout the year, especially for Christmas, Valentine's Day, Mother's Day and summer sales.

With the ever increasing escalation of energy and labor, gloxinias may be a good crop for consideration. Not only are they a marketable crop but they are considered to be a low labor crop needing no disbudding or pinching. One essential requirement is to provide good ventilation. A wire or snow fence bench improves air circulation. If this is not possible, elevate plants on inverted pots.

PROPAGATION

Most growers purchase started seedlings or start plants from tubers. Large scale producers generally start gloxinias from seed. For timing purposes, seed sown in February yield flowering plants in August. Corms should flower 4-5 months after planting. Cultivars do not come true from seed and can be propagated from leaf petiole cuttings.

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SOIL MIX AND FERTILITY

Fertilizing will depend greatly upon the growing medium that is utilized. The soil or soilless mix must be loose and friable but certainly one that is high in organic matter, such as 50% peat. At any rate, the potting mixture should be one that drains well.

With a soilless mix regular feeding is necessary. Heavy feeding will produce very deep blue-green foliage. Osmocote (14-14-14) at 10-12 lb. per cu. yard may provide adequate nutrition without using liquid fertilizer. If a liquid fertilizer is utilized, 150 ppm of N, from 15-0-18 or 15-0-15 at every watering should provide sufficient fertility.

CULTURE

A 6 inch gloxinia crop will flower in from 12 to 20 weeks from transplant in Connecticut, varying with the time of year grown. For regular cultivars a 12 x 12" spacing is necessary. Gloxinias would be more widely grown if they were not so difficult to handle and ship because of the big tender leaves and the space they require.

Dwarf gloxinias may be an answer to this problem. They will grow on about half as much space per pot--thus twice as many pots per bench as the standard varieties. Additionally, they are 12 to 14 days faster in reaching maturity. Some growers claim that they can be finished at less than an 8 x 9 spacing, giving a bit less per plant but so much better production that in the long run they can be more profitable. This size can be a good 10-12 week crop during high light periods.

A temperature of $64^{\circ}-68^{\circ}F$ is optimum; most growers use $65^{\circ}-70^{\circ}F$. A temperature of less than $60^{\circ}F$ slows growth and results in a downward

cupping of leaves which also may be a symptom of low nutrition.

LIGHTING

Gloxinias require from 1500 to a maximum of 2000 footcandles of light for best flowering. Excessive light intensity causes leaf burn and low intensity results in leggy growth. Gloxinias respond well to lighting during the winter months; 200 ft. candles will be of benefit to plants. According to Dr. Marc Cathey, if plants are lit for four weeks at the pot-tight stage, they will flower two weeks earlier. Fluorescent fixtures work, are inexpensive and well suited for this purpose. A 16 hour photoperiod is given using cool white fluorescent tubes placed 8 inches above the plants. Salable 4-6" pots of gloxinias can be produced from seed in 22 weeks under artificial light. Growth regulators such as B-nine help to reduce stretching on gloxinias. Generally apply it two weeks after the transplanting date. Do not apply it after the buds have formed.

