

Chip Budding *Aralia*®

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Aralia elata and *A. spinosa*, love them or hate them, they are not for the faint hearted. The common names, Hercules-club or devil's-walking-stick, refer to the stout stems covered with sharp thorns — only the devil could clasp it! The huge, doubly compound leaves, up to a meter long, are actually quite delicate in appearance, in contrast to the stark, bold, thorny stalks seen in winter. The solid green-leaved species have a place in the landscape, but the variegated aralias, all *A. elata* selections, are guaranteed to attract attention. The three cultivars most commonly encountered are 'Variegata', 'Aureovariegata', and 'Silver Umbrella'.

Variegated forms sold in the U.S.A. are mostly propagated in the Netherlands and are retailed here by mail order nurseries. Two-year-old plants, +/-30 cm, typically retail for as much as \$155, plus shipping.

We have chip budded plants for several years, anytime from January through March. We have grown rootstock from seed. However, *Aralia* suckers readily from roots and root pieces, so most of our rootstock consists of suckers dug from a nursery bed in late fall. Stem diameter of 1½ to 2 cm is ideal. Stems are cut to a length of about 30 cm. Understocks are stored in large baskets with the roots packed in aged, damp wood chips and kept at 0 to 10 °C.

Budwood is often in short supply because the plants seldom branch and the large leaves (and buds) are widely spaced. A 30-cm scion often may only have three good buds.

Our propagation method is similar to that reported by Leiss (1977). We chip bud the bare-root stock at a bench and tie the buds in with rubber budding stripes. Understock is generally taken directly from cold storage for budding, that is, it is not first stimulated into growth with warm temperatures for several days. Grafted plants are placed in a greenhouse bench covered with white polyethylene sheeting and the roots are set in and covered with a peat/bark medium. Temperatures typically range from 20 to 25 °C. Callusing and initiation of bud growth are notable within 3 weeks. At about 4 weeks the plants are potted (2 to 3 gal) and left in the greenhouse until after danger of frost. They grow best the first year if given some shade (~50%).

The large leaves disguise the limited stem growth the first year. Four to six centimeters of growth is common; however, 'Silver Umbrella' is the best grower of the three for us and may grow 30 cm the first year. The second year, whether in containers or in the ground, grafts often grow 60 to 80 cm. Suckering from the understock is initially a nuisance but becomes almost a nonproblem by the middle of the first growing season. However, pruning, as done to collect budwood, will stimulate root suckers.

Our success rate has varied widely from 50% to 80%. The reasons for failures are often not obvious. We can tolerate the lower rates only because of the high crop value and because labor to do the budding is available in winter.

LITATURE CITED

Leiss, J. 1977. Propagation of *Aralia elata* 'Variegata'. Comb. Proc. Intl. Plant Prop. Soc. 27:461-463.