Choice Registered Clydesdale Mares in Alberta.

LIVESTOCK

Peas and Oats for Silage

The problem of securing satisfactory succulent feed for cattle in winter has been keenly felt by stockmen in Alberta. In Central Alberta the growing of corn for silage is not feasible for the reason that only fifty per cent. of the years in which corn has been grown has the crop reached sufficient volume to be considered profitable. The best substitute for corn is peas and oats, seeded at the rate of one bushel of peas and two of oats to the acre. In fact, the experience with these two fodders as grown under Central Alberta conditions would indicate that peas and oats are superior for silage purposes to corn, and since this crop is dependable every year, and the yield satisfactory, it is safe to predict that it will occupy a premier position among the silage crops for this section of the West.

Peas and oats, or oats alone, can be sown for silage purposes as soon as the crop intended for threshing has been seeded, and the crop will be ready for putting into the silo when the oats are in the late milk or early dough stage, before the crop intended for threshing is ready for the binder. The green bundles are at once run through the cutting box and cut as fine as possible, going into the silo absolutely green. There should be at least three active men in a silo 12 feet in diameter, men who will keep on the move continually in order to insure that the silage be thoroughly tramped, particularly at the edges, as the centre will, in a measure, take care of itself since the pressure from above, as the silo is filled, increases. The amount of oxygen remaining in the silage will depend on the amount of tramping, and the amount of oxygen will be the determining factor in the keeping qualities of the silage. After the silo has been first filled it will settle and may be filled again in the course of five or six days. In this way another 10 to 15 tons may be accommodated and a silo so filled, 30 feet high and 12 feet in diameter, will hold 80 to 90 tons, according to the amount of moisture in the crop at the time it is cut.

Freezing Not Serious

Some bulky fodder, such as hay or oat straw, is usually fed in conjunction with silage, as well as the usual grain ration. When so fed, cows on full of milk will consume around 40 pounds per day. Even though the silage freezes around the edges of the silo it will come out in flakes, and the freezing does not appear to affect injuriously its feeding value.

Experiments, which have included the whole dairy herd at the Lacombe Experimental Station, have been carried on during the past two years to determine the relative feeding value of this silage as compared with the same feed cured in the ordinary way in the shock as green feed. Both years the results have been very decided in favor of ensiling the crop, showing a saving in the cost of producing one pound of butter of as much as four cents per pound and as much as seven cents per pound with silage made from peas and oats as compared with silage made from corn. In making the determination of the cost of butter, ensilage has been valued at $3.00 per ton, and cured green feed at $10.00 per ton.

When these values have been used as a basis, striking economies have been effected by the use of silage made from peas and oats. The feed cost of a pound of butter was 16.7 cents when peas and oats silage was fed, and 20.84 cents when the same feed, cured as green feed, was used. In each case this is the average of the results of four trials in which the whole herd was used, and it shows a saving of 4.14 cents per pound in the cost of a pound of butter, directly due to the method followed in curing the fodder, a saving of 20 per cent.

Gestation or Pregnancy

Gestation, or pregnancy, is the period during which the female carries its young, extending from the time of impregnation until birth. The average period of pregnancy in mares is eleven months. In cows nine and a quarter months. In ewes five months. In sows four months. The signs by which pregnancy is manifested are not always definite or discernible until pregnancy is well advanced. The earliest sign and guide is the non-recurrence after breeding of the usual periods of heat, so that the animal no longer comes in season and manifests no sexual desire for the male. It has also been observed in many cases that a change becomes noticeable in the disposition of an animal when it becomes pregnant. As a rule mares become less irritable and more sluggish after they conceive and gain in flesh. Cows, in particular, show a tendency to gain flesh during the first six months of pregnancy. This tendency is taken advantage of by cattle feeders in that they usually prefer to breed cows which they wish to fatten for beef.

One of the noticeable signs is that as the period of gestation progresses, the belly steadily enlarges and becomes distended, particularly at the lower part, while the flanks become more hollow, and the hips on each side of the croup appear sunken. The udder also becomes more developed and appears more prominent and firm as pregnancy advances. Towards the last few weeks of pregnancy the udder becomes filled with a yellow sticky liquid known as the colostrum, and which later changes into proper milk. In many mares a small amount of waxy material forming on the ends of the teats indicates the near approach of foaling time. In cows, after the sixth month, and in mares, after the seventh month, the foetus becomes capable of movement in the womb, and its presence may be noticeable and its movements discernible, particularly after the mother has taken a drink of cold water.

The presence of the foetus may also be detected by feeling the abdomen with the hand. To do so a person takes a suitable position on the right side of a cow, and on the left side of a mare, with the back turned towards the animal's head. The right or left hand, as the case may require, is then placed against the belly of the animal, just below the flank and about nine inches in front of the stifle. By pressing on the belly at this point, a hard mass or body of the foetus may be felt, and its presence detected distinctly if it moves. After the third month in the mare and cow pregnancy can be sometimes determined by introducing the hand into the rectum and vagina and feeling the womb. In the pregnant animal the neck of the womb becomes closed with a plug of mucus, known as the vaginal seal, and the womb is found to contain a hard mass, and, at a later stage, the body of the foetus can be distinguished. It has also been shown that soon after an animal becomes pregnant, its blood undergoes some change, which can be determined by a special laboratory blood test, known as the "Aberhalden" test for pregnancy.

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