The Ontario Agricultural Gazette

The Official Bulletin of the Dominion Cattle, Sheep, and Swine Breeders' Associations, and of the Farmers' Institute System of the Province of Ontario.

THE DOMINION CATTLE, SHEEP, AND SWINE BREEDERS' ASSOCIATIONS.

A mual Membership Fees :- Cattle Breeders' \$1; Sheep Breeders', \$1; Swine Breeders', 82. BENEFITS OF MEMBERSHIP.

BENEFITS OF MEMBERSHIP. Back member receives a free copy of each publication issued by the Association to which he belongs, during the year in which he is a member. In the case of the Swine Breeders' Association this includes a copy of the Swine Record. A member of the Swine Breeders' Association is allowed to register pigs at 50°, per head; non-members are charged \$1.00 per head. A member of the Sheep Breeders' Association is allowed to register sheep at 50°, per head; while non-members are charged \$1.00. The name and address of each member, and the stock he has for sale, are published once a month. Over so, or copies of this directory are mailed monthly. Copies are sent to each Agricultural College and each Experiment Station in Canada and the United States, also to prominent breeders and probable buyers resident is Canada, the United States and elsewhere. A member of an Association will only be allowed to advertue stock corresponding to the Association to which be belongs; that is, to advertise cattle be must be a member of the Dominion Cattle Breeders' Association, and to advertise the pheneut be a member of the Dominion Sheep Breeders' Association, and to advertise swine be amender of the Dominion Swine Breeders' Association. The list of cattle, sheep, and swine for sale will be published in the third issue of each month. Members having stock for sale, in order that they may be included in the Gazette, are required to notify the under-strade for sale, in order that they may be included in the date will be published in the most con-densed form. 'F. W. Horson, Sceretary. Parliament Buildings Toronto, Oct.

AN ABRIDGED REPORT OF AMERI-CAN EXPERIMENTS WHICH ARE OF VALUE TO CANADIAN FARMERS.

(Continue.) from last issue.)

SELECTION OF POTATOES FOR PLANTING.

The North Dakota Station reports on experiments during two seasons in the selection of potatces for seed, making comparison of the growth from large and small tubers from the same vine. In 1894 the tubers were selected from hills of normal growth, which indicated that their origin was from a single seed piece and which showed considerable difference in growth, number, size and form of the potatoes. Small tubers were selected from those weighing between 11/2 and and 2 oz, and large ones from those exceeding 6 oz in weight. The specific gravity of the tubers was found to be essentially the same for large and small tubers from the same hill, but often very different in different hills. After the selected potatoes had been treated with corrosive sublimate for the prevention of scab, one piece, an ounce in weight, was taken from the bud end of each tuber. These pieces were planted in the spring of 1895 three feet apart each way and four inches deep, with the cut surface down, only one piece being planted in each hill. The average weight per hill from the small tubers when dug was 2.1467 lbs., and of that from the large tubers 1.92 lbs.

The preparation for the next year's crop was made as above, the only hills from which no seed was planted being those which had produced only large or only small tubers. The average yield per hill in 1896 was 26.54 oz. from those planted with pieces of small potatoes, and 25.45 oz. from those planted with pieces of large polatoes.

At the Wyoming station the yield

from small potatoes planted whole was greater than from cuttings made of large potatoes, but the percentage of marketable tubers was less from the whole seed. Potatoes planted eight inches apart in the rows gave the best results. Green manuring with peas resulted in an increase in yield of more than 38 per cent. During a cold, wet season it was found that seed treated for scab with corrosive sublimate produced a good stand, untreated seed planted with bone meal in the furrow produced a partial stand, while untreated seed without bone meal failed to grow.

The relative yield of potatoes grown from seed cut from the bud end, centre, and stem end of the potatoes at the New Jersey Station was conclusively ... favor of the centre pieces. Three varieties of potatoes, the Early Rose, American Giani, and Rural No. 2 were tested.

LOSS BY EXPOSURE OF CORN FODDER.

That corn fodder left in the fields until required for feeding purposes loses much of its feeding value is well known to the careful agriculturist, but how much of its properties it loses is not often considered by a large number of farmers. Some light is thrown on this question by some analyses made at the Oklahoma Station of com fodder taken from the inside and outside of the shocks which had stood in the open field all winter.

The results show a considerable reduction in the feeding value of the corn stover, equal, in the opinion of those who conducted the test, to fully one-fourth of its original worth, with a corresponding increase in the crude fibre, the least valuable point.

So long as corn fodder is left out in the fields, the only way to reduce this loss in feeding value is to place the sheaves in stacks with only the buts exposed, or else to keep them in long

narrow shocks, supported by a central pole on posts. The better way, however, is to build a silo and turn the corn into silage.

PLANTING AND CULTIVATION OF CORN.

A number of experiments in early and late planting of corn during periods of five. six and seven years at the Indiana Station indicated that the best results are to be obtained by planting between the 1st and 10th of May. The highest average for eleven years resulted from planting stalks fourtcen inches apart in the row. It was noticed that, in dry years, the yield of stover increased with the thicker planting, while the yields of grain decreased, yet, on the whole, a greater total yield of corn and stover was obtained from the thicker planting

Tests of cultivating drilled corn from one to four inches deep showed that the best average yield was obtained when the cultivation was two inches in depth.

THE SUGAR BEET.

Farmers' Bulletin 52 of the United States Department of Agriculture gives considerable information about the culture of sugar beets. The best soils are those having good drainage and good capillarity. Barnyard manure should be applied one or two sessons before the sugar beets are grown, as fresh applications reduce the sugar contained in the beets. Heavy, nonnitrogenous manures injure the quality of the beet, not so much by decreasing the sugar content as by increasing the percentage of non-sugars. The growing of sugar beets in rotation with other crops is recommended.

The author recommends late fall plowing at least 9 inches deep, and, on stiff soils, subsoiling to the depth of 6 or 7 inches more. Thorough surface cultivation should be given before planting, which should be done as early as possible, as the early-planted beets give a larger yield and a higher content of sugar than late-planted beets.

An estimate is made of the cost of growing beets on land worth \$75 per acre, with labor at \$1 per day, and the distance to the factory not more than three miles. This is given at \$59.50, and the return, with a yield of 15 tons of beets per acre, at \$4.50 per ton, is given at \$67.50.

The plants retained for seed should be smooth and regular in shape. They should weigh from 20 to 24 oz, and be selected from beets of the best quality. The leaves are to be removed