

## **Advice 11-2015 of the Scientific Committee of the FASFC on the prevention and control of *Aethina tumida* in bees.**

Mid September 2014, an outbreak of *Aethina tumida* (small hive beetle) was demonstrated for the first time in the EU, more specifically in Southern Italy. Despite the current official measures, the risk exists that the small hive beetle will be introduced in Belgium, the more because Southern Italy is one of the most important export areas for living bees.

The following questions are asked to the Scientific Committee:

- Which preventive measures can be taken in order to prevent the introduction of *Aethina tumida* in Belgium?
- How can an efficient surveillance be organized in order to detect rapidly a possible introduction of this parasite?
- If *Aethina tumida* should appear in Belgium, which measures can be taken in order to eradicate the parasite in a rapid and effective manner?

The Scientific Committee has listed all possible ways of introduction of *Aethina tumida* and has assigned them a score according to their risk for the introduction of *Aethina tumida* in Belgium (Annex 1). According to the Scientific Committee, the main risks lie in the legal and illegal import of living bees and bumble bees, the import of bee products such as comb honey, honey, pollen, comb, beeswax and the import of non-bee related products such as second hand beekeeper equipment, fruit and general transport of goods. The Scientific Committee is of the opinion that an introduction and establishment of *Aethina tumida* in Belgium is possible.

The Scientific Committee recommends to organize an information campaign amongst beekeepers, traders of bees and beekeeper equipment, veterinarians and animal health inspectors to accustom them with the biology of *Aethina tumida* and the symptoms of the infestation and to point out the risk of introduction of *Aethina tumida* in Belgium and the catastrophic consequences of a possible outbreak for the sector. It is also recommended to identify beekeepers and traders who have recently imported bees and beekeeping equipment and to submit them to an increased surveillance.

Because of the great importance to detect a possible introduction in an early stage, the Scientific Committee recommends to install an active surveillance focusing on introduction sites (e.g. ports, airports and beekeepers which have imported bees or beekeeping equipment) using bait hives. Furthermore, a molecular test should be developed and validated to allow a fast and reliable detection. It is also recommended to install a communication network/platform in which the government, veterinarians and beekeepers take part in order to report on a regular basis on the current situation of the infestation with *Aethina tumida*.

The Scientific Committee has studied a number of control measures based on a literature study and has characterized them according to the matrix in which they can be applied, their efficiency, potential undesired effects, practical implications and the acceptability for beekeepers (Annex 2). In general, it appears that there is little experience with the control of the small hive beetle. However, it shall be clear that a combination of measures is necessary to efficiently combat the infestation and that control measures must be applied in an early stage and must be drastic in order to be able to stop the spread of the infestation. Once the infestation becomes endemic, control measures rather have to focus on the zootechnical control in order to minimize the losses. Furthermore, the Scientific Committee recommends to develop a scenario in order to be prepared for a possible outbreak of *Aethina tumida* in Belgium. Finally, it is crucial to dispose of a database in which all beekeepers in Belgium and preferably also the location of their hives is registered to allow a rapid action in case of an introduction.

The full text is available on this website in dutch and in french, respectively under the section "Wetenschappelijk Comité/Adviezen" and "Comité scientifique/Avis".