

UNIVERSITY OF MISSOURI

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SELECTING AND JUDGING CORN

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The same reasons that make it necessary to select animals carefully in breeding live stock also make it necessary to select ears of corn carefully if one wishes to make better corn. A good ear of corn will produce other ears like it if conditions are favorable and for this reason only good ears should be selected for planting. If we should all take as much care in selecting our seed corn as the breeder of animals does in selecting animals, the yield of corn in Missouri would be greatly increased.

In selecting corn for show, or for seed one should have definitely in mind the characteristics of a good ear of corn. A good ear may be described as follows: The ear should be from $9\frac{1}{2}$ to $10\frac{1}{2}$ inches long and 7 to $7\frac{1}{2}$ inches around, measured at a point one-third the distance from the butt to the tip. It should be practically the same diameter from end to end; that is it should not be distinctly tapering. The rows of kernels should be straight, and the kernels should be of such shape that they will fit tightly together with no furrows left between the rows. The butts should be well rounded out with kernels evenly arranged around a cup-shaped cavity about one inch across. The tips should be well filled out to the end with deep, even kernels. The kernels of the ear should all be very nearly the same size and shape. They should be wedged-shaped but not pointed; they should have large smooth hearts or germs not blighted, nor discolored. The length of the kernel should be about one and one-half times as great as its width at the widest part and it should be of the same thickness from one end to the other. The kernels should show no mixture with corn of the opposite color. The cob should be of medium size, neither very large nor very small.

Score Card A--Corn

SCALE OF POINTS (Explanation on Page 87)	NO. OF SAMPLE			
Trueness to type and breed characteristics.				
1. Uniformity of Type 10	.....	.....	.....	.....
2. Shape of Ears 10	.....	.....	.....	.....
3. Length of Ears 10	.....	.....	.....	.....
4. Circumference of Ears 5	.....	.....	.....	.....
5. Purity. (a) Kernel..... 5	.....	.....	.....	.....
(b) Cob..... 5	.....	.....	.....	.....
<u> </u>	45			
Maturity and market condition.				
6. Maturity 5	.....	.....	.....	.....
7. Market Condition 5	.....	.....	.....	.....
<u> </u>	10			
Yielding qualities and vitality.				
8. Character of Germ 10	.....	.....	.....	.....
9. Kernels (a) Shape..... 5	.....	.....	.....	.....
(b) Uniformity..... 5	.....	.....	.....	.....
10. Butts 5	.....	.....	.....	.....
11. Tips 5	.....	.....	.....	.....
12. Space 5	.....	.....	.....	.....
13. Size of Cob 10	.....	.....	.....	.....
<u> </u>	45			
Total..... 100	.....	.....	.....	.....

VARIETY STANDARDS

	Length	Circumference
Yellow		
Reid's Yellow Dent.....	10 to 10½	7¼ to 7½
Leaming.....	10 to 10½	7½ to 7¾
St. Charles Yellow.....	10½ to 11	7¾ to 7¾
Cartner.....	9 to 9½	7¾ to 7¾
White		
Boone County White.....	10½ to 11	7½ to 7¾
St. Charles White.....	10 to 10½	7¼ to 7½
Johnson County White.....	10½ to 11	7½ to 7¾
Silvermine.....	9 to 9½	7 to 7¼
Commercial White.....	10½ to 11	7½ to 7¾
General Entries.....	9½ to 10½	7¼ to 7¾

NAME.....

DATE.....

HOW TO APPLY THE POINTS OF THE SCORE CARD

1. *Uniformity of Type (10)*—For each ear differing in shape, color or indentation from the type of the variety cut from one-quarter to one point.

2. *Shape of Ear (10)*—Ears should be as nearly cylindrical as possible and have straight rows running from butt to tip. These characteristics usually indicate a high per cent of corn to cob, and a large number of kernels of uniform size and shape for planting. Cut one-fourth to one point for each ear that tapers too greatly.

3. *Length of Ears (10)*—Add together the deficiency and excess in length of all ears not conforming to the standard for the variety, and for each inch thus obtained cut one point. Should the deficiency exceed 10 inches a cut of two points for each additional inch shall be made on the total score.

4. *Circumference of Ears (5)*—The deficiency and excess in circumference (one-third the distance from butt to tip) of all ears not conforming to the standard of the variety, shall be added together and for each inch thus obtained a cut of one-half point shall be made.

5. *Purity—Kernel (5)*—Kernels should be free from mixture with corn of opposite color. Mixture in yellow corn is shown on caps of kernels; in white corn on the sides. For each mixed kernel in an exhibit cut one-fourth point.

Purity—Cob (5)—Cobs should be of one color; in yellow corn, red; and in white corn, white. (Except St. Charles White.) For pink cobs cut one-fourth to one-half point for each according to shade. One cob of the opposite color shall bar the exhibit.

