Don’t Try to Store Frozen Meat Too Long

The longer frozen meat is stored, the more flavor and quality is lost, says June C. Gibbs, nutritionist with the UA Extension Service.

Long storage beyond the recommended time lowers the flavor of both the fat and lean meat. The more fat on the meat and the more it’s cut up, the shorter its freezer life, added Miss Gibbs.

"Ground meats and thin cuts will not keep as long as roasts and steaks at least an inch thick," said the nutritionist.

When packaging meat for freezing, it is important to keep the oxygen shut out, because oxygen makes the meat rancid and will cause "freezer burn," which is loss of moisture, she said.

Conclusion:
1. Thirty percent or more plants will result in an early spring soil temperature when an effective treatment of petroleum mulch is applied.
2. Earlier plantings are possible without being affected by sudden cold snaps.
3. Treatment provides greater span in planting period (as often desirable) by using emulsion applications during first half of planting season.
4. More flexibility in planting results from choice of wet or dry seeding without sacrifice in stand or yield.
5. With precision planting it is safe to plant two or three seeds per hill when using petroleum mulch instead of 3 or 4 as often required with untreated surfaces.
6. Plant shallow for preplant irrigation, deeper for preirrigate planting when using petroleum mulches.

High Yielding Hybrid Cantaloupes
Tested by Mesa Research Team

By R. E. Foster

The University of Arizona Agricultural Experiment Station and the Agricultural Research Service, U.S. Department of Agriculture, released two new cantaloupe stocks last December. These were put out with a modest notice, without the fanfare that usually accompanies a new variety.

Why so quiet? Because in themselves the new cantaloupes would interest neither the Arizona melon growers nor their customers. The new stocks, however, could herald the most significant advance to hit the Southwestern muskmelon industry since the introduction of the PMR 45 variety.

G1-A and G1-B, the newcomers, were released as breeding lines for the development, production, and use of F1 hybrid cantaloupes. First generation hybrids have proven their value in many crops, especially corn, onions and sorghum. Cantaloupe hybrids experimentally produced and tested at the UA Mesa Experiment Station yielded 75 to 100 percent more marketable fruit than standard varieties. The hybrids also had better appearance, improved flesh characteristics and higher sugar. It is a fair assumption that both growers and consumers will be eager for such hybrids.

Is Not Complicated

Final production of the hybrid seed for growers will be fairly easy and only slightly more costly than production of ordinary seed. Details of the procedure are explained in a scientific article, but briefly they may be summarized as follows: A special “Seed Parent” cantaloupe stock is planted in the usual manner. Another special “Pollen Parent” line is sown close by and a good supply of bees is provided when flowers appear. As soon as fruit is set on the seed parent, the pollen parent plants are killed. Fruit is allowed to ripen and seed is harvested in the usual way. The “catch” in the whole operation lies in the development of the special “Seed Parent” and “Pollen Parent” breeding stocks.

Seed produced with the method outlined above will not be pure F1 hybrid. Since the bees will move pollen from both types of parents, hybrid seed will be formed only following the mating of the seed parent plants by the pollen parent plants. Seed parent pollen carried to seed parent flowers will produce ordinary or non-hybrid seed.

A crop resulting from the method proposed will be a mixture of F1 hybrid seed and non-hybrid seed, and a field planted with such seed will contain both hybrid and non-hybrid seedlings. This is not at all as serious as it might seem. If the non-hybrid seedlings can be recognized at thinning time they can all be removed. After all, more seed is always planted than is needed, and most of the seedlings are chopped out in thinning the crop to the desired stand.

Remove the Unwanted

The real value of UA Cantaloupe Breeding Lines G1-A and G1-B lies in the fact that when these stocks, or breeding material derived from them, are used as “seed-parent,” the non-hybrid seedlings can be spotted by the regular thinning crew after minimum instruction and removed easily and quickly. With all the non-hybrid seedlings chopped out, the final field stand consists of only the desirable F1 hybrids, capable of doubling yields.

To supply the anticipated demand for F1 hybrid cantaloupe seed, seed companies will face two challenges. First, many experimental hybrids will have to be made and tested. Only the right combinations of selected breeding stocks will give superior F1 hybrids and until more information is obtained on each breeding line, the best combinations can be found only by a trial-and-error method. Secondly, the stock chosen as the seed parent must be bred and selected to carry the “recognition” characteristics present in G1-A or G1-B.

Probably both phases of research will be carried out simultaneously by seed companies. The UA Horticulture Department is continuing to develop superior parent cantaloupe stocks, and the program is now being extended to include honeydew melons and watermelons.

Grower demand for the new type of cantaloupe seed would be a major factor in speeding its availability. Demand indicates interest and defines the market.

(Continued from Previous Page)
Table 2. Average Yield For 16 Plots
Yield of Seed Cotton #/A
(Campbell Avenue Farm)

<table>
<thead>
<tr>
<th>Treatment</th>
<th>1966</th>
<th>1967</th>
</tr>
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<tbody>
<tr>
<td>Untreated</td>
<td>3030</td>
<td>3008</td>
</tr>
<tr>
<td>Treated</td>
<td></td>
<td></td>
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</tbody>
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