AFB – Spore forming protozoa (bacillus larvae) . The larvae is fed the EFB with the larval food. The spores germinate in the ventriculus of the larvae. They break through the walls of the ventriculus and enter the hamoelymph. The bees die of septicaemia. The bees die after the cell is sealed. The larval form disintegrates, melts down, becomes thick & sticky and finally dries to a hard scale. The colour changes from white to black.

Open brood no signs. Sealed brood: the doomed cells become moist & dark. Cappings sink, become concave & perforated. Match-stick is used to detect the roping of the larvae. Length of rope 1-2cm.

AFB is a notifiable disease. It is easily identified in the field. It can be confirmed in the laboratory with a piece of the scale under light microscope.

There is no treatment & destruction of the hive after dark when all the bees have stopped flying is necessary. All parts of the hive should be burnt including combs & frames. Scorch all hive parts & any other tools (hive tool/smoker etc.) should be disinfected

EFB – non spore forming protozoa (mellissococcus pluton). Larvae is fed the pathogen which multiply in the ventriculus, feeding on the larval diet & larvae die of starvation. Dead larvae is not sealed & quickly removed by the bees.

Sealed brood no signs. Open brood: the larvae become contorted & change colour white to yellow to brown. Melted down appearance. Dead larvae are often removed by the bees & this is why the disease is often missed by the beekeeper as dead larvae are removed before he/she gets to see them.

Difficult to detect in the field but can be confirmed in the laboratory by examining a frame of dead or dying larvae under light microscope.