

Barley and Malt Sprouts.

Through the burning of a brewery in Owen Sound some 25,000 bushels of barley and malt were sold for feeding purposes. I was fortunate in getting 260 bushels barley at 16c., and 100 bushels malt at 10c. per bushel, and ask the following questions, as they will interest several of your subscribers here:

What is the comparative value of 100 pounds of malt sprouts and 100 pounds of barley for feeding purposes? What are 100 pounds of malt sprouts worth? We feed to hogs and milch cows, and will have 200 chickens to fatten. What does the malting process do to barley?

Grey Co., Ont. W. M. M.
Malt sprouts contain more than twice the amount of protein (flesh former) that barley does, but only about one-half the amount of starch, and an equal amount of fat. It is, therefore, what is commonly called a rich food; that is, it resembles cotton-seed meal, oil cake, and other nitrogenous foods. It is also decidedly rich in fertilizing constituents, containing 35% nitrogen, 14% phosphoric acid, and 16% of potash. These comparisons and figures indicate that malt sprouts are valuable to feed in conjunction with the ordinary grains. Unfortunately, stock are not very fond of malt sprouts, but they will eat sufficient of it to make it a very valuable food. At 10 cents per bushel, if dry, we should consider it very cheap. In malting, the starchy matter of the barley is changed to dextrine and sugar, which in turn is extracted, and with water makes wort. This wort is then fermented, and produces beer. When the wort has been extracted the remaining grain is called wet brewers' grains, and when kiln dried, dried brewers' grains.

Maritime Experimental Farm.

The Experimental Farm for the Maritime Provinces is situated at Nappan, N. S. a station on the Intercolonial Railway, about 6 miles from the town of Amherst. The farm is well suited for its purpose, comprising a variety of soil. Most of the fields now under cultivation have been underdrained, and a good deal of the farm is now in a high state of cultivation.

Mr. R. Robertson, the superintendent, is a firm believer in the growing of clover and in thorough cultivation, and the object lessons which he is able to give along these lines to the increasing number of farmers who visit the farm during the summer season are doing a world of good. Mr. R. is deservedly popular, not only as a friendly, cordial and courteous gentleman, but also as an Institute speaker, because those of us who know him best know that his practice is as good as his preaching.

Many seem to have the idea that having the Government purse to draw on, large quantities of commercial fertilizers are used which an ordinary farmer could not afford to buy, but Mr. Robertson informs us that the field crops of turnips, mangolds and corn were grown with barnyard manure in really much smaller quantities than many of us are in the habit of using, and no commercial fertilizer at all except in strips for experimental purposes, the secret being a short and rational rotation, by which a heavy crop of clover aftermath is turned under every third or fourth year.

In the experimental plots a large number of different varieties of grain, roots, etc., have been tested, also several kinds of commercial fertilizers. It is proposed this year to increase the size of the plots in the various experiments, which will make the information so gathered much more valuable.

The most interesting experiment now being carried on in the stables is moderate feeding vs. high feeding, and while it is too early in the experiment to say what the conclusion will be, we find that the well-fed steers of twenty-four months old are as heavy and as much matured as the moderately-fed ones of thirty-six months. Some of the steers are tied with chains in double stalls, and others kept in box stalls, and it is found that those kept in the box stalls have given the best returns every time.

There are three bulls kept on the farm—two Ayrshires and a Guernsey. The Ayrshires are Utopia, by Matchless (7560), and Robbie Burns, by Utopia, dam Imp. Yellow Kate. The Guernsey is imported Golden Rule, a lengthy, deep-sided bull of splendid quality. There are six pure-bred Ayrshire cows, including the two imported cows, Yellow Kate and Soney of Holehouse. Yellow Kate has a fine heifer calf a few days old, and is giving fifty pounds of milk per day. Three Holstein cows, one of which, Ilda Rookie, is giving sixty pounds of milk per day; two Guernseys, and fifteen grade cows. There are seventeen heifers of different breeds and ages, and thirty-six steers. There is a flock of Shropshires, and also of Leicesters, and the lambs which are just being dropped are a fine healthy lot. The swine consist of Yorkshires and Berkshires and the crosses of these two breeds, about fifty of all ages. The thrifty condition of the whole stock reflects a great deal of credit on the indefatigable herdsman, Mr. Robert Donaldson, to whom nothing is too much trouble if it serves to the comfort of the stock or the accommodation of the public.

