PROPAGATION OF TAXUS BY CUTTINGS

GERALD VERKADE

Verkade Nurseries New London, Connecticut 06320

Two-year liners are the main-stay of our business so we root about 600,000 taxus yearly. We root in both glass and plastic-covered greenhouses. Our glasshouses use conventional hot water bottom heat but the plastic use forced hot air. In the glasshouses we use a 5" deep medium of 1/3 perlite, 2/3 coarse sand. The medium is used 3 to 4 years by using 2% formaldehyde drench.

The plastic houses are $21' \times 96'$. The cuttings are stuck in $4' \times 4'$ pallets with side boards at a depth of 5" coarse sand and plastic burlap under the medium. We have found that the air space between the ground and the medium helps maintain a 60° F rooting temperature.

November to December is the time to make all taxus cuttings to obtain rooting with the least top growth. The cuttings are taken from 2 to 20 year old plants and placed in cold storage to be made up. They are all made up in handful bunches and cut to 8" in length with clippers. They are then stripped of needles $2\frac{1}{2}$ " from the bottom and quick-dipped in 3 parts water, 1 part Chloromone.

The cuttings are then stuck, the row is opened by drawing a meat cleaver through the medium along $1'' \times 2''$ spacers and the cuttings placed 3/4'' apart, then firmed by tapping the spacer with a hammer and flooded in.

Rhizoctonia is the biggest problem we have after the cuttings start to root. The problem increases as the weather gets warmer. Between February and June we drench the medium 2 or 3 times with oxyquinoline sulfate at a rate 1 lb/400 gals. It is short-lived but most effective.

The cuttings at the time of planting (June 15) are 90-95% rooted; we save the unrooted ones and re-stick to plant in September.