

## CLEMATIS PROPAGATION

RAYMOND J. EVISON

*Treasures of Tenbury Ltd.*  
Tenbury Wells, Worcestershire

There are several methods by which clematis can be propagated: from seed, division of root crown, layering, grafting and, lastly, by internodal cuttings.

**Seed.** Most species come virtually true from seed; however, some do give variations. *Clematis tangutica*, *C. flammula*, *C. ser-ratifolia*, *C. fargesii* var. *soulei*, *C. integrifolia*, *C. recta*, *C. campaniflora* and *C. armandii* are some of the species which grow readily from seed. Large-flowered cultivars will also reproduce easily from seed, giving many interesting variations and forms. Many of the new cultivars being introduced by nurseries at present are the result of such chance seedlings. Seed can be sown in the normal John Innes Seed Compost and germinate between six weeks and six months, depending on cultivar and method used.

**Layering.** Layering is used mainly by amateurs; plants establish after nine months.

**Division.** Division of herbaceous cultivars takes place during dormancy. 'Heracleifolia', 'Davidiana' and 'Wyevale' and the forms of *C. integrifolia* can be split, giving an easy and quick propagation method; however this type will also root from cuttings.

**Grafting.** I personally feel that grafting is outdated, expensive, and unnecessary now that we have new facilities available for the production of clematis by cuttings. It is argued that some cultivars are difficult to grow from cuttings; however, if the right type of material is available then all the large-flowered cultivars propagate easily from cuttings. I also feel that clematis have been given a very bad name through wilt and die-back and have caused disappointment to customers. This, I feel, lies at the door of grafting. However, grafting can be used for the establishment of stock plants of rare forms under glasshouse conditions.

**Cuttings.** Clematis cuttings can be taken for about 7 to 8 months of the year if cutting material has been made available by early forcing of stock plants. There are two basic methods of obtaining first class cutting material.

1) By growing mother stock plants especially for cutting production; e.g., at our Guernsey nursery, Victoria Vineries Ltd., we have a mother stock house of 7,800 sq. ft., whereby we have a crop rotation system allowing cutting material to be available on a 6 to 8 week cycle, thus enabling us to finish taking cuttings at one end of the mother stock house at the same time the plants which

were first cut down at the other end have grown again and are able to give the next flush of cutting material.

2) Alternatively, cutting material can be available during June and July from plants which were potted in February and March as rooted cuttings. A single node cutting is used, prepared by a one-sided razor blade. The cutting is made by completely removing one leaf by cutting the excess stem away  $\frac{1}{4}$ " above the node and  $1\frac{1}{4}$ " below the node and then reducing the remaining leaf area by half. The cuttings are then dipped in a Captan solution. Serradix No. 2 is the hormone rooting powder used. One hundred cuttings are inserted in a standard plastic seed tray  $2\frac{1}{2}$ " deep. A layer of gravel is placed in the bottom of the tray for drainage. The cutting compost varies but is basically one part loam, one part peat, two parts sand, and two parts grit.

The cuttings are pushed into the compost leaving the node just below the surface. The box is then taken into the propagation house where the temperature is maintained between 65°F and 95°F. The sand bed temperature is kept at 75°F. A manually controlled mist is used every  $\frac{3}{4}$  hour with a 15 second burst of mist; 70% shading is used during hot sunny days — this being reduced on cloudy or wet days. At Victoria Vineries we use a soil integrator which measures the calorific value of the light and is set to give a similar mist pattern. A material called Dacron, which gives a 70% heat shade and a 50% light shade is used.

Cuttings must be kept in a healthy condition by the picking off of rotted foliage. To assist with this problem Captan, Fungex, and Folosan are used as preventive fungicide controls at two-week intervals. Rooting takes place 3 to 4 weeks after insertion of cuttings. By the 6th week weaning-off is put into practice by reducing the amount of mist, shade, and bottom heat.

Increased ventilation and watering by hose-pipe or watering can takes place at this time; 12 to 14 weeks after insertion of the cuttings the plants are potted-on into 3" or 4" x 5" plastic pots and placed in a polythene tunnel or a cold glass-house. This potting-on should be practiced no later than mid-August unless heat or supplementary lighting is used. Potting can be restarted from mid-February if plants are given frost protection after potting.