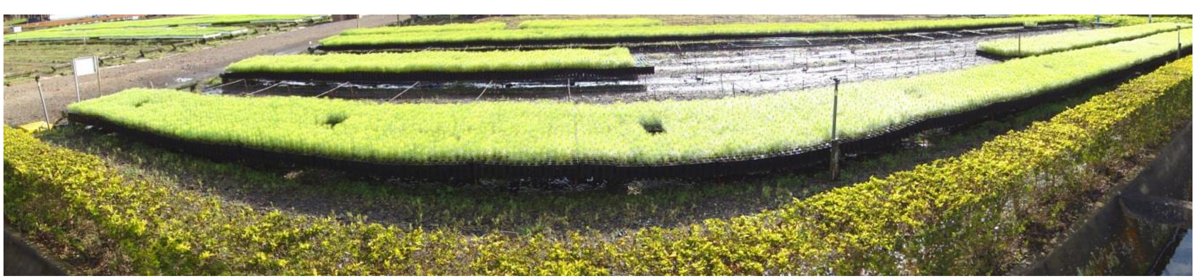
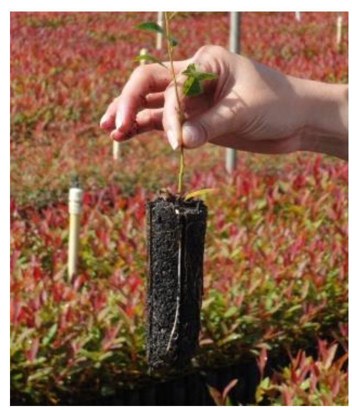
UNIÓN PLÁSTICA S.A.S.

Soluciones Confiables en Plástico

Illustrated description of the grow trays as used for pine and eucalyptus seedlings



Using a suspended wire bed to hold grow trays with pine and eucalyptus seedlings, we benefit from automatic root trimming due to suspending the cones in air, and thus we achieve better growth control. The shading effect produced by this system also inhibits weed growth, and any excess water simply drains to the ground.



Here we note the vertical veins running down the insides of the cones, which are essential for preventing spiral root development (choking). The roots form a kind of mesh which gives structure and support to the soil inside the cone and prevents it from falling apart. Removal can be accomplished by pulling on the planting itself, or by pushing a wooden rod up through the bottom.

Planting of eucalyptus cuttings in growing trays, resulting in highly uniform plant development.

In a square meter the traditional bagged system (10 cm. by 15 cm. tubular bags) only produced 256 eucalyptus plantings. The plastic growing tray produces 400 in the same space. This allows a substantial savings in nursery size and in watering equipment.

In order to increase production and improve ergonomics during the soil filling process, it is recommended to do so on a slope which is at comfortable height for the workers filling the trays. The grow trays are filled using a large spatula to pour the soil into the cones. Afterward the soli is lightly compacted by tapping the tray on a floor or other hard surface. This lowers the soil level and leaves space for additional soil. Typically in a nine-hour work shift a worker can fill 800 trays, which amounts to 32,000 cones.

Soil-filled growing trays are carried, ideally 30 per cart, to the nursery area.

Trays with plantings in the nursery are carried on carts to trucks which will transport them to their final transplant location. The ideal load is 18 trays per cart.

The trucks are equipped with angle irons along the interior sides upon which metal or wood shelves are installed for stacking the growing trays. These trucks transport the plantings in the trays to the field for transplanting.

The shelves are built over each layer of grow trays as they are placed in the truck, leaving 40 centimeters headroom above the plantings to avoid possible damage. Generally each truck can be stacked 4 levels high. To avoid drying out the plantings, the truck is covered above, in front, and behind, leaving only the sides open. The entire process is done without the need for any stackable packaging or boxes.

A truck bed (6.5 x 2.4 x 2.1 meters) stacked four layers deep can carry approximately 15,000 plantings to the transplant site.

After use, the grow trays are disinfected with a 10% hypochloride and 90% water bath.

The growing trays are stackable for efficient storage

The 53-cone grow tray suspension system is similar to the 40-cone system and uses the same method to expose the tray bottoms to air, with the resulting automatic root trimming.

At this stage these flower cuttings remain in the grow tray for two to three weeks instead of the traditional system's four-week period, resulting in significant energy savings and increased nursery turnover.

Finally the grow trays are transported on large wheeled carts to the transplanting site.

The benefits of using these plastic grow trays are: faster nursery turnover, increased productivity, energy savings, fertilizer and other nutrient savings, lower mortality rate among transplanted plantings, superior root development, and space savings by stacking during storage. Additionally, with this system there is significant savings due to the reusability of the trays, which have been field tested to last over 10 years.

Contact Us

Carrera 39 12 A 151 Acopi-Yumbo

Tel. 57-2-664 4425 Fax 57-2- 664 7336

Postal Code. 760502 Yumbo, Colombia

Valle del Cauca, Colombia

www.unionplastica.com

uniplas@unionplastica.com