

MICHIGAN AGRICULTURAL COLLEGE EXPERIMENT STATION

PRESS BULLETIN NO. 59

To the Editor:

The notice below will be of value to many of your readers. We, therefore, ask you to cooperate with us in calling attention to this timely matter.

R. S. SHAW, Director.

EUROPEAN FOUL-BROOD AND ITALIAN BEES.

European foul-brood is the most quickly destructive of all of the brood diseases in Michigan, when it appears in colonies that are not of pure Italian blood. The common black or brown bees succumb very quickly when attacked. The disease usually makes its appearance very early in the spring.

The larvae or little grubs in the cells are attacked when they are about three days old, and die very soon afterwards. Occasionally, one is found dead in a capped cell. So, in looking for the disease, it is best to give careful attention to the larvae which are curled up in the backs of the cells. They are yellowish in color when the disease is first observed, gradually turning darker until they are brown, and sometimes, almost black. The larvae do not adhere tightly to the cell-walls as in American Foul-brood, but may be removed from the cells at any stage of the disease. The decaying larvae are only very slightly ropy, and there is usually very little odor pres-

ent. As the dead larvae dry up, the bees usually remove them. Frequently the bees suck the body juices from the dead larvae, leaving them almost transparent. Such larvae are removed very soon afterward. The surest sign of European Foul-brood is the presence of yellow-colored, dead larvae, curled up in the backs of the cells. Drone and queen larvae are affected as readily as worker larvae.

The treatment for European Foul-brood is usually the same as for American Foul-brood. However, it is necessary in addition, to requeen all colonies, that show signs of the disease, with high-grade Italian queens. Treatment without requeening does not result in eradicating the disease.

Further information regarding the disease and its treatment can be secured from Special Bulletins 58, 64 and 76, which may be secured free from the Michigan Agricultural Experiment Station, or by addressing the State Inspector of Apiaries.

B. F. KINDIG,

State Inspector of Apiaries.
East Lansing, Michigan,
March 12, 1917.