

The use of sludge biosolids resulted in significant growth enhancement during each of the two, 2-year studies. The soil organic matter and the cation exchange capacity were also significantly enhanced. The issue of soil pH depression with the use of cake must be addressed.

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Low-budget Grafting of Japanese Maples

Ted Kiefer

Rivendell Nursery, P.O. Box 82, Stathern's Neck Rd., Greenwich, New Jersey 08323 U.S.A.

Rivendell Nursery is a 190 acre B&B nursery specializing in landscape-sized plant material. About 50% of our lined-out material is produced in-house. Japanese maples are one of the plants we produce by bench grafting.

I started grafting maples in January about 8-years ago. After a few years, I had two problems:

- 1) With only one heated house I was out of room with many grafts and many cuttings.
- 2) I needed more time in January and February for dormant pruning.

We switched to grafting maples at the end of August because:

- 1) It kept the help busy during a slow time
- 2) We created a grafting house with materials we had on hand using no heat.

OUR METHOD

Acer palmatum seed is collected in early September while still green. Seed is sown in flats and covered with sand. Young seedlings are transplanted into 4-inch pots in a pine bark, peat, and sand mix (3:2:1, by volume) with a 360-day time-release fertilizer. In late August, we collect scionwood early in the morning. Leaves are removed leaving a piece of petiole attached and stored in a refrigerator until ready to use. We only collect enough for 1 day's grafting. Scions are grafted onto the potted seedlings using a modified side veneer graft. Once grafted, the union is wrapped with an 8-inch budding strip and the top sealed with Tree Kote.

Finished grafts are placed in a 14-ft-wide polyhouse covered with plastic saved from the spring. Mist is applied every 20 min for about 2 weeks at which time the plastic is removed and replaced with a shade cloth. Grafts are then overwintered in an unheated cold frame and headed back in mid-February with a 3-inch snag left. In May, the snag is removed and plants are potted into 2-gal pots anytime from June until August (time permitting). Plants are staked and grown on for 2 years and lined out in September-October.

This method has produced 80% to 95% depending on the cultivar. Although I use a Tina grafting knife, my help uses a 98¢ razor knife purchased at local hardware stores.

After 5 years of this low-budget method, we have upgraded to a high-budget house with vents and a fog system. My initial results show the "low-budget" method works just as well on maples.