

Feeding Bees in Their Winter Quarters . . .

The following circular on feeding bees in their winter quarters has been issued at the experimental farm, Ottawa where a number of very careful experiments in apiculture are being conducted by Mr. J. Fixter. Owing to the past unfavorable season for honey gathering in the Ottawa valley many letters have been received from people who have only a few colonies of bees, stating that when carrying their bees into winter quarters they had discovered there did not seem to be sufficient store of honey in the hive to carry the bees through the winter. To gain information as to the best method of overcoming this difficulty the following experiment was tried with six strong colonies of bees.

Four frames of sealed honey were taken from each of the six colonies leaving the cluster on the four remaining frames. The four frames were left in the centre of the hive with a division board at each side and the light packing was placed between the division boards and the sides of the hive. The wooden covers were removed and a large propolis quilt made of heavy canvas was placed over the top of each hive. A layer of the top of the propolis quilt was placed to keep in the heat, absorb moisture and prevent draughts or upward ventilation. The bottom boards were left as they came from the bee yard leaving the entrances wide open.

The experiment was as follows:—

Two colonies received maple honey of the best quality,

Two colonies received candied honey and sugar,

3. Two colonies received partly filled sections of honey.

Each colony when put on this test weighed 31 lbs and each was given 5 lbs of its particular food to start with. The experiment lasted from November 18th., 1902 to March 22nd., 1903.

The two colonies fed on maple sugar consumed 11½ lbs. each, they were examined every two weeks and water added to the sugar through holes in the tops of the cakes keeping it soft and moist.

The two colonies fed on partly filled sections of honey consumed during the same time 14¾ lbs each. There was for several reasons considerable waste in this test and if partly filled sections could be sold even at a reduced price it would be advisable to do so instead of feeding back.

The two colonies that were given candied honey consumed 10¾ lbs each. The candied honey was moistened at intervals which made it easier for the bees to suck up. Candied honey is made as follows:— Take good thick clover honey and heat (not boil) it until it becomes very thin, then stir in fine granulated sugar, after stirring in all the sugar the honey will absorb, take it out of the utensil in which it has been mixed, and thoroughly knead it with the hands. The kneading makes it more pliable and soft so that it absorbs or rather takes up more sugar. The kneading operation with the adding of fine sugar should be continued until the dough is so stiff as to be quite hard to work. It should then be allowed to stand for a day or two, and if at the end of that time it is so soft as to run or be sticky a little more sugar should be kneaded in. It should be cut into convenient sized cakes and placed on top of