

Swine.

THE SWINEHERD.

It Pays to Market Wheat as Pork.

The American hog furnishes a solution to the problem of a more diversified form of farming especially until the orchard and hop yards of the state come into a bearing condition. Hog raising seems to be the most promising industry open to the farmers of Northern Idaho. Farmers have hesitated because ignorant of the value of wheat as a food. Many of the farmers of the Western states were reared in the corn belt of the country. They have been so accustomed to feeding corn it is difficult for them to understand the feeding value of other grains. It is true that wheat cannot equal corn as a producer of fat, but it has been thoroughly demonstrated by a dozen experiment-stations and by scores of practical farmers that wheat and certain of its milled products are far superior to corn as a food for young pigs. Corn-fed hogs are always dwarfed in size. Wheat-fed hogs have a larger bone, a stronger framework, more blood and better digestive organs. These are the things that make a hog. Corn-fed hogs are so excessively fat that a reaction has set in against the use of such pork.

Prof. Atwater, the highest authority in the world on food questions, says: "Our diet is one-sided: the food we eat has too little protein and too much fat, starch and sugar. This is due partly to our large consumption of sugar and partly to the use of such large quantities of fat meats. One-half of the disease which embitters the middle and after part of life is due to an excessive and one-sided diet. Can we not cater to this demand and furnish a high grade of pork of fine flavor and free from excessive fatness? Wheat will do the work. (1) Prof. Henry of Wisconsin has shown that 5½ lbs. of corn meal is required to make 1 lb. of dressed pork and that the same gain is made by 5½ lbs. of wheat shorts. Sanborn of Utah found that 3½ lbs. of wheat will produce a pound of gain. The Washington agr. college found in a one-month trial that 4 lbs. of wheat would produce a gain of one pound. Throughout the Eastern states farmers are now extensively feeding wheat as a substitute of corn.

An Indiana farmer sold a portion of his wheat at 60c; the remainder he fed to hogs and realized 96c. Many farmers of Morrow Co., O., received 75c a bu for wheat by turning it into pork when the market price of wheat was 50c. The Armours, Swifts and Fairbanks of the next decade will live on the western side of the continent. Until these conditions are fulfilled farmers should co-operate and establish small packing houses and try hogs as a remedy for dull times and cheap grain.

Farm and Home.

A Sow in Perfect Health will never eat her pigs. Constipation or indigestion is the direct cause, being caused by improper feeding. No harm will be done the swine in giving them the run of the feed lot with the other stock, horses and cattle. Give them a corn ration with an occasional feed of bran and ship stuff. If it is where they can get it they will occasionally chew on fodder and corn stalks. Three or four weeks' run in the clover field before farrowing will bring them through all right. It is

(1) And so with pease.—Ed.

not unusual for a sow to eat a pig that has been crushed or born dead, and we are not alarmed to see them do it, but prefer to have their systems in such a state of perfect health that they will have no relish for this kind of food. If sows have the run of pasture or wood lands while in farrow they will seldom if ever develop this habit. The farmer that is compelled to keep his sows in a dry lot must make an effort to bring about the same conditions that the sow has while on pasture, must put before her food that will produce the same results. The serious objection to the small or dry lot rests in the inability to secure an abundance of exercise, which is a prime factor in the production of a healthy embryo. With a dry lot and sufficient corn to keep the sow contented almost certain disaster will follow at farrowing time. But with a ration of wheat, or if wheat is not fed use bran and ship stuff, along with collar and kitchen refuse or waste, such as potatoes, apples, pumpkins etc., we should have no fear that the sow would destroy her pigs, especially if she can have the run of the feeding lots, and take exercise by gathering the wastes. An occasional blade of fodder, a clover burr, leaf, or stem, all help in keeping the system in condition. Wood ashes and salt are necessary adjuncts in securing health. The sow needs the properties found in the ashes to aid in building up the bone formation of her young. If wood ashes cannot be had a small amount of ground bone in the feed will answer the same purpose. But when the food is rich in muscle and bone-forming properties the farmer need not be particular to add these things from other sources. However no better aid can be given the system to get rid of unhealthy tendencies than a box of wood ashes constantly in reach.

Farm and Home.

Symptoms of Hog Cholera are thus described by the Iowa state board of health: "The presence of the disease is indicated by a cold shivering, lasting from a few seconds to several hours; frequent sneezing, followed by a loss of appetite; rough appearance of the hair, drooping of the ears, stupidity, attempts to vomit, tendency to root the bedding, to lie down in dark and quiet places, dullness of the eyes, often dim; sometimes swelling of the head, eruption of the ear and other parts of the body; dizziness, laborious breathing, vitiated appetite for dung, dirty and salt substances, accumulation of mucus in inner corner of the eye, discharge from the nose, fetid, offensive odor of the discharge from the bowels, offensive exhalations, diarrhal discharge are semi-fluid, of grayish-green color and often with blood. In many cases the skin on the belly between the hind legs, behind the ears and even on the nose has numerous red spots, which toward the fatal termination turn purple. As the disease progresses the animal becomes sluggish, the head droops, with the nose near the ground, but usually will be found lying down with the nose hid in the bedding. If there has been costiveness, about two days before death there will be offensive discharges; the voice becomes faint and hoarse; the animal is stupid, wrination increases rapidly; the skin becomes dry, hard and very unclean; there is a cold, clammy sweat, and death soon follows, with convulsions, or gradually by exhaustion without a struggle. In chronic cases, or those of long duration, the animal becomes weak, lies down most of the time, eats but little

and has the diarrha. These cases may linger for weeks, scattering the poison of the disease in the discharge wherever they go."—*Farm and Home*

The Grazier.

