

American Foulbrood

AFB Swab Testing



AFB disease, or American Foulbrood disease, is a bacterial infection that affects honeybee colonies.

The disease is caused by the bacterium *Paenibacillus larvae*, which produces spores that can survive for years in beehives and beekeeping equipment. While adult bees are not affected by the disease, infected brood are likely to die before or during the pupal stage. AFB is primarily spread through contaminated food and equipment, and it can devastate entire colonies if left untreated.

Analytica are IANZ accredited and MPI RLP approved to perform testing for AFB on honey samples. We have developed a new method that analyses swabs taken from the entrance of hives for AFB and which allows composite testing of up to 10 swabs (combining of multiple swabs into one sample that is tested). Composite testing is a cost-effective way of monitoring large numbers of hives which are expected to not show signs of AFB, as if all swabs in the composite sample are negative for AFB, only one test is needed (as opposed to 10 negative results, one for each hive). While this method is not yet accredited, it offers the industry a cost-effective way of monitoring large numbers of hives for early outbreaks of AFB.

Equipment:

- Swab and tube can be ordered by emailing: dispatch-analytica@alsglobal.com
- Request form
- Permanent Marker

Instructions for swabbing

Step 1:

Choose the hive you want to test for AFB

Step 2:

The recommended area for swabbing is hive entrances, as these will have the highest concentration of bee traffic.

Read this whole step before continuing.

- Remove the swab and tube from the wrapping.
- Swab an entrance for 5 seconds, moving the swab back smoothly back and forth while rotating the swab in hand.
- Put the swab in the tube so that the swab is in the liquid.
- Snap the swab stick in half and close the lid of the tube with the swab inside.

Step 3:

Label your tube with the hive ID. Repeat steps 1, 2, and 3 until you have swabbed all the hives you want to test.

Step 4:

Fill in the request form and send it in with the swabs. See below for testing options.

Testing Options:

There are two ways we can test your hives—individually or as a composite.

Individual testing is where we test each swab and report how many spores we found. Produces one result per swab.

Composite testing can be a cost effective way to test hives that are at low risk of having AFB. Up to swabs can be combined into one composite, where we test them together and report the spore count of the 10 swabs combined (similar to our Tutin composite testing). A single negative result for a composite sample will indicate non-detectable levels of AFB in all hives combined in the composite for a fraction of the cost of testing all hives individually.

Individually retesting of composites can be performed when a composite comes back with a positive result, at a cheaper price than our individual testing, so hives that contributed to the positive result can be identified.

Helpful Contacts

Customer Service Team

Ph: +64 7 974 4740

Email: info-analytica@alsglobal.com

Dispatch (Order Kits)

Email: dispatch-analytica@alsglobal.com