

Corn Growing and Potato Planting

Test Your Seed Corn.

A great many farmers have lost time and money in recent years by planting seed corn that did not grow or had weak germinating power. To make sure that the seed is good it should be tested. Not only should there be good plump, well developed seed, but the seed should have sufficient vitality to make it grow vigorously from the start.

There are several ways of testing. An ordinary dinner plate with a double fold of moistened muslin or woolen material between which the kernels can be laid, covered with another plate, to prevent too rapid drying, makes a very good germinating chamber. If the corn is on the ear take about five kernels from each ear and keep separate, marking the ear from which they come. Take one kernel from the tip, three from the various parts of the middle portion, and one from the butt. If the corn is shelled then make a selection of, say, 100 kernels fairly representing the sample. The tester should be placed in a room ranging around seventy degrees in temperature. All kernels should be sown early and vigorous sprouts in five days under these conditions, should be considered as not fit to plant. In a good sample, at least 95 per cent. of the kernels should germinate in five days. When the germinating power is known, then planting should be conducted accordingly.

Growing Corn for the Silo.

In our eight years experience in corn growing, we have come to the conclusion that it is better to plant the varieties that mature early although not producing as many tons to the acre, but having a larger percentage of well matured ears. Well matured corn makes a better quality of food, and will not so in the silo, like corn cut too green and immature. For a number of years we have sown Edward's Early Yellow, Improved Leaming and Mammoth Cuban, but last year we found that White, sp. Yellow Dent, or Wisconsin Early did well, ripened earlier and produced splendid ears.

The great point in growing corn is to have a good seed bed. There is nothing better than clover sod, plowed in the fall, top dressed in the winter or spring with manure, and thoroughly cultivated. If you have a field infested with weeds and thistles, if treated as above described, the weeds will be pretty well killed by the cultivation necessary to produce a good crop of corn. Cultivate as early in the spring as possible; it will help the soil to retain the moisture, and also warm it. We like to sow, if possible, from the twentieth to the 24th day of May, and harvest before the 26th of September, if it is sufficiently matured, but would rather risk a little frost, than cut and store in the silo too green.

Corn grows rapidly, and requires plenty of heat, sunlight and cultivation. It is very important to test seed before planting, to ascertain the proportion that will germinate, then one can have an idea of the quantity to sow to the acre. Probably the best method to secure good seed is to go through the field, before cutting, and select the best ears, cut, husk and hang up in a dry place, so as to thoroughly dry before the cold weather sets in.

We sow with a 10 hoe drill, using two hoes, the third from each end, and drill the same as if sowing other

grain; this will make the rows 35 inches apart. Set the indicator to five pecks to the acre, and by stopping eight hoes, you will sow one peck to the acre, which is quite sufficient, if the grain is good. Harrow soon after planting and again after the young plants appear, with a light harrow, or better with a weeder several times. In this way you will kill a great many weeds just coming through the ground, saving a lot of work later on. In cultivating for the first time, work as close to the plants as possible, and later, cultivate shallower, so as not to injure or destroy the little roots that spread through the soil. In a dry season, cultivate often, and always after a heavy rain, as soon as the soil is in a fit condition. Working the surface soil well will help it to retain the moisture.—L. Warren, in Farmers' Institute Report.

Potato Planting.

The most satisfactory time to plant potatoes is about the middle of May. By planting at this time the potatoes will be coming up when danger of frost is over. Good crops can be produced by planting up to the middle of June, or later, but the larger yields will be obtained from the earlier plantings, as the longer time the potato has to grow, the larger the crop will be. It has been found that the most economical set to use is a piece of potato with at least three eyes and a good amount of flesh. Mines in the field are often due to using small pieces, especially when the spring is dry. The potatoes used for seed should be good average specimens of the variety planted. Potatoes for seed should be kept as nearly dormant as they can be and, if possible, prevented from sprouting before being cut for seed. After planting, the new shoots from the sets live for a time on the pieces of potato, and if much of the substance has been taken from the potato by sprouting in the cellar, the withered piece will not throw as strong a second sprout, for the first is broken off in handling, and if the season is dry many of the sets may not sprout at all.

Potatoes should be planted as soon after cutting as possible, as plump sets will give better results than withered ones for the same reason that has been stated already. If help is scarce and the seed has to be cut a few days in advance the sets should be covered with lime or plaster, as this will prevent withering to a large extent, and thus increase the yield. There are machines on the market for cutting the potatoes, but hand cutting is still the most satisfactory method. Where potatoes are grown in large areas it is far more economical to use a potato planter than to drop the sets by hand. The man who plants in this way makes the row, opens the drills, plants or drops the sets, covers the sets and applies commercial fertilizers at the same time, if desired. To do as much by hand would require a span of horses and a man to open the drills with a plow, three men or boys to plant, and one man to scatter the fertilizer, a span of horses and a man with double mould board plow to cover the sets.

The planter will do as good work as a man dropping the sets if it is watched, so that clogging, which otherwise might occur at rare intervals, is prevented. In dry seasons the stand of potatoes is better from a planter, as the soil is in closer con-

tact with the set, which is thus kept moist and prevented from drying up. When there is a dry time it pays to roll loose soils after planting for this very purpose. If a planter is not used drills may be opened with a double mould board plow thirty inches apart and deep enough so that when the soil is leveled the sets will be about four inches below the surface, as this has been found the best depth. The sets should be dropped from twelve to fourteen inches apart in the rows. The drills are then closed with the plow as soon as possible after the sets are dropped to prevent the drying out of the sets.—W. G. Macdon, Central Experimental Farm, Ottawa.

Potato Scab.

The Maine Experimental Station has made a special study of potato scab. In a press bulletin just issued the following advice is given:

Probably the most common way in which scab fungus is disseminated is by the use of infected seed. It is therefore of the utmost importance to use clean seed. Where it is impracticable to procure clean seed, or in case of doubt, it should be treated with a fungicide. While such treatment will help scabby seed, it may not act as an entire preventive. It is therefore best not to use seed that is much affected.

Formaldehyde gas either in solution or in the dry gaseous state can be effectively used to clean suspected seed. Formaldehyde (formalin) is sold in a solution of about 40 per cent. strength and can be obtained at any drug store. A few bushels of seed are most conveniently treated as follows: Make up a solution of formalin of the desired bulk using 16 ounces of formalin (40 per cent. solution of formaldehyde gas) to each 30 gallons of water. Soak the seed two hours in this solution and then spread out the tubers to dry. After drying, the potatoes should be cut and planted in the usual way, but care should be taken not to allow them to touch one box, bag or bin where scabby potatoes have been kept.

Cleaning the Plow.

The following plan for cleaning the plow, which will work well on other tools of iron or steel, is recommended: Slowly add one pint of sulphuric acid to one quart of water, handling it carefully and stirring slowly as considerable heat will result from the mixing.

When it is cool, moisten the surface of the metal with this, and then rub dry, after which wash off with pure water. This application should clean any surface not too highly rusted, but if the tool has been long neglected, it may require more than one application.

After cleaning, a thorough coating of grease is given before putting the tool away, and when taken out to use give another greasing, and it will go easier.

Clovering.

Seeding to clover will be more necessary this season than for some years back. On a great many farms clover is so badly feared that it is doubtful if it will come to much. Its only salvation is good growing weather and rolling as early as possible. By the time this is in the hands of our readers the fate of the clover crop will be known. If you have not yet done so, give the clover field a good rolling.

In seeding to clover, the seed should be sown early. On fall wheat the earlier it is sown the better.