

Rape.

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As the questions of cheap meat-production and profitable cattle-raising come more to the fore, forage plants peculiarly suited for young cattle and stockers, as well as pigs and sheep, must come more and more to the front.

It is well known that the pig thrives on grass or green food alone, but the importance and necessity of feeding him on such is very often overlooked. Another consideration frequently neglected is the comparative value of different forage plants for the end in view. The conditions governing the feeding operations, however, enter into this matter, and frequently such crops as can be most conveniently produced or utilized must take precedence over others better adapted to the end in view.

Of the various crops more or less extensively cultivated as forage crops at the Central Experimental Farm during the past few years, for cattle, sheep and swine feeding, none has given quite such satisfactory results as rape. The variety best suited for forage is Dwarf Essex. During the past year about 4 1/2 acres have been under rape. The plots have been cultivated as follows:

Plot 1. This plot, 1 1/2 acres in extent, was a slightly loamy sand. It was manured 15 tons to the acre, in May, and the rape sown in drills 30 inches apart, on May 19th. This crop grew very rapidly and yielded, in August, 28 tons green fodder to the acre. A second crop grew up and gave about 3 tons to the acre.

Plot 2. This plot, 1 1/2 acres in area, was a good loam. It was manured 12 tons to the acre, in June, and sown in drills 30 inches apart, June 16th. In August it cut 22 tons to the acre, and the land was then plowed.

Plot 3. This plot, 1/2 acre in area, was sown broadcast, on June 18th. This plot had been used as pig pasture the preceding summer, so no manure was necessary. This plot was used as a pasture for store pigs.

Plot 4. This plot, three-sixteenths of an acre in area, was sown in drills 38 inches apart. It was used as pasture for pigs.

Plot 5. This plot, 1 1/2 acres in area, was sown on sod plowed July 16th. No manure was added, but the best seed-bed possible under the circumstances was prepared, and the plot sown July 23rd, partly in drills 18 inches apart, and partly broadcast. The land being rather dirty and in a poor state of tilth, this plot did not do very well. The part sown broadcast was a very light crop indeed. The part sown in drills did very much better, however, as it was possible to cultivate by means of the hand-wheel hoe.

Plots 1 and 2 were cut and used as soiling crops for steers, calves, pigs, and sheep. It was impossible to get any idea of the exact feeding value from the animals fed. The steers, 10 in number, averaged 1,000 pounds weight, and made gain at the rate of 2 pounds per diem each while on the rape, no grain being fed. The pigs to which it was thrown in small quantities ate it with avidity and were quite evidently benefited. A lot of ten steer calves were given a good feed daily, and appeared to enjoy the juicy leaves and stems very much, and to thrive thereon. Sheep were allowed to feed upon lot 5, and ate it down quite close. As soon as turned upon the rape they began to improve in flesh. The greatest value of the crop would appear to be a pasture for pigs.

Statement of costs of proceeds of an experiment with a lot of six pigs:—

Table with 2 columns: Item and Cost. Items include six pigs at \$3.00, 3.16 acre at 30 cts, 2007 lbs. meal at 40 cts, etc.

From a study of the habits of pigs pasturing on plot 1, I should say that the best results would be secured by sowing the rape in rows 24 to 30 inches apart, at the rate of about three pounds of seed (Dwarf Essex) to the acre. When thus sown this can be cultivated by horse power when young, and has a tendency to branch out and develop a large leaf crop rather than go to stem. It is most interesting to watch the niceness of discrimination exercised by your practical rape-eating pig as he strolls leisurely down the row and selects the juicy leaves that best please his fancy. I have observed, too, that your trained pig is equal to the best of chemists in picking out those parts of the plant most valuable for food. He soon learns to shun the larger or old leaves, and feasts upon the young, the tender, the juicy. A study of the chemistry of the plant will be found in the report of Mr. F. T. Shutt, Chemist of the Experimental Farms.

Below is a statement of the cost of producing the forage:

Table titled 'COST OF GROWING ONE ACRE OF RAPE' with 2 columns: Item and Cost. Items include rent of land, cultivating in autumn, plowing in spring, etc.

Territorial Crop Statistics.

The Department of Agriculture at Regina has just completed the compilation of threshers' returns for the year 1900. Below will be found a statement showing the result of last season's crop in the various sections of the Territories, as well as a comparison with the figures for the preceding season:

Large table with 6 columns: District, Bushels Threshed (1899, 1900), Acreage (1899, 1900), Yield per Acre (1899, 1900). Rows include Wheat, Oats, and Barley for Assiniboia, Saskatchewan, Alberta, and Territories.

The total area under crops of wheat, oats and barley, as reported by threshers, was 605,347 acres in the year 1900, and from this was harvested 8,007,062 bushels of grain. This shows 92,610 more acres of land under cultivation than during the preceding year, but the yield falls short by 3,331,418 bushels. This is accounted for by the extremely dry spring and early summer in the eastern portions of the Territories and by bad harvesting weather throughout. Early snowstorms in the West caused heavy losses by lodging the grain, and thus materially reduced the yield.

An Unfavorable Opinion of Spelt.

The following is a letter from an Iowa correspondent of the Wallace Farmer, which will be read with interest by many of our readers:

If your correspondent from Marshall county, who desires to know the merits of spelt, will carefully look through the catalogues of several seedsmen, he will soon discover that the identical cuts used by some of them to show the wonderful stooing properties of spelt are used by others to represent certain kinds of oats, and by still others to represent certain grass. Quack grass could be much better represented by these cuts than spelt. Those cuts have induced many farmers to introduce this new kind of grain.

Being short on meadow, I sowed several acres of this grain last spring. It matured after the barley and before the oats. Each of the three grains I mowed and stacked the same as hay. In bulk the spelt exceeded the oats, but in weight it was much less at time of stacking.

