

is sufficient moisture for germination at this depth and the soil has been properly firmed previous to seeding. Where soil conditions are not so favorable, seeding as deep as two inches may be advisable."

Regulating the Drill

With flax at the present high prices it is advisable to make sure that it is being sown at the proper rate. Drills, even of the same make, vary in the rate at which they seed. The size of the seed of the particular sample of grain determines how many pounds will be put on per acre. A rule for testing a grain drill is as follows: There are 43,500 square feet in an acre. Divide this number by the number representing the width of drill in feet. Divide the number thus obtained by the number of feet represented in the circumference of the wheel. This will give the number of revolutions which the wheels will make when drilling one acre of ground. Jack up the wheels and turn enough times to represent the distance which would be travelled in sowing one-quarter of an acre. Collect the seed, which has been run out on a sheet, and weigh it. The drill may be readjusted until it will show the amount of seed desired.

Varieties of Flax

Variety tests over a period of three years at the Manitoba Agricultural College show that Premost or Minnesota No. 25, as it is sometimes called, gave the best results. The comparative yields of common varieties are shown in the following table:

Variety Name	Yield in Bushels and Lbs.			
	1915 Bus. Lbs.	1916 Bus. Lbs.	1917 Bus. Lbs.	Average 3 Years
Premost or Minnesota No. 25	15-42	13-42	18-42	16-04
N.D.R. No. 52	17-14	16-20	16-05	14-32
N.D.R. No. 114	16-06	16-20	14-41	13-41
Novelty	14-32	7-48	14-16	12-13
Long Stem	5-18	6-44	17-50	10-00
Golden	3-00	5-20	13-22	7-14
N.D.R. No. 73	—	—	18-17	—

It will be noted by the table that N.D.R. No. 52 and N.D.R. No. 114, two wilt resistance varieties originated by Professor Bolley, of North Dakota, yielded almost as much as Premost.

Flax wilt is a fungus disease which attacks the root of the plant, causing the plant to shrivel up and die. The disease may be carried over by the seed or in the soil. When the soil becomes badly infected it is impossible to secure a crop. Sealy, wilted seeds are an indication of infection. The usual formalin treatment as used for wheat and oats will disinfect the seed provided it is first thoroughly cleaned. The treatment should be thorough, and be given at as short a time as possible before sowing.

Is Flax Hard on Land?

The general impression that flax is hard on land appears to be without foundation. The following table showing the loss of fertility from ordinary crops of wheat, oats and flax, shows that the one essential plant food element upon which the flax plant makes a heavy draft as compared with wheat and oats is nitrogen:

Acre Yields and Fertility Loss

Crop	Bus.	Yield Nitrogen	Phosphoric	Potash
Wheat	20	35	20	35
Oats	50	50	18	45
Flax	15	55	18.3	29

The treatment of the soil and not the loss of fertility is given by Professor Harrison, of the Manitoba Agricultural College, as the cause for the generally observed lower yields of other crops after flax. He says:

"Flax, for the most part, has been sown on new land, quite frequently, in fact, on spring breaking. Over the major part of the West there is not enough moisture properly to decompose the sod and mature a crop of grain of any kind in the same season. Hence, one or both must suffer. It has been found that sod on land cropped in this way will take several years to get into a proper condition unless it is followed the following season. Knowing the shallow rooted habit of the flax plant, it is easy to understand how it would use up any moisture that falls and at

the same time draw heavily upon the supplies of plant food that are being liberated in the surface area of soil. When a crop is grown on spring breaking, it should, in most cases, be followed the following year. This rule applies equally well for the cereals as for flax. It will, however, be understood that where the rain fall during the following summer is fairly heavy these ill results would not be so marked.

"When flax has been grown in rotation with other crops, no ill effects have been apparent, and we believe that the aforementioned conditions are largely responsible for the idea that the crop is very exhaustive."

Growing Fodder Corn

Growing corn for feeding purposes for this western country is a coming necessity, and I often notice articles in the agricultural press, as well as in the local newspapers in agricultural columns. I also have inspected corn plots that our neighbors have planted in an experimental way, for it is the first corn they have ever tried to raise, and I find they all seem to resort to the same plan of planting, it being the easiest and most rapid process known to date; that of using the grain seed drill. Very few grain drills have a capacity to give you seed enough for a good stand of stalks for feeding purposes. It is the same for earing purposes. It should be the last system to use in planting for earing purposes.

I have had 50 years' experience in the corn field in Ontario, when Ontario

was just as crude as this west is today. When the people began to make their minds up to get into the dairy business, the herds increased and feed problems had to be solved. As any Ontario native knows, severe droughts occasionally visited that country in earlier days, when farming was not up to present-day science. This made it quite necessary to grow and depend on some crop other than hay and straw. Corn was introduced. Like the residents at present in this country that have not come from a dairying community, with some corn experience, farmers planted their corn as they planted their wheat. The results were unsatisfactory.

While this is not a recognized corn belt and our nights are too cold for the growth and maturing of earing corn, particularly of the coarse feeding varieties, we have got to turn our attention to growing all the stalks we can, and forego the loss of ears to some extent, unless we happen to have a very favorable corn season, as we occasionally have here. In the absence of silos it is quite necessary to grow a finer stalk of woody substance. With thin planting we will get a heavy, woody, stubby stalk which will set for ears, which will seldom mature to be of any value. On the other hand, by using plenty of seed, a thick growth is made; the stalks will run up high, will be less woody, will dry out when cut much more quickly than coarse stalks which will hold moisture and freeze hard when the cold weather comes and become useless unless put into a silo when harvested.

Proper Planting Methods

Take 10 acres of land you have laid out for summer fallow. Plow it, say eight inches deep; harrow it well, open up a furrow as you would for potatoes, three feet apart, get the boys or girls or the hired man, or better still, yourself, to follow up the plow, dropping the corn in the furrow. You can do this about as fast as the team will walk. By taking a handful of corn and working your fingers a little you will distribute the corn hit and miss in the bottom of the furrow, as our plows have wide bottoms. You may have a clear space of 10 to 12 inches after the dirt rolls back. After the plow passes on you will see in drop-



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