

A New Canadian Milk Record for Three-Year-Old Holsteins.

EDITOR "THE FARMER'S ADVOCATE":

The junior three-year-old Holstein heifer, May Echo Posch, developed and owned by the Dominion Experimental Farm, Ottawa, has just completed a year's official R. O. M. test establishing a new Canadian milk record for the junior three-year-old class. Freshening at three years and twenty-eight days, she produced in 365 days on official test, 24,458.7 pounds of milk and 806.77 pounds of fat, equivalent to 1,008.46 pounds of 80 per cent. butter. This record of May Echo Posch's places her second on the World's list of junior three-year-olds for milk production, under official test.

May Echo Posch was bred by F. R. Mallory. Her sire is Dido Count Gerben, a grandson of the famous bull, DeKol 2nd's Butter Boy 3rd. The dam of May Echo Posch is Lawncrest Rosa Posch, a daughter of the famous bull Inka Sylvia Beets Posch, and out of May Echo Darkness. May Echo Darkness in turn is a daughter of the famous sire, Sir Inka Darkness Keyes and out of May Echo Verbeke the dam of May Echo Sylvia, and in turn one of the famous daughters of the great cow, May Echo.

May Echo Posch consumed the following feed during the six weeks before freshening and the twelve months on test.

Meal at \$25.00 per ton, 6,822 lbs.	\$ 85.24
Silage and roots at \$2 per ton, 22,510 lbs.	22.51
Hay at \$7.00 per ton, 2,014 lbs.	7.05
Green feed at \$3.00 per ton, 6,875 lbs.	10.31
Dried beet pulp at \$29.00 per ton, 636 lbs.	9.22

Total cost of feed.....\$134.33

Valuing her eighty per cent. butter at 35 cents per pound, and skim-milk at 20 cents per hundred-weight would show a gross return of \$400.14 with a profit over feed of \$265.81. Had milk been sold at 8 cents per quart the gross return would have amounted to \$782.40, with a profit over feed of \$648.07.

The average per cent. fat in the milk was 3.29. Undoubtedly had this heifer been given a reasonable rest and preparation for calving, the percentage of fat might have been materially higher, at least, during the first two or three months of her lactation period. It will also be noticed that the feed cost to produce 100 pounds of milk was 54.9 cents, and to produce 1 pound of butter, 13.3 cents.

May Echo Posch finished her lactation period on the fifth day of February, 1917, in splendid condition, weighing 1,348 pounds, which was an increase of more than 200 pounds over her weight at the commencement of this period.

Canaan Beauty 2nd, a senior three-year-old Holstein heifer, owned and developed by the Dominion Experimental Farm, Ottawa, has also just completed a year's official test. Freshening at the age of three years six months and twenty-four days, this heifer produced 18,637.5 pounds of milk and 605.32 pounds of fat making 756.79 pounds of butter, testing 80 per cent. fat. Although this is considerably less than her stable mate yet it was a very good record for a heifer at this age. Canaan Beauty 2nd is a great granddaughter of the famous cow Sarah Jewel Hengerveld 3rd, and also a great granddaughter of Lilly's Jude Aakrum de Kol, the sire of many heavy producing cows of excellent type.

Canaan Beauty 2nd, consumed during the two months previous to freshening and the 12 months on official test, the following feed:

Meal at \$25.00 per ton, 6,205 lbs.	\$ 77.56
Silage at \$2.00 per ton, 21,412	21.41
Hay at \$7.00 per ton, 1,852 lbs.	6.48
Green feed at \$3.00 per ton, 6,875 lbs.	10.31
Dried beet pulp at \$29.00 per ton, 368 lbs.	5.34

Total cost of feed.....\$121.10

Valuing her 80 per cent. butter at 35 cents per pound, and the skim-milk at 20 cents per hundredweight the gross return would be \$300.02 or a profit over feed amounting to \$178.92. Valuing the milk at 8 cents per quart the gross return would amount to \$594.16 or a profit over feed amounting to \$473.06. The average per cent fat in the milk from this heifer was 3.34. The average feed cost to produce 100 pounds of milk was 65 cents, and to produce 1 pound of butter was 16 cents.

During the year's test the two heifers above mentioned at no time received all the grain or roughage which they desired. During the first eight months of the year both heifers received practically the same ration which was a mixture of:

Hay (mostly clover)	6 to 8 lbs.
Corn silage	30 lbs.
Roots when available	60 lbs.

