

FIELD PACKAGING

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Abstract.--Field packaging minimizes labor requirements at the nursery and reduces seedling exposure. Uniform seedbed density and accurate inventories are important prerequisites.

The real test of a good nurseryman is field survival. Efforts to grow quality seedlings can be negated by improper handling from the nursery bed to the planting site. Lifting and packaging for shipment is one of the most important steps in any nursery operation.

Seedlings cannot be transferred from nursery beds to planting sites without some exposure time and root damage. However, field performance can be greatly improved by minimizing root damage and exposure time during lifting.

To succeed, a lifting operation must be geared to the needs of your organization. Sometimes we are prone to criticize without knowing the circumstances. If you have a good program underway, stay with it, but never be happy with the status quo. There will always be room for improvement.

Everyone in the nursery business is dedicated to the job of producing quality seedlings at a reasonable cost. However, rising costs of fuel, machinery, labor, and chemicals have dictated many changes. One big change that has progressed steadily over the past 20 years is the development of mechanical harvesters. These machines come in many forms and with many different names. They are designed to handle one, two, four, seven or eight rows. The amazing thing about seedling lifters is that no two are exactly alike. All have been modified to fit needs peculiar to the owner. Nearly every nursery throughout the South has some form of a mechanical seedling lifter.

Even though seedling harvesters take on different forms, their lifting abilities are quite similar. A belt transfers the seedlings from the beds to a conveyor platform. At this point, depending upon company, seedlings are either transported to packing sheds or packaged directly on the machine.

Two methods of field packaging are most common: KP bags and bales. In either case the back end of the seedling lifter is modified to handle bag closer or strapping equipment, packaging material, and limited storage. Seedlings are placed directly into bags or bales, with exposure limited to 30 to 45 seconds. Some machines are equipped to spray water on seedlings before packing, while others add a moisture-holding material such as peat, sphagnum, cotton batting or hydro mulch. Bags are closed with a sewing machine powered

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by a 12-volt battery. An air compressor is used to strap metal bands around bales. The packaged seedlings are stored at the rear of the machine. Adequate storage space is available on our machine to make one complete round with the lifter. Bagged seedlings are trucked to storage facilities.

Seedbed uniformity, with limited culls and accurate seedbed inventories, are prerequisites to field packaging.

Field packaging minimizes labor and improves overall efficiency during the lifting operation.