In the garden and horticultural department we found the horticulturist, Mr. Saxby Blair, busy preparing for hotbed work. This department is one of the most useful adjuncts of the farm, as Nova Scotia is perhaps more of a fruit country than a stock country. Over five hundred varieties of vegetables were under

test last year, including seventy-five varieties of tomatoes, a glance at the names of which is enough to make the average farmer dizzy; then, seventy kinds of peas, eighty of beans, forty-nine of cabbage and fifty of garden corn. In the future, more attention is to be given to mode of cultivation and fertilization. Over one hundred and fifty varieties of small fruits have been tested, including strawberries, gooseberries, currants, grapes. There are two hundred varieties of apples under test, and an interesting feature is an eight-acre orchard completely surrounded by woods (bush) to protect it from winds. Over three hundred kinds of ornamental trees and shrubs are grown on the farm grounds, and much reliable information as to the most



Station in Manchuria.

Russian workmen saluting Greek orthodox priest.

suitable sorts obtained. Twenty-three hedges are grown, side by side. Mr. Blair informed us that the perennial border contained three hundred and fifty different varieties and species. We left the grounds pleased with our visit, and more than ever convinced that Mr. Blair is a student as well as a worker, and not surprised that he is an interesting Institute speaker, for certainly his heart is in his work.

In the experimental plots, the largest yields were obtained from Sensation oats, with ninety-eight bushels per acre; Oderbrucker barley, sixty-six bushels per acre; Bryon wheat, forty-two bushels per acre; Arthur peas, forty-four bushels per acre; Selected Leaming corn, eighteen and one-half tons; Perfection Swede turnips, fifty tons; Mammoth Yellow Intermediate mangold, forty-six and one-half tons; Ontario Champion carrot, thirty tons; Pearce potatoes, six hundred and five bushels.

C. H. B.

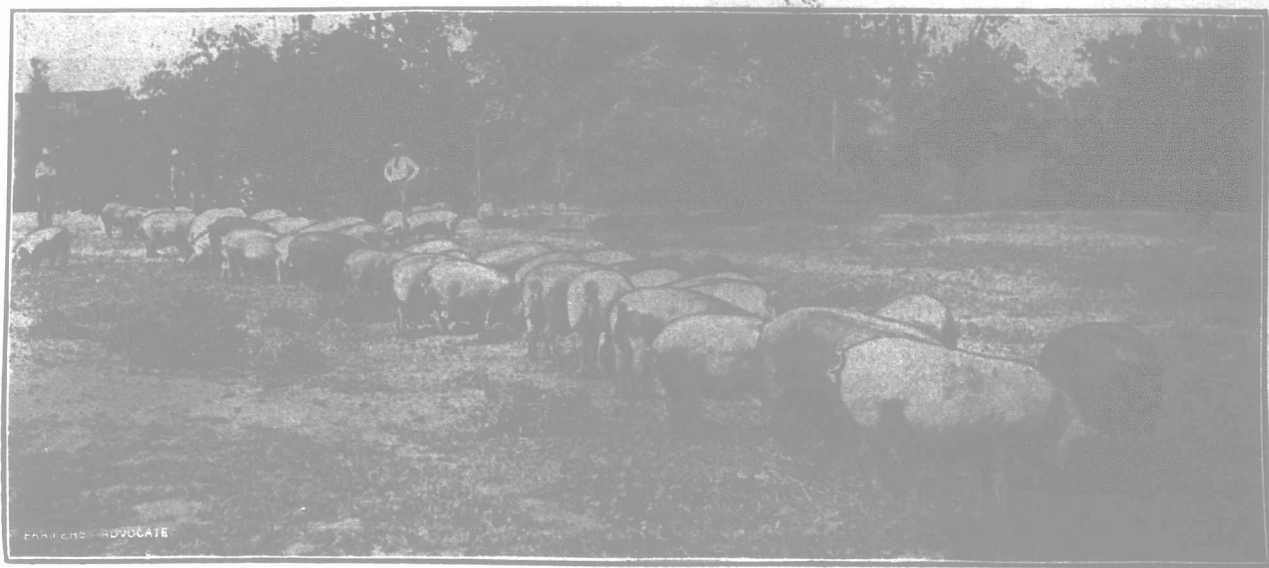
Over \$35.00 Profit per Acre.

