

Christmas Tree Hybrid

Christmas trees grown to order, with ornaments attached. They are a possibility now—not this Christmas nor the next; but in 1967 growers will receive young trees for field testing.

The Christmas tree came to the Forest Service almost as a bonus from a long program of hybridization at the Pacific Southwest Forest and Range Experiment Station's Institute of Forest Genetics, Placerville, Calif. From Institute research, aimed primarily at better wood from faster growing trees, has now come a hybrid pine ideally suited for that bright spot in the house on Christmas morning.

The hybrid—a cross between the Sierra Nevada lodgepole pine and the shore pine—grows fast, about 6 feet in 4 to 5 years. It develops more than

one whorl of branches each year to produce a full, many-branched tree with a conical shape and straight trunk. The hybrid has a thick dark-green foliage and produces cones when it is 5 years old, the cones decorating the tree just as it reaches the right size for harvesting.

Some of these desirable characteristics for Christmas tree production, combined in the hybrid, are lacking in each of the parent varieties.

The institute's scientists started work on producing the hybrid in quantity this year, in a cooperative project financed mostly by the California Christmas Tree Growers, who will receive the trees in 1967 for transplanting.

The scientists say the hybrid Christmas tree can be produced in quantity because there are no major genetic barriers

to crossing the lodgepole pine and the shore pine, both varieties of the same species. There is difficulty in many cases in crossing pines of different species.

Quantity breeding for the Christmas tree began in 1963, when tree geneticists at the Institute collected a large amount of pollen from several trees in a natural stand of Sierra lodgepole pine. Last spring, the scientists used this pollen to pollinate shore pine, of several geographic sources, growing in the Institute's arboretum. Several hundred conelets developed from the pollinated flowers, and the geneticists expect 3,000 or more viable seed in 1965.

The seed will be planted in the station nursery in 1966, and seedlings should be ready for transplanting in 1967.

The California Christmas Tree Growers will grow most of these trees in a wide variety of environments. The Institute will transplant a few seedlings for further study of the hybrids ability to reproduce itself.

The hybrid can be produced by crossing lodgepole with shore pines in either direction.

The geneticists have made the reverse cross—lodge pole pollinated with shore pine pollen—and they expect to harvest about the same number of seeds from it as from the first cross.

Food For Peace Feeds 92 Million People

Food For Peace serves at least two important functions: most important from a humanitarian point of view, it puts this country's agricultural abundance to work building a better world; secondly, it opens up new and profitable markets for our surplus products.

T. H. Patton, director of Cooperative Extension Service, Pennsylvania State University, says, "This vast program of United States food assistance is feeding the hungry, creating jobs, and paying wages. Also it's paying U.S. expenses in other countries and building new appetites and future commercial markets."

It does these things through food donations and through food sales to countries for their own currencies. Every day 92 million hungry people in more than 100 countries get at least part of their food under this program. In 1963 food donations totaled \$341 million, Patton pointed out. Much of this food went to victims of disasters.

Children are the main targets of food donations. School lunches have already doubled and they expect to harvest about the same number of seeds from it as from the first cross. Children are the main targets of food donations. School lunches have already doubled and they expect to harvest about the same number of seeds from it as from the first cross. Children are the main targets of food donations. School lunches have already doubled and they expect to harvest about the same number of seeds from it as from the first cross.

U. S. food donations according to Patton.

The real goal of Food For Peace is not to maintain breadlines, but to eliminate basic causes of hunger through economic development.

Under the food-for-peace part of the program, 300 previously jobless Moroccans — paid primarily with wheat — built 1,200 school houses and 600 residences.

Food For Peace is opening doors to new markets. Soybean oil under the program, for example, first bought by the Spanish people learning more about its uses, and now they are the largest customers for soybean oil.

Japan, for another example, was a large early recipient of Food For Peace shipments. Their Minister of Agriculture says, "U.S. food shipments brought my country back to the brink of mass starvation. It put a brake on inflation and paved the way for reconstruction of industry." Japan is now the largest cash customer for U.S. farm products.

These projects, and many more, are making Food For Peace one of the most powerful weapons against the twin scourges of hunger and poverty.

SAVE MONEY

with

Reists Seeds

A Big Selection of

**ALFALFAS
CLOVERS**

Freshly Inoculated (at no extra charge)

VOLKMAN

HYBRID SUDAN — SORGHUM

For fast growing silage — green chopping pasture

REIST SEED COMPANY

Mount Joy, Pa.

Phone: 653-3821

**Black Coal On The Ash
Pile — Total Loss**

Recent tests indicate whole and undigested grain, hay and silage passing through your cattle at an excessive rate and into the barn cleaner is just as much a total loss, entirely unprofitable, unwise and above all unnecessary.

ISF — CATTLE SPECIAL is loaded with various types of Live Rumen Bacteria Dried — Vitamins A, D2 and E — Vital elements and basic minerals — developed and tested to improve TDN economically.

INTERNATIONAL CATTLE SPECIAL: Tested, proven and acclaimed on thousands of dairy and beef farms and agricultural colleges — Ask your representative to see recent college tests and results.

Improve your present feeding efficiency, health, production, body maintenance and repair for your Dairy and Beef herds throughout the year with ISF CATTLE SPECIAL — A name to remember, proven to do so much for pennies per day, per animal.

**BOOKING PLAN EFFECTIVE
NOW — AT SAVINGS!**

Ready and able to serve you better.

CLAIR CASSEL
Box 173, Manheim
Ph: 665-4510

ROY H. MILLER
S. Grant St., Manheim
Ph: 665-5213

INTERNATIONAL STOCK FOOD CORP.
Waverly, New York

CLOSE OUT SALE

Of All

Farm Equipment And Parts

OPEN — 8 a.m. - 4:30 p.m. WEEKDAYS

SATURDAY 8 a.m. - 12 Noon

PRICES SLASHED ON ALL NEW & USED MACHINERY and NEW HOLLAND, INTERNATIONAL & NEW IDEA PARTS . . .

ENTIRE INVENTORY WILL BE SOLD

AT BARGAIN PRICES!!!!

(Going Out of Business)

NEW EQUIPMENT

- | | |
|---------------------------------|--|
| Farmall 504 Tractor | No. 901 Gandy Insecticide row crop applicators |
| IH 3 bottom 3 point hitch plow | IH Model 47 Baler |
| McCullough Model 740 Chain Saw | IH Model 37 Baler |
| IH Platform carrier for tractor | IH Hay Conditioner |
| IH 6' Snow Blade | Weed Sprayer pumps, booms and guns |
| | IH Model 160 Spreader |
| | IH Model 103 Spreader |

USED EQUIPMENT

- | | |
|-------------------------------------|--|
| IH 3 bottom plow with 3 point hitch | IH Model 2A Hay Conditioner (Demonstrator) |
| New Holland 66 PTO Baler | IH 45 Baler |
| New Holland Super 66 PTO Baler | New Holland 77 Baler |
| IH 46 Baler | New Holland 66 Baler with Engine |
| IH Model 27 Mower | Cunningham Hay Conditioner |
| Gravelly Mower | IH Model 100 Mower |
| | IH 2-row cultivator |
| | Used Milk Coolers (can) |

MISCELLANEOUS TOOLS & EQUIPMENT SUCH AS: Shovels, Scrapers,

Barn Brooms, Hand Tools, Nails, Garden Hose, Lubricating Oil, Grease,

Fencing, Farm Gates, Etc.

ALL AT SACRIFICE PRICES!!

Hershey Farm Implement Store

WEST CHOCOLATE AVENUE

Hershey, Pa.