

South Dakota State University
**Open PRAIRIE: Open Public Research Access Institutional
Repository and Information Exchange**

Extension Circulars

SDSU Extension

1-1923

Harvesting the Corn Breeding Plot

Ralph E. Johnston

George H. Valentine

Follow this and additional works at: http://openprairie.sdstate.edu/extension_circ

 Part of the [Agriculture Commons](#)

Recommended Citation

Johnston, Ralph E. and Valentine, George H., "Harvesting the Corn Breeding Plot" (1923). *Extension Circulars*. Paper 146.
http://openprairie.sdstate.edu/extension_circ/146

This Circular is brought to you for free and open access by the SDSU Extension at Open PRAIRIE: Open Public Research Access Institutional Repository and Information Exchange. It has been accepted for inclusion in Extension Circulars by an authorized administrator of Open PRAIRIE: Open Public Research Access Institutional Repository and Information Exchange. For more information, please contact michael.biondo@sdstate.edu.

HARVESTING THE CORN BREEDING PLOT

by

Ralph E. Johnston
and
Geo. H. Valentine
Extension Agronomists

A. THE CROP MUST BE CAREFULLY HARVESTED:

The correct harvesting of the ear-to-row breeding plot is the most important phase of the entire year's work. Unless the harvesting of the plot is done very carefully the whole purpose of the work may be completely defeated.

The percentage of stand is an important factor to consider in connection with determining yield of the various rows of the breeding plot. Unless the rows of the plot have the same number of stalks (or within a dozen of the same number) the comparative yields would not be true information as to the yielding ability of the rows. In case the number of stalks is not the same (or nearly so) the percentage of stand should be figured for the various rows. A perfect stand should be figured at three stalks per hill with hills 42 inches apart each way. If corn be drilled the percentage of stand can be figured on the same basis by counting the number of stalks in the row, figuring 100 stalks for every 116 $\frac{2}{3}$ feet as a perfect stand.

B. HARVEST EACH ROW SEPARATELY:

The corn from each row of the ear-to-row breeding plot must be husked and weighed separately. The corn from these rows can conveniently be husked in a small sled drawn by one horse. This sled should be large enough to hold the corn from one row which is then weighed separately. All the ears from each row should be brought to one end of the field. A sled divided into two compartments works much more convenient if rows are not too long. By using such a sled a round trip could be made and two rows husked.

The soft corn and marketable corn should be separated and weighed in different lots and recorded as such on blanks

furnished by the State College Extension Service, (one of which is attached herewith.)

The time of harvesting should be at the regular time for doing such work in the community. All rows of breeding plot should be husked the same day under the same weather conditions.



Row No. 10 No. 9 No. 8 No. 7 No. 6

An Ear-to-row test Plot in
Jones County - 1922.

Ears from each row are weighed separately to determine highest yielding rows. Yields figured per acre were as follows for these rows: Row No. 6.53 bu.; Row No. 7, 30 bu.; Row No. 8, 27 bu.; Row No. 9, 19 bu.; Row No. 10, 29 bushels.

C. SAVING SEED FOR NEXT YEAR:

From the total number of rows in the breeding plot pick out half of the rows which show the highest yields and then select the best seed ears out of the marketable corn harvested from these rows. A number of the best ears from the very highest yielding rows can be saved apart from the other ears for an ear-to-row breeding plot next year if the club member desires to have such a plot.

After determining the highest yielding rows then go and get the remnants of the ears which planted these high yielding rows and mix all high-yielding remnants together, carefully storing it away for next year when it is to be planted in the multiplying plot. The good ears from the highest yielding rows are to be saved and used for planting the regular corn field or else can be sold as seed corn.

EXAMPLE: If Row No. 5 is a high yielding row - then save all the good ears harvested from this row. All these ears can be stored with the other ears saved from the high yielding rows in the ear-to-row plot. If you intend to save a few ears for an ear-to-row plot next year then save one more from Row 5, but mark "For Ear-to-row plot-1924". Save all the shelled corn you have left in the sack marked "Remnant No. 5". Follow this same procedure with all high producing rows.

If Row No. 7 is a low producing row then do not save any ears from this row but feed all of it, get the sack marked "Remnant No. 7" and feed the corn in it. Follow this for all low producing ears.

References:

- "Corn Culture in South Dakota, "S. D. Bulletin No. 181.
- "Better Seed Corn" F. B. 1175, U. S. Dept. of Agriculture.
- "Good Seed Corn Every Year", Extension Service Bulletin 104,
Iowa State College, Ext. Service, Ames, Iowa.

