

NOVEMBER 24, 1910

Tuberculosis.

1. Is the process of testing for tuberculosis of the bowels dangerous?
2. After the animal has been dead for twelve hours, can a veterinarian decide by the post-mortem appearances, with the naked eye, that it died of tuberculosis of the bowels, he having attended the animal during its sickness of only one week?
3. Would tuberculosis of the bowels cause death, the animal being sick only a week?
4. Is it possible that tuberculosis be present in an apparently healthy herd, all cared for and fed alike, and some of them being sold, would die of the disease in six months?
5. Would you advise the former owner of those that died to have his whole herd tested?
6. Is any qualified veterinarian capable of testing with safety?
7. Give details of the test, with length of time required to test one animal or a herd.

J. H.

- Ans.—1. No.
2. Yes.
3. Yes, the disease is liable at any time to develop and cause death in a few days, irrespective of the organs diseased.
4. This is quite possible, and often the case. The disease does not cause visible symptoms of apparent disease of any kind until the organ or organs involved become diseased to such an extent as to interfere with their functions.
5. It would be well to have the whole herd tested, and, in fact, it is the only means of ascertaining which, if any, of the animals are diseased.
6. Certainly.
7. The animals to be tested must be kept in the stable, and cared for as usual. The operator should take the temperature of each, say at 3 p. m., 6 p. m., and 9 p. m., and, of course, keep a record. He then (at 9 p. m.) injects the tuberculin, and at 6 o'clock next morning he again takes the temperature, again at 9 a. m., and 12, noon, 3 p. m., 6 p. m., and 9 p. m. If, during this time, an animal's temperature reaches 2 degrees or more above the highest before injection, it denotes that he or she is tubercular. If the increase be between 1 and 2 degrees, it is a suspicious case, and should be again tested in about six months. If the increase, if any, be not over 1 degree, the animal is not diseased. It requires the same time to test one as a herd, provided the herd does not contain more than one man can attend to, in which case he would require an assistant to take temperatures. Of course, the test can be commenced at any time, but the hours named are usually selected, as it allows the operator his night's rest.

Quick Returns from Hogs.

Editor "The Farmer's Advocate":

On May 3rd, 1910, sow farrowed 10 pigs; saved six.

COST OF PRODUCTION.	
Feed for sow	\$ 5.00
Service of sow	1.00
Four bushels wheat screenings	3.00
600 pounds chop	7.80
500 pounds chop	6.50
900 pounds chop	11.25
50 bushels mangels	5.00
2,000 pounds milk, at 25c. per cwt.....	5.00
Total	\$44.55
RETURNS FROM HOGS.	
Sold six hogs on Nov. 3rd, 1910; weight 1,190 pounds, at 7 cents	\$83.30
Cost of production	44.55
Profit	\$38.75
N. M. CLUMP.	
Brant Co., Ont.	

THE FARM.

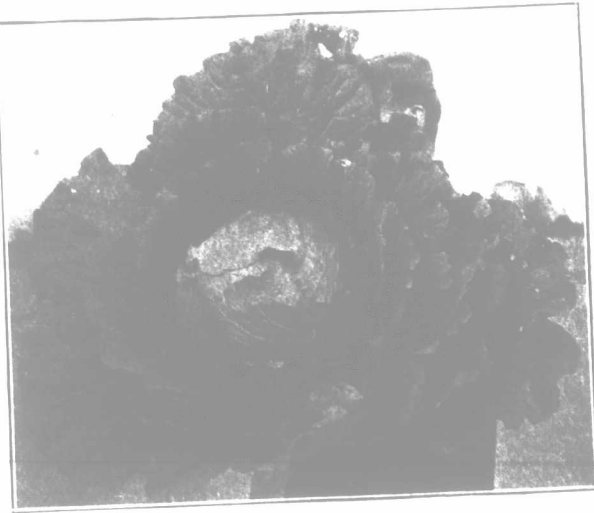
Burgoyne's Fife.

As a result of experiments which have been carried on during the past few years, a new seed wheat is claimed to have been produced in England which will combine the well-known milling strength of Canadian Fife with the yielding qualities of English wheat. The success of the experiments under review lies with Professor Biffen, of the Department of Agriculture of the Cambridge University, who has been working in conjunction with the Home-grown Wheat Committee of the National Association of British and Irish Millers. The new seed wheat, which is a cross of Fife and Essex rough chaff, will be known as Burgoyne's Fife, and it has already been tested on a large scale on various soils in different parts of the country. After considering the reports furnished by the growers and the milling and baking interests, the committee have come to the conclusion that Burgoyne's Fife is an improvement upon any known variety of English wheat, so far as quality is concerned, and is a

wheat which is likely to succeed, as regards yield, under many conditions, both for autumn and spring sowing.—[Weekly Trade and Commerce Report.

Grains, Grasses and Roots at Macdonald College.

One of the chief disadvantages of our Agricultural Colleges is that they are so few and far apart that our farming people do not get in close personal touch with them and with what they are doing. A few hundred students each year are in attendance, and a few thousand farmers annually visit these institutions for one or two days; the former gather much valuable knowledge, but the latter are overwhelmed with the size of the institutions and the multiplicity of their efforts, and go away inspired, maybe, but only slightly informed. If farmers could visit



An Excellent Crop for Sheep.

