

## HAMS Stored in Tight Cloth Bags Keep Well for Use in Farm Home

Wrapping smoked hams in parchment paper and then storing them in fly-proof muslin bags proved to be the most desirable method when hams are

to be kept for several months at ordinary air temperatures, according to the results of a 3-year test just completed at the Animal Husbandry Experiment Station, Beltsville, Md. The method prevented infestation from skippers and excluded part of the air and light that hasten development of rancidity in the fat. Most farmers who butcher hogs during cold weather for their year's supply of meat are faced with the problem of keeping the meat sound and palatable through the summer without the use of refrigeration. As a result, farm-stored hams often deteriorate in quality or are lost entirely through infestation of insects.

The general quality of these wrapped and bagged hams (fig. 37) was not consistently different from those that had been hung up unwrapped and unbagged nor from those that had been shaded with black cloth, or bagged and painted with various protecting preparations such as lime or yellow wash. There was some difference in shrinkage in storage and in the results

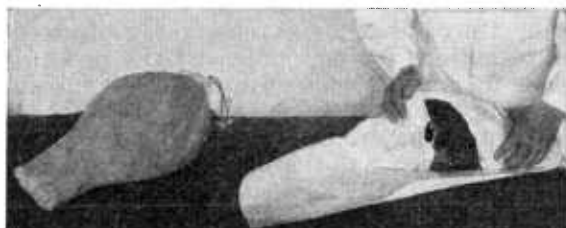


FIGURE 37.—Method of wrapping a smoked ham in parchment paper (right) preparatory to bagging. The ham shown at left has been bagged and painted with yellow wash to prevent infestation by skippers.

from the cooking tests conducted with some of the hams, but the differences were not material except for the damage caused by skippers in the unwrapped hams.

Skippers got into the storeroom in spite of all precautions and infested the hams, a fact which demon-

strated the advantage of protecting the individual hams even though the storeroom was supposedly flyproof.

### Results of Various Methods of Storing

Some of the 210 hams used in the investigations were coated with a mixture of pepper and molasses. These coated hams possessed a flavor after aging that was considered to be sweeter and slightly more pungent than the others. There was, however, some loss caused by skippers; except for that fact this method would be a highly satisfactory one for those persons who like the flavor of pepper.

Other hams were buried in crushed rock salt, in wood ashes, and in oats. All these lots were musty in flavor and undesirable. The meat buried in crushed rock salt absorbed too much salt during storage and the lean portion became undesirably dry and tough. Storing smoked meat in wood ashes, salt, or oats is apparently not satisfactory in a climate as humid as that of Washington, D. C., and vicinity.

Hams hung unwrapped in a dark, imperfectly ventilated homemade meat-curing box, such as is frequently used for curing meat in the South, aged as satisfactorily as those hung in the open storeroom. No skippers gained entrance to this box, though that danger was always present when the lid was raised for an examination of the meat.

Hams made airtight by the use of heavy coatings of paraffin or stored in rubber bags all spoiled. Most of this spoilage was on the surface, but the meat was considered unfit for use.

Mold developed on all the hams regardless of the method of storage. During damp weather the growth was extensive and during dry periods much of it disappeared. The least mold was found on the unprotected hams hung in an open window where the air circulation was greatest. Mold did not damage the flavor of any of the hams except those that were buried in ashes, salt, or oats. In those cases a musty, moldy flavor permeated the entire cut.

All the hams used in these tests were from carcasses that had been chilled promptly after slaughter. The cold, trimmed, fresh hams were dry cured with a curing mixture of 8 pounds of salt, 2 pounds of brown sugar, and 4 ounces of saltpeter for each 100 pounds of meat. The meat was cured at a temperature of about 38° F. and 3 days' curing time was allowed for each pound of weight of the average ham. The cured hams were washed and smoked for 3 days at a temperature that did not exceed 110°. No smoked meat was wrapped or packed until it had cooled to air temperature after removal from the smokehouse.

The mean monthly temperature of the storeroom in which the smoked meat was kept ranged between 46° F. in February to 78° in July and August; the mean humidity ranged between 36 and 95 percent.

R. L. HINER, *Bureau of Animal Industry.*

**H**OGS of Danish Origin Imported for Breeding Studies in This Country Science is constantly exploring new opportunities of aiding the producer of agricultural commodities to conduct his business more efficiently and to meet the needs of a changing economy. In this connection animal and plant breeders are putting forth their efforts toward making available new types and strains or varieties that are superior in important characteristics. These efforts have included importations and subsequent studies with respect to adaptability, merit in comparison with present varieties and strains, breed improvement, and possible advantages from crossbreeding.

### Value of Production Records

For a number of years the Department of Agriculture has recognized the advantages of selecting breeding animals of the meat-producing species on the basis of performance records. It was with the needs of the industry in mind, especially for a more effective method of selecting breeding stock, that the Department together with the Iowa Agricultural Experiment Station, recently became interested in studying Danish hogs and methods under American conditions.

Since the beginning of the present century the swine industry of Denmark has shown remarkable development. That country has shown the world the striking improvement that can be accomplished by well-planned, systematic testing methods, associated with good feeding and management. Denmark's valuable background of performance records in both economy of production and quality of product caused the Department and the Iowa station to obtain a number of Danish pigs, carefully selected, for such research purposes.