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Good Seed for More and Better Corn
Michigan State University Extension Service
J.F. Cox, Farm Crops
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EXTENSION SERIES

SEPTEMBER, 1917

GOOD SEED MEANS MORE AND BETTER CORN.

FIELD SELECT SEED CORN

In late September and October

Enter field of standing corn carrying sack or basket, husk and pluck for seed: Mature, well filled ears; Borne on vigorous plants; Growing under average field conditions.



Good seed corn can only be secured by selecting in the field from standing stalks, drying immediately and storing properly.

DRY IMMEDIATELY AND STORE PROPERLY

Hang by strings or wire trees, or place on racks, no ears touching. Place in a freely ventilated, dry room where freezing will not take place. The vitality of moist corn is sapped by molds and is injured by freezing. Properly dried corn resists injury from freezing and mold ng.

SELECTING AND CURING SEED CORN

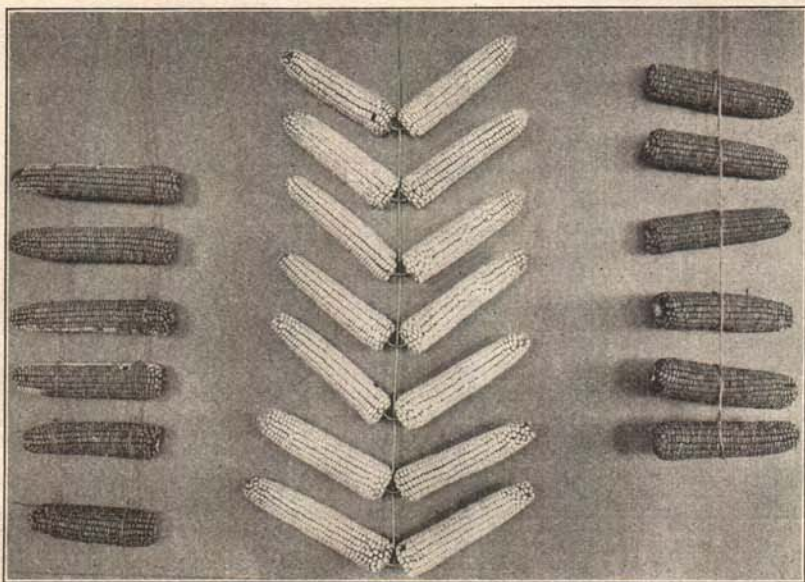
J. F. Cox

DEPARTMENT OF FARM CROPS

Two factors which will largely determine the yield of next year's corn crop, are the selection and curing this fall of seed to be planted next season. The common practices of selecting seed corn from the crib or when husking the general crop are too costly to be continued. Such corn usually germinates poorly and may result in poor stands. It is extremely important that the most mature and highest yielding corn of this season's crop be selected and properly stored to furnish seed for planting next spring.

ADVANTAGES OF FIELD SELECTING SEED CORN

The great advantage of selecting seed corn in the field before the crop is harvested lies in the fact that mature corn is secured and that a study of the plant on which the ear grew and of its environment can be made. In selecting from the shock or from the crib little is known of the parent



Practical methods of drying seed corn. Free ventilation is necessary for rapid drying.

plant or the conditions under which it grew. Corn which has stood in the shock or in the crib is more or less seriously injured by the development of molds or by freezing while in a moist condition.

It has been demonstrated that the corn plant is easily altered by proper selection methods. Yield, time of ripening, position and character of ear

