UNDED 1866

longest disass of horse

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APRIL 11, 1906

Innisfail.

THE FARMER'S ADVOCATE.

pigs and four winter ones. Here are the figures which show the result of my experience with the fall litter.

The four pigs were born on the 22nd day of October weaned on the 21st day of December; and weighed on March 21st. They were then five months old and weighed 641 pounds, (the barrow weighed 181 pounds). The grain fed was a mixture of oats, barley and wheat, and amounted to 2154 pounds. The account, therefore, stands as follows:

To 2154 lbs. grain at 1c. per lb. . . '\$21 54 " Grinding 2 05 " Keep of sow for five months ... 5 00

\$28 59

By 641 lbs. pork at local price of \$5 50 per hundred..... \$35 25 \$6 66 Profit.

This gives one a profit of over one cent per pound. I figured the grain at one cent per pound, because I consider it impossible to make wages and raise grain for less. Let us figure the grain at local rates and see what we get.

Co 12 bus. wheat, 720 lbs., at 55c	\$6	60
" 15 bus. barley, 720 lbs., at 26c.	3	90
" 21 bus. oats, 714 lbs., at 22c	4	62
" Grinding	2	05
" Keep of sow, five months	5	00

\$22 17

By 641 lbs. pork at \$5.50 per hundred.... \$35 25 13 08 Profit

I am confident that the cost of production can be considerably reduced by feeding roots in the winter Sugar beets and mangels would prove useful, and I mean to have a good supply on hand next winter to still further reduce the cost of production. What I have done with four pigs, can be done as easily with forty if you can provide warm quarters, plenty of feed and give ordinary attention.

GEO. DUNCAN.

Making Beef With Corn, Oats, Millet and Speltz.

An experiment at the South Dakota station with corn, speltz, millet and oats for fattening was conducted as follows :- The calves were fed on separated milk during the first six months of their lives, three of the lot were fed a ration of ground flax in addition to the milk while the fourth lot was given ground barley. Good gains were made during the entire period. While on grain during the months of June, July, August and September last, the lot receiving the ground speltz made the largest gain in weight. During the months of October, November and December it required the following number of pounds of grain for a pound of gain: corn 5.96, oats 5.14, millet 5.78 and speltz 5.94. , On being slaughtered the following dressing percentages were obtained in comparison with the weights at home: corn 60%, oats 57%, millet 58% and speltz 58.3%. Good judges about the Union Stock Yards, Chicago, pronounced the corn-fed lot as being both the best on foot and showing the best carcasses, and the fat on this lot was much the thickest of any of the four lots, although the oats-fed lot were well finished. The lots receiving the millet and speltz were not so thickly covered with fat but still showed a good carcass. After the carcasses were hung up it was easy to distinguish the animals having Jersey blood, by the excess of inside fat, especially about the kidneys.



The Bounty on Sugar Beets.

The government of Alberta is wrestling with the problems connected with the development of the beet sugar industry. Competition from the British Columbia refiners of cane sugar is too strong. It is the old story of a slaughter market designed to crowd out the competition of the weaker rivals. If the B.C. men have money to throw away in an over-ardent desire to monopolize the markets for themselves, it is proof of the assertion that they have basked too long in the trust-producing sunshine of high protection, and possibly a little higher duty on their raw material, which would be eqiuvalent to a reduction of their protection, might increase the revenue and at the same time make them less assertive of their divine right to govern the markets of the west for their own benefit.

Meanwhile, the people are in a position to help out the Alberta sugar growers. The production of beet sugar involves the expenditure in the province of much more money than the refinement of the product of the southern grown cane. China has found the boycott as effective as a tariff in the exclusion of certain products. Would it not be wise for Alberta sugar users to demand the home grown product and thus by patronizing home industry help in the development of the province?

Experience with Alfalfa.

EDITOR FARMER'S ADVOCATE:

The first time I sowed alfalfa was in the spring of 1903. Where the seed came from I don't know. It was mixed with some laburnum seed, and I was a little surprised when it grew alfalfa instead of laburnum. It grew perhaps a foot high the first summer and in the second one, twenty two inches. In 1905 it was cut on July 12th—later than it should have been-and was then about two feet high. It grew again and, after growing a foot or so and maturing some seed, was cut on October 2nd.

This is in two little short rows and although it gets some attention in the way of cultivation, it is very little. There is a larger patch, half of which is in-noculated with soil from Lethbridge. It was sown in 1904, and both in that year and in 1905, the in-noculated half looked, if anything, a little darker in color, but there was very little difference. It was sown far too thick and has never grown over

a foot high. Some of the plants have roots half an inch through at the top. I have followed them down about two feet, through a hard clay subsoil.

Half of both the innoculated and non-innoculated pieces were mulched in the winter of 1904-5, but there seemed no difference anywhere in the wholepatch in the summer.

Alta.

ARCH. MITCHELL.

Sow Pure Seed Wheat.

these the disease can not be wiped out by the usual methods of treating with bluestone and formalin.

Smut spores may be carried by the wind from field to field and are believed to live in the soil from year to year. Burning the stubble will do much to destroy smut spores and smut balls, as well as weed seeds that lie on the surface.

One of the most effective means to combat smut is to use well screened seed taken from a vigorous and fully matured crop, that was free from smut and sown under the most favorable conditions for rapid growth, with a view to get a healthy growth of green eaf as soon as possible after sowing.

