

**Winter Rye.**—The average yield of grain per acre of each of three varieties of winter rye distributed in the autumn of 1908, is as follows: Mammoth White, 28.1; Common, 22.1; and Washington, 19.6. In the experiments throughout Ontario, the Mammoth White surpassed the Common rye by an average of 5 bushels per acre in 1907, 5.4 bushels per acre in 1908, and 6 bushels per acre in 1909.

**Fertilizers with Winter Wheat.**—In the co-operative experiments with different fertilizers applied to winter wheat, the average yields of grain per acre for five years are as follows: Mixed Fertilizer, 25.2 bushels; Nitrate of Soda, 23.8 bushels; Muriate of Potash, 22.9 bushels; and Superphosphate, 22.7 bushels. The unfertilized land gave an average of 19.9 bushels per acre. The Superphosphate was applied at the rate of 320 pounds and Muriate of Potash and the Nitrate of Soda each 160 pounds per acre. The Mixed Fertilizer consisted of one-third of the quantity of each of the other fertilizers here mentioned. The usual cost of the fertilizers as used in this experiment is between four and five dollars per acre.

**Fodder Crops.**—In each of six years, the seed of Hairy Vetches and Winter Rye has been distributed throughout Ontario for co-operative experiments in testing these crops for fodder purposes. In the average of six years' experiments, the Hairy Vetches produced slightly the largest yield of green fodder per acre, but in 1909 the largest yield was produced by Winter Rye.

#### Distribution of Material for Experiments in 1909.

As long as the supply lasts, material will be distributed free of charge in the order in which the applications are received from Ontario farmers wishing to experiment and to report the results of any one of the following tests: 1, three varieties of Winter Wheat; 2, two varieties of Winter Rye; 3, five Fertilizers with Winter Wheat; 4, Autumn and Spring Applications of Nitrate of Soda

and Common Salt with Winter Wheat; 5, Winter Emmer and Winter Barley; 6, Hairy Vetches and Winter Rye as Fodder Crops. The size of each plot is to be one rod wide by two rods long. Material for numbers 3 and 4 will be sent by express and that for the others by mail.

C. A. ZAVITZ.

O. A. C., Guelph, Ont., Aug. 18, 1909.

#### EXTRACTING AT HIGH SPEED.

No doubt many find the ordinary extractors very unsatisfactory, especially when the honey is thick. Of course, the gasoline engine solves the problem for those who can afford it, as with it, the reel runs much faster and steadier. My honey is extra thick this season (no free advertising intended) and I found it impossible to get nearly all the honey from the combs by using the crank on the drive shaft. After extracting about five supers I decided to make some improvement if possible. I placed the extractor about one foot from the wall and about six feet from the extractor I belted a boxing taken from an old binder to the 4 inch by 4 inch studding in the wall. An 18 inch pulley with a 3-4 inch shaft was fitted into this boxing and a crank bolted onto the pulley. Then I took the crank off the extractor and put on a 7 inch pulley and connected the two by a two-foot belt. I think I get about five times the speed I formerly did and the work seems to be about one-fifth. I put the combs from the five extracted supers through again and I am sure I got ten pounds of honey, although I did not weigh it. I was afraid the extra speed would injure the combs, but I found to my surprise, that they came out in better condition than they ever did. I think it is because the belt gives a steadier motion than the crank on the shaft. I am sure it would pay many beekeepers to try this arrangement.

H. A. SMITH.  
Palermo, August 5, 1909.

#### Chalmers

Winter cases on hand where attention on our bees (properly for what might this line, but I would like troubles which C. Wheeler of good many of page 185.) M. of his friends made his mistake of colonies did bad signs of stores were full of honey." I can make any mistake in cases, or which I consider we have. is anything but I feel certain trouble was though Mr. W. but sealed stores they gave out, condition of their bees, no doubt honey to keep before getting into an unfit state for gave them dysentery, either kills leaves the bees they are not working, and one until the hive is in starvation, then troubles in winter. I believe, is the dwindling, not some will argue water is one of dwindling. I fail to see we may call Chalmers