Bulletin No.4

B.C.P.H.A. - Capital Region Division

Examination for Disease

There is one serious disease likely to be encountered by the beginner and others. The disease is known as AMERICAN FOULBROOD which attacks the larvae of the bee and kills it just before it is ready to enter the pupal stage. The bacteria are spread from the diseased remains, in the combs, to the larvae, by nurse bees, and by robbing or drifting of bees from one hive to another. Inter-mixing of equipment by the beekeeper is often responsible for spreading the disease, since the honey in a diseased hive contains numerous diseased spores.

As the disease spreads, many of the cappings will be sunken and perforated. Most of the infected larvae lie along the side of the cells where they lose their plump form and become a shapeless mass, with a glue-pot odour. The remains of the dead larvae will dry and a tough brown scale remains in the cell. If death from the disease does not occur until pupae have been formed, the tongues of these pupae will often show as thread-like attachments to the upper walls of the cells. They form a chocolate brown mass of dead tissue which, when tested with an applicator, will often string out in a long tin rope.

The drugs used in the control of American Foulbrood are TERRAMYCIN & SULFATHIAZOLE. The preferred form is sodium sulfathiazole, which is soluble in a liquid feed such as sugar syrup. It is also satisfactory as a dust.

A PREVENTATIVE TREATMENT IS ADVISED IN CONTROLLING American Foulbrood, rather than using the drug as a cure for already existing disease. Colonies, showing evidence of disease, should be disposed of by burning, or melting. Consult your Bee Inspector for help and advice in what to do with a diseased colony.

EUROPEAN FOULBROOD is a disease caused by Streptococcus pluton. The young coiled larvae in the bases of the cells, when they have this disease, appear discoloured with a slightly yellow tinge. They are often twisted out of their normal position and may be streaked with white lines. In some instances the larvae die after they have become extended in the cells, or even when they have reached the early pupal stage and the cells have been sealed. Under such severe infection, the appearance of this disease is often confused with American Foulbrood. However, the larval remains form loose scales which are easily removed from the cell. Sometimes, European Foulbrood is very severe and swift to spread from hive to hive. Some of the larval remains may be bluntly ropy, but not stringy, when pulled out of the cells.

The drug used for the control of European Foulbrood is TERRAMYCIN. Where disease is suspected, the Bee Inspector should be notified.

Treatment with the drug should be confined to very early Spring and must not be administered to bees during the honey season. Use early in the Spring, at least one month before the main honeyflow.

HR.
25th January, 1974.