

Propagation of Hinoki Cypress Cultivars

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Chamaecyparis obtusa cultivars are used very much in the landscape because they can tolerate both shade and sun conditions. In Japan where plants grow to 60 ft or more they are a source of important lumber products, while the slower growing and dwarf cultivars are used in the landscape.

Propagation of this species is easy. At Bald Hill Nurseries, Inc. we propagate cultivars of *C. obtusa* by cuttings and by grafting.

CUTTING PROPAGATION

The propagation method using cuttings is as follows:

- Cuttings 8 to 10 in. are gathered from established plants in December or January. They are then trimmed down to about 3 in. wide by 7 in. long with the bottom 3 in. of branches removed. A 1-in. wound on one side is made, then a 45 degree cut is made on the basal end. The cuttings are then quick dipped (5 sec) in Wood's (1 : 6, v/v) and when they are almost dry they are then dipped in Hormodin #3.
- The double-dip method promotes better rooting in that using a single stronger solution seems to cause burning or a large callous that does not produce roots. Cuttings are stuck in a sand-filled bench with bottom heat. Cuttings are kept moist by hand watering when the sand begins to dry, usually once a week, and misted by hand daily. Cuttings that have not rooted by May can be restuck with rooting occurring by late summer.

GRAFTING

The propagation method by grafting is as follows:

Cuttings of *C. obtusa* 'Plumosa Retinispora' are taken in early November. The cuttings are trimmed to 8 in. long, foliage is cut back to 2.5 to 3 in. in width, and the stems are stripped on the lower 3 or 4 in. Prepared cuttings are dipped in Hormodin #3 powder and stuck in sand-filled benches with bottom heat. 'Plumosa Retinispora' cuttings are treated the same as *C. obtusa* cultivar cuttings during rooted. By June 1st they should be rooted.

Rooted cuttings are potted in 2-1/4-in. pots using loam instead of potting mix. The potted cuttings are then placed in outdoor sand beds and the pots are covered with sand up to 2 in. above the rim of the pot. They are shaded with 50% lath shade, watered, and cared for in the usual manner.

The potted liners are lifted out of the sand beds before the freeze, brought into a propagating house, and placed under the benches until they are grafted. We start our grafting after January 1st.

Collection of *Chamaecyparis obtusa* cultivar scions. If collected in cold weather (30 to 40F) they are submerged in water for 15 min to thaw them out. We prepare our scions 6 to 8 in. long, remove any growth 4 in. from the bottom, cut foliage

back to 3 to 4 in., and shake to remove any dead foliage from the scion. After preparation they are counted, put in plastic bags, and then placed in the cooler until needed.

The potted understocks are prepared by wiping the pots and stems. The understocks are put in cedar flats—45 to a flat. The scions are taken from the cooler, removed from the plastic bag, and spread on a table for 2 h before grafting.

A veneer graft is made and tied with a rubber strip. As the grafts are completed they are placed, standing up, in a plastic tent. The bench of the plastic tent has 3 in. of wet peat moss on which the grafts are placed side by side. They can even be double stacked if you are short of space. No wax or peat moss is needed to cover the union. Once the tent is filled it is sealed. After about 3 weeks the grafts are examined and should be completely calloused.

After the grafts are fully calloused, the plastic is loosened at the bottom to allow air into the tent. The grafts are aired this way for 3 to 4 days after which the plastic is raised from the sides. After an additional week or two the grafts are placed on an open bench. The pots are submerged in moist peat to a level where the peat covers about 2 to 4 in. of the base of the union.

GROWING ON

Rooted cuttings and grafts are planted in 1-gal containers. Our mix consists of sand, peat moss, and aged bark mulch (1 : 1 : 1, by volume). We incorporate a high N plus minor elements fertilizer—22N-4P-8K, 8 to 9 month controlled-release type.

Although grafting is still the faster way to produce *Chamaecyparis obtusa* cultivars, the propagator has the option of sticking cuttings if more scions than understocks are available or if grafting is not possible.