

consuming most of the cut fodder there was an average waste of 31 per cent of all the cut fodder. The value of cut corn or cut fodder depends so much upon the character of the fodder used, the animals to which it is fed and the manner of feeding that it is difficult to give more definite information as to the actual increase in value by cutting fodders.

CORN AND MILLET AS FERTILIZERS.

To the Editor of FARMING:

Will you please answer through the columns of your valuable paper as to the value of corn and millet as fertilizers, and if they possess any important value for ploughing under and following with wheat or other grains? Also can you inform me where cow peas can be procured and at about what cost per bushel?

OBSERVER.

Answered by C. A. Zavitz, Experimentalist Ontario Agricultural College, Guelph.

(1) Green manuring with clover, peas, and other leguminous crops actually enriches the soil in nitrogen obtained from the air. The ploughing under of corn, millet, buckwheat, and other non-leguminous crops, however, adds practically no essential fertilizing ingredients to the soil except those which were taken out by the plants, but supplies a mass of vegetable matter which decays in the soil, and thus improves its physical properties. Many fields are very poorly supplied with humus and the ploughing under of any succulent and leafy growth will prove beneficial. In this way corn, millet, and buckwheat are useful for green manuring, but when clover or peas can be grown and ploughed under, much better results can be expected.

Experiments have been conducted at the Ontario Agricultural College by ploughing under different crops as green manure for winter wheat. In the results of four tests, land on which buckwheat was grown and ploughed under produced an average of 29.9 bushels of wheat per acre and land on which common field peas were grown and ploughed under, produced an average of 37 bushels of wheat per acre. This shows a difference of a little over 7 bushels of wheat per acre in favor of using common field peas as against buckwheat as a green manure for winter wheat.

(2) Some of the leading varieties of cow peas can be obtained as follows: Southern Black Eye at \$2.25 per bushel from D. Landreth & Sons, Philadelphia, Pa.; Whip-o'-will at \$2.50 per bushel from Henry Phillips, Toledo, Ohio; New Era at \$4 per bushel from Iowa Seed Co., Des Moines, Iowa; Warren's Extra Early at \$3 per bushel from W. H. Maule, Philadelphia, Pa., etc. As the cow peas are mostly too late in growth to suit our climate, the seedsmen in Ontario do not advertise them extensively, but no doubt they would secure seed to fill all orders.

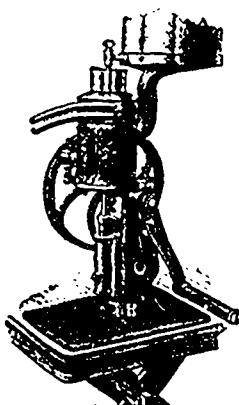
"ALPHA" DE LAVAL CREAM SEPARATORS MISREPRESENTED

AT MARKHAM, ONT.

WE publish for the benefit of our patrons a full report of this test, which is an overwhelming refutation in every particular of the statements as published in the Markham *Economist* of July 6th, 1899.

Cream Separator Test

As cream separators are claiming considerable attention just now, it is with pleasure we note a very interesting contest which took place at the farm of T. Weir, Esq., Scarboro, a few days ago, between the "Alpha de Laval," represented by Messrs. Lindback & Caiscullen of Toronto, and the National by M. Stonehouse, of this place, and T. C. Rogers, of Guelph, later Instructor at the O. A. C. Dairy School for the past eight years. Mr. Weir operated both machines and a given weight of milk run through each. The test of skimming was made by the Babcock Tester, the pounds of butterfat being practically the same in both separators. The National, however, was the easier to turn, although putting through seventy-five pounds per hour more milk, and seems in many other ways to have advantages which make it superior and more practical separators for farmers than the De Laval. One strong point in favor of the National is its home manufacture, being made in Guelph, by the old and reliable Raymond Mfg. Co., the De Laval, we understand, being partly made in Denmark and finished at New York, which besides being a foreign machine, is much dearer in price. Judging from appearances, simplicity of construction, easy cleaning, etc., seems to be much in favor of the home machine. Mr. Stonehouse, the agent of them, is not only an experienced, practical dairyman and buttermaker, well known here, but has used a separator for quite a number of years.—*The Markham Economist*, July 6th, 1899.



BABY ALPHA

MARKHAM, Sept. 22, '99.

To The Canadian Dairy Supply Co.,
Gentlemen,— Montreal, Que.

Hearing the various reports given out by the agents of the National Separator Co., of Guelph, Ont., saying that they have beaten the "Alpha" De Laval in a test at my place which was run June 27th, 1899, in justice to the "Alpha" Baby No. 1, I will give you the following facts relative to this contest:

Prof. Rogers of Guelph, was present, representing the "National," and C. R. Lindback of Montreal, representing the "Alpha." I had on trial the "National" Separator, advertised capacity 333 pounds per hour, and "Alpha" Baby No. 1, 300 pounds per hour. It was agreed by both parties that I would turn both machines. This is the result of test:

Machine.	Amt. skimmed per hour.	Speed of machine per minute.	Butter fat in lb. milk.	Density of cream.
Alpha	330	6000 to 6500	.04	38.80
National	330	9000	.07	34.20

By this can be seen that the "ALPHA" beat the National in all points, running a heavier cream, running above advertised capacity, skimming closer and running at much less speed.

We made a test of skim milk from "Alpha" Baby No. 1, which I had skimmed the evening before and we found it tested .02, showing the variance in speed caused the difference .02 in next day's test.

We run milk through "Alpha" first, and I being slightly nervous at start, I ran it at uneven speed, while the "National" was run 55 turns all through the run. I'll say further in justice to the "Alpha" that from the time it was placed on my farm I never had any trouble with it, while the "National" did not work satisfactorily different times, and Mr. Rogers also had to change his bowl before the test.

As result of the test I have bought the "Alpha" No. 1, and am running it right along, and am pleased to say it is giving entire satisfaction.

Yours truly,
Brown's House, Ont. THOS. WEIR.

P.S.—Also one of the reasons I bought the "Alpha" it was much stronger built and therefore much more durable.

We honestly believe that Alpha De Laval Cream Separators are superior to any separators sold in Canada. They do their work perfectly, require less power, do not get out of order, anybody can operate them.

Please ask for particulars.

The Canadian Dairy Supply Co.

327 COMMISSIONERS STREET
MONTREAL, QUE.