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Selecting and Caring for Seed Corn

BY

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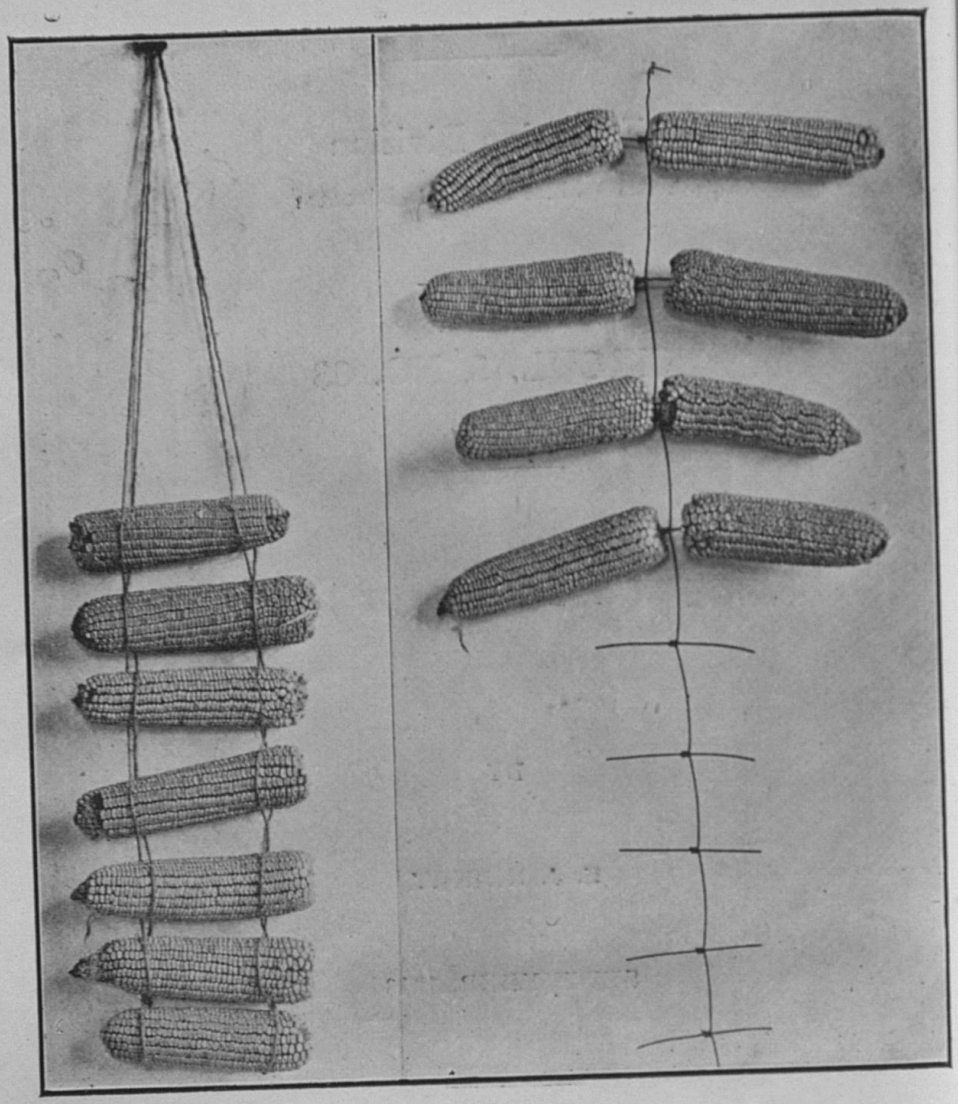

Fig. 1.

Fig. 2.

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The great shortage of corn suitable for seed over a large part of Kentucky last year threatened for a time to result in a serious reduction in acreage of this most important crop. Owing to the fortunate fact that considerable corn in Southwestern Kentucky was found to be of good quality, this danger was averted and farmers were able to obtain sufficient seed of a fair quality but with considerable trouble and expense.

Much of the seed bought was of varieties untried in the sections where it was used and it is doubtful if as good results will be obtained as from home-grown seed of tested varieties.

The careless practis of depending upon corn taken from the crib in the spring for planting was responsible for the shortage of seed. The 1917 crop matured late and, because of unfavorable drying weather, the grain contained a large percentage of water when put into the crib. Corn dries out slowly in cribs, due to the limited circulation of air, and most of the moisture was still in the grains when the severe freezing weather came in early December. As a result the germ was destroyed. The few farmers who gathered seed when the corn first ripened, or even when the first husking was done, and gave it an opportunity to dry out quickly had good seed. This shows that even with the extremely unfavorable and unusual climatic conditions prevailing last year a shortage of seed is unnecessary.

