

the silo. Roots are a succulent feed, and are especially valuable for cattle, but owing to the amount of labor involved and the risk of damage from early frost, they cannot be called economical. In any case, roots form only a small part of the food consumed, whereas good silage will furnish nearly all the roughage a cow needs, and the danger of damage to the crop by frost is very slight. The silo preserves for winter use a larger proportion of the nutritive elements of green fodder than is possible by any other method.

Ensilage is valuable chiefly for dairy, fattening, and stock cattle and sheep. It should be sparingly used as horse feed, as it induces colic easily. It is not profitable or suitable for swine.

Kinds of Ensilage

Corn is pre-eminently the plant from which ensilage has been made in Eastern Canada and in the Eastern and Middle States, but in the greater part of the Western Provinces the corn plant does not mature sufficiently to make good ensilage within the growing season. In the southern part of the Province, for example in the Medicine Hat, Bow Island and Lethbridge districts, corn has proved a success. Where it can be grown satisfactorily it is the best ensilage crop on account of the large yields it gives.

Even though corn cannot be grown profitably in all parts of the Province, it is still possible to profit by the use of the silo in Alberta. As substitutes for corn for ensilage, alfalfa, green oats and green peas and oats mixed, have been used in various parts of Alberta for the past three or four years, and have proved satisfactory. In places where alfalfa is grown successfully it often happens that wet weather is encountered about the time it is ready for the first cutting, with the result that it is either left standing too long waiting for good weather, or it is cut and is damaged considerably by rains. When this is likely to occur it is a saving to cut at the proper time, run immediately through a cutting box, and blow into the silo.

Oats can be grown successfully in any part of Alberta, and if cut when the heads are just turning, or when the straw is nearly in the dough stage, and put immediately into the silo, the ensilage makes excellent feed. The oats can be sown in the spring after all the crop that is intended for threshing is put in, and can usually be cut and put into the silo before the grain crop ripens, thus not interfering with the production of grain crops. If seed peas are available it will greatly improve the ensilage to sow at least one bushel of peas to the acre, mixed with the oats. This, fed in conjunction with tame or native hay and a small allowance of concentrated feed, will keep the animals in excellent condition through the winter months, and will afford a great saving in roots and in oat and barley chop.

Ripening of the Fodder in the Silo

It is necessary to know something of the preserving uses of the silo. Ensilage undergoes a ripening process similar to that of cheese. The chief result of the ripening is that the proteins are made more digestible. In addition to this the fibres are