

## SCIONS

Scions selected are 2 to 3 mm in diameter, soft to semihardwood with active growth and a length of 75 mm. They are immersed in water with chlorine (100 ppm) added for 5 min and then rinsed and drained before grafting. Leaf length is reduced by half.

## GRAFTING TECHNIQUE

The plants are whip grafted. The object is to produce an instant "ball on stick" or standard *Ixora*. This means that the rootstock cuttings are 80 cm tall – the rootstock is in a gradient of semihard (2 year old) at one end (the rooted one) to increasingly soft towards the tip of the cutting (current years growth). So, it is important that the graft be made in the right spot, i.e. not right at the tip where the rootstock is so soft that it wilted and couldn't support the graft and not too far down in the harder older tissue where callus production is slow and the graft doesn't take either. The scions are prepared in a similar manner, with a match of both cambium layers preferred. The graft is wrapped with two to three layers of Nescofilm<sup>®</sup> lab tape using the "nail winding technique" (Boorman, 1991).

The newly grafted plants are placed into trays of water 20 mm deep under mist until callus forms and tape splits (3 to 4 weeks). They are then sun hardened. Rootstock growth is very vigorous and needs to be checked twice weekly and removed.

## LITERATURE CITED

Bailey, L.H. and E. Z. Bailey. 1976. Hortus third. Macmillan Publishing, U.S.A.

Boorman, D.A. 1991. Rootstock preparation for grafting of *Grevillea* species. Univ. Qld (Thesis).

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## Propagation of Mondo Grass

### Michael Gleeson

Castle-Lyn Nursery, 1191 Old Northern Road, MIDDLE DURAL NSW 2158

I am here today to tell you how I propagate mondo grass (*Ophiopogon japonicus*)!!

Now you may ask why this guy is getting up here and telling us about something any propagator knows how to do? Why, it's so easy that the job is usually given to the junior staff to do. We know that all you have to do is stick a few bits into pots or in the ground, leave them there for a few years fighting with the weeds, and when you think about it go and get them and divide them. But what if the boss comes to you one day and tells you that you are to produce 5000 plants every year for the next 3 years in tubes. Your problem now is to know how much stock material you need to establish to produce the plants required, and how to do it in a specified time frame. This is where I may be of some use to you by presenting this paper.

We all know of course that mondo grass is propagated by division. It can also be grown from seed, and I will come to this later. I will start with the production of the stock plants. The best time of year to do this project is August (early spring). Stock plants are grown in 200-mm squat pots and are established by planting four tubes, that have been held over from last years output, into a good quality potting medium.

A mix that is a bit on the sandy side is better as I find it easier to shake out later. A dose of 8-9 month Osmocote<sup>®</sup> (18-2.6-10) or similar is added at potting. These pots are then placed into the nursery in a position that is protected from the hottest part of the day. This group of stock plants is fed on a regular basis with the normal liquid feed programme which in my case is Peters<sup>®</sup> ( Peat-Lite High N ) fertilizer every 7 to 10 days. These plants will then be left to grow over the following season and will not be dealt with until next August. It is important to keep weeds under control.

It is now 12 months later and time to divide the stock plants. The pots are brought to the work area and the soil is shaken vigorously from the roots (it is easier to do if the soil is a bit on the dry side at the time). The clumps of material are now placed on the work bench where the job can be carried out in comfort. Division is done with an old pair of secateurs (blunt blades) or with a pair of cheap scissors. I cut off all the newest rhizomes first, then I cut the central clumps into as many plantable pieces as possible. The size of the plantlets varies considerably, the smallest being about 13mm high to pieces that may be difficult to fit into a tube. These pieces are then planted into 50-mm tubes. Trays of tubes are then placed out into the shadehouse to grow on and these are saleable about 4 to 5 months later.

Over the years I have been keeping a record of how many plants I can obtain from each stock pot and have found that a return of 15 to 1 has been a consistent figure. This means that every four tubes planted in an 200-mm pot returns 60 plantlets. Therefore, if you require 5000 a year you need to plant about 85 stockpots with 340 tubes. Every year it will be necessary to keep back from sale 340 tubes to plant on to obtain your required supply of stock for the following season.

Seed is also a useful way to propagate mondo grass and this can be done at the same time. My stock plants flower while they are in the growing on phase and the resulting fruit is ripe at the time the plants are divided. The seed is collected during the division process and put aside to be planted later. I don't clean the fruit pulp from the seed, I just sow it as it comes into a good quality potting media. Germination takes about 8 to 10 weeks and the germination rate is high. Seedlings are planted out when they are big enough to handle. Seedlings establish at a similar rate to the divided plantlets.