This was fed daily in addition to which was given grain, never exceeding 25 pounds daily, and salt. The meal mixture during this period was varied from time to time but was composed of:

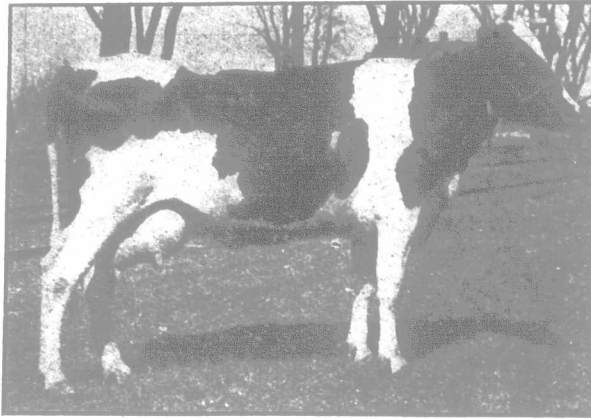
Bran	1,400 lbs.
Gluten feed (23%)	400 lbs.
Cotton seed meal (41%)	400 lbs.
Linseed oil meal	400 lbs.
Ground oats	600 lbs.
Peanut oil meal (40%)	400 lbs.

The meal mixture fed these heifers during the latter months of this test was composed of:

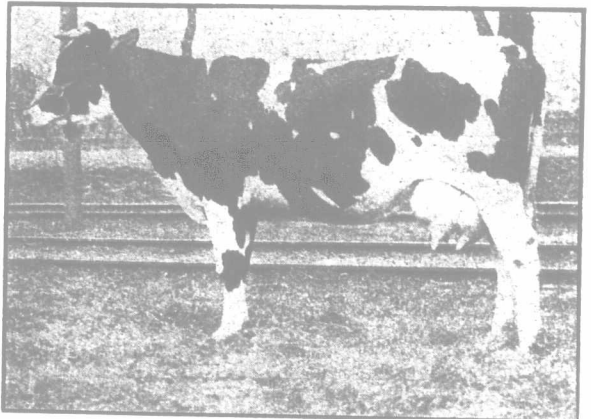
Bran	400 lbs.
Dried distiller's grains	200 lbs.
Gluten feed	200 lbs.
Linseed oil cake	100 lbs.
Dried beet pulp	50 lbs.

Even with the comparatively heavy feeding which these heifers received the margin of profit over the feed is exceptionally good. At no time during the period was there any evidence of the heifers being off-feed and they grew rapidly and gained in condition during the latter months on test. The accompanying photographs show these heifers after having milked several months. The credit for these and other good records of cows on official test on the Central Experimental Farm at Ottawa, is largely due to Robert Cunningham, herdsman at this Farm. E. S. ARCHIBALD.

Dominion Animal Husbandman.



May Echo Posch.



Canaan Beauty 2nd.

HORTICULTURE.

The Quantity of Garden Seed Required.

The following recommendations may be useful when making up the order for vegetable seeds. The amount of seed of each vegetable is stated for certain length of row:

Asparagus.—1 oz. to 100 ft. of drill; 2 lbs. will provide roots for 1 acre.

Beans.—1 pint to 100 ft. of drill; 1½ bus. per acre.

Beet.—1 oz. to 50 ft. of row; 4 lbs. per acre.

Brussels sprouts.—¼ oz. to 100 ft.

Cabbage.—1 oz. to 300 ft. of drill; 10 oz. produce 2,000 to 2,500 plants.

Carrot.—½ oz. to 100 ft. drill; 2½ lbs. per acre.

Cauliflower.—1 oz. to 2,500 plants.

Celery.—½ oz. per 100 ft. drill; 2½ lbs. per acre.

Corn.—¼ to ½ pint to 100 hills; 1 peck per acre.

Cucumbers.—1 to 2 ozs. to 100 hills; 1 to 2 lbs. per acre.

Egg plant.—1 oz. produces 2,000 plants.

Endive.—¼ oz. to 100 ft. of drill; 4½ lbs. per acre.

Kale.—1 oz. to 300 ft. of drill.

Kohl-rabi.—1 oz. to 300 ft. of drill; 4 lbs. per acre.

Leek.—1 oz. to 100 ft. of drill; 4 lbs. per acre.

Lettuce.—¼ oz. to 100 ft. of drill; 3 lbs. per acre.

Melons (musk).—2 ozs. per 100 hills, 4 x 4 ft.; 2 lbs. per acre.

Onion.—½ oz. to 100 ft. drill; 4 to 5 lbs. per acre.

Onion sets.—1 quart to 50 ft. drill; 8 bus. per acre.

Parsley.—½ oz. to 100 ft. drill; 3 lbs. per acre.

Peas.—1 to 2 pints to 100 ft. drill; 1½ to 2½ bus. per acre.

Peppers.—1 oz. produces 1,500 plants.

Radish.—1 oz. to 100 ft. row; 10 to 12 lbs. per acre.

Rhubarb.—1 oz. seed to 125 ft. of drill; 3½ lbs. per acre.

Salsify.—1 oz. seed to 100 ft. drill; 8 lbs. per acre.

Spinach.—1 oz. to 100 ft. of drill; 5 to 6 lbs. per acre in drills; 30 lbs. per acre broadcast.

Squash.—8 ozs. to 100 hills.

Tomato.—1 oz. produces 2,000 to 2,500 plants.

