

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.

Annual Membership Fees:—Cattle Breeders' \$1; Sheep Breeders', \$1; Swine Breeders', \$2.

BENEFITS OF MEMBERSHIP.

Each 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 50c. per head; non-members are charged \$1.00 per head.

A member of the Sheep Breeders' Association is allowed to register sheep at 50c. 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 20,000 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 in Canada, the United States and elsewhere.

A member of an Association will only be allowed to advertise stock corresponding to the Association to which he belongs; that is, to advertise cattle he must be a member of the Dominion Cattle Breeders' Association, to advertise sheep he must be a member of the Dominion Sheep Breeders' Association, and to advertise swine he must be a member 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 undersigned by letter on or before the 9th of each month, of the number, breed, age, and sex of the animals. Should a member fail to do this his name will not appear in that issue. The data will be published in the most condensed form.

F. W. Henson, Secretary.
Parliament Buildings Toronto, Ont.

THE DOMINION CATTLE BREEDERS' ASSOCIATION.

Shorthorns.

Bonnycastle, F. & Sons Campbellford, Ont. 6 bull calves; 9 cows and heifers.
Douglas, James Caledonia, Ont. 16 bulls, under 10 months; young cows and heifers.

Jerseys.

Bull, H. H. & Sons Brampton, Ont. 5 cows and heifers; 6 bulls, 2 weeks to 2 years.
Caldwell Bros Orchard, Ont. Bull, 14 months; 2 bulls, 3 and 5 months.

Devons.

Harper, Samuel Colbourn, Ont. Stock, both sexes, all ages.

Herefords.

Smith, H. D. Compton, Que. Bull calves.

Ayrshires.

Caldwell Bros Orchard, Ont. 2 bulls, 13 months; bull, 3 months; 5 heifers, 12 to 16 months.
Yuill, J. & Sons Carleton Place, Ont. 3 bull calves, 3, 5 and 9 months; females, all ages.

THE DOMINION SHEEP BREEDERS' ASSOCIATION.

Shropshires.

Pettit, W. G. Freeman, Ont. Yearling ewes; ram lambs.
Yuill, J. & Sons Carleton Place, Ont. 7 ram lambs; 1 shearing ram; females, all ages.

Cotswolds.

Bunnycastle, F. & Sons Campbellford, Ont. Ram; 15 ram lambs; 9 yearling ewes.
Parks, E. & N Orill, Ont. Stock all ages.

Oxfords.

Cooper, J. V Picton, Ont. Ram, 2 years; 3 shearing rams; ram lambs.

THE DOMINION SWINE BREEDERS' ASSOCIATION.

Berkshires.

Bonnycastle, F. & Sons Campbellford, Ont. 30 head, 1 to 2 months.
Bowman, W. R. Mount Forest, Ont. Boars and sows, all ages.
Bull, H. H. & Sons Brampton, Ont. Stock, all ages.
Colwell Bros Newcastle, Ont. 5 sows and 4 boars, under 1 month; 3 sows, 9 months.
Cook, F. Parkhill, Ont. 4 sows; 3 boars, 8 months.
Decker, C. R. Chesham, Ont. 40 head, 2 months to 2 years.
Holdsworth, R. L. & Sons Port Hope, Ont. 11 yr. 2 years; 3 boars and 3 sows, 1 and 9 months.
King, Wm. Penn Oakwood, Ont. Boar, 20 months; 3 boars, 4 months; stock, under 1 month.
Mark, G. H. Oakwood, Ont. Aged boar; 5 boars, 2 months to 1 year; stock, 1 week.
Mutch, I. P. Pilot Mound, Man. Stock, both sexes, all ages.
Russell, Francis Cedarville, Ont. 6 boars and 6 sows, 3 months.
Shipman, G. H. Cannington, Ont. Boar and sow, 9 months; 5 boars and 2 sows, 4 weeks.
Smith, H. D. Compton, Que. Young pigs.
Yuill, J. & Sons Carleton Place, Ont. Stock, both sexes, all ages.

Tamworths.

Brown, Wm Paisley, Ont. Boars and sows, 2 months.
Caldwell Bros Orchard, Ont. 5 boars, 6 to 10 months; stock all ages.
Dixon, Wm. L. Dromore, Ont. Sow, 1 year; 5 young pigs, both sexes; 1 to 2 months.
Shipman, G. H. Cannington, Ont. 2 sows, 3 months.
Simmons, J. H. Chatham, Ont. Stock, all ages.
Smith, H. D. Compton, Que. Boar, 3 months; sows, all ages.

Duroc-Jerseys.

Fraser, I. O. & Son Fellows, Ont. Stock boar, 2 boars, 9 and 11 months; sow, 9 months; young stock, 2 weeks to 4 months.
McCutcheon, Hugh W Glencoe, Ont. 40 young pigs, both sexes; sows.
Parks, E. & N Orill, Ont. Stock all ages.
Taylor, J. H. Richmond Station, Que. Stock for sale, sows and boars.

Yorkshires.