Opinion on Feeding Stuffs.—Old Subscriber.

I shall feel greatly obliged by an opinion in your next week's issue of the comparative values of the following feeding-stuffs, taking into account their manurial values:—Linseed cake 8.0d. per lb.; lentils, 5.4d. per lb.; beans, 8.1d. per lb. [You should have said for what stock and for what purpose. It is no use attempting to answer your question, as we do not even know if the food is for fat or lean stock—cattle or sheep, ewes or lambs, calves or cows. You do not say if your beans or barley are English or foreign, or if your cotton cake is decorticated or undecorticated. The differences in standard composition are of such a nature that while one sample of linseed cake might be of superior value to a sample, say, of beans another might be inferior. You can only arrive at a conclusion on each sample separately, and at each price quoted. If you suppose that comparative values can be worked out into decimal places from tables of analysis, we are afraid you will be disappointed. We should advise you to make a trial and watch the results; and also if you put a definite issue before a competent agricultural chemist, with samples, his advice will be useful.]—*Eng. Ag. Gazette.*

NOTES ON RAPE GROWING.

By Professor Thomas Show.

I have been greatly interested in reading the reports in reference to rape culture in the November issue of *The Nor'-West Farmer*. I feel much gratified to notice the results. The season was unfavorable and yet the judgment formed by those who tested the rape was quite favorable. I was specially interested in the report of Jacob Scott, sr., of Brant. What more particularly arrested my attention was the number of times he pastured the rape. I have known of its having been pastured off twice, and have heard of its having been pastured three times, but never before did I hear of its being pastured five or six times from the one sowing. If it will stand that in Manitoba it will certainly prove of great value as a fodder plant.

The unanimous verdict given by those who have tried it, as to its feeding value, is only what I should expect. There need be no question as to its utility in providing food for cattle, sheep, swine and poultry. The only question of vital importance is, how can it best be grown? My conviction is that under the present system of rotation, rape will be grown with most advantage on the bare fallows. These should undoubtedly be plowed early in the season. Probably it would be better to plow them the preceding autumn. (1) They should be worked frequently or at least occasionally on the surface to secure conservation of moisture to sprout the seed when it is sown. Two modes of sowing may be adopted. The first is to sow broadcast, and the second to sow in rows on the level. I do not recommend sowing in raised drills in your country, owing to the dryness of the summers and the looseness of the soil. If the bare fall-

(1) Of course it would.—Ed.

low has been stirred occasionally up till the time of the sowing of the seed, I should imagine that broadcasting would answer every purpose, and here I may mention that when giving surface cultivation, I can believe that good results would follow from the use of the roller immediately after the stirring of the soil, to prevent surface evaporation.

In dry seasons there can be no question of the advantage of sowing in rows, and cultivating. The cultivation would be attended with the double advantage of playing havoc with the weeds, and of more completely retaining ground moisture for the use of the plant. But the cultivation should be shallow, or surface evaporation will be encouraged. I can imagine that in favorable seasons great crops of rape can be grown on your bare fallows, but mark you, farmers, the land will have to receive careful attention up to the time of the sowing of the rape. The effort should be made to send as many of the weeds as possible to the land whence they shall never return, before the rape is sown, otherwise they may come in large numbers in the broadcast rape.

The only objection to sowing in rows is the labor of cultivating but I can imagine that the farmers of Manitoba could have this labor done, generally speaking, before the ripening of the wheat. Such a mode of sowing rape would be greatly helpful to weed destruction, since it would not only destroy weeds growing at the time of the cultivation, but it would encourage the germination of other weed seeds, and these in turn would be destroyed.

One reference in the reports I do quite understand. Rape is represented as being easily injured by frost. This is not in agreement with my experience or observation in growing the plant. It is injured by hard frosts, but slight frosts, or even pretty severe ones, do not seriously injure it in Ontario. I have often seen sheep feeding upon it amid the snow.

The best time to sow would be carefully considered in Manitoba. It is important to sow in time to secure germination, and yet if sown too early the hot winds spoken of would injure it. But I imagine that these hot winds are rather exceptional. The hot winds that cause rape to wilt will also injure wheat. Cultivation will prove a good antidote to the injury threatened by the hot winds.

It is all important that good seed be secured and true to name. To make sure on this point, some of your seedsmen should import a goodly quantity of the Dwarf Essex at once. (1) They should then prove it by growing it in greenhouses, and when thus proved, they could advertise accordingly in the agricultural papers. When thus guaranteed, a ready and large sale of seed would be likely to follow. I would suggest to farmers not to buy unless the merchant will guarantee the seed true to name.

The pasturing of the rape where it grows will be a grand thing for the land. It tends to impact it for the following crop and it also enriches it. The frosts will kill the rape, so that it should not give any trouble in the following crop.

Now, farmers, give careful attention to this question. It is an important one for your country. Proceed cautiously, but be sure and investigate. The question is being studied in Minnesota, not only by the farmers, but it is being investigated at the very excellent experiment station here, where the conditions are not very far different from those in Manitoba.

(1) Cole, i. e., colza is just as good.—Ed.