The smut spores germinate and produce a mould like growth, which develops beneath the surface of the soil. The wheat plant becomes diseased with smut only during its early stages of growth, when the tissues of the young plant are very tender. As soon as the green leaf is well developed on a vigorous plant, it is past the stage when it is likely to become diseased. Anything that weakens the vigor of the plant, as small or shrunken grain, very deep sowing, spring frosts or prolonged cold or dry weather at time of seeding, increases the danger from smut. The effect on vitality and the strength of growth of seed grain treated with either bluestone or formalin for the prevention of smut, depends upon the strength of the solution, the time the seed is allowed to soak before being dried, and the time between treating and sowing. All authorities recommend seeding as soon as possible after treating. The intervening time should not exceed two weeks.

-SEED COMMISSIONER CLARK.

Weeds.

All weeds are either:

One year plants, which begin to grow in spring, ripen seeds the same season and then die, as wild oats, lamb's quarters and wild mustard.

Two year plants, which begin to grow in one year and ripen seeds and die in the next season, as ball mustard, false tansy, false flax and hare's ear mustard.

Many year plants, which start from a seed and then live for many years, as Canada thistle, field sowthistle, quack grass.

All weeds can be controlled if the seedlings are destroyed after germination and before they have formed seeds. The sooner this is done the easier and better it is.

Harrowing growing grain in spring kills myriads of weed seedlings while they are small and delicate, and at the same time is great advantage to the crop by killing its aggressive enemies, which later would crowd it and rob it of its food and also by breaking up the surface of the soil and thus preventing evaporation

A shallow layer of soil, such as is produced by dragging a harrow over cultivated land is the best known non-conductor of moisture and thus prevents the evaporation of soil moisture.

Two-year weeds occur in autumn on stubble land or on poorly cultivated summer fallows. These may all be killed when small, by discing late in autumn, early in spring before they make new root-growth. If the land cannot be worked early in spring, a duckfoot or spring-tooth cultivator must be used.

If other spring work will allow, light spring plowin is an excellent way to destroy all kinds of weeds on farm land.

Many-year plants either root deeply or they do

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The stockmen and farmers of Western Canada want J. H. Grisdale as the next Live Stock Commissioner. No better way of impressing one's ideas on the subject can be devised than to write the member representing the constituency you live in at Ottawa-no matter what his politics, write your M.P. anyhow.

Light hogs are in good demand at present and enjoy the premium simply because they are scarce. With bacon consumption abnormal and shipping demand reasserting itself, the 150 to 200-pound animal is likely to enjoy continued popularity.

* * *

Light hogs are going to be worth the money right along, simply because they are wanted, and there exists absolutely no incentive to cut them loose.-Live Stock World.

How to Keep in Touch With Up-to-Date Matter.

Dear Sirs:

Enclosed find \$1.50 for my renewal subscription to the Farmer's Advocate. Through the medium of your bright, newsy paper one can keep in touch with most profitable, practical information for farmers and stockmen.

G. G. CRAM.

Morden, Man.

The Red Fife wheat of the west is badly mixed with other varieties. A crop from a mixture of varieties cannot be expected to ripen evenly and in consequence the sample of grain is inferior. Too deep sowing weakens the vigor of the plant. The aim should be to pack the soil and thus raise the moisture rather than sow four inches deep in order to put the seed down to moisture. The average crop of Red Fife wheat has lost much of its old time vigor, productiveness, and quality, through lack of care in the use of good pure seed from vigorous and fully matured crops.

Much can be done to increase the yield and strengthen the vigor of the crop by the use of the fanning mill. The fanning mill removes all small and broken grains, which produce weak plants that are later in maturing.

The loss of vigor in the crop has made it more susceptible to rust, smut and other fungous enemies, as well as to insect pests. An examination of a smutted crop will show that about 90 per cent. of the plants affected with smut are the weaker plants from small and shrunken grains.

Considering the danger from smut, rust and unevenness in ripening, it would be better to screen out a peck of the small and shrunken grains and sow one and one-quarter bushels per acre rather than sow one and one-half bushels of unscreened seed.

The practice of annually selecting large heads of grain from vigorous and fully ripened plants that are true to the desired type and variety, to furnish seed for a breeding plot or base of supply of pure seed, has proved to be both a practicable and profitable means of keeping varieties pure, increasing the yield and improving the quality of the grain.

The use of seed wheat from smutted grain is a dangerous practice. Some of the apparently sound grains from a diseased plant-a plant that carries spores within the apparently perfect kernel. In sacks.

rooted weeds should be lowed deepl just before flowering and cultivated often enough afterwards to prevent the development of any leaf growth with which they could lay up a store of food for the next year's growth. Shallow-rooted many-year plants should be plowed lightly in hot weather so that the sun may dry out their roots.

Deep-rooted many-year plants, if plowed shallow, become worse and the same is the case with shallowrooted many-year plants. All weeds must be fought according to their special nature.

Plants drink with their roots and eat with their eaves. Cut off their roots and they soon die of thirst. Cut off their leaves and prevent them forming new ones and they must starve to death.

-DR. FLETCHER.

Method of Bluestoning.

EDITOR FARMER'S ADVOCATE:

I see by your issue of March 14th, that there are two or three of the same opinion as I am, that im-I think mersing is the way to bluestone wheat. the same as D. G. Lowe, that most of the farmers are at fault. I will try to describe a plan by which I bluestone. I take a coal oil barrel and cut it in two and take two gunny sacks and immerse the wheat. I tie a small rope to beam of granary, and then to a small pole about six or eight feet long. Then I take a short piece of rope and tie to the end of pole and put a half hitch around the mouth of sack. I now raise the sack out and put two small sticks under it. While one is draining, I put about $1\frac{1}{2}$ bushels in another, raise it and by this time the first is ready to empty and so on. I generally use one pound of bluestone to 8 bushels of wheat. When I immerse oats in this way, I use formalin. Oats only a few smut balls-may be found to contain smut should be covered after with horse blankets or old NELSON ALLEN.