

Selected Notes from the Mail Round Robin

Submitted over a period of time by Harry Heineman

Using Surflan to Induce Polyploidy

Both from Pat McCracken and Tony Avent I learned of a new method of producing polyploid plants using the common weed killer, Surflan. The method is simple and very inexpensive. The steps are:

1. Use seedlings 4-7 days after germination.
2. Wash soil from roots.
3. Soak plantlets in glass dish contain Surflan solution for 24 hours.
4. Transfer to cheesecloth and wash in water for 3-4 hours.
5. Plant in soil. Note the root tips will be swollen and they will rot readily at this stage.
6. Keep the plants cool, ideally at 68-75 degrees. Plants will make no growth for about two weeks. At this point, notice the thick growth of new leaves.

Results of success should range from 50 and 90 % Use a lower dose on grasses and a higher dose on daylilies A high rate is 1:100 and a lower rate is 1:200.

Pat McCracken used this method on *Magnolia grandiflora* seedlings with quite good success but he applied the Surflan to the young plants just as the true leaves were forming, hence no effect on the roots. I saw his plants and can verify his success.

August Kehr

(printed posthumously)