

# Instructions for European Foulbrood/American Foulbrood Sample Collecting

You will need:

- Cotton swabs
- Aluminum foil
- Envelope for shipping
- Honey Bee Submission Form

## To Swab for American Foulbrood (AFB):

Brood of an AFB infected hive are a chocolatey-brown color and “melt” onto the bottom of the cell. The cappings of the brood cells will also appear sunken and/or perforated and may ooze. These are the cells that you will want to swab; we recommend swabbing several different cells, from different frames if possible, to obtain a representative sample of your colony. Sometimes the contents will stretch and appear “ropey” as you pull the swab out of the cell; this is called the “rope test,” and is another indicator that your hive may be infected with AFB.



Source: Texas Apiary Inspection Service (TAIS)

Source: BeeInformed.org

FIGURES 1 AND 2. Example of the “rope test,” an indicator of an AