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PACKAGING CHRISTMAS TREES



Packaged trees stacked and ready for sale

A Progress Report on Polyethylene Film Bags

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WILL CONSUMERS BUY Christmas trees in packages? What would it cost the grower? Will the retailer take to the idea? What is the most satisfactory material? What should a good Christmas tree package do? What problems could it help solve in Michigan's plantation Christmas tree industry?

Some answers to these and other questions were found in three tests from 1961-1963 in Michigan. Briefly the tests showed:

- (1) polyethylene film to be the most satisfactory packaging material (details on page 2).
- (2) favorable reaction from a Consumer Test Panel in Detroit and ready acceptance by Christmas tree shoppers and three retail outlets in the pre-Christmas season of 1963 (details on page 3).

These three tests indicate a potentially big market for packaged Christmas trees, particularly for large retail merchandisers. Plantation Christmas tree growers are urged to proceed slowly and cautiously with this new opportunity to expand sales, and use only highest quality trees for packaging.

The tests were looking for a packaging material and methods that would be:

- cheap enough to allow wide usage
- easily available to the Christmas tree industry

- strong enough to protect the tree during handling, storage, and transit
- reasonably easy to apply to the tree
- reasonably easy to handle throughout all steps in the marketing process
- able to maintain tree freshness and quality over a long period of time
- transparent
- attractive to the customer
- adaptable to self-service sales.

SOME PROBLEMS

A packaging material of these qualities might help solve some marketing problems in Michigan's plantation-grown Christmas tree industry. Some of the problems are:

1. **Extending the harvesting season**—A longer harvest season would use labor more efficiently. There would be less of a peak harvest season requiring large crews for a short time. Earlier harvest also could avoid bad weather. Trucking and delivery schedules would be easier to maintain.
2. **Preventing tree damage**—Although wrapping or tying provides good protection, many trees are broken

or damaged while being loaded, unloaded, stored and sold.

3. **Providing more consumer convenience**—To many people, handling a Christmas tree can be a nasty job which good packaging could improve. Unprotected trees leave needles and pitch on the car, the consumer, and the carpet.

4. **Controlling quality**—Plantation-grown trees as well as wild trees do not always remain fresh and green, but often lose their needles or become dry and prickly. Scotch Pine needles do not drop but become very sharp and prickly. A package that would retain freshness would help solve this problem.

5. **Improving storage**—Tree storage and handling on the farm and on the retail lot is often a serious problem in heavy snow, sleet or freezing rain. A package would protect trees from snow and rain and provide for greater ease and cleanliness in handling.

6. **Increasing sales to mass retailers** (food chains, department stores, variety stores)—Sales to these outlets are severely hampered because of the great difficulty of handling and merchandising. A packaged tree could be shipped and handled through central warehousing, storage, and from there to the individual store. If the package could also be used to merchandise the Christmas tree, it would be even more effective.

THE FIELD TESTS

With these problems in mind, several different packaging materials were evaluated before polyethylene film bags were selected for further testing.

Several growers cooperated in testing polyethylene film in 1961. Plastic roll stock—a continuous sleeve-like material on a roll, 16 inches in diameter—was tested in 2-mil, 3-mil, and 4-mil thicknesses.

The three methods to close the packages were: (1) taped closed on both top and bottom, (2) taped closed on top only, and (3) taped closed on top with perforations in the plastic bag. A plastic tape similar to that on potato bags was used.

Growers cut Scotch Pine and Spruce Christmas trees every two weeks starting in September. They placed the trees in the different thicknesses of plastic, and used the different closure methods. A "check" tree, unpackaged, also was cut each time.

Trees were evaluated for greenness and freshness before bagging, so as to be much alike as possible. After the trees were cut, they were stockpiled under shaded conditions. Trees were packaged by use of a

regular tying funnel. A shoulder was attached to the funnel. The end of the plastic sleeve was slipped over the shoulder. Then the operator reached through the sleeve and pulled the tree into the plastic and taped the ends close as called for. The sleeves were precut to the proper length before packaging.

