obtained seven cuttings and multiplied these to about 2000 plants at present. This species will be reintroduced to its native habitat in cooperation with IUCN.

- *Tarenna barbonica* is also a member of the Rubiaceae with flowers that look like *Ixora*. Two plants (trees) remain in the wild. Propagation by cuttings is almost impossible (we used rooting hormones without success). Now the *Tarenna* is growing in Thailand from seed production. We have found that *Tarenna* grows about 20 cm per year, not a commercial success due to the high production costs.

SUMMARY

I have tried to explain some of the results of my hobby in this paper. Of course it is meant to be on a commercial basis, but the love for plants and flowers is a never-ending passion for me. It is nice that we can help nature by developing rare and endangered species for the market, as far is possible, supervised by science and internationally acknowledged conservation institutes. In this way we let our customers become more involved with conserving nature.

Clematis Propagation©

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INTRODUCTION

Much valuable plant material is often wasted when clematis are propagated only in the early to mid season. Experiments were carried out and two methods have been adopted to utilize normally discarded material. It was found that flowering wood on compound dichasial cymes was almost as easy to strike as the earlier season's softwood, and useful struck cuttings, which grew away rapidly either in the current season, or the following spring were successfully produced.

In the second method described wood that would otherwise be pruned off and discarded in winter from potted stock plants is used in a modified repotting method to produce easily removed, layered plants in the stock plant pot. The stock plant is undamaged, and regenerates in spring from the base as usual for the material required for propagation in the normal method.

PROPAGATION METHOD 1: CUTTINGS FROM COMPOUND DICHASIAL CYMES

Cuttings of *Clematis* × *durandii* were taken from compound dichasial cymes, as illustrated in Figures 1, 2, and 3.

The nodal cutting is trimmed and the stem slightly wounded for about 10 mm near the base. One leaf is removed and the other reduced.

The cuttings are dipped in a root promoting powder (Rootex P™, 3 g·kg^{-1} IBA), then set in a mix of sharp washed river sand and perlite (1 : 1, v/v) in seedling trays. Trays are placed on the propagation bed under intermittent mist and at 25 ºC.

Results. Eighty-five percent of cuttings had rooted and were ready for potting on to 50-mm tubes in 4 weeks. Unrooted cuttings were returned to the trays and re-

Figure 1. The basal cutting is removed and trimmed, along with the unwanted flower stems.

checked after 2 weeks. A 91% strike rate was achieved after 6 weeks. Those cuttings made from the split nodes usually produce shoots in the spring from dormant leaf axil buds in addition to the upper buds. Roots usually emerge from both the base and the edges of the cambium layer in the split node cuttings.

Other clematis types which produce the compound dichasial cymes, such as *C. texensis, C. viticella,* and *C. florida* have been successfully struck using this method.

PROPAGATION METHOD 2: LAYERING OF CLEMATIS STOCK PLANTS

In this method, the stock plant is repotted into a larger pot, and the thin wiry stems produced during the growing season are spiraled into the pot during the repotting. This method is especially useful for difficult to propagate varieties, can be adapted to other plants, and is space saving.