Certainly, with the experience of last year so fresh in mind, few farmers will neglect to gather an adequate supply of seed this fall at the earliest opportunity. In these critical years in our history when such great issues depend upon the production

of good crops, we must take every precaution to produce such crops. No other factor is more important in getting good yields of corn than good seed and with no other crop is it easier and cheaper to be assured of having good seed. First-class seed cannot be had in any year by getting it from the crib in the spring. While such seed may grow it will not give as vigorous and strong plants as seed that has been properly cared for.

How to Select Seed

Selecting seed from the field just previous to cutting the crop, or when the corn is ripe enough to cut, is by far the most satisfactory method of selection. Not only does this early gathering insure plenty of time for the ears to dry out thoroly before freezing weather but it permits the selection of ears from the most vigorous and healthy plants and from the stalks that most nearly meet the grower's ideal in regard to height, location of the ear, the angle of the ear, etc. Like produces like and continued selection for these characteristics will tend to produce a strain of corn in which all the plants approach the ideal sought for.

In general we may say that the varieties of corn grown in Kentucky would be improved if we could secure more stocky and shorter plants, with the ears carried uniformly lower down on the stalk. Such a type of corn would be easier to harvest and be less likely to be blown down by strong winds. In addition it is desirable that the tips of the ears hang downward, as such ears shed rain better and are less likely to be damaged. Another desirable characteristic is uniformity in maturity. Only by field selection can we hope to influence the type of plant.

Experiments have not shown that any particular type of ear is better than another, as far as yield is concerned. Thus the grower may suit his own fancy in selecting a type of ear. Uniformity of type is desirable, however, as an indication of careful selection and breeding. It is natural to select large ears for seed and there is some evidence that the selection of large ears may have some influence upon yield.

Soundness and freedom from disease are the most important qualities to be sought for.

A convenient arrangement for gathering seed ears is a grain sack suspended over the shoulder as is done in broadcasting grain by hand. It is an added convenience to have the mouth of the sack held open with a hoop. If most of the husks carried in the sack.

Selection at Husking Time

Field selection is so much more desirable than any other method that it should be employed if possible. The next best time to select is when the first corn is husked. While good, sound ears can be selected at this time, one has no knowledge of the type of plant on which they were produced. The best ears can be gathered while husking and thrown aside, or the selection can be made while loading and unloading the corn. The first method offers the best chance of getting the best ears, however.

Select Enough Seed for Two Years

When the crop is a good one it is an excellent idea to select enough seed for two years, as, in some seasons because of drouth or some other cause, it is difficult to find good seed ears. Gather a liberal supply, as one always finds ears that must be discarded when the corn is shelled and frequently fields must be planted twice.

Caring for the Seed

The subsequent care of the seed ears is even more important than the selection. To preserve its germinating power the corn should be bone dry before freezing weather comes; then no degree of cold will injure it. The problem is to store the seed ears so that they will be safe from injury from mice and rats and yet be in a position to dry out rapidly. On the average farm there is rarely to be found a rat-and-mouse-proof seed house, and about the only way to protect stored seed from those active pests is to hang it up in the top of cribs, sheds, etc. Fortunately this method of storing seed corn cannot be

improved upon, as far as supplying good conditions for drying is concerned. The ears can be strung on binder twine (Fig. 1), or hangers can be made of wire fence (Fig. 2). If desired, a good type of hanger can be bought at a reasonable price. Of course there are various other ways of storing seed that will provide ideal drying conditions, such as shelves, drying-racks and posts studded with nails, upon which the ears are stuck. The main problem is to have plenty of space between the ears.

A room or crib can be made mouse-proof by lining with wire cloth, and when such a room is available various handy devices can be used for storing seed that cannot be used under ordinary farm conditions.

The commercial seed-corn grower will need a special seed house, rat-proof and mouse-proof and, if possible, capable of being heated. Usually such houses are provided with tiers of shelves on which the ears are laid.

In Kentucky the use of artificial heat is not necessary, except, perhaps, in seed houses where large amounts of seed are stored. Even in seed houses a high temperature is not desirable.

It usually takes about two months to ten weeks for corn to become bone dry even under the most ideal conditions. When thoroly dry the ears can of course be put into barrels, boxes or any convenient place.

Always hang or store corn as soon as brought in. The ears are often damaged by lying around for some time. In case of field-selected corn, which contains much moisture when gathered, the ears should never be left in sacks or piles, even overnight, as the corn will heat and spoil very quickly.

Do not be caught without plenty of good seed corn next spring. Gather enough for planting and replanting for two years. Also enough for a neighbor who may forget to gather seed.