PRODUCTION, COST REDUCTION, QUALITY STOCK PRODUCTION, EN.

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Cover crop

Following the seedlings, we use mixed cowpeas (iron and clay) at 1-1/2 bushels per acre broadcast, 1,000 pounds 15-10-5 fertilizer, or the equivalent of what is needed for the soil. We have had excellent success in adding organic matter and nitrogen back into the soil using this practice, planting early spring, and leave it standing until early fall; at this time using a rotary mower to pulverize the peas before turning the crop under.

Preparing the, land for planting

Immediately after the pea crop has been mowed down, the land is turned using a turning plow that will completely turn it approximately 1/8-inch in depth, harrowing it a number of times and bring it to a level surface by going over it several times in different directions with a 9-foot road scraper blade with two 6-feet x 6-inch heels on it.

Treating the soil for root rot

Since we have been bothered with root rot the last 3 or 4 years, we have started treating late summer with 1 pound of methyl bromide per 100 square feet of soil, using 24 x 100 feet polyethylene tarps, moving the tarp every 24 hours. A crew of 6 men treats approximately 1-1/4 acres per 8-hour day. The total cost per acre for material and labor is S300. We have been running experiments on a couple of other soil treatments and believe the Vapam has good potentiality if we can get the correct applicator to apply it at the same even rate of 100 gallons per acre; not using a tarp but sealing it in with the water system immediately after applying it to the soil.

Planting season

We have found that treating the soil encourages the growth of the seedlings; therefore, we have moved our sowing season up to the last half of April to help prevent the plants being too large. We all acknowledge we can have them too large as well as too small for top quality stock.

Weeding with mineral spirits

Treating with methyl bromide reduces the weeding problem; however, we still use mineral spirits to control 90 to 95 percent of that we do have. We use from 20 to 24 gallons per acre, applying it after 3:00 p.m. at 40 to 50 pounds pressure. Approximately 5 percent of various weeds must be gotten by hand.

<u>Fertilizing</u>

As has already been mentioned, treating the soil increases the growth. Therefore, there is no fertilizer added before sowing and very little if any after sowing, only a light side dressing in spots if needed.

<u>Spraying</u>

We always have red spider but before we notice any sign of them we start spraying with malathion at the rate of 1-1/2 pints per 100 gallons of water, from about September through October and some time on into the winter if it should be real dry.

Spraying cedar and cypress for blight, we use dithane Z-78 at the rate of 2 pounds per 100 gallons of water; 1 spraying per week for the first 3 months. Then until lifting season using puratized 1-pint per 100 gallons of water. This has controlled the blight with cedar and Arizona cypress.

The lesser corn stalk borer is controlled by adding chlorodane 40 percent wetable, 6 pounds per acre at intervals from early July through October. However, don't wait until an infestation is recognized or extensive damage may have been done.

<u>Quality stock</u>

There is a number of things to consider when speaking of growing high quality stock. However, we have found that sowing your seed correctly, that is, knowing your germination and sowing to get approximately 25 seed per foot to germinate, we plant 7 drills per bed on 7-inch center. This gives us a nice balanced top and root system, not too small or too large.

Processing seedlings

Our lifting, grading, packing, and loading cost us from \$0.75 to \$0.80 per 1,000, paying our lifters and graders \$1.00 per hour and all skilled help from \$1.10 to \$1.25 per hour.

Production and cost

Our production for 1964-65 planting season approximately 30,000,000 slash; 1,000,000 sand; 200,000 loblolly; 150,000 longleaf pines (all pine \$4.00 per 1,000); 1,000,000 redcedar; and 500,000 Arizona cypress at \$8.00 per 1,000.