SUMMARY OF REPORTS FROM COUNTY AGENTS

COUNTY	Deficiency.	Enough for normal supply for one year	Special campaign necessary.	Enough for normal supply for 2 years.	Special campaign necessary.	Surplus.	Special campaign necessary.
Presque Isle	yes.....	yes.....	?				
Gd. Traverse	yes.....	no.....	yes.....	yes.....	yes.....		
Branch	yes.....	no.....	yes.....	yes.....	yes.....	yes.....	yes
Hillsdale	yes.....		yes.....				
Arenac	yes.....		no.....				
Manistee	yes.....	no.....	yes.....	yes.....	yes.....	yes.....	yes
Eaton	yes.....		yes.....	yes.....	yes.....	yes.....	yes
Huron	yes.....		yes.....				
Iosco	yes.....	no.....	yes.....				
Cass	yes.....	yes.....	yes.....	yes.....	yes.....	yes.....	
Lenawee	yes.....		yes.....	no.....	yes.....		
Montmorency.....	yes.....						
Sanilac	yes.....						
Ingham	yes.....	no.....	yes.....	no.....	yes.....	yes.....	yes
Van Buren	yes.....	yes.....	yes.....	yes.....	yes.....	yes.....	yes
Calhoun	yes.....	no.....	yes.....	yes.....	no.....		
Mecosta	yes.....	yes.....	no.....	yes.....	no.....	yes.....	yes
Otsego	yes.....						
Ottawa	yes.....	no.....	no.....	yes.....			
Newaygo	yes.....	no.....	yes.....				
Lapeer	yes.....						
Wayne	yes.....	yes.....	yes.....	yes.....	yes.....	yes.....	yes
Ogemaw	yes.....		yes.....		yes.....		
Shiawassee	yes.....	no.....	yes.....	yes.....			
Gladwin	yes.....	yes.....	no.....			no.....	
Oceana	yes.....		yes.....	yes.....			
Tuscola	yes.....	no.....	no.....		no.....		
Montcalm	yes.....	no.....	yes.....	no.....	yes.....	no.....	no
Livingston	yes.....	no.....	yes.....	yes.....	yes.....		
Emmet	yes.....		no.....		no.....		
Midland	yes.....	yes.....	no.....				
Mason	yes.....		?				
Bay	yes.....	no.....	yes.....	yes.....	yes.....	yes.....	yes
Saginaw			yes.....				
Macomb.....	yes.....						
St. Clair.....	yes.....						
Clinton.....	no.....						
Charlevoix	no.....	yes.....	no.....	yes.....	yes.....	yes.....	
Oakland					yes.....	yes.....	
Monroe				yes.....	no.....	yes.....	?
Osceola	yes.....		?		?	?	
Jackson	no.....	yes.....	no.....	yes.....	yes.....	?	
Missaukee	yes.....		no.....			no.....	

Compiled
 September 31, 1918
 by J. W. Nicolson,
 Extension Specialist
 Farm Crops

MICHIGAN AGRICULTURAL COLLEGE
 Extension Division
 East Lansing, Michigan

Insure Michigan's 1919 Corn Crop Now

There are five counties with an actual deficiency.

Only four report a normal supply for two years' needs without special campaign.

POOR SEED GIVES A POOR CROP

Labor spent now in saving seed will save ten times the labor which will otherwise be wasted in taking care of a poor crop.

DON'T DEPEND ON CRIB CORN

Don't select ears and then leave them in a pile or in crates. The ears may look sound but most of these "ripe" ears contain 25 to 30 per cent of moisture and molds readily attack them. You may have serious injury from these mould, causing low vitality seed without much exterior evidence of disease or injury.

The following report of conditions in the state based on observations and opinions of county agricultural agents (and farmers and elevator men in counties where there are no agents) indicates that there is enough corn that will make seed *if*—*IF*—it is properly stored.

We must also remember that of the seed actually saved and stored, over one-half will not be handled carefully, i. e., stored so each ear can dry separately in a well-ventilated place; over one-half will be left in crates, placed in piles or sprad out thin on a floor where it is warm, but where there is no air circulation. Any one of these things and other errors of handling will cause a great deterioration in the germinating power, so *it will take an amount of corn necessary for two years to really supply enough seed for next year's planting* when that time comes.

Moreover, many farmers who have mature corn are so busy they are leaving this matter, along with other things not pressing at the moment and the late fall is not usually a good time to dry and make a high quality seed corn.

There is scarcely a county in the state where *one-half the farmers* have corn that is suitable for seed. Very few of this half will save more than enough for themselves, and comparatively few of the other half will get their seed this fall.

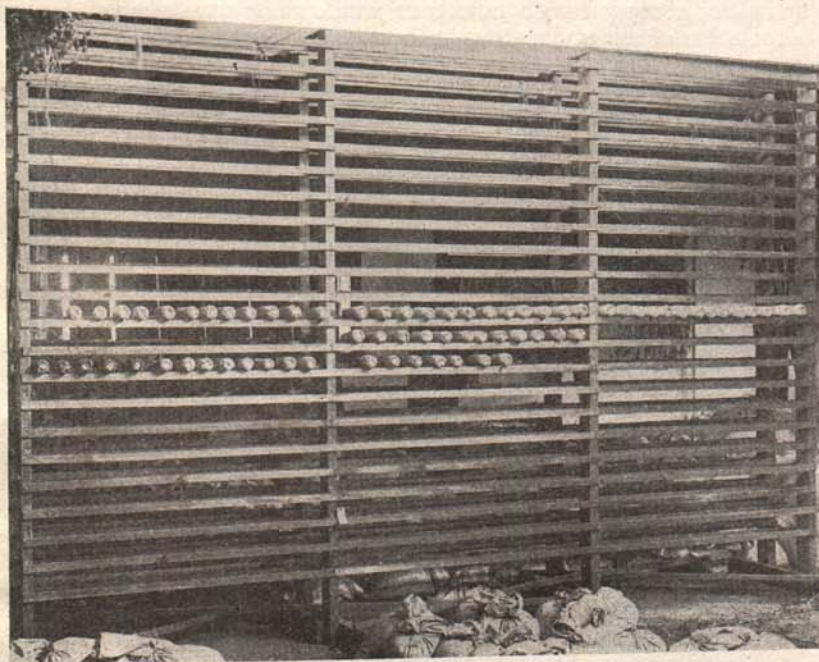
Those who have a surplus of good seed corn will be performing a patriotic duty, and incidentally should receive a remunerative price for their work, if they will save all this surplus they can, to insure the planting of Michigan's entire acreage with Michigan grown corn.

