

## Growing Sweet Corn for the Canning Factory

By G. E. STARR

Sweet corn requires a warm growing season, but as it approaches maturity the temperature should be somewhat cooler, for the ears then mature more slowly and the quality of the corn is maintained for a longer period than if harvested during hot weather. A large portion of lower Michigan provides almost ideal climatic and seasonal conditions for the production of good crops of sweet corn with high quality, and, as a result, it is becoming one of the important canning crops for this state.

Though sweet corn differs but little from ordinary field corn in its cultural requirements, there are certain methods and practices in soil preparation, fertilization, cultivation, and harvesting of the crop that are likely to lead to an increase in yield as well as in quality of the product.

### HOW TO GROW THE CROP

**Soil and Soil Preparation.**—Select a well-drained fertile silt or clay loam soil which is well supplied with humus and is retentive of moisture. A clover sod is very desirable. Plow in late fall or early spring. Fall plowing is to be preferred, in order that the seed bed may be firm and well settled. Early spring plowing should be followed by roller or cultipacker and harrow.

In the spring, the soil should be harrowed or disked at intervals of a week or ten days until planting time, thereby insuring a firm and compact seed bed, a fine condition of tilth, the destruction of a large share of the weed seedlings, and a good supply of moisture close to the surface—thus making for more rapid and uniform germination of the seed.

### MANURES AND FERTILIZERS

If stable manure is available, it is customary to apply it to the corn crop. Apply six to eight tons or more per acre before plowing. The use of 300 to 500 pounds per acre of super phosphate or a complete fertilizer high in phosphorus to supplement the manure is likely to result in a large increase in yield.

If manure is not available or the soil is in a poor state of fertility, use a complete fertilizer such as 4-16-4 or 4-8-6. Apply this broadcast at the rate of 300 to 500 pounds per acre before fitting the land, and mix thoroughly with the soil.

**Planting.**—Plant the seed when all danger from frost is over and the soil is well warmed up. As the sweet corn crop is used in an immature condition, it may be planted much later than it is customary to plant field corn. Furthermore, since the canner must be assured of a continuous supply over a considerable period, it is customary for him to arrange with the growers for a succession of planting dates ranging from late May to July first, or later.

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If the soil is in a good condition of tilth and comparatively free from weed seeds, the seed may be drilled in rows three feet apart, dropping the kernels ten to twelve inches apart in the row. In most cases, however, better results will be obtained if the seed is planted in check rows, dropping three or four seeds to the hill in hills three feet apart in each direction for the larger growing varieties, and as close as two feet apart each way for the smaller growing sorts. The seed should be planted to a depth of not more than two inches on well-worked loam soils, and on heavier soils the depth of planting should be somewhat less.

**Seed.**—Plant clean, plump seed of good germination. In order that the proper strain and variety be used, it is customary for the canner to supply seed to the grower. It is to the advantage of both canner and grower that care be taken to secure seed of high germination, free from disease.

**Varieties.**—There are several varieties of sweet corn used by the canners. The principal ones are Golden Bantam, Crosby, Hickoks Hybrid, Country Gentlemen, and Stowells Evergreen. These varieties vary somewhat in season and in habit of growth, but, as the smaller varieties are usually planted more closely together in the row, the yield per acre does not vary as greatly as might be supposed.

**Cultivation.**—Cultivation should be frequent and shallow. The primary object in the cultivation of corn is to destroy weeds. Deep cultivation after the corn has reached a height of eight to ten inches will destroy many of the feeding roots which lie close to the surface of the soil, and may seriously reduce the yield of the crop. It is a good practice to harrow the soil after planting. For the first cultivation, the ground may be stirred somewhat deeply, working close to the row. This should be given as soon as the plants are sufficiently developed so that the rows may be easily followed. The next cultivation, about a week later, should be further from the plants and not so deep. Later cultivations should be very shallow, sufficiently deep to destroy the surface weeds but not deep enough to destroy the feeding roots. The blade type of tooth known as the "sweep" or "duck foot" is rapidly displacing the large shovel tooth for efficient corn cultivation.

**Harvesting.**—Harvest the sweet corn crop when it has reached the proper stage of maturity. This is usually determined by the field man from the canning factory, who is trained to know when the corn is in best condition to make a high grade pack. A delay of a day or two in harvesting, especially if the weather is hot, will seriously reduce the value of the crop. Corn picked in the early morning, while it is cool, will retain its quality longer than if harvested in the heat of mid-day.

### YIELDS AND RETURNS TO THE GROWER

Sweet corn is distinctly a cash crop. It is customary to grow this crop under contract with a canning factory. The price is named in advance and does not fluctuate within the season, thus eliminating one crop risk. It requires a comparatively short growing season and is not likely to be injured by late spring or early fall frosts. The crop is harvested in an immature condition, so that a considerable portion of the food value of the plant is retained in the stalks, which may be fed green or converted into silage. A yield of four tons or more per acre may be expected under favorable conditions; under very good conditions it may run as high as seven tons per acre. Certain varieties yield more heavily than do others, and it is customary for the canner to grade his prices accordingly.