During the winter the calves, pigs, and often the horses, had free access to the stack yard, which contained barley, oats, spelt, clover, prairie hay, stover, corn fodder, and millet. The unanimous preference which these animals exhibited for certain stacks, and their disinclination for others, proved a valuable object lesson.

It was clearly evident that the barley was the chief attraction. After that in order came oats, corn fodder, clover, millet, prairie hay, and spelt.

The corn stover which I hauled out into a dry feed lot was the only feed which my dairy cows had during the day, but at night I filled their mangers with oat hay, with an occasional dessert of clover, and a Sunday dinner of fodder corn.

As spring approached, the oat hay disappeared and I began substituting spelt. The cows refused to touch it, grew gaunt and decreased the supply of milk, and while the horses ate some of it, yet they seemed to take any other grain or hay better. It was stacked rainproof, and came out fresh and bright, but the fiber is too woody, in my opinion, to be of much value as hay. The grain is less in quality and quantity than oats. I will not sow any this year, because I see no advantage in doing so. Barley hay is fine, but the yield is too small to be of as much benefit as oats.

Good, bright corn stover, fed in connection with well-cured oat hay, cut just before it is fully ripe, produces most excellent results, and I shall continue to follow feeding my dairy herd on that line.

A Day with a Western Shepherd.

BY J. M'VAIG.

The Doukhobors and Galicians and their customs and habits are interesting to us, because they have become part of our commonwealth, but they lack the initial interest of fellowship and common nationality that many other settlers in the West have for their eastern friends. Apart from the large foreign immigration that is setting in Canada-wards, the West has absorbed a great many eastern men or boys who have felt that they could do better if they only had the chance, and have consequently left the competition of the east for the open prairies of the West. These may be artisans, farmers' sons, or 'varsity grads. If they come as far west as Southern Alberta or Western Assiniboia, with its free grasses and balmy winter climate, under the kindly chinook, they soon conclude that the cattle business is the business of the country, and the goal of most is to get a start with a few cows; hence, many start riding for the big outfits, and convert their annual savings into cattle, and wait for their bunch to grow until it is large enough to afford constant employment and sufficient return to warrant them in homesteading a quarter-section, putting up a shack, and going into the cow business in an independent way. The cowboy life has been written and talked of "good and plenty," as the Western phrase goes. The picturesque aspects of it have not been neglected by fulsome newspaper correspondents. In fact, the pomp and circumstance of the old cowboy life, with its cartridge belts, guns, rough-riding, and eager sports and vices, have been given a prominence and emphasis greater than actual present humdrum working conditions warrant. But all Western men are not rough-riding, irresponsible cowboys; they are not even cattlemen at all. There are a good many shepherds. The newspaper men seem to have passed the shepherds up, but they are an interesting and an important economic factor of Western life just the same.

We had decided to see them at work. The natural grasses soon exhaust near the towns, and the shepherd tries to get where nobody else is, if possible. A visit to a sheep ranch does not mean a drive in a broad-cushioned phaeton for three miles and return, but a horseback ride of twenty miles. The ideal and typical way of traveling in the West is on the frisky "cayuse," as the Western pony is called. He may be heady and fresh at first, and roll you a bit for the first couple of miles, for the healthy pony is fond of moving. His wind and constitution are good, for he has been brought up outside, with exercise all the year round and with plenty of dry feed. By and by you get closer to your Mexican saddle, with its high pommel and cantel, and it is much more comfortable than the diminutive English saddle—"postage stamp," the cowman calls it. The air is fresh and exhilarating as champagne. Your whole frame is in pleasurable exercise, and you feel for once independent of the druggist and his drugs. But this is another story. Two hours and a half brought us to the camp of our shepherd host—a real 'varsity man, but he has given over talking about that now. It was still light enough to see the camp lay-out. Large shedding, more noticeable for its extent than architectural grace; large corrals adjoining it; dipping plant, wool press, a mower, horse-rake, and large basket wagon, with which to gather the short prairie hay, against an occasional bad winter spell; but no harvesters, plows or seeders; and, finally, the shack of the proprietor. This was the picture before us as we jolted down the coulee to the river "bottom," protected on both sides by high-cut banks which carried up the bench lands at both sides of the stream. The sheep bunch were in the corral for the night. We could see the white mass and hear the bleat of an occasional unhappy member of the flock, who always seemed to have two or three, or perhaps half a dozen, imitators.

We ate and slept, and ate again, the last time before daylight, as the first time after dark, for the shepherd must be early afield. The dogs were already clamorous to be out before the lamp was extinguished—two collies and a greyhound, the collies to work the flock, the greyhound to protect the panicky, stupid sheep against wolves and coyotes. The greyhound bore many a scar, and was quiet and sedate, but the Scotch dogs were all movement, back and forth, and had to be brought "in to heel" frequently. The flock were already noisy; a second's pause found a new leader, and then came a regular chorus until the corral sent out a confused din of sheep calls. The corral is opened, a black goat is the recognized leader, but hundreds of quick hooves are striking the hard-trodden, dry way up the coulee; the dogs are quickening the front ranks by barking along the sides, and are shooting back to hurry the loiterers behind, and the day's work has opened. The pace slackens after the corral is empty, and the flock ascend the slope to the bench in long files, one after one, in a continuous, wavy movement, that seems of one sheep instead of twenty five hundred of the little quadrupeds. By and by the bench and the grass are reached, the head ones pause for the first bite, and the ones behind spread and dress up to right and left until the flock is spread to a quarter or half a mile front, and in this way the circle for the day progresses. As among men, the aggressive get the best bite, and the strong, husky ones of the