

The Frequent Changing of Seed

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The length of time that a crop can be grown successfully on any one farm without a change of seed from some outside source, has an exceedingly important bearing on the work of the plant improvement. If it is necessary to frequently introduce seed of a certain variety from a different soil, or climate, or locality, the work of crop improvement on the individual farms is greatly limited. If, on the other hand, it is possible to satisfactorily grow a crop on one farm for a number of years without a change of seed, the work of plant improvement for the individual farmers has many possibilities.

A number of varieties of oats, spring wheat, winter wheat, barley, and potatoes have been grown on the farm of the Agricultural College, at Guelph, Ontario, from 16 to 21 years without a change of seed from outside sources. Of 35 varieties the yield of grain per acre in 1910 was greater than the yield per acre in either the first or the second year of the experiment in the case of all varieties, with the exception of two varieties of spring wheat and four varieties of winter wheat.

On the whole, the average yield per acre during the latter part of the period has been greater than the yield per acre for a corresponding period at the commencement of the experiment. The soil on which these varieties have been grown has changed but little in fertility and no plant selection has been used in this particular test. It seems quite possible to grow the same varieties for a considerable length of time without change of seed, providing care is taken in the quality of the seed used.

Corn Improvement Through Our Club

Loss Huff, Kent Co., Ont.

We believe that through the proper selecting and grading of our seed corn, we can increase our yield at least 25 per cent. We select a type of ear as the standard, and then try to improve on that type or style of ear. The type of ear selected is of good length, good butt, and the tip producing good corn, so there is no col. non-producing. The corn rows on the cob should be straight, even and compact, and the grains to have a good square shoulder.

THE KIND OF EARS TO SELECT

We should be very particular about the kind of stalk we select our seed from. It should have a good, strong butt, and gradually taper to the tassel. Ears from stalks producing them near the ground should be chosen, because such ears ripen earliest, and in wheat or oats the same thing is noticeable. The ear that is high up on the stalk is much later ripening. This is easily proven where there are twin ears on a stalk—the one nearer the ground always ripens first. By practicing such selection top heavy corn is avoided, such as is apt to go down in a storm.

To get a good stand the seed should be carefully graded, the large, medium, and small corn should be kept separate, so that the planter can be regulated to plant three or four grains in a hill. A great many people imagine they have a poor class of seed, when the trouble really is non-grading.

SEED SUITABLE TO LOCALITY

It is necessary that one should select seed corn suitable for soil and locality. The Flint varieties are better adapted to light land, and the Dent varieties to heavier land, although the White Cap and Butler Dent grow well on either soil.

Seed corn should be kept perfectly dry, and where there is a good circulation of dry air. The best methods are to put it on a rack or hang up with binder twine, so that no ears touch.

Some members of our club have seed plots, but the majority favor picking their seed from the field. A clover sod on heavy clay, fall ploughed and well cultivated in spring, gives

best results. On sandy land, spring plowing is best. I may say that our average yield is 100 bushels of ears to an acre, and all our corn has thoroughly ripened.

THE FIFTH PRIZE FARM IN THE PROVINCE OF ONTARIO

Mr. D. Duncan's Farm Described by W. F. Stephen who, along with Mr. Simpson Rennie, Placed the Awards in the Second Year of the Dairy Farms Competition Conducted by Farm and Dairy.

WE visited Mr. D. Duncan's farm on July 10th, 1910. His farm comprises 350 acres of land in two lots, a portion of the land is somewhat rolling. The level portions are part sandy, and part clay loam.

Fronting as they do the roadway, the house and surroundings are prepossessing. The house is built of red and white brick, one and a half stories, with a double front, bay window and half veranda. It is fronted by a well clipped lawn, flower pots and some shrubbery. The house is well finished, and complete in many regards.

wherein was about 40 loads at the time of our visit. A mere economical system of handling and conserving the manure would have given a higher score in this regard. The buildings on the other farm were of modern build and quite convenient.

A square silo, 16 by 28 by 30, and a circular stove, 14 by 30, preserves the corn crop and gives abundance of silage for winter and summer feeding.

