Propagation of *Rhus copallina* var. *latifolia* 'Morton'©

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GOAL

Produce 500 rooted plants to pot up into a 3-gal container by late July to early August the same year.

INTRODUCTION

From the 1981 proceedings, the article by Mr. Richard E. Cross, "Propagation and production of *Rhus typhina* 'Dissecta' (syn. 'Laciniata')" (Cross, 1981), gave me a place to start. In the article it was suggested that stem cuttings will not work and, though inconsistent, root cuttings will produce. The cuttings should be collected from dormant plants, cutting length should be about 4 inches, and it is important to protect the cuttings from too much moisture (dryer is better) and freezing until field planting in May.

METHODS TRIED

Using some spare bottom heat space we decided to try and start rooting in January. First we tried laying the cuttings on their sides in standard 1020 flats. This resulted in a tangled mess and the loss of too many viable cuttings when planting into a 4-inch pot. We then tried sticking directly into the 4-inch pots. This worked fine, however it took 4 to 6 weeks longer for the plants to root in enough to hold a ball than we wanted. So we tried direct sticking into various plug trays we use and finally settled on one. We also made three attempts over 2 years to root softwood stem cuttings and had one cutting root.

PROCEDURES USED

In mid-January thaw out, 16 to 18 3-gal plants from the previous years crop were selected. This yields about 800 root pieces. We cut the pieces to $2^1/_2$ to 3 inches long, to fit our plug trays, with a minimum diameter of about $^3/_{16}$ inch. The side roots and root hairs are trimmed off and dip in Hormex #3, stack in an open flat, cover with newspaper, and let set for 2 or 3 days at around 50 ºF. The cuttings are then stuck into a $2^1/_4$ × 3-inch tube tray leaving $^1/_4$ inch of the top of the cutting exposed. We use our standard commercial medium, which is 12 peat : 3 perlite : 5 composted bark (by volume). The trays of cuttings are then placed on the greenhouse bench at 65 to 70 ºF bottom heat and 60 to 40 ºF day/night air temperature. The trays are lightly watered when first placed on the bench, then watered only enough to keep the media slightly moist.

RESULTS

The cuttings sprout over a 2- to 4-month period, some as late as mid-June. After most have sprouted the trays are moved out to a shade house, usually around mid-May. By late July the cuttings have grown enough to hold a nice tight plug when pulled. Over the last 7 years our success rate is around 60%.

Overall, cutting diameter does not seem to be a big factor in survivability. It seems just as many fat cuttings as thin cuttings fail to sprout. Water management seems to be the most important factor. Any over watering before vegetative growth starts will cause the cutting to die.

This system works well for us. In only 7 months we have a nice vigorous plug ready to go into a 3-gal container.

LITERATURE CITED

Cross, R.E., Sr. 1981. Propagation and production of *Rhus typhina* 'Laciniata', cutleaf staghorn sumac. Comb. Proc. Intl. Plant Prop. Soc. 31:524-527.

New and Exciting Plants©

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The following is list of plant discussed in Chris Hansen's presentatiton.

SUN PERENNIALS

Lilium 'Scheherazade'
Lilium 'Silk Road'
Sedum 'Purple Emperor'
Sedum 'Matrona'
Sedum 'Black Jack'
Sedum 'Samuel Oliphant'
Gaillardia 'Fanfare'
Gaillardia 'Oranges & Lemons'
Phlox paniculata 'Goldmine'
Stokesia 'Peachie's Pick'
Campanula punctata 'Pantaloons'
Echinacea 'Razzmatazz'
Echinacea purpurea 'Sunset'
Echinacea 'Sunrise'
Hemerocallis 'Malja', Golden Zebra™ daylilly

SHADE PERENNIALS

Hosta 'White Wall Tire'
Asplenium scolopendrium (syn. *Phyllitis scolopendrium*)
Asplenium scolopendrium 'Crispa Moly' (syn. *Phyllitis scolopendrium* 'Crispa Moly')
Adiantum aleuticum 'Japonicum' (syn. *A. pedatum* 'Roseum')
Athyrium niponicum var. *pictum* 'Burgundy Lace'
Dryopteris erythrosora 'Brilliance'
Heucherella 'Sunspot'
Tiarella 'Heronswood Mist'
Brunnera macrophylla 'Jack Frost'
Helleborus