

FIELD TRIP NOTES:
DAVIS HEADQUARTERS NURSERY
(Containerized Nursery)
California Department of Forestry
C.J. Eden, Nursery Manager

The Davis Headquarters Nursery of the California Department of Forestry is located in Davis, California on Interstate Highway 80 about 10 miles west of Sacramento in the heart of the Great Valley of California.

Capacity of the nursery is 800,000 plants. With the construction of another section of lath house in fall, 1978, or spring, 1979, capacity will increase to about 1,100,000.

Species produced are: white fir; Douglas-fir; sugar, Scotch, ponderosa, bishop, Coulter, Brutia, and Monterey pine; coast and Sierra redwood; Arizona cypress; toyon; red bud; red gum, ironbark, manna, and dwarf blue gum eucalyptus; fremontia; and incense-cedar. Seedlings are grown as one year stock except for Scotch pine which is grown for two years.

Propagation is entirely by direct seeding into containers. Containers are 1.5" x 1.5" x 6" in size (about 13 cu. in.). They are square, open bottom tubes made of 25 mil, black, high density polyethylene.

Fifty containers are held in a wooden box with slat sides and bottom. A screen of 4" hardware cloth is placed in the bottom of the box. This permits air pruning of roots and holds the potting mix in containers until a root mass can be formed.

Eighteen boxes (900 containers) are placed on a pallet. The pallet is centered under the discharge chute of a soil shredder. Potting mix comprised of a 1:1 mix of peat moss and vermiculite to which 20% by volume of pumice has been added is mixed in a transit cement mixer and run through the soil shredder.

The pallet rests on a vibrating platform which is run for only a few seconds to settle the mix. A board with 50 pegs is used to press seed spots in one box at a time.

Seeding is done with units made up of two shallow plastic trays. Each tray has 50 holes with the same spacing of the seed spots. By sliding the upper tray in the bottom tray the two sets of 50 holes can be lined up over the spots. This plastic seeding unit is similar to that used by Louisiana-Pacific at their Clotilde Merlo Nursery.

NOTE: Davis nursery was not visited during the field trip. However this presentation was to be made to compare the type of container used with those used in the LP and Simpson nurseries. Unfortunately time did not permit its presentation. Apologies to Jay Eden.

Vermiculite or sand is used to cover seed, however #2 silica grit is being considered. Seeded containers are then moved into a fiberglass house for germination. Pallets holding boxes of containers are placed on the cement floor of the house.

Seedlings are held six to eight weeks in the house. Watering is done by hand. Houses are equipped with cooling, heating and extended day lighting.

From the fiberglass house plants are moved on the pallets to a lath house. Each house has a cement floor on which the pallets are placed. Watering is by rainbird or Roberts sprinklers.

To ship, trees are removed from the wooden boxes and packed 100 containers to a waxed cardboard carton. The size of the carton is 16" x 16" x 20". Wooden boxes and screens are retained to be used again during the next propagation season.

Plugs cannot be pulled readily from containers. Removal is most easily done by wetting the root mass and pushing from the bottom of the containers with a wooden block.

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