

**PROPAGATION OF RHUS AROMATICA
BY SOFTWOOD CUTTINGS
RAY E. HALWARD**

*Royal Botanical Gardens
Hamilton, Ontario, Canada*

Rhus aromatica, a native shrub commonly known as fragrant sumac, has a wide range as its native habitat. It is found in Quebec, Ontario and at least 13 States from Northeastern to Southern to East-Central regions of the U.S. It is classed zone 3, on Canadian hardiness map.

CHARACTERISTICS

The fragrant sumac has small yellow flowers in clusters opening in May before the leaves unfold, followed by very attractive red fruits in summer. In the fall it is noted for its brilliant colour ranging from yellow-orange to scarlet. This colour is somewhat subdued by the hairy leaves. Its height varies from 1 to 5 feet depending on growing conditions, making it a multi-use plant. It is extremely valuable as a bank plant and ground cover in areas where low maintenance is required.

PROPAGATION

The shrub suckers freely suggesting layering or root cuttings are the best methods of propagation wherever sufficient stock is available. It is probably most often propagated by seeds which are usually quite plentiful.

This year our landscape department requested me to propagate about 500 fragrant sumac for a sand bank planting. This gave us the necessary incentive to try this plant from cuttings as we had only 2 large plants in our nursery. Being an advocate of mist propagation, I decided that we would try softwood cuttings first. On June 23rd, we stuck 750 wounded cuttings 3 to 4 inches in length in boxes in a sand-peat mixture (3:1) under intermittent mist, in a fiberglass house shaded with saran. Treatment consisted of 1% IBA plus Captan 50W 1:1 by volume on 450 cuttings and 2% IBA plus Captan 50W 1:1 by volume on 300 cuttings. One week later, June 30th, we had to restick the same cuttings as they were rotting at the base. From a total of 750 cuttings, we rooted 150 under mist.

I then decided to try another approach. On July 26th, we prepared the same mixture, sand-peat in boxes and stuck 360 fresh cuttings 4 to 5 inches in length, 120 per box. The cuttings were all treated with 1% IBA powder plus Captan 50W, 1:1 by volume. The cuttings were watered in and the foliage allowed to dry off, after which each box was sealed in plastic and placed on the non-shaded side of the fiberglass house. Temperatures frequently rose to 95° F during the sunny hours of the day. After one month's time, on Aug. 25th, the plastic was removed and the following results were ob-

served. (The number of cuttings rooted in the 3 boxes were 87, 78, 63 respectively, giving an overall average of 63% rooting.) Our experience from the past summer leads me to believe that cuttings taken later will root better than cuttings taken earlier; also a higher rooting percentage can be obtained under plastic than under mist.

RALPH SHUGERT: Ray, I am curious as to why you were rooting *Rhus aromatica* rather than raising them from seed unless, of course, you were interested in propagating a specific clone.

RAY HALWARD: First of all, I did plant some seed just in case I could not root them but I was interested in seeing what could be done in propagating them by cuttings. I also thought it might be a faster way of raising some larger plants in a shorter time. One additional reason was that I could find very little written on the asexual propagation of this plant and I feel it is one of our better native plant materials.

RALPH SHUGERT: For those of you who may be interested in seed propagation of this plant, I would comment that it does come readily from seed. My experience has been that it requires no pre-treatment and I prefer fall sowing. In the Plains States, to get the best seedling it should be left as a 2-0. With normal cultural practices, it should yield 50 to 60% 12 to 18 inch 2-0 seedlings and you can get up to 25% 2 to 3 foot seedlings at this same stage. If you are trying to reproduce a clone then it is, of course, necessary to go to some form of asexual propagation.

In closing this afternoon's program, I want to thank the members for their attention to the speakers and for their participation in the program and I wish to thank all of the speakers for a job well done. This concludes this afternoon's program.

THURSDAY EVENING SESSION

The twenty-second annual banquet was held in the Capitol Ballroom of the Hartford Hilton Hotel, Hartford, Connecticut. The following presentation was made by F.L. Steve O'Rourke.

STEVE O'ROURKE: Mr. President, fellow members and guests: The Award of Merit Committee which is composed of the last five members to have received the award is charged with the selection of an individual who has made significant contributions to the field of plant propagation and to this Society. Nominations are made by the membership and the award may not be given if in the opinion of the Awards Committee, none of the nominees meet these criteria. The Awards Committee has selected a recipient of the Award of Merit for 1972.