PRELIMINARY PREMIUM LIST FOR

CROPS CLUBS - 1923

C O R N C L U B

To be offered as State Premiums to be awarded Nov. 15, 1923:

- One free trip to Chicago for Champion Corn Club Member District I.
- One free trip to Chicago for Champion Corn Club Member " II.
- One free trip to Chicago for Champion Corn Club Member " III.

These trips are awarded to Corn Club members by the South Dakota Bankers' Association and are to be taken at time of International Exposition Hay & Grain Show. Trip will include visits to Stock Yards, Packing Plants, Lincoln Park, Field Museum, Department Stores, Theatres, etc. Entire trip to be chaperoned by Mr. P. J. Scarbro, State Club Specialist.

The winners for this trip will be determined according to the following basis of achievement:

Yield - - - - -	30%
Economy of production - - - - -	30%
Record of year's work - - - - -	15%
Story, "How I grew my crop" - - -	15%
Exhibit (To determine quality) -	10%

Report blanks will be sent all members September 15th. Record of year's work should be kept in Junior Account book.

At the State Fair:

Amount offered in Cash Premiums - - - \$180.00
Specials valued at about - - - - - 92.00
(See Premium list of State Fair)

Total premiums - - - - - \$272.00

The Champion Crops demonstration teams will get a free educational trip to the State Corn and Grain Show at Sioux Falls during January. (Definite dates to be determined.)

At The State Corn and Grain Show:

Sweepstakes for State Ten-car exhibit, 15-Jewel Elgin
Gold watch.

Cash Premiums amounting to - - - - - \$177.00
(Premium list to be printed later)

Specials amounting to about - - - - - 40.00
(Specials include a Silver Loving Cup)
(offered by Dakota Improved Seed Co.,)
Mitchell, S. D.

All Club members eligible to compete for Grand Sweepstakes
of Cash - - - - - \$25.00

P O T A T O C L U B

To be offered as State Premiums to be awarded Nov. 15, 1923:

One free trip to Chicago for State Potato Champion. (Award to
be made according to same Basis of Achievement as Corn
Club (shown on previous page). This trip is to be award-
ed by the S. D. Bankers' Association and is to be taken
at time of International Exposition Hay & Grain Show.)

At State Fair:

Cash premiums - - - - - \$50.00
(See State Fair Premium List)

Specials amounting to about - - - - - 20.00

The Champion Crops demonstration team wins free
Educational trip to Corn & Grain Show at Sioux Falls during
January.

At State Potato Show:

Cash premiums - - - - - \$50.00
(Premium list to be printed later)

Specials - -

BLANK FOR RECORDING YIELDS OF EAR-TO-ROW TEST PLOT

Name of Breeder _____ Address _____

Location of Plot: Sec. _____ Twp. _____ Range _____ County _____

VARIETY _____ Length of Rows: _____ Rods. No. of rows _____

Date Harvested _____

Row No.	Weight marketable corn in lbs.	Weight soft corn in lbs.	Total weight in lbs.	Row No.	Weight marketable corn in lbs.	Weight soft corn in lbs.	Total weight in lbs.
1				21			
2				22			
3				23			
4				24			
5				25			
6				26			
7				27			
8				28			
9				29			
10				30			
11				31			
12				32			
13				33			
14				34			
15				35			
16				36			
17				37			
18				38			
19				39			
20				40			

BLANK FOR RECORDING YIELDS OF EAR-TO-ROW TEST PLOT

Name of Breeder _____ Address _____

Location of Plot: Sec. _____ Twp. _____ Range _____ County _____

VARIETY _____ Length of Rows: _____ Rods. No. of rows _____

Date Harvested _____

Row No.	Weight marketable corn in lbs.	Weight soft corn in lbs.	Total weight in lbs.	Row No.	Weight marketable corn in lbs.	Weight soft corn in lbs.	Total weight in lbs.
1				21			
2				22			
3				23			
4				24			
5				25			
6				26			
7				27			
8				28			
9				29			
10				30			
11				31			
12				32			
13				33			
14				34			
15				35			
16				36			
17				37			
18				38			
19				39			
20				40			

BLANK FOR RECORDING YIELDS OF EAR-TO-ROW TEST PLOT

Name of Breeder _____ Address _____

Location of Plot: Sec. _____ Twp. _____ Range _____ County _____

VARIETY _____ Length of Rows: _____ Rods. No. of rows _____

Date Harvested _____

Row No.	Weight marketable corn in lbs.	Weight soft corn in lbs.	Total weight in lbs.	Row No.	Weight marketable corn in lbs.	Weight soft corn in lbs.	Total weight in lbs.
1				21			
2				22			
3				23			
4				24			
5				25			
6				26			
7				27			
8				28			
9				29			
10				30			
11				31			
12				32			
13				33			
14				34			
15				35			
16				36			
17				37			
18				38			
19				39			
20				40			