

Feeding Value of Ensilage.

An interesting experiment to ascertain the value of corn ensilage as a cattle food has just been concluded at the Ontario Agricultural College, Guelph, under the supervision of the able experimentors of that place. Six steers were used in conducting the trial, and these were divided into three groups of two each. The animals were as uniform in general condition and disposition as it was possible to get them and for a few weeks before were subjected to the same treatment to place them in uniformity for the experiment. The test lasted for 110 days during the winter when all food given the animals was carefully weighed as also was that which remained uneaten. They were fed three times and watered twice daily and were weighed twice a week during the entire test.

The table below as given in the college *Review* gives the daily ration of each animal.

Foods.	Group 1	Group 2	Group 3.
	lbs.	lbs.	lbs.
Meal—Equal parts barley, oats, peas.....	12.7	12.7	12.7.
Corn Silage.....	79.4	41.6
Roots.....	41.5.
Hay.....	11.3	14.3.

As a result of the trial the two steers in groups 1 showed an average gain of 1.850 pounds per day; in group 2 1.857 and in group 3 1.697 pounds.

This list speaks volumes for the value of ensilage over roots as a fattening food, and as regards the cost of producing the two crops a difference has been shown to be in favor of the silage.

Barrenness in Mares.

There are few diseases, for barrenness is certainly a disease or a diseased condition, which so completely refuses to answer to the will of the stockman and which is more thoroughly provoking to the owner of a fine mare bred in a long line of noble ancestry than a obstinate case of sterility. The loss of progeny does not simply mean a financial loss, but in many cases it means the wrecking of the fondest hopes and most cherished plans of the horse owner, who desires to perpetuate the

characteristics of the sire and dam in a foal. Animals troubled with sterility, are more commonly found in stables where valuable stock only is kept. The mare comes in season regularly and the owner is at a loss to account for the result.

All thorough horsemen fully realize that brood mares should be subjected to a proper course of treatment to ensure the best results and secure regularity of pregnancy. High feeding with strong heating food will render the chance of progeny less certain. A superabundance of fat in the system, also too much blood in the veins deters the production of young. Not only is the condition brought about by high feed and too much good treatment, but also by the reverse. An animal kept low in condition by poor and scanty feeding, or by excessive overwork or one in a very aged condition will produce offspring with uncertainty. Besides these there are frequently causes, which, cannot be well understood. There may have been over or under feeding; the mare appears to be in first class condition yet no foal is produced. In cases of this nature it may be concluded that the animal is diseased in other particulars or is suffering from a mechanical defect which requires the attention of a veterinary surgeon.

Judicious feeding, to keep the female in a proper condition of fleshiness, and in good heart is essential. A little hemp or flax seed given occasionally is a great aid to the spirits and exerts a widely stimulative effect upon the system. Badly cured hay and smutty grain and impure water are to be avoided. Exercise is essential. The mare irregularly or never worked and never put to pasture but kept in a stall for long lengths of time will not breed with certainty. The organs of the body require plenty of exercise for their proper development and the discharge of their functions. Too close in-breeding has been known to produce sterility.

The Value of Crosses.

We very frequently hear that an animal has a number of crosses of a certain blood in it and that one

can select and breed in a chosen line for a result although neither sire nor dam may be pure bred. In speaking on this point an exchange says: It is not the number of crosses of any particular blood which indicates the proportion of that blood, but a given number of crosses composed with all the crosses constituting the whole quantity of that particular blood in the horse. Now to find the crosses of any particular blood in any horse the annexed table will be useful.

The first cross is.....	1/2
“ second “	1/4
“ third “	1/8
“ fourth “	1/16
“ fifth “	1/32
“ sixth “	1/64
“ seventh “	1/128
“ eighth “	1/256
“ ninth “	1/512
“ tenth “	1/1024

Suppose in tracing the pedigree of a horse you find any given cross in the third degree of descent, it is manifest that the horse has one eighth of that particular cross. If in the fifth cross he has one thirty-secondth of that blood and if in the tenth cross, he is only 1/1024 of that blood. It is too definite as a rule to say that a horse has so many crosses of any given blood, but with this table one can say how many parts he has of that blood.

Covering Dew with Soil.

The advantage of working around some kinds of plants while they are wet with dew, which is thus shaken off and covered by soil, is very marked. There is no time so good for hoeing cabbages as before breakfast, while the dew is on them. We know good farmers who, during hot days in Summer, get the cultivator at work very early in the morning, and then rest both men and horses during the midday heat. The advantage of this is not merely the cooler weather for working, but the fact that dew condensing from the atmosphere in the cool nights contains a much larger proportion of ammonia than ordinary rainwater. In contact with the soil this is absorbed, and is thus saved from wasting when the drop of dew evaporates. But beans cannot be cultivated to advantage when wet as it injures the leaves, and we are inclined to place potatoes in the same category.—[Ex.]

It is the young animal that pays best for fattening purposes, and about the only one that pays well. This one fact ought to be worth millions to the country, and yet many farmers disregard it in trying to fatten old stock.