

## BIOSECURITY MEASURES IN BEEKEEPING | AMERICAN FOULBROOD

Detection of AFB

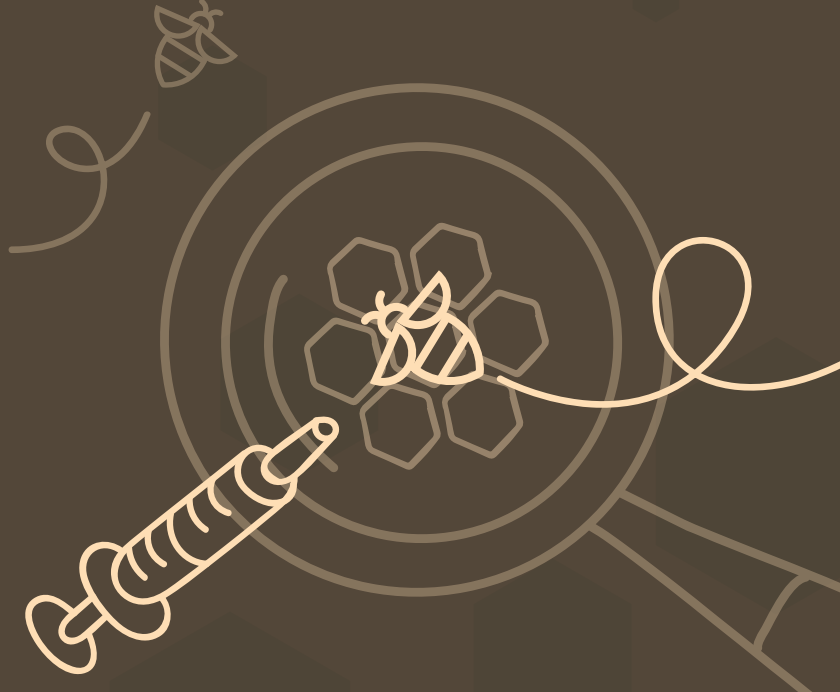
### Visual detection of AFB-typical signs

Visual detection of typical signs of American Foulbrood is essential for identifying the disease in hives.

This involves looking for signs such as pupal remains attached to the cell, irregular patterns of capped brood, and darkened comb.

A beekeeper with adequate knowledge can make an initial diagnosis in the field by carefully inspecting the brood chamber for characteristic signs.

This early detection is crucial for implementing control measures and preventing the spread of the disease among hives.



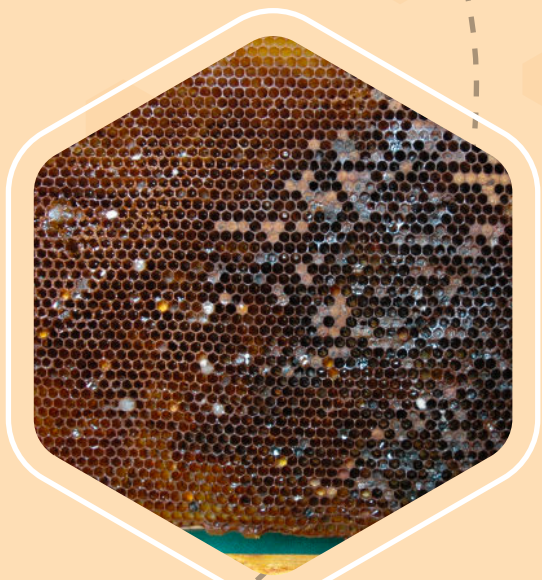
step  
1

**American foulbrood is a dangerous disease of bee larvae**, and it is important to be able to distinguish the signs in your beehive. It also needs to be reported to veterinary authorities.



