



FARM AND DAIRY

& RURAL HOME



We Welcome Practical Progressive Ideas

Trade increases the wealth and glory of a country; but its real strength and stamina are to be looked for among the cultivators of the land.—Lord Chatham

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The Growing of Ensilage Corn in Quebec Province*

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Some Advice on the Wherefore of Corn Growing, the Selection of Variety and Seed, and the Growing of the Crop.

WE are growing more small grains in the country to-day than we actually need. Many dairymen are growing grain and exchanging it for concentrates, whereas corn-growing would give them more feed.

Some have objected to corn because it is a heavy feeder and is hard on the soil. True, a large crop of corn will take a lot of fertility out of the land. But that is exactly what we want—to take out all the fertility we can in the form of big crops, but we want to treat the soil in such a manner that this fertility will be returned.

The acreage devoted to corn for ensilage is increasing; the acreage of corn grown for grain is not. One reason for the increase of ensilage corn is that the corn belt is being pushed steadily northward.

Accompanying this development is an increasing demand for seed corn of the right kind. Some growers are taking advantage of this and are trying to produce seed of the right type, but these are comparatively few. A large proportion of the seed corn which we use in Quebec is grown in Essex county, Ontario. The Essex growers must learn to produce what we need. The reason we have come to depend on south-western Ontario for our seed corn in preference to the corn belt of the United States, is that the Ontario growers send us seed that is better suited to our requirements.

When the farmer goes into a store to purchase seed corn in bulk, he generally chooses from the lot having the largest kernels. Now, we like large seed but we also want seed that will mature in time to be cut for ensilage. The large kernels we have found will not mature sufficiently early.

What we need, then, is a smaller kernel that will mature early, and the further north we go the more this statement holds true. We have planted some large kernels that never produced any ears at all. Another point noted is that the farther north corn is grown, the more careful must be the seedling. In addition we must sow seed of strong vitality and of a variety suitable to the district; a proper rotation must be followed and intelligent cultivation practiced.

How shall we select our seed corn? First, we ask ourselves the question: is it of a suitable variety? This can only be ascertained by experiment or by observing how it has done with others. Next, will it grow? This can be easily determined by the ordinary box test. As to the best kernels to select when buying in the ear, those from the middle of the ear are the best. The butt kernels are late maturing while the tip kernels are early but produce too fine a growth. Finally, is the ear well bred?

*Address delivered by Prof. Klinck, of Macdonald College, at the Guelph Winter Fair.



Where Quebec Corn is Best Stored

These two large stave silos afford storage room for the corn grown on the farm of Geo. H. Montgomery, Missisquoi Co., Que. Corn cannot be ripened properly in the greater part of Quebec province, but it can be sufficiently matured to make excellent silage. Prof. Klinck deals specially with Quebec conditions in the article adjoining.

To decide this last point one must have some knowledge of the characteristics of the different varieties. The dent corns have the characteristically dented rather square kernel, which is comparatively deep. The cobs are usually well covered with straight rows of the yellow dents. Early Leaming is the best suited to Quebec province. It is inclined to lack uniformity in the rows and to be open and irregular in the covering of the butt and tip. The Leaming variety has been grown since 1826. Different men have had different ideals as to what was the best type, with the result that all kinds of types have been originated. The medium and late types are too late maturing for Quebec and eastern Ontario. For this reason it is important to buy Leaming on the cob to be sure of getting the early, which is smaller, shallower and narrower in the kernel than the late.

In the white cap yellow dents there is much need for a standard. The large variety is too late in maturing for our climate. Some of the small varieties are deeper in the kernel and, therefore, later than the medium. The most suitable are the medium and some of the small varie-

ties. These corns incline to lodge. Wisconsin No. 7, a white dent, is more uniform. Corn growers in western Ontario who have grown this variety exclusively have done well. They must see to it, however, that the standard is maintained. To sum up, the Early Leaming is first choice, then the medium and small White Cap Yellow Dent and then Wisconsin No. 7.

Of corn grown for grain, Compton's Early is the best with Longfellow a good second. Both are flint corns. The former while larger in the ear has a smaller kernel and matures earlier.

When buying seed corn in the ear it is important to note the condition of the cob. The cob should not be spongy. Neither should it be too large as it is then apt to mould. If too small it does not carry a large enough proportion of grain. If, on removing the kernels, the tip cap at the base remains on the cob, the ear is worthless. One needs to be on the watch for frosted ears.

In regard to this point many people are careless with flint corns because they believe they will not freeze as readily as will the dents. As a matter of fact, the opposite is true. When dent corn ripens the ear falls over, the husk loosens and the grain dries and hardens quickly. The ears of flint corn remain erect. Rain collects at the butt of the ear, with the result that freezing does much more damage.

CORN CROSS-FERTILIZES

Corn is cross-fertilized, the pollen being carried from plant to plant by the wind. Normally the silks, by which the pollen is able to fertilize the ovaries, are about six inches in length. If there be no pollen then the silks will grow for several times this length. If there still be no pollen then additional ears will grow out from the base of the first one. The first kernels to be fertilized are those at the base of the ear. About five days elapse between the time that the butt kernels and tip kernels are fertilized.

Rotations differ but the best ones are those in which corn follows clover. Corn does best on a rich early soil. When grown in hills, we plant 42 inches apart each way and consider three stalks to a hill a full stand. When in rows, we plant one foot apart in the row and 42 inches between rows. This stand gives the best balanced ensilage.

Early in the season the cultivation should be fairly deep but as the season advances it should be shallower. The reason is that the new roots which the corn plant sends out are near the surface and deep cultivation cuts them off, thereby doing perhaps as much harm as good. This is no cause, however, to cease cultivation. Even after the corn has become too high for the two row cultivator it will pay to keep at it with a one row strawberry or straight toothed cultivator.