How to Grow a Bumper Corn Crop

by

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GOOD YIELDS COME FROM GOOD SEED

The record yields of shelled corn per acre in 1913 were in Fond du Lac County 133 bushels and in Racine County 137 bushels.

DO NOT DESTROY THIS BULLETIN BUT FILE IT WHERE YOU CAN FIND IT WHEN WANTED

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HOW TO GROW A BUMPER CORN CROP

The yield of corn is directly dependent upon the stand. The stand of corn in Wisconsin during recent years has been only 60 to 70 per cent. The crop must, therefore, be limited to that per cent. Forty-one bushels per acre, Wisconsin's average yield, can be obtained by securing one good ear per hill from corn checked in hills, three and one-half feet apart. We are, therefore, getting only one-half of a yield of corn throughout the state. One of the causes of low stand is low vitality of the seed. Planting one dead ear means planting 800 dead kernels, losing 800 plants and 800 ears or $4 worth of crop. Therefore;

THE CLOTH ROLL TESTER.

A very simple tester can be made out of a piece of muslin nine inches wide and sixty inches long. With indelible pencil mark off squares two and one-half inches each way leaving eighteen inches at each end for rolling.

2. Test each ear of seed corn used.

The sawdust germinator shown on next page is made from a box about twenty-five inches wide, four inches high and any convenient length. Two inches of moist sawdust is packed in the bottom of the box and covered with a piece of muslin, marked into squares, 2½ inches by 2½ inches. The corn is placed on the squares, covered with another piece of muslin and then finally, with a pillow of moist sawdust, 2 inches thick. The muslin and sawdust should be sterilized by boiling each time after being used.
Lay the ears side by side on a floor and separate them into ten ear lots by nails or pieces of cardboard between ears 10 and 11, 20 and 21, etc. From ear one remove six kernels from different parts of ear, and place them on square 1 of germinator, tips pointing one way and germ side up. Likewise, place six kernels from ear 2 on square 2, etc., until all the squares are filled. With sawdust tester, cover the corn with a pillow two inches thick, filled with moist sawdust. (See cut No. 3.)

Moisten the cloth roll tester (see cut No. 2) and roll it up from one end toward the other, being careful not to misplace kernels. Tie strings around the roll at the middle and each end to keep the kernels in place. The above cloth roll tester will hold 20 ears; enough for one acre. Corn for a large field will make several rolls. Place the rolls into a pail with tips of kernels pointing up. Fill the pail with luke-warm water, and after a few hours pour off water and invert the pail. By thus soaking every other day, keep cloth roll moist for 8 to 10 days. So also in using the sawdust tester, keep it moist, not saturated, for 8 to 10 days. Do not let the germinator freeze, but keep at a temperature between 60 and 70 degrees, common room temperature. Low temperatures keep weak corn from sprouting, permitting only the vigorous corn to grow. High temperatures may make kernels sprout in the germinator that would not grow in the field.

Growing box tester.

Growers find a cheaply made shallow box, a sawdust bed, a sawdust pillow and a piece of muslin makes an ideal seed corn tester.

When sprouts are about two inches long, carefully unroll the tester so as not to misplace the kernel. Examine the kernels in each square, reject all weak ears showing one or more missing roots or stems, or splindling ones. Save for seed only ears showing perfect strong and vigorous roots and stems. Weak germinating corn produces nubbins and barren, earless stalks.

(b) How to read the test.

Remove tips and butts to get uniform kernels. Grade and set planter for each grade, so that it will plant three or four kernels, 99 out of every 100 times. A failure to get the right number of kernels planted makes poor stands as surely as planting dead kernels.

3. Grade Corn. Set planter for each grade.
The best yields of corn on rich soils come from corn, checked four kernels per hill, three and one-half feet apart. The best

4. **Thickness of planting.** yields with a fair per cent and quality of seed corn come from planting three kernels in hills three and one-half feet apart on similar soils. Poor soils and larger varieties require thinner planting.

Every variety of corn, like every herd of cows, has low yielding and high yielding strains. The former may produce 30 to 40 bushels while the latter may produce 70 to 100 bushels per acre. The varieties disseminated by the Wisconsin Experiment Station, contain only the high yielding strains. They have been bred and improved for yield of ears and fodder, and therefore, are the highest yielding varieties available in the state.

The small eared, high yielding, early maturing varieties, bred at the Experiment Station, are adapted to special sections of Wisconsin, as follows: Silver King, Wisconsin No. 7, for the southern sections. Golden Glow, Wisconsin No. 12, for the central section. Wisconsin No. 8 for the northern section. Address R. A. Moore, Agronomy Department, Madison, Wis., for list of growers of these varieties in your locality.

Perfect ears of corn are hard to find, but they reproduce their kind. You can grow next year's entire crop of corn from the direct progeny of early perfect ears. To do this select the 10 best ears that you can find and plant them in the south edge or southwest corner of the field where the prevailing winds will protect the resulting crop from pollen from inferior plants. Select the seed for next year's crop from this seed plot. A great improvement can be accomplished quickly by using such a seed plot.

Manured sod gives a fertile loose sod, most favorable to corn. Placing corn on sod only, accords with the three or four year rotation, most favorable to dairying, and conserving soil fertility.

8. **Put corn on manured sod.**

It is easier to keep weeds from starting than to kill them when once well developed. Harrowing once or twice before planting time kills many weeds and saves much labor later. Weeds take nourishment and pump moisture from the soil, and thus rob the corn plant.

At tasseling and silking time, corn requires a large amount of water and plant food. Hold the moisture in the soil for this critical time by a continuous mellow dust mulch, not only during May and June, but also by means of single horse cultivators during July and early August.

Cultivate deep and close to the hill when the plants and their roots are small. Thirty days after planting corn, the roots meet in the middle of the row, two inches below the surface. After this time, therefore, the cultivator should not run too close to the plant, nor deeper than 1, 1/2 to 2 inches.

Subject for June Bulletin: "Planting Potatoes"