Those who do not have seed will only be doing their patriotic duty by obtaining and properly storing adapted seed whenever possible this fall.

and even feeding value can be changed within wide limits. Field selection and proper storing as compared with prevailing selection methods will usually increase the yield of ordinary corn varieties from seven to ten bushels per acre. Enough corn to plant twenty acres can be easily field selected in a day's time by one man. With a seven-bushel increase per acre the corn grower who plants twenty acres of corn will be rewarded with 140 bushels in his next season's crop or at present prices \$140 a day for his labor in field selecting and storing—admittedly a profitable day's work.

HOW TO FIELD SELECT CORN FOR SEED

The proper time to field select seed corn is in late September or during October when the corn is sufficiently mature and ready to husk. In making the selection, the best way is to walk down the rows with a sack tied over the shoulders, or carrying a basket, plucking those ears which are considered desirable. Mature ears borne on vigorous plants growing under average conditions, which are carried at the right height, about the center of the stalk or just below, and with tips slightly drooping, should be selected. These ears should then be properly stored and further selection for uniformity, type and composition can be made through the winter or when making the germination test. By proper field selection, any farmer in Michigan has it in his power to markedly improve his corn variety.



A seed corn rack, which insures proper curing, made from 2 x 4's and lath.

CURING AND STORING SEED CORN

Good seed corn can only be secured by thoroughly drying carefully selected mature ears before being exposed to freezing weather. In late September and during October corn as it comes from the field contains from thirty to forty percent moisture. In this condition it is easily damaged by molding and freezing. In order to retain its vitality it must be rapidly dried so as to pass through the winter with a moisture content of twelve to fifteen percent.

Immediately after harvest, corn for seed should be placed where it will receive free ventilation in order to dry rapidly. No two ears should be allowed to touch. Many excellent devices for drying and curing seed corn are in common use. The ears may be strung on binder twine and hung from a rafter. Wire trees on which the ears are impaled may be made from woven wire fences, or may be purchased. Racks may be easily constructed from two-by-fours and laths on which the ears may be laid. These racks should be placed in the attic or a spare room in the house, tool room, etc. A well ventilated room is necessary. A cellar without furnace is as a rule a poor place to store seed corn. During the early period of drying all windows should be opened so as to remove excess moisture.

Corn properly dried will not be greatly damaged by freezing but it is best to store where it will not be exposed to extreme cold.

Where large amounts of seed are to be handled, special corn drying houses are desirable, equipped with numerous windows or panels which will give free circulation of air, and a stove to furnish artificial heat to hasten drying and prevent freezing.

This fall is the time to select Michigan grown corn for next year's crop. Corn from other states is often not well adapted to Michigan conditions. To insure a sufficient supply of good seed corn to plant Michigan's crop the coming spring, the concerted action of all Michigan corn growers in selecting and storing the best corn for seed this fall is necessary.

SOME SEED CORN FACTS

By selection in field during late September and October, mature high yielding ears which will germinate can be secured.

About one corn grower in one hundred in Michigan selects seed corn in the field before harvesting the main crop. If every farmer field selects, a great increase in corn yield will result.

Seed corn of high vitality can only be secured by drying rapidly immediately after picking and storing in a well ventilated room.

Dependable seed cannot be secured from the crib.

Good seed means a good stand. Planting poor seed results in frequent missing hills. It costs as much to cultivate a poor stand as a good one.

It pays to handle seed corn properly.—

A little work this fall in field selecting, drying and storing seed corn insures

 Better germination and a more vigorous start next spring

 More full hills and fewer spaces in the row.

 A heavier and richer crop for the silo.

 A larger yield of well ripened corn.