

Fodder Corn and the Silo.

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Conclusion.

GROWING THE CROP.

In Canada the corn crop is unquestionably the most suitable for ensilage uses. The manner in which the crop is grown determines to a great extent the possibility of its being cured with success and certainty. It should be grown to a stage near maturity. Then the several plants will have attained the largest amount of nourishing substance for the feeding of cattle, and will be capable also of long preservation, without waste or loss. The feeding value per acre is greatest when the crop is almost matured when cut. The conditions essential to enable the plants to reach that stage of growth in our Dominion are:—(1), Early Planting; (2), Suitable Varieties; (3), Thin Seeding; and (4), Frequent Cultivation.

1. *Early Planting*.—Although a loose, warm soil is known to be best adapted for its growth, large crops can be obtained from clay lands as well as from sandy soils. The land should be drained either naturally or by artificial under-drainage. It should be worked into a fine seed-bed. To attain that, I recommend for most soils, deep Fall ploughing and thorough surface cultivation in the Spring. If the land be foul with weeds, a surface cultivation at two intervals of 10 days each will give the weeds a chance to start, when they may be again destroyed by the cultivation preparatory to the planting of the corn. In that way the young corn plants may obtain a good start on fairly clean soil. The labor of keeping the field clean during the Summer, will be very much lessened by such a treatment in the Spring. The planting in the several districts should be late enough to miss the late Spring frosts, and early enough to obtain the full value of the growing season. Early planting should be shallow, that the sun may warm the seed-bed and so prevent the seed from rotting in the ground; later planting may, with advantage, be deeper to insure sufficiency

of moisture for germination. A liberal quantity of barnyard manure worked into the soil will be applied profitably. Corn from a manured part of a field will be on an average from $2\frac{1}{2}$ to 3 feet longer in the stalk, will tassel out from a week to 10 days earlier, and will carry a much larger proportion of ears to the stalks than on a part of the same field of similar soil where no manure has been applied.

2. *Suitable Varieties*.—Our information on this matter is yet very scant. It may be safely recommended that at least one-half of the acreage to be planted, be seeded with some variety that will mature in the locality. The other half may be seeded with some of the larger growing varieties of ensilage corn, such as "Mammoth Southern Sweet," "Giant Prolific," "Sweet Ensilage," "Red Cob Ensilage," "Mammoth Sweet Ensilage," etc., etc. From examinations made and analyses conducted at the Ontario Agricultural College last year under my direction, it was learned that over 42 per cent. of the total dry matter, and over 56 per cent. of the total crude protein were contained in the leaves of the plants, which had not then reached a stage beyond what is called "early milk." This would indicate that such varieties as are leafy in their growth will be rich in feeding constituents.

3. *Thin Seeding*.—It has been practically decided by the judgment of those who have had the longest and most successful experience that corn for ensilage, should be grown in hills or rows. These should be from 3 to $3\frac{1}{2}$ feet apart. In rows the seeding should not be thicker than 3 grains to the foot. When large white ensilage corn is grown the seeds should be from 6 to 8 inches apart in the rows; three seeds to the hill is enough. A common force-feed seed drill may be used for the planting in rows, all the spouts except two being stopped up. One idle spout may be dragged in the soil to mark for the driver's guidance, in order that all the rows may be an equal distance apart.

4. *Frequent Cultivation*.—Level cultivation is preferable to "hilling up" or "moulding up." If the surface of

the soil should become crusted, as soon as the corn appears 2 inches above the ground it should be harrowed over with light harrows. That treatment will keep down any growth of grass and destroy tender weeds. The harrowing may with advantage be repeated once or twice before the corn is more than 8 inches high. Frequent and shallow cultivation between the rows or hills afterwards will keep down weeds and promote growth. The cultivation should be continued as long as practicable, even until the stocks are higher than the man and the horses. When the lower leaves begin to turn yellow and the ears of the corn are in the milky stage, the crop should be cut.

THE SILO.

The prejudice against the construction and use of silos is fast disappearing from the minds of observant farmers. The partial failures of some of the first efforts to introduce into this country the ensilage system of preserving fodders, originated a timidity and opposition which are now uncalled for. The causes of those failures are understood, and can be so guarded against, remedied or removed that satisfactory results may be obtained with certainty. In the handling of perishable commodities the damage and loss that may be sustained, will be proportionate to the absence of applied knowledge and skill. All rational and successful human effort is the result of some person's accurate observation and clear thinking. A clear knowledge of "how to do it" and the "doing of it" just that way will enable farmers, as well as other men, to cope successfully with the things most difficult to do well. The curing of a crop of fodder corn in the silo is now an easy and invariably satisfactory work to the farmer who follows right directions with reasonable prudence. It used to be stated that there was a loss in the feeding value of fodders when put into or taken from the silo. When the ensilage was partially decayed, of course that was the case; but a similar depreciation of quality and consequent loss in the feeding value would result if the hay, grain and straw were allowed to become rotten in the mows or granaries. The spoiling was and always is a result