Turnip.—1 oz. to 200 ft. of drill; 1 to 2 lbs. per acre.

Varieties of Vegetables for the Garden.

Sometimes it is rather perplexing when we have to decide on the proper varieties of vegetables to plant in small gardens. Those who have tried out different kinds, side by side, will have some ideas upon which to base their judgment this spring, but in case they have given it no particular attention we shall suggest a few varieties which are in common use in farm gardens and by the vegetable growers. We shall begin with the crops which are more or less permanent in character; then we shall mention the kinds that are usually transplanted, and third will come those kinds of crops which are seeded in the garden every spring.

Asparagus.—Palmetto, Argenteuil and Conover's Colossal are staple varieties of asparagus.

Rhubarb.—Victoria and Raspberry are good.

Strawberries.—Varieties here depend very much upon soil and local conditions. A good, all-round domestic berry is the Senator Dunlap; the Gandy is an early berry but not an exceptional bearer. The Glen Mary and Sample are two kinds that might be given a place. The Williams and Warfield do well when planted together, on account of the latter being imperfect in the flower. The Williams is very popular among growers who ship large quantities. Its green tip stands it in good stead when shipping, but it does not add to its value for domestic purposes.

Celery.—White Plume or Golden self-blanching are desirable varieties for the early crop. Paris Golden Yellow comes on in mid-season. Giant Pascal and Evans' Triumph are often planted for the late crop.

Tomatoes.—Earlianna is early and a good yielder, but is not usually so smooth as the Chalk's Jewel, which is slightly later. Stone and Success are two varieties that are used considerably under field conditions. Bonny Best, Byron Pink, Ponderosa, Plentiful and Early Detroit are other varieties from which selection can be made.

Melons.—Rocky Ford, Emerald Gem, Hackensack and Montreal Market are good kinds of muskmelons, while Hungarian Honey and Cole's Early of the watermelon type are the most likely to ripen.

Cabbage.—Jersey Wakefield is a good early variety of cabbage, and Early Winnigstadt is another. Copenhagen Market is a medium or autumn kind, while for late the Danish Ball Head is good. All Seasons and Flat Dutch commend themselves. Mammoth Rock is a good red variety.

Cauliflower.—Early Erfurt and Early Snowball should give very good specimens of this crop.

Lettuce.—Make weekly sowings of lettuce, and for varieties select from Grand Rapids, Black Seeded Simpson, Hanson, Big Boston and Paris White Cos.

Radish.—Radishes should be planted at intervals of a week or two. Rosy Gem, Scarlet Turnip, White Tip and French Breakfast are good varieties. It is nice to have two or three different kinds.

Peas.—For the early crop try Extra Early, Alaska, Nott's Excelsior, American Wonder, or Gradus; for late use Advancer or Stratagem.

Beans.—The varieties of garden beans, which are likely to give best results are: Keeney's Rustless Golden Wax, Hudson Wax, Detroit White Wax, Stringless Green Pod, Valentine and Wardell's Kidney Wax.

Cucumbers.—For slicing use Davis Perfect, White Spine, and Cumberland; for pickling, Westerfield and Chicago Pickling are good.

Citrons.—Colorado Preserving and Red Seed.

Beets.—These should be planted for early summer use and about the first of June for winter storing. Egyptian Turnip is an extra early kind. For moderately early try Early Model, Eclipse, and Black Red Ball. For late summer and winter, Detroit Red and Long Smooth Blood give good satisfaction.

Carrots.—Every gardener should try Chantenay; Danvers and Rubicond follow very closely.

Parsnips.—Two good and common varieties are Hollow Crown and Guernsey.

Turnips.—The winter supply can usually be obtained from the field crop of Swedes. For early ones in the garden try Extra Early, Purple Top Milan, and Golden Ball.

Pumpkins.—Sugar and Jumbo are two good varieties.

Squash.—For an early squash use Crookneck or White Best Scallop. Hubbard is a good late variety.

Corn.—Broadly speaking, there is no better variety of garden corn than Golden Bantam. Plantings should be made at intervals of a week or two. Country Gentleman and Stowell's Evergreen are also good, but they are later.

Onions.—The Yellow Globe Danvers, Prizetaker, Red Westerfield, Southport Yellow Globe and Southport Red Globe are the varieties grown, with preference given to the first.

Spinach.—Victoria, Virofly and Bloomfield.

Eggplant.—Black Beauty and New York Improved.

Kohl-rabi.—Early White or Purple Vienna.

Vegetable Marrow.—Long White Bush and English Vegetable Marrow.

Co-operative Vegetable Selling.

EDITOR "THE FARMER'S ADVOCATE":

The value of a single product in vegetable farming co-operatively handled is illustrated by the Annual Report on the business of the Long Island Cauliflower Association, operated and controlled solely by cauliflower-shipping farmers. No others can hold stock. It does not buy any vegetables as a speculation nor store any. It charges a certain sum for acting as a shipping agent and this is not only a smaller sum than