



European Union Reference Laboratory for honeybee health

SMALL HIVE BEETLE

The small hive beetle is a notifiable pest in the European Union. It is not yet present in Europe.

Etiological agent

Aethina tumida is a free-living predator and scavenger affecting honeybee populations.

How to recognize *Aethina tumida*?

- **The larva**

The larva is the harmful stage to the colony when it occurs in the hive. It is about 1 cm long. It is creamy-white like the wax moth larva (*Galleria melonella*) but the presence of 3 pairs of long forelegs and spines on the dorsal side of each ring distinguish it from the wax moth larva.



- **The adult**

Light-coloured after its birth, it becomes brown to black. The head, the thorax and the abdomen are well separated.



Biological life

The fertilized female lays eggs (1.5 x 0.25 cm) in clusters in wood crevices, at the bottom of the cells...

The larval stage lasts for 10 to 16 days. Larvae are carnivorous and eat brood, pollen and honey.

The mature larvae leave the hive and dig 10 to 30 cm in the ground for metamorphosis that lasts 15 to 60 days. Soft grounds and a temperature up to 10°C are necessary conditions.

Mating occurs outside of the hive.

The adults can fly more than 5 km and infest other colonies.

This disease form has been designed to recognize the clinical signs of the disease in the honeybee colony.

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Suspicion criteria/ Infestation consequences for the colony

The larvae dig galleries in the frames and destroy the brood. The excretion in the honey change the color colour and makes the honey to ferment. The risk is also present in stored honey before the extraction.

Clinical signs of infestation by the Small Hive Beetle:

- **Observation of phoretic beetle, unusual larvae or eggs**
- Galleries inside the frames
- Brood destruction
- Modification of the honey colour and honey fermentation

What to do in case of suspicion?

Alert as soon as possible the competent authority which will implement adequate measures.

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