THE FEATURE OF THE FARM

As the score for this farm indicated, the strong feature of this farm was its live stock, and especially its herd of registered Jersey cattle, Berkshire and Tamworth swine and their crosses. At the time of our visit there were 55 cows (41 in milk) and 19 heifers, as well as 10 bulls (ranging in age from 10 months to three years), and 20 calves.

This Jersey herd is one of the best in Ontario. They are true to type, are very uniform, show constitutional vigor and are heavy milkers. They have won many laurels in the show ring, and needless to say Mr. Duncan is proud of them and that he has many customers for his stock. The milk from this herd is separated, the cream going to supply customers in Toronto. The skim milk is fed to the calves and hogs. A large revenue is realized each year from this fine herd in the sales of stock and cream.

MANY HOGS ARE RAISED

The by-product of the dairy—skim milk—over and above that fed to the calves, is turned to good account, as many hogs are raised and fed each year. At the time of our visit there was one boar, 17 brood sows, 82 young pigs and 42 hogs just about ready for the packer. The sows showed Berkshire breeding and had been mated with a Tamworth boar. Mr. Duncan likes this cross, as they feed easily, mature early and weigh well. The piggyery has 12 pens and a runway is given to all the pigs. Those fattening were kept in a large shed, and waste crackers, etc., from a biscuit factory forms a large part of the ration. From 150 to 175 hogs are fed off every year.

The 14 horses kept are of no particular breeding, but are good, large work horses.

REVENUE FROM POULTRY

In poultry Mr. Duncan had six varieties of hens, besides turkeys and ducks. A nice revenue is got from this department of the farm. Egg production is aimed at, especially in winter.

A wide range of crops are grown, and include 10 acres of peas and three acres of flax; the former crop was seen on few and the latter on no other farm visited. The grain of these goes to balance up the ration fed on the Jersey herd. As yet alfalfa is only grown to a limited extent, but each year more land on Mr. Duncan's farm is being seeded to this splendid feed for milk production. While the stand of crops was fair they were not as uniform as we expected, and weeds were also too plentiful. A six year crop rotation is practised on the heavy land—hay and pasture three crops, peas, fall wheat, seeding down with oats. On the light land the rotation as practised is hay and pasture three years, corn, roots and corn, then seeded with oats.

The manure is hauled to the land during the winter and spread or put out in small heap.

And Now One For Ontario

The unqualified success that attended the first Canadian Apple Show, recently held in Vancouver, B.C., has brought forth the suggestion that a National Apple Show be made an annual event in Canada. Next year, if held, it will be in Eastern Canada. Where is it to be held? Where do you think it should be held?

The far eastern provinces have but a limited area devoted to orchards, as compared with Ontario. Quebec is not to be thought of in connection with holding a National Apple Show. If held at all, it must be in Ontario. Ontario last year produced 70 per cent. of all the fruit grown in Canada and this fruit was unexcelled in quality.

It is now the proper thing for Ontario growers to get busy and arrange for a National Apple Show next year to be held in Toronto. The enterprise of the fruit growers of this banner province of Ontario is all the guarantee required to ensure the matter of placing our superior fruit on exhibition and carrying out the details of a Canadian National Apple Show, which will be second in name only.

It has a fairly good water supply and what no other place had—an old-fashioned bake oven in the outside kitchen.

The dairy room is in the cellar. It has a concrete floor and a drain therefrom. To this room the cream is taken from the separator and stored in ice tanks until taken to the city each morning. While this dairy room is a desirable place for the purpose, yet there is more labor involved in taking cream to and from this dairy, and ice to it, than if a combined ice house and dairy were built outside at a limited distance from the stable, and where the cream cans could be loaded on a wagon direct.

A SPLENDID GARDEN

The garden with one exception was the best seen in our rounds, having a variety of vegetables and small fruits, as well as plum and pear trees. It was apparent that weeds had been plentiful. There was a large orchard, but here and there trees were missing which detracted from the score.

The buildings were adequate for the needs of the farm, but those on the home farm were somewhat scattered. They were as convenient as could be made from buildings of their time. Also they were fairly well lighted and ventilated.

The arrangement for feeding was convenient, and a carrier conveyed the manure to the yard,

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