

## DYSENTERY.

Healthy bees eject their faeces during flight. When in winter flight is impossible, the faeces may accumulate to such an extent that the bees are unable to retain them and will soil the hive and combs with yellowish brown spots. The faeces consist of the parts of the food that cannot be digested, and also the waste products. The food should, therefore, contain as little indigestible matter as possible. Sugar syrup fulfils this condition well, but it is not a complete food for bees. A good flight in favourable weather usually puts a stop to dysentery, but if the bees are unable to fly or if they make an untimely flight in cold or windy weather they may die in great numbers. Honey-dew, the sugary excrement of plant lice or aphides, deposited principally on the leaves of trees on which these insects are feeding, and sometimes gathered and stored by the bees, contains a large amount of indigestible matter and quickly produces dysentery. Honey-dew honey has a disagreeable flavour and dark colour. Fortunately, in Canada it is seldom stored in sufficient quantity to be harmful. The honey gathered by bees located on certain marsh lands in Nova Scotia has also been found to produce dysentery. Bees wintered with care and supplied with syrup supplemented with syrup made from a good grade of white refined sugar are little or not at all affected.

## BEE PARALYSIS.

Bee paralysis is the name given to an obscure disease of the adult bee in which the bees are seen to crawl out of their hive with a trembling jerky motion and frequently with their abdomens distended. They often climb blades of grass and upon reaching the top, being unable to fly, they fall to the ground. The affected colonies sometimes dwindle considerably. The trouble usually occurs in spring. No certain remedy for bee paralysis is known, and it usually disappears at the advent of the honey flow.

The nature of this disease has not been ascertained and it is not unlikely that the symptoms noted are due to different causes in different cases. In Great Britain a disorder known as Isle of Wight disease with symptoms like those of bee paralysis has in late years caused enormous loss. The cause of Isle of Wight disease has been traced to *Nosema apis*, a unicellular parasite of the alimentary canal of the bee. The parasite may however be present without causing any disease. There are grounds for suspecting that some of the cases of bee paralysis in Canada may also be due to *Nosema apis*, which has been found in the United States. Care should be taken not to import the British variety of this parasite into Canada.

## BEE DISEASE LEGISLATION.

Acts for the suppression of Foul Brood have been passed by the following provincial legislatures:—

Ontario, 1897, repealed 1906.  
Quebec, 1908.  
British Columbia, 1911.

Manitoba, 1914.  
New Brunswick, 1915.

The Ontario Act of 1906 provides for the appointment of bee inspectors under the control and direction of the Minister of Agriculture. The inspector, when directed by the Minister, visits and examines apiaries to ascertain whether foul brood exists in a malignant type. It is the duty of the inspectors to order all affected colonies, together with the hives and contents and tainted appurtenances that can not be disinfected, to be immediately destroyed by fire under his personal superintendence, but if the inspector finds the disease to exist in a mild type or incipient stage and can be successfully treated he may omit to destroy.