To the Editor "Farmer's Advocate":

Sir,—I have been noting with interest the articles that appear in your paper in regard to the sugar-beet industry; also, what some of our local newspapers have to say on the subject. The Dresden and Wallaceburg companies have been very honorable in their dealings with the farmers. My experience is somewhat limited, having grown beets but two seasons: nine acres in 1902 for \$4.00 per ton, delivered at the Dresden factory, for which I received \$567.00; total cost for growing and marketing them, \$495.00; net profit, \$72.00, or \$8.00 per acre; that is, placing wages at \$1.50 per day for men, and \$3.00 per day for man and team. Farm was six miles from the factory. Remember, that was a very wet season, and caused a great deal of extra work. As for crop No. 2, I had just two acres, with much better results, receiving \$175.56 after the seed had been paid for. Total cost at the same scale of wages, \$104.00; net profit, \$71.56, or \$35.78 per acre. The price for the last crop was \$4.33 1-3 per ton, delivered at the Dresden factory. I think, as farmers become accustomed to growing beets, they will find them a paying crop. I am very sorry that we are going to lose our factory at Dresden.

Kent Co., Ont.

JOS. ANDERSON.



One Hundred Chester White Hogs.

Growing on grass and one feed of grain per day, at River View Farm; the property of Robt. Clarke, 41 Cooper St., Ottawa, Ont. (See ad. on another page.)

Successful Potato Culture.

To the Editor "Farmer's Advocate":

I have been requested to write a brief article on potato culture in Aroostook Co., Maine. The soil where these famous "spuds" are grown is a deep, yellow loam, that was originally covered with a heavy growth of yellow birch and sugar maple, with a few beech and other hardwood trees mixed in. The bed rock is limestone, standing edgewise near the surface, and in some places breaking through, consequently no drainage is needed.

The best potatoes are raised on clover sod, plowed under, any time after haying till the next June, but the ground is generally plowed in the fall.

As soon as the land gets dry in the spring the spring-tooth harrows are put on. The ground should be harrowed until it is nice and mellow. We are now ready for the planter. As there is always such a cry about the potatoes growing too big, most of the farmers select small-sized potatoes for seed. These are cut by hand; although there are several seed cutters on the market, the careful farmer prefers the old way. Long practice has taught the farmers' sons and daughters to cut potatoes very fast—ten barrels is a fair day's work, but there are many who will cut fifteen barrels a day. From three and a half to four barrels of cut seed is used per acre. The planters in use here drop the seed and fertilizer, and cover them at the same time. The seed is planted about two inches below the surface, and covered with a hill about three inches high. The rows are from 30 to 36 inches apart, according to the variety of the potatoes. If no stable manure has been used, from three to ten hundred pounds of commercial fertilizer is used per acre, but as a rule about five hundred pounds. A man and team will plant from five to seven acres per day. Potatoes will do well here planted any time in May, or even later, but the sooner they are planted the quicker they are out of the way. When the sets commence to come up the cultivators are put on, and the land between the rows thoroughly pulverized. The horse-hoe is then put to work, and weeds and young potatoes are covered, and the deeper the better, as the potatoes never come up even. Some of the young plants are two inches high, but covering them does not hurt them in the least; they will come again in a few days, black and rank, apparently greatly benefited by the fresh dirt that has been put over them. But it is different with the weeds; they cannot get through, and are gone forever. I can only think of one weed here that will come up again with the potatoes, and that is the Canada thistle. If there are any of these in a field they will have to be cut out with a hand hoe. The ground is now free from weeds; in fact, the hoeing is done much better than it could be done by hand, and so much cheaper and easier. The potatoes are all right now until they are five or six inches high, then they are cultivated again and hilled up with the horse-hoe. A little later a shovel-plow, or spade as we call it, is again run between the rows. Unless the season is remarkably dry, this is about all the cultivation they need.

About the time the buds begin to form on the vines they are sprayed with Bordeaux mixture. Fifty pounds of common stone lime is carefully slaked in a kerosene barrel that holds about fifty gallons; the barrel is then filled with water. Fifty pounds of blue vitriol is dissolved in fifty gallons of water in another barrel, or a pound to a gallon of water, no matter what it is dissolved in. This is called "Stock mixture." These will keep indefinitely until mixed together. If the sprayer holds fifty gallons, five gallons each of the stock mixture is put in, and the sprayer filled with water; now add one-half pound of Paris green and you have material enough to spray an acre. The vitriol and lime is bad for the beetles.