

PROPAGATION OF XYLOSMA

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Cutting Materials: Wood for cuttings should be taken from healthy plants that have attained a spring growth of 6 to 8 inches. Remove the soft tip down to the first mature leaf, then begin taking cuttings down the stem. We cut the leaves in half but that's mainly because we stick 400 to the flat.

Hormone: Hormodin No. 2 - we have had very good results with this. The media is 3 parts Sponge Rok, one part peat moss mixed with water in a tub. The media is packed around the edges of the flat and leveled off. The cuttings are placed in intermittent mist house. Our largest house is 100 feet long, with a capacity of 150,000 to 200,000 cuttings. The house has 50% saran shade on top, a 6 mil. polyethylene on that. One wall is nine feet, the other wall is six feet high. We leave an opening on the highest wall in the summer so the heat can escape. In the winter it is completely covered. The mist is controlled by two 5-minute timers, one for each half of the house. They are connected to a 24 hour timer, which turns them on in the mornings and off at night. We do not have bottom heat. Our first crop of Xylosma cuttings was made and placed in the mist about the middle of June. Our rooting percentage of this crop was 60-70%. The second crop was made and placed in the mist approximately five weeks later. The results were very poor and we feel that this was due to a hot spell that we had at that time. We find that the biggest enemy to Xylosma is too much heat. Our third crop was put in about the middle of August. We had very good results, probably 80-90% rooting at this time. They are still in the mist house.

We do all of our propagation of Xylosma in the summer. The cuttings begin to root in about 3 weeks, but take at least 6 to 8 weeks before you have a high percentage. If you have a big percentage of new growth on your cuttings, you have a better chance of bringing them on. Cuttings that have roots and no leaves will not live. We have found that they will never "break". The hardening off of this variety is trickier than rooting it. We take them out of the mist houses and place them in our cold frames. The sashes are covered with plastic and the frames are shaded with 90% saran shade. We keep them closed for 3 or 4 days, then the sashes are gradually raised to give air. They are hardened off for 3 to 4 weeks. We pot the rooted cuttings in square plastic pots.

Potting media: 1 part plaster sand, 2 parts peat moss and a small amount of hoof and horn. After potting they are placed in the mist house again. In about 3 weeks, about 70% are growing with short roots. We sort them and transfer the ones that are growing to our saran house. In hot weather we hand spray every 45 minutes in the middle of the day. We keep the potted Xylosma in flats, on benches, to keep them dry. You stand a good chance of losing them, even as a ready liner, if you get too much rain in the winter. If it is a very wet season, we do not hesitate to move them out of the saran house into the open, so they will dry out faster.

MODERATOR MOREY: Where exactly do you get your cuttings - from your liners, from gallon cans, from stock, or from other plants?

MR. OLSSON: It's a very common item, as you probably know, in southern California. Sometimes we get our cuttings from our own customers because at least 50% of our liners are sold on contract ahead of time, so our customers would be very glad to let us prune their plants in cans, use our labor, and take the material home instead of spending their own time, and then they get the first chance to buy liners.

MODERATOR MOREY: The second question is how much blood meal do you use in your feeding?

MR. OLSSON: Being in wholesale, as we are, I try to make them grow fast; we use a handful to a flat and a half; we go over it very quickly, broadcast it, and then water it down.

VOICE: Do you take tip cuttings or below the tip?

MR. OLSSON: We always cut the tip out because this is during the growing period, so you have a very soft tip with light colored foliage. As I said, when you get to that shiny dark green leaf color - from then on we take cuttings on down the stem.

VOICE: How long should the cuttings be?

MR. OLSSON: They are usually two nodes, sometimes three.

VOICE: Ours always defoliate. What do we do wrong?

MR. OLSSON: I used to have a lot of trouble, even in our regular cold frame; they should be kept at high humidity and still try to keep the temperature down and out of drafts.

VOICE: What pressure do you use in the mist system?

MR. OLSSON: Our pressure there is 80 to 100 pounds. We use the Economy nozzle, which has a 1/32 inch hole, tapped right into the pipe. The pipe is about 2 to 2-1/2 feet above the flats.

VOICE: What light intensity is in the houses?

MR. OLSSON: We have 50% saran shade on the greenhouse. There's no glass, it's plastic with polyethylene on top.

VOICE: How high do your temperatures get?

MR. OLSSON: We try to keep under 95° if we can but we like to have it more than 70° F. We have no bottom heat. All we have is three gas heaters to keep the frost out at night. We are starting to use them now (October) to have a little higher starting temperature in the morning.

VOICE: If there's only one leaf on the cutting, if you lose it, is the cutting lost?

MR. OLSSON: If there is a new shoot starting, then of course it would have other leaves, but without the original leaf and no new shoot, there's no use potting it. It can have beautiful roots, but there's no use to pot it, as far as I can see.

VOICE: How much hoof and horn do you use in the potting media?

MR. OLSSON: We don't know how much you should use. We use very little, approximately 4 lbs. to a mixture of 4 bales of peat moss and 1/3 parts sand.

VOICE: Have you tried redwood sawdust in place of peat?

MR. OLSSON: I haven't personally, but Martin Usrey and I have been through quite a few different mixtures, and I think Monrovia Nursery will also agree that sand isn't bad at all.

MODERATOR MOREY: The next material under discussion is Convolvulus cneorum. Mr. McCabe has a reasonably able substitute in Mr. Martin Usrey of Monrovia Nursery Co., who will give this talk.

PROPAGATION OF CONVOLVULUS CNEORUM

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In the propagation of Convolvulus cneorum (Morning glory bush) we have tried taking cuttings at different times of the year; however, the nature of the plant is such that the wood is always soft. Consequently, the cutting is made a little longer than it would be otherwise in order to get into firmer wood. Cuttings are made about 5" long, with the basal cut made just below the node.

The best times for the propagation of this plant was found to be at two different months in the year - April and September, although cuttings made at these times still gave erratic results; some years very good, but in other years only fairly good. When the cuttings were made at other than the times mentioned, the results were also erratic, but response was usually poor.

The "hormone" we use is Hormodin No. 1 because the condition of the wood necessitates this concentration. Results have been poor where higher concentrations were used.

The cuttings are stuck into a 2 parts Sponge Rok (perlite), 1 part peat moss mix when the flats are to be placed in the coldframes, and into a 3 parts Sponge Rok, 1 part peat moss when they are placed under intermittent mist.