6. *Maturity (5)*—Ears should be well matured, heavy, dry, and the kernels bright and firm on the cob. For immature or loose ears cut not to exceed one-half point.

7. *Market Condition (5)*—Ears should be free from injury or decayed spots. Ears showing rotten spots or injuries should be cut one-fourth to one half point. A dead ear should be cut five points. Two dead ears shall bar the exhibit.

8. *Character of the Germ (10)*—Germ should be full, smooth, bright, not blistered, shriveled or discolored. When broken should show a fresh, oily appearance. Cut not more than one point for each ear showing inferior germs.

9. *Kernels—Shape (5)*—The ideal kernel is slightly wedged shape but not pointed, the length of which is approximately one and one-half times as great as the width of the widest part. For each ear showing kernels of poor shape, cut from one-fourth to one-half point.

Kernels—Uniformity (5)—The kernels from the different ears should be of the same size and shape; also those in each ear should be uniform. For each ear having kernels which differ in shape or size from the majority cut from one-fourth to one-half point. For each ear with very irregular kernels cut from one-half to one point.

10. *Butts (5)*—An ideal butt on an ear of corn should be well rounded out, with regular rows of deep kernels, solidly and evenly compacted around a clean cup-shaped cavity. Cut not to exceed one-half point for each defective butt.

11. *Tips (5)*—The tips should be filled out to the end with deep kernels in regular rows. The ideal tip is completely covered, but if kernels are deep and regular to end of cob no cut need be made. Cut not to exceed one-half point for each defective tip.

12. *Space (5)*—There should be no open space between rows, nor between the kernels in the row, either at the crown or at the cob. Cut not to exceed one-half point for each ear seriously defective in this respect.

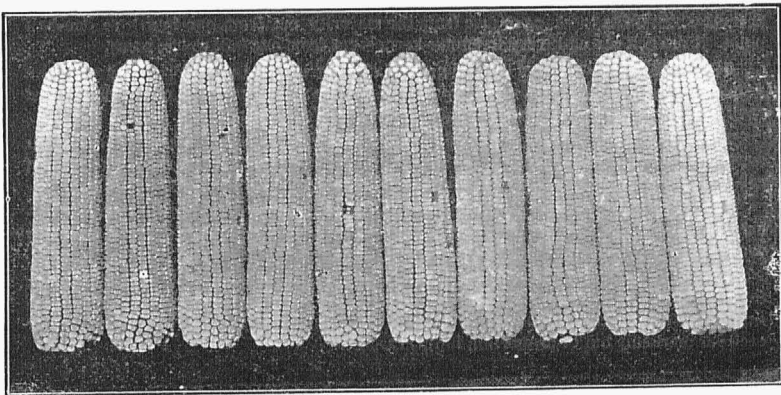
13. *Size of Cob (10)*—The cob should be medium in size with diameter about twice the depth of the kernel. Too large a cob gives a low per cent of corn, while too small a cob does not favor a large yield per acre. Cut from one-half to one point for each ear markedly out of proportion in this respect.

NOTE: The score card is designed for scoring ten ear samples. To score single ears cut in tenths of points according to judgment.

SELECTION OF CORN FOR SHOW.

At fairs and other places where corn is shown for premiums it is customary to show ten ears together as a sample, and consequently in judging such samples the ten ears must be considered as a whole instead of a single ear. In selecting a sample it is well to first select twenty-five or thirty of the best ears to be found and lay them out on a board side by side. Then go over them with the characteristics of a good ear in mind and study them carefully. An hour spent in picking out the good and bad points of the various ears one after another will help very much in deciding which ears will make the best exhibit. Finally pick out the most ideal ear in the lot and use it as a standard in selecting the other nine. Bear in mind that one of the most important points about a good sample of corn is what is known as uniformity of type. By this is meant that every ear should look as near alike every other ear as possible. They should all have the same shade of color, the same size, the same shape, the same color of cobs, the same character of kernels, whether rough or smooth, wide or narrow and be true to the type of the variety. Each ear should measure up to the score-card standard for the variety in both length and circumference and should be solid, well matured, free from damaged grains and all indications of mixture. Keep in mind the idea of "mates" as if selecting a show team of driving horses or a herd of cattle or other stock. Show corn is seed corn and all of the ears should be alike so that the product may be uniform.

For the purpose of determining the depth and shape of kernels, the character of the germ and the size of the cob, two kernels may be removed from the same side of the ear but no other kernels should be missing.



AN EXCELLENT SAMPLE OF CORN.

Champion Ten Ears of Yellow Corn.

National Corn Exposition, Omaha, 1909.

Grand Champion Ten Ears Missouri State Corn Show, 1909.