Bowman, W. R. Mt. Forest, Ont. Boars and sows, all ages.
Johnson, J. W. Underwood, Ont. Imported boar, 2 years; 2 imported sows, 2 years; young stock, both sexes, 3 months.
King, Wm. Penn Oakwood, Ont. 11 boars, 2½ to 30 months; sow; stock, under 1 month.
Russell, Francis Cedarville, Ont. Boar, 5 months.

Poland-Chinas.

Taylor, J. H. Richmond Station, Que. Stock for sale; sows and boars.

Chester Whites.

Birdall, F. & Son Birdall, Ont. Young sows and boars.
Holdsworth, R. L. & Sons Port Hope, Ont. 4 sows, under 1 year; 9 sows and 1 boar, 3 months.

GROWING POTATOES AND PREVENTING DISEASES.

By ALF. BROWN, Picton.

(Continued from last issue.)

If from drenching rain or other cause the soil gets so firm that the tubers are showing above the surface, we use the hillers on the scuffer, covering the row enough to keep them from being sun-burned, as the common phrase goes; but it does not require the sun to make a potato look green, the light from a small cellar window will destroy the quality of the best potatoes. To prevent this we keep the bins covered with a mat, or anything that will exclude the light, and the quality will compare favorably with the ideal way of wintering in pits.

SCAB.

The scab is a fungus growth on the skin of the potato, thus making it unsightly for market and causing considerable waste in cleaning for the table. To kill the scab we first wash the seed so that the preparation reaches every part of the skin. Make the solution with one ounce of corrosive sublimate dissolved in one gallon of hot water, added to seven gallons of water, or in this proportion for any quantity required. We use the sheep dipping tank; but two barrels or an oil barrel sawn in two will answer the purpose. Leave the potatoes in the solution ninety minutes then draw off the solution in the other barrel or in any wooden vessel, or dip out the potatoes when they are ready to cut and plant, and they will not produce a scabby crop unless they are handled in crates or bags that have had scabby potatoes in them, or planted on land that has produced a crop of scabby potatoes. There has been a popular opinion that fresh stable manure caused the scab. We staked out a plot and applied fresh manure directly on the seed after dropped; but the crop from all parts of the field was smooth and clean, including this plot. This plan takes a little additional time and expense, but we have found it to pay us well from ready sales at top prices.

BLIGHT.

Early in August, 1895, we noticed the under and older leaves on our potatoes showing brown patches; these patches were then spreading rapidly. Although too late to get the best results, we undertook in the middle and at the end of August to spray with Bordeaux mixture, with only crude implements at our disposal. The result was an increased yield of 36 bushels to the acre from the sprayed over the unsprayed parts of the field. 1896 found us prepared to do first-class spraying at short notice, and again the blight commenced during the last days of July. We made three sprayings with Bordeaux, the first, middle, and end of August. At the time of the last spraying we found the unsprayed rows completely dead with blight, while the sprayed rows were quite green and remained so up to the time of frost late in September; and yielded 87½ bushels to the acre

more than the unsprayed rows. The same variety (Empire State) was used for the test, all planted the same day, under the same conditions, and each received, as far as possible, the same care, with the exception of spraying. At Cornell University Agricultural Experiment Station, in 1897, the potato plots cultivated on the level yielded 325 bushels per acre against 288 bushels per acre from hilled rows, showing a larger yield in favor of level cultivation of 37 bushels per acre. The experiment was with Carman No. 3. At the same station the R. N. T. No. 2, unsprayed, with five cultivations, yielded 234 bushels; sprayed four times, with five cultivations, yielded 305 bushels; sprayed four times, with seven cultivations, yielded 347 bushels; showing an increased yield of 71 bushels per acre from spraying for blight, and an increased yield of 113 bushels per acre as the result of spraying and two extra cultivations.

FLEA BEETLES.

The flea beetles are very troublesome, some seasons doing considerable damage to the young plants, enfeebling their growth and making them an easy prey to disease. Neither Paris green nor Bordeaux kills this pest, but the latter seems to be very offensive to them and they hunt new feeding grounds when it is used.

SPRAYING OUTFIT.

Our outfit consists of a spramotor No. 2 with eight feet of hose connecting the pump to the centre of a nine-foot piece of gas pipe, with four nozzles arranged in it three feet apart. With this we can spray four rows of potatoes as fast as a horse can walk. The barrel, pump and all are mounted on a cart made with two rake wheels 6 feet apart, so that when the horse is walking between two rows the wheels are running between the next two, on either side. Two men with this rig will mix and apply a 50-gallon barrel of Bordeaux or Paris green solution in 45 minutes, if the water is not more than 40 rods from the field to be sprayed. At 10c. an hour the expense of applying a barrel is 15c. One 50-gallon barrel is sufficient to spray an acre of potatoes once except when the vines are very heavy. Four ounces of Paris green to the barrel of water is enough to destroy the young Colorado beetles, but if they get nearly full-fledged double this amount will be required. The total cost will be from 19c. to 23c. per barrel, including material and time for spraying. For Bordeaux we use 6 pounds copper sulphate and 6 pounds fresh lime, costing 47c. per barrel applied.

VARIETIES.

The best varieties ever introduced have lost in vitality in a few years. This makes it necessary to originate new sorts. It is very interesting work and might be taken up by our young people. Care should be taken to gather seed balls from the best varieties. Wash out the seeds in the