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LILAC PROPAGATION

RAY E. HALWARD

Royal Botanical Gardens,
Hamilton, Ontario, Canada L8N 3H8.

We have been propagating lilacs extensively since 1967 and due to the generosity of botanical gardens, arboreta, and park areas supplying propagating material, we now have one of the largest collections in the world and are the official registration authority for the International Lilac Society for lilac cultivars. We are aiming for a complete collection and any new additions would be most welcome. Stocking the collection to where it is today gave me the opportunity to try a great many species and cultivars. I have found lilacs to be consistent performers as far as rooting is concerned, the overall average of rooting during those years being 75-100%.

Timing. I have taken lilac cuttings from early June after flowering until July 26th in quantity, and have found even at this late date 70% rooting was obtained. In most cases we prefer to take our cuttings from the last week in June until the second week in July. Cuttings with mature leaves are much easier to handle. We have had mature-leaved cuttings in plastic bags in cool storage for a week and ended up with 80% rooting.

Media for Rooting. We have used sand, peat, and perlite in various combinations over the years and we find three parts sand to one part peat moss, preferably sphagnum peat, will give us the most consistent results. All cuttings are rooted in boxes for easy handling.

Systems and Method. We use an intermittent mist system with 550-A Florida nozzles overhead in a shaded, double-lined fibreglass greenhouse. The water supply is a well having very

hard water. The pressure is maintained about 60 p.s.i. The timing on the mist system has been controlled until this year by an electronic leaf made from bees wings, but now is on a 30-minute timer set to give a 30-second burst every 30 minutes. This is increased or decreased the first few weeks according to the weather. It comes on at 8:00 a.m. and shuts off at 7:00 p.m.

The mistbed has a heating cable set at 70°F which is activated during the cooler weather and this is an effective root-inducer. Suspended above the mistbed is a row of 100 watt electric light bulbs, 3 feet apart, which are timed to come on at 4:00 p.m. and shut off at 5:00 a.m. the following morning, thus keeping the cuttings on a long day and in a vegetative state. The lights also provide some heat on cold evenings and the foliage on the cuttings dries off during the light period. A ventilating fan set at 90°F keeps the air circulating and the temperature below 100°F.

Length of Cuttings and Treatment. Cuttings vary in length from 6-10 inches and vegetative shoots are preferred rather than shoots with flower buds. They are taken preferably in early morning and stuck as soon as possible. If this is not possible then cuttings are dipped in a pail of water and excess water removed by shaking. They are placed in plastic bags filled with air and stored in a cool place until ready for sticking. Wounding in a couple of places on the lower part of the cuttings is a part of the procedure and has proved to be an aid to a better root system. Various hormones at different strengths have been tried, but I now use equal parts of 1% IBA and Captan 50 W as a dry dip.

The cuttings are gradually hardened off in September and stored in the boxes until spring planting or when needed for winter grafting. A shaded cold frame in a lath-house gives us adequate protection during an average winter; when extreme conditions occur bottom heat is added.

Winter Propagation. Soft shoots from forced plants can be readily rooted under plastic in a greenhouse or under artificial lights.

We have available on request propagating material of most cultivars in our collection.

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