

PROPAGATION OF HYBRID LILACS FROM CUTTINGS

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While many forms of plant propagation, other than Hybrid Lilacs, produce more satisfaction in terms of financial remuneration or quantity production, I believe there are few which contribute any more toward satisfying the inherent love of growing plants, which we all must share.

The taking of cutting wood from a fine specimen plant of hybrid lilac, which is in full bloom and covered with morning dew, leaves little to be desired in this great feeling of being an integral part in the creation of beauty and form. So much for the aesthetics of lilacs.

Perhaps the one thing to stress more than any other is the inconsistency of results in producing hybrid lilacs from softwood cuttings. It is neither my purpose, nor intent to pretend, that we get anything other than mediocre results in our attempts.

Generally, our percentage of survival from propagation frames to the field is from 20% to 50%. Seldom do we experience a greater success than indicated above. While it is true that with an adequate supply of stock wood, 50% would be very nice, if not the best, the fact remains that in most varieties we are quite limited in our supply.

An explanation of our propagation must begin with a brief accounting of our physical set-up. We propagate in concrete slab frames which are sunk in the ground and protected by glass sash and canvas duck curtains. We have also had two-years experience with a mist bed and I am happy to say that most of the experience has been quite encouraging. Up to the present time, however, we have attempted no hybrid lilacs in the mist frame.

The cutting medium is a sand and Michigan peat mixture of 3 parts sand and one part peat which is approximately 4" deep after dry compaction before sticking.

The long frames run East and West and the top of the medium is approximately 12" below the sash level.

The cutting wood is taken when the blooms first begin to open and this is usually about May 5th to 10th in our area. Several cuttings can be obtained from each terminal branch and our practice has been to bring the entire branch end into the cutting room before removing the individual cuttings.

The cuttings is removed with a sharp knife through the basal ring and a portion of the large soft leaves is removed (about 1/2 of the individual leaf). In addition, the very tender tip end of the cutting is removed to prevent excessive wilting.

The cuttings are treated with Hormodin Powder No. 2 and stuck in the sand and peat medium.

After a thorough watering, the sash is laid over the frame and made as nearly air-tight as possible to prevent moisture loss. Our method of producing this semi-airtight condition is to use folded newspapers. We don't use anything fancy for sure, but we do fold the newspapers long ways, getting about eight thicknesses and we lay these be-

tween the frame side itself and the sash and also between the sash, across the frame so we do get a reasonable moisture proof barrier there and fairly airtight situation.

The lilac cuttings are then left until the rooting action has begun. Periodic checks, in which random cuttings are examined, indicate the time when the sash should be lifted up slightly in order to begin aeration of the beds. This should occur when the roots are approximately 1/2" long.

When the roots begin to attain a brown color and toughen up, the sash are removed and replaced with lath shades. Periodic hand watering is essential at this time.

The rooted cuttings are banded in 3" x 3" vita-bands in early September if everything has gone well. Sometimes it has been found desirable to leave them in the propagating frame over winter for early spring banding.

The lilacs which are banded in late summer are plunged in a deep pit (36") and covered over with sash during cold weather. This usually readies them for regular lining out the following spring.

I would like to emphasize the fact that percentages can be weighted or affected by many factors. We attain a survival percentage of 20-50% as I have said. This would, no doubt, be higher if we were to leave many of the heavily-calloused cuttings longer in the frame.

Another factor is the scarcity of stock wood. I feel definitely that in varieties where there is an abundance of wood, the resulting higher percentage of success is in part due to the ability of the propagator to be more choosy in his material.

There is no doubt that a better rooting percentage can and will be attained through more careful attention to detail, better sources of wood and better hygienic practices.

The prime motivation for our method of hybrid lilac propagation is the desire to produce a better plant for the consumer which will be as trouble-free as possible. This we are doing with soft wood cutting propagation.

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PRESIDENT SCANLON: Thanks very much, Jack. Our next speaker is Dr. Henry Kirkpatrick of the Boyce Thompson Institute for Plant Research, Yonkers, N.Y. Dr. Kirkpatrick will also discuss the propagation of lilacs from cuttings.

Dr. Kirkpatrick presented his paper, entitled "Propagation of Hybrid Lilac from Cuttings." (Applause).