

farmer has a silo or not it will pay him to grow a few acres of corn. Some of it will serve the purpose of supplementary feed for his cows during the latter part of August, when the pastures are dry and the green peas and oat crop is done.

Generally speaking corn does best on lightish soils where the drainage is good, or soils, for example, in which there is a slightly larger percentage of sand or the higher constituents than of clay. In any case corn should always be planted on land on which water will not lie after a heavy rainfall, and never on low wet ground. Some successful corn-growers follow the plan of plowing and top-dressing the land in the fall and cross-plowing in the spring. Good crops have been grown on sod plowed shallow in the fall and then worked well with the disc harrow in the spring. Whatever plan is adopted the aim should be to keep the plant food near the surface and not bury it so deep that the plant will have a hard time to find it. The surface should be well worked and the soil made as fine and as free from weeds as possible.

As to planting, there are several things to be considered. In this country, taking one year with another, on or about the 24th of May is the best time for planting corn. At any rate no corn should be planted till both the soil and the air is warm and suitable for the growth of the plant. It would be better to keep the seed in the bin rather than plant it when the soil is damp and cold. As to the mode of planting there is a difference of opinion. In this country planting in hills is generally considered to give the best returns. The field is marked in rows both ways and the corn planted where the markings cross. This plan admits of cultivating both ways and gives plenty of room for the corn to mature providing the rows are at least three feet apart. Some successful corn-growers put the corn in in rows from 3 ft. to 3 ft. 6 ins. apart with one seed every 10 or 12 inches. There are special corn drills made for this purpose, but they are not used in this country to any great extent. It is hard to regulate the ordinary grain drill so that it will sow corn sufficiently far apart in the drills. If a proper drill for the purpose is at hand the planting of the corn in rows, as described, certainly means less labor, and if the ground is clean to begin with the after-growth of weeds will not interfere much. Corn should be planted at from two to three inches deep. If the land is rolled immediately before planting perhaps two inches would be sufficient.

As to the variety of seed to plant considerable might be said. In selecting seed it is a good plan to select the varieties that have proven to be the hardiest, that will come to maturity in this country and that will give the largest bulk of ears. Farmers in the various districts will have to be governed by their own climatic conditions in making selections. A variety that would come to maturity in the southern part of this province might not do so in the northern part. In the co-operative experiments over Ontario in 1897, as published in the report of the Experimental Union for that year, the Clouds' Early Yellow Dent corn appeared to be well suited to warm soils in Southern Ontario; the Mammoth Cuban, Wisconsin, Earliest White, Dent and Evergreen Sweet to Central Ontario, and the Salzer's North Dakota and Compton's Early to Northern Ontario.

Corn cannot have too much cultivation after it is planted. A gentleman whom we met last week, and who grew corn very successfully in New Jersey for several years, stated that he always followed the plan of going over his corn ground with a light slant-tooth harrow as soon as the plant made its appearance above ground. This plan served the double purpose of preventing the growth of weeds and of conserving the moisture in the soil, and did not injure the corn plant any. A slant-tooth harrow is one in which the teeth slope toward the rear end of the harrow. We are inclined to think this good practice if the right kind of harrow can be got to do the work. The work of the cultivator, at any rate, should not be long delayed after the corn is above ground. If the land is fairly clean a form of cultivator that will merely loosen the soil will do. Someone

has said that the cultivator should be kept going continually, which is very good advice. Of course, what is meant is to have the cultivator ready, and whenever there is a spare hour keep it moving.

Growing Potatoes.

(Continued from last issue.)

MANURING FOR POTATOES.

During the four seasons, 1895 to 1898 inclusive, elaborate field experiments on the manuring of potatoes have been made at the trial grounds in connection with Reading College. The results of these experiments are of a striking character, and show in a forcible manner how systems of manuring potatoes should vary according to the soil, the climatic conditions, the kind of potato, and the previous treatment of the land.

The objects of the experiments have been to ascertain the relative effects of farmyard and artificial manures; to compare the results of applying the manures in the early winter and at the time of planting; and to discover what combination of artificial manures is best suited for the potato crop.

Mr. Sutton sums up these experiments as follows: "The experiments of the past four years show that small results were obtained by direct application of manures to the potato crop, in a district with a dry soil and limited rainfall. Potatoes are most successfully grown on land in high condition, and the results indicate that on such high-conditioned land the direct application of many artificial manures for potatoes will do harm rather than good. There is not much to choose between applying manures in the early winter and at the time of planting. It has been very striking all through the experiments that nitrate of soda has had far more effect in increasing the luxuriance of the haulm stem than the weight of the tubers. Another result of the experiments is that potash manures have not had the effect of increasing the crop to the extent anticipated when the investigations were commenced. It is also noticeable that farmyard manure has, with few exceptions, failed to give satisfactory results; this is, in all likelihood, due to this manure keeping the soil drier, and thus intensifying the effect of dry seasons, and partly also to the land having been heavily dressed with farmyard manure in previous years.

A summary of similar experiments conducted at Rothamsted is also given and the average crop per acre for the twenty years, 1876-1895, with the same manures applied annually, is as follows:

"No manure, 1 ton 11 1/2 cwt.; 14 tons farmyard manure (with the addition of superphosphate before 1883), 5 tons 2 cwt.; where superphosphate only was used the average crop was 3 tons 2 1/4 cwt.; and mixed mineral manure, including superphosphate and sulphate of potash, gave on the average 4 1/2 cwt. more than superphosphate only. Further, nitrate of soda and mixed mineral manure gave the best average for these years, viz., 6 tons 1 3/4 cwt.; where ammonia salts were added to mixed mineral manure instead of nitrate of soda the average result was less by 2 3/4 cwt. per acre.

"In two important points the Reading results agree with those at Rothamsted: (1) the addition of a potash manure to superphosphate has not materially increased the crop, (2) farmyard manure has not given as good results as a judicious application of artificial manures. It should also be noted that the nitrate of soda has given a better result than ammonia salts including sulphate of ammonia containing the same amount of nitrogen."

GROWING THE POTATO.

Potato growers in the old land pay special attention to the early market. The selecting of the seed in Jersey is described as follows: "The seed is carefully separated at the time of lifting, and 'boxed' at once. These boxes are very simply made, and are supplied at a moderate price.