Cabbage yields 42 tons to the acre, at Macdonald College.

them often enough to get thoroughly acquainted, it would be much better. With a view of getting our readers in closer touch with one of these splendid institutions, a visit was recently made to Macdonald College, and a few of the many splendid things being accomplished are here presented.

The Agronomy Department, in charge of Prof. L. S. Klink, is accomplishing splendid work, obtaining invaluable information in many varied lines of research. Striking results are being obtained along many lines of work in the growing of field crops. Experiments have been conducted for three years to determine the differences in different rates of seeding oats, wheat and barley. Sowing oats 5 bushels per acre gave 71.20 bushels grain and 1.9 tons of straw at harvest time; 3½ bushels gave 69.23 bushels of grain and 2.1



Mangels at Macdonald College.

The average yield for all varieties grown was 47.53 tons per acre. The maximum yield was 54.47 tons per acre.

tons straw; and 1½ bushels of grain at seeding yielded 59.56 bushels and 2.13 tons straw, thus clearly indicating that light seeding inclines to a straw harvest, in which the grain ripens less regularly. With barley and wheat, little advantage arises in sowing more than two bushels per acre.

TIME OF SEEDING.

As to time of seeding, several sermons stand out in the results. For three years, at five periods, each one week apart, beginning as early as possible in the spring (April 24th), spring wheat, barley and oats were sown. With spring wheat, the first seeding yielded 35.56 bushels per

acre, the second 26.95, and so on down, until the last yielded at harvest 15.90. Thus it is evident that spring wheat must be sown early in Eastern Ontario and in Quebec for good results. With oats, exactly the same conclusion is established, the first seeding averaging over 70 bushels, and the last averaging 59.36 bushels. But, with barley, slightly different results were obtained. The early and the late seeding both averaged higher than the middle periods, the first being the highest, pointing to the inference that, if barley cannot be sown early, it does better sown rather late. Peas on the other hand yielded higher from the middle periods of seeding than from either the early or the late sown crops.

TIME OF CUTTING.

A corresponding line of investigations have been made into the proper time of cutting. Harvesting was done at five different periods a week apart, the fourth one of which represents fully-ripe grain, and the fifth overripe. The yield of grain from the first cutting was 32 bushels per acre in oats, from the second 49 bushels, the third 57 bushels, the fourth 60 bushels, and the fifth 53 bushels, which clearly shows that the grain fills very fast toward ripening, that early cutting is costly, and that in late cutting much is lost by shattering.

VARIETIES.

In the variety testing, several kinds of oats have yielded well for the three-year periods. Early Triumph, however, has headed the list, giving 69.32 bushels per acre, with the Ottawa Experimental Farm strain of Banner oats standing second, with 64.92, the Dery Banner giving 64.72, the O. A. C. Banner 61, and the Joannette 51.28, the latter evidently being poorly adapted to this section of country.

Excellent results have been obtained with milling spring wheats, Pringle's Champion averaging for three years 30.26 bushels per acre, White Russian 29.13, Red Fife (O. A. C. strain) 29.02, Red Fife (Ottawa strain) 26.36, and Crewdson's 24.99. It is also being clearly demonstrated by the work at Macdonald College that winter wheats can be successfully grown in this section of country. The average yield of nine different varieties, covering three years, has been 41.14 bushels. Abundance has averaged, for the three years, 48.77 bushels; Kharkov, 48.12, and Turkey Red, 43.98.

The six-rowed barleys have averaged 8 bushels per acre more than the best of the two-rowed kinds. This ought to be sufficient evidence to divorce farmers of Quebec from the two-rowed kinds to which they have been so long wedded.

GREAT ALFALFA RESULTS.

But what seems to be best of all are the results with alfalfa. Alfalfa flourishes wonderfully at the College. Inoculation is not necessary, perhaps because sweet clover has preceded it in many places. The yields are wonderful, and the stands perfect. This year, one lot has yielded 9.46 tons of cured hay, and another 8.27, in three cuttings.

Professor Klink believes thoroughly in leaving a plentiful amount in the ground to freeze down in winter, and the lots are now about 18 inches high. The value of this practice was demonstrated last year by cutting part of the aftermath back to six inches in height. As a result, this year the first two yields were considerably less on the cut-over part, and the stand weakened. Alfalfa-growers may be able to profit from this piece of work.

Success has been attained with summer sowing, though spring sowing has been giving larger yields. When sown in the fall, the crop must be gotten in about the 8th of

August, the land manured and lightly topped in the spring again for best results. With spring sowing, weeds are kept in abeyance until the crop is established by the use of a nurse crop. If nurse or cover crops are not used, fall sowing is preferred. Three and three-fourths tons of hay have been obtained the first year from fall-sown crops. The fact that no method of handling on undrained heavy land obtained less than 4½ tons of hay the first year, surely ought to impress farmers in the surrounding country that alfalfa, the queen of the hay crops, may be widely established without much of a struggle.