## MIGHTY-MINIS, SMALL ROSES WITH BIG POTENTIAL\*

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Within the past few years, a new form of floricultural crop has emerged that may outdate, if not outclass, similar plants that are currently in the marketplace. Though diminutive in size, new cultivars of the miniature rose have been making big names for themselves. These plants range in size from 5 to 18 inches (the majority falling within the 12 to 18 inch size category) and have the potential for replacing the standard polyantha pot roses that have traditionally been utilized for the Valentine's. Easter, and Mother's Day marketing periods. Not only are they smaller and easier to manage, they also require less The average sized miniature rose takes 6 to time to force. 8 weeks to flower while polyantha types require 8 to 12 weeks. This allows for a faster turnover and more efficient use of valuable greenhouse space (2,4).

These "miniature giants" are usually shipped to the greenhouse in small containers. For example, one distributor ships them in 2 1/4 inch pots for 75 to 90 cents plus freight. These are then placed in 3,4,5 or even in 6 inch pots (for larger growing cultivars) for forcing and wholesaled for 3 to 5 dollars (5).

Forcing itself requires 6 to 8 weeks in the greenhouse. The actual time to flower is primarily dependent upon the size of the growing container (the smaller pots requiring the least amount of time for a smaller all-round plant). Pot in a well drained mix (either soil or soilless; a 1/3 soil, 1/3 peat, 1/3 sand or perlite with a pH of 6-7 has been recommended by the Sequoia Nursery in California). Normal moisture levels should be maintained (3,4).

Miniature roses should be grown at  $50^{\circ}$  until root growth has developed. Then temperatures may be adjusted upwards to  $60^{\circ}$  nights. Temperatures may be manipulated in order to speed or slow down plant development for a specific holiday market. This allows for proper time schedules to be followed. Forcing time will be extended by perhaps 3 weeks if shoots are pinched to obtain bushier plants (3,4).

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Space the plants adequately to allow for good air circulation and all-round even growth. High light intensities are necessary for quality rose production. Other cultural practices including keeping the foliage dry (especialy at night) will help to minimize the incidence of mildew and other diseases. Insect pests, especially mites and aphids, are common and may be treated as in standard rose production (2,4).

Fertilization is important during forcing. A continual fertilization program at 150-200 ppm N similar to that given other blooming plant crops is suggested. A program of 20-20-20 in rotation with calcium and potassium nitrates (3:2, a 15-0-18 analysis) should prove to give satisfactory growth and flowering. This should avoid the problems of root burn and bullheading which are often associated with over, or improper fertilizing techniques (4).

In the past, miniature roses were considered to be "babes" to the industry. With all the new colors, styles, and forms (including tree and climbers) becoming available, they may be the "child prodigies" of the future.

## References

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