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LATERAL ROOT PRUNER

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Root pruners have been used effectively in pruning the lateral roots of seedlings planted in rows. Although common in many nurseries, they have certain disadvantages. At Mason State Tree Nursery we have made some modifications of this general method and now have a pruner we believe is more effective.

The root pruner is mounted on the back of a wheeled tractor by means of a common 3point hydraulic lift. It is built on a cultivator frame with the shank clamps staggered at 6inch spacing. Nine 18-inch rolling coulters were mounted on the frame in place of the cultivator shanks (fig. 1). A vertical guide rod on the front axle is necessary to keep the coulters in position between the tree rows. Stabilizer braces are used on the cultivator.

The staggered arrangement of the coulters is much better than having them in a straight line, since there is less soil compression and lifting action. The swivels on the coulters permit changing direction with less soil disturbance and stress on the coulters.

We undercut the beds at a depth of 4 to 6 inches with a horizontal tree lifter blade without tines before using the lateral root pruner. The root systems are pruned on three sides.

The cuts remain distinct for a year. Clumps of seedlings can be lifted easily at any time for root inspection and replaced.

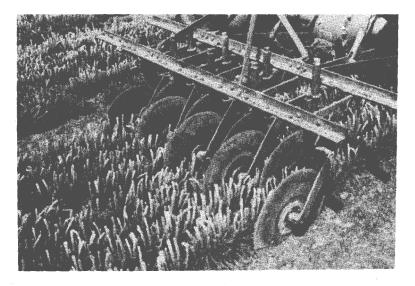


Figure 1.--Lateral root pruner with staggered arrangement of coulters.

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