

MOISTURE RETENTION MEDIA IN PACKING

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Almost all Nurserymen are experiencing difficulty in material acquisition for packing of tree seedlings. Moisture retention media is one of the most important factors in a seedling bundle. Sphagnum and peat moss have been the most widely used media in the past. Moss is becoming increasingly harder to find, and when available, the cost almost prohibits its use as a packing media.

Prices of peat moss will vary greatly due to factors such as freight, grade of moss, source of moss, etc. In inquiring with Nurserymen about packing media currently in use, I found prices varied from \$3.12/bale to \$4.70/bale. I have paid as high as \$5.78/bale.

I wrote several of you to ascertain the moisture retention media currently used in packing operations. I was rather surprised at the varied media combinations in use by the Nurseries. Some variances from the standard forest service bale with moss are:

	<u>Packing Method</u>	<u>Moisture Retention Media</u>	<u>Cost/M for Media</u>
1. Virginia	Bale	20" Table Cloth; Slurry	.02; .019
2. Tennessee	Bale	Conwed Ground Wood Pulp	?
3. Kentucky	Bale	Conwed Root Wrap	.37½
4. Georgia	Bag	Sphagnum Moss	\$4.00/bale for moss
5. South Carolina	Bag	Conwed Hydro Mulch	.05
6. Arkansas	Bag	Slurry	.02

Last year we packed 15 million Loblolly in bags at our Bluff City Nursery. The roots were treated with kaolin clay slurry and the bags strapped. Bags were kept at room temperature for up to 3 weeks, and in cold storage (36) for two months with no visable loss in vitality. The majority of these seedlings were planted by Weyerhaeuser, however, International Paper Company, Georgia Pacific Corporation and Potlatch also planted these seedlings. All companies reported early survival has been comparable or better than normal.

This year we are planning to convert 100% to bag and slurry packing. In addition to the slurry, a small amount of peat moss will be in the bags to provide enough moisture to hold the seedlings at room temperatures for extended times for individual plantings.

Based on usage and Nurserymen comments, the Conwed Hydro Mulch and Conwed Root Wrap seem to be the most promising replacement for moss. The Nurserymen using Conwed's product were satisfied with its use and reported no problems with applicant complaint as far as dry seedlings.