FIELD TEST RESULTS

1. All trees cut and packaged before Oct. 15 were unsaleable because of decay and mold. Unpackaged trees cut before Oct. 15 were very dry and brittle. The perforated ($\frac{1}{4}$ " hole every 12") bags, closed on the top only, were satisfactory for preservation purposes and did not cause nearly so much molding or discoloration as the other packaging methods in trees cut before Oct. 15.

2. Trees cut and packaged after Oct. 15 remained in good saleable condition throughout the marketing season. Packaged trees were definitely much fresher and in better condition than the unpackaged.

3. Even with the roughest handling, packaged trees were not damaged in any manner.

4. The 16-inch sleeve roll stock was large enough to package large $5\frac{1}{2}$ to 7 foot Scotch pine trees.

5. Trees in all forms of polyethylene packages were definitely fresher, brighter, and retained their needles better. Packaged Spruce retained nearly all of their needles, while unpackaged Spruce, even those cut in early November, lost a large percentage by the end of the test period.

6. The 3-mil plastic seemed to be a good weight; 2-mil was too light. A weight of 4-mil apparently is not needed.

7. Labor and material costs would vary considerably depending on equipment used and the amount of polyethylene purchased. However, it was felt that in a large volume, 5 to 7 foot Scotch Pine Christmas trees could be packaged for about 10¢ each, including labor and material. The cost of bundling or tying with twine would be saved, since the trees that are packaged are not tied first.

8. Particularly during warm weather, there was a great deal of condensation in the bags. This was partly solved by the perforations, but the best solution seemed to be to shock the trees in windrows after packaging so that condensation could escape through the bottom of the bags.

9. The polyethylene used was extremely slippery, and made it rather difficult to handle the trees. A non-slippery polyethylene was used in later testing.

WOULD THEY SELL?

The next step was to test consumer reaction to packaged Christmas trees.

A Michigan State University Consumer Panel in Detroit compared a polyethylene packaged tree and an unpackaged tree of equal quality. No effort was made to promote or sell, and there was no previous history of packaged trees, no brand identification, and no retailer image to stand behind the tree quality. Panel response was considered favorable.

Next, the polyethylene packaged trees were put to the test in a "real-life" sales situation in December 1963 in two retail chain stores—one in Grand Rapids, the other in Kalamazoo—and at a "Garden Center" in Grand Rapids. It took place during the second week of December — before most consumers buy their trees.

Two hundred U.S. No. 1 quality Christmas trees were packaged in the same manner as in the field tests and labeled with a "satisfaction or money back" guarantee.

Most of these trees were in the 5½ to 7 foot range. Each tree had been sprayed with a green paint to insure uniform color and quality appearance in the packages. The non-slippery plastic handled well with no mechanical damage to any tree during the test.

The trees were stacked in front of the two stores, and 4 trees were removed from the package and displayed upright in cement blocks. The packaged trees were priced at \$3.98—take your choice. Trees of similar quality were available within a block of each store priced as low as \$1.50. In the garden center

the trees were priced at \$4.95 and were stacked up with only one tree unpackaged and on display. Many unpackaged trees were on display and priced from \$2.00 up in the garden center.

No advertising or promotional aids were used.

RESULTS

In one of the chain stores, all of the trees were sold at the end of the week. At the other, only 18 trees were left.

Comments of the store managers were definitely favorable. They found excellent quality, easy handling (no extra help needed and no decrease in efficiency of the regular help), lively customer interest, no handling problems in snow and rain, and 80 to 85% of the trees sold without removing the package.

Customer comments were generally similar to those of the store managers. Although about two-thirds of those interviewed in the stores thought that not being able to see the trees completely was a disadvantage, nearly one-half indicated they would purchase a packaged tree without removing the package. Nearly one-half thought they would be cleaner to handle, one-quarter thought they would be fresher, one-third thought they would be easier to handle and store.

Based on this experience, packaging appears to be a practical device for improving the merchandising of Christmas trees. The key to its success is not the package itself. It is what is being packaged. The package should contain only top quality Christmas trees.



Display of packaged Christmas trees at a Grand Rapids supermarket, December 1963

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