

# Cyclamen from seed

---

Robert Adzima

*Floriculture Greenhouse Manager*

Cyclamen grown from seed can be a frustrating crop, but the results can be quite rewarding. The beauty of the finished crop can be very striking, and the sales appeal is very high.

My knowledge is an accumulation of information from *The Ball Red Book*, *Cornell Recommendations*, *Florist Crop Production and Marketing*, *Commercial Flower Forcing* and about twenty-five years of growing experiences.

During the latter years, we have seen the advent of miniature varieties, fast crop varieties and those with scent. Cyclamen is a slow-growing crop. Using a 50°F night growing temperature, ten to twelve months are required to produce the standard cyclamen from seed.

Cyclamen from seed, sown about January 17 in a 60°F house, finishes or is ready to sell mid-October to about Thanksgiving. We have sown the seed in a number of different mixtures including: soil, peat, perlite (1-1-1), pure peat and peat pellets. These media have produced good crops with variable germination. Good germination for cyclamen is somewhere around seventy percent.

When you order the seed, there are lots of qualifying factors. Seed companies offer cyclamen in a multitude of colors, single and double flowers, fringed flowers, standard and miniature varieties, and with a range of leaf variegation.

Plugs and prefinished plants are also available and should be considered as an alternative to seeding.

We start with pasteurized materials—soil, peat, perlite, flats, pots and covers. Light soil mixes such as a 1-1-1, (soil, peat and coarse perlite) are amended with 4 oz osmocote (14-14-14), 1 oz Electra (5-10-3),

2 oz superphosphate and 8 oz dolomitic limestone per cubic foot. Pure peat is amended with 1 lb dolomitic limestone, 1.6 oz  $MgSO_4$ , .55 oz  $KNO_3$ , 1 oz superphosphate, 1.25 oz Osmocote (14-14-14) and .075 oz fritted trace elements in 1/10 cu yd. Plastic square pots 2 1/4" are filled and put in flats. Peat pellets are expanded directly in the flats.

One seed per pot is sown in a 1/4" indentation made in the center top of the media. Seed size varies a great deal from the size of snapdragon seed to the size of a pepper seed. Cover the seed with vermiculite and water the flats. Seeds germinate in the dark, so cover the flats. It takes one to two months for germination which will be uneven. Remove germinated plants every few days and move to a 60°F growing area. Grow until several leaves have matured and the roots reach the edge of the soil ball. Transplant into a larger 4 1/2" pot and grow at 50°F until the roots reach the edge again. When shifting the plants to a large pot, be sure to keep the corm 1/2 to 2/3 exposed over the top of the soil. If the corm is buried (too low) the cyclamen will not grow and heavy losses will occur. Shift to a finishing pot—5 1/2" azalea pot for miniatures or 6 1/2" azalea pot for standards.

Fertilization should begin when the plants are in 2 1/4" pots and quite large just before the first transplant. Once they are established in the 4 1/2" pots, they can be fertilized on a regular basis—three weeks apart starting in August and, beginning in late September, two weeks apart until sales. A crop should receive about seven applications of fertilizer during a growing cycle when using the previously described nutrient fortified 1-1-1 soil potting mix. We mix our own fertilizer using potassium nitrate, urea, calcium nitrate and mono-ammonium phosphate with an analysis of 19-4-24. We use a Gewa proportioner and apply approximately 345 ppm N.

Cyclamen become infested with most of the normal insects plus a few more, such as cyclamen mites, thrips and taxus weevil larvae. Some of the insecticides we use are oxamyl, a systemic which controls many of the insects including the weevil larvae; plictran against cyclamen mite; orthene and PT1300 against thrips; and dursban drench against fungus gnats. We have also used Banrot drench when it appears we are having root rot problems. It is a good idea to use the fungicide Benlate twice during the growing cycle to control botrytis and other fungal problems which occur.

When the crop begins to flower, you might want to pull out the first few flowers to even out the flowering. Cyclamen is a lovely crop to grow to add to the diversity of pot crops and is ever more popular and in demand.