step  
2

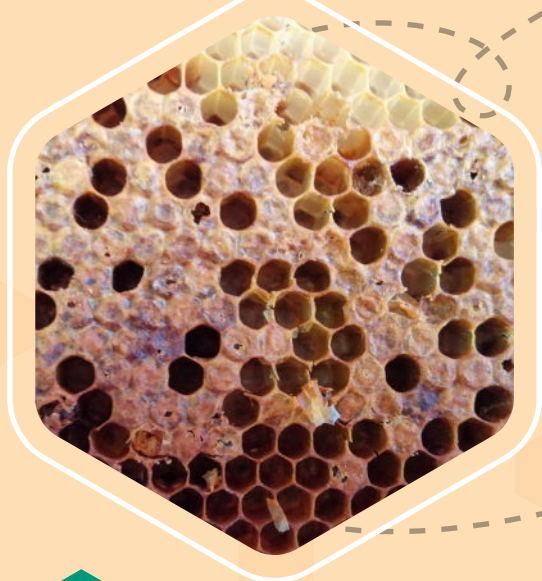
**You should look for scattered brood** during the routine check-up of honeybees.



step  
3

**This bacterium affects capped larvae**; therefore, we should look for signs on the capped brood cells.

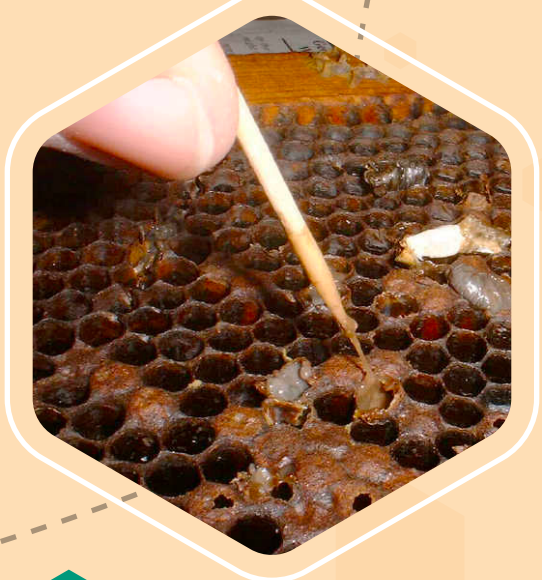
Notice the holes or fallen caps that may indicate infection.



step  
4

**If we open a suspect cell**, the typical test we can do is the matchstick test to observe the consistency of the content of the brood cell.

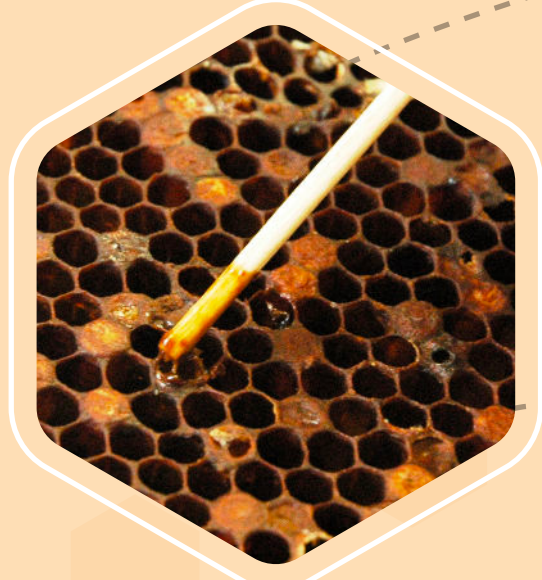
The bacterium kills larvae and causes a change to a liquid, gooey consistency. We see a dark material that stretches from the cell.



step  
5

**In prolonged infection**, we may not be able to pull out the liquified larvae and instead, a hard material is present at the bottom of the cell.

This substance is hard to get out.



step  
6

**In case of detection of these signs**, we should contact a veterinarian and request a laboratory diagnosis.

This is done on a piece of comb with a brood.



step  
7

**In the case of positive results from laboratory diagnostics**, the only treatment that is allowed is to burn the beehives affected, because the bacterium can survive in spores for several decades and withstand standard disinfection.



© Visual detection of AFB-typical signs  
All images © Jurej Toporčák



Visit us

[www.bthenet.eu](http://www.bthenet.eu)

Contact us

[info@bthenet.eu](mailto:info@bthenet.eu)

Follow us

[f](#) [@](#) [X](#) [in](#) [v](#) [@BTHENETProject](#)

#### Our Consortium



Funded by the European Union

Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union. Neither the European Union nor the granting authority can be held responsible for them.