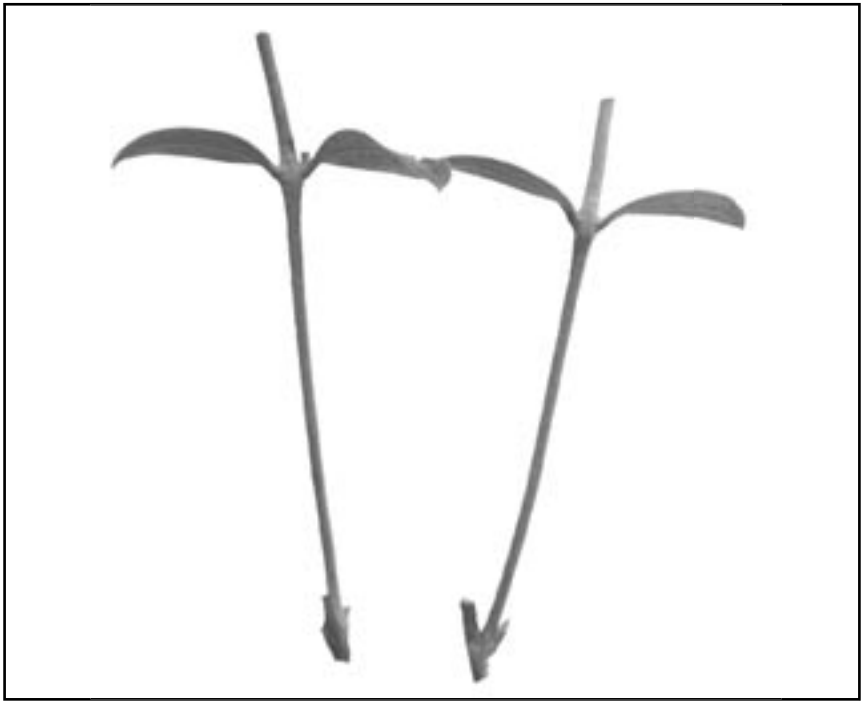

Figure 2. The remaining material is cut above and below the fork in the stem, and then split at the node.

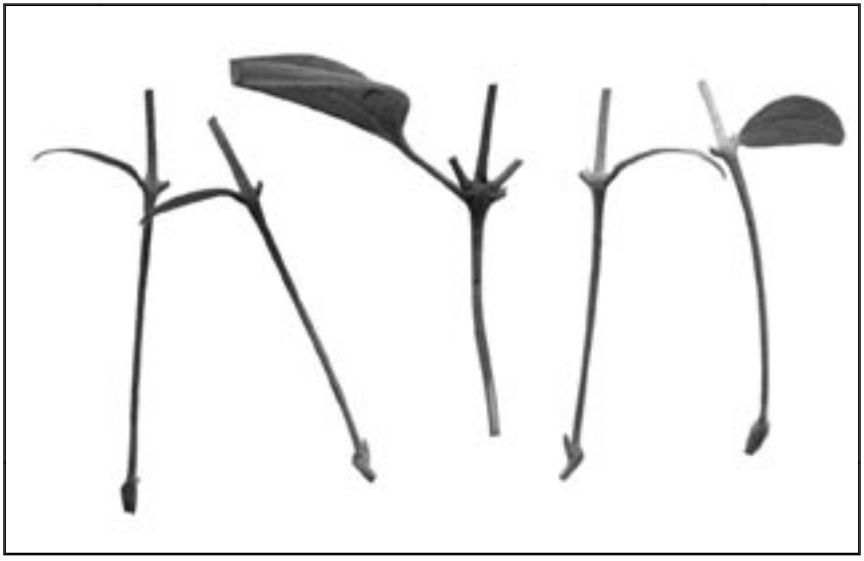

Figure 3. Completed cuttings from compound dichasial cyme material.

In autumn/winter, when repotting plants to larger containers, carefully remove the stakes from the stock plant and trim the stems to about 1 m in length, ensuring that good buds are in place along the stems. Remove the dead leaves, and any thin unwanted stem material. Knock the stock plant from the pot and carefully loosen roots as necessary.

Prepare a larger pot and quarter fill with good potting mix. Place the prepared plant into the larger pot. The plant may be placed in on an angle in order to lower the top stems in relation to the top of the pot, or part of the root ball may be trimmed away. Planting the stock plant deeper generates roots from the crown of the clematis, strengthening the plant.

Insert the stakes required for supporting the following seasons growth. Bend the stems down and start spiraling them around the edges of the pot and below the finished potting level, filling up with mix as this is done. The tips of the stems may be placed above the surface level and taped to the stakes or left just below. Settle the mix and water in as usual. No wounding of the stems or plant hormone is necessary for this method.

The plant is grown on, and harvested during the season as a stock plant.

Growth usually occurs from most of the buried nodes and shoots will break through the surface of the mix from these buried nodes as soon as growth commences in the spring. By about mid summer the plant may be removed from the pot, and the well-rooted layers easily removed from the edge of the main plant. Trim these layers to two or three sets of leaves then pot on.

Cuttings may be taken from both the layers and the stock plant before the layered plants are harvested, making handling of the stock plant easier.

Layers will grow away easily when potted and the main stock plant can be replaced in its pot unharmed.

This is a useful method if cutting material is in short supply. Many rooted plants can be produced utilizing otherwise discarded material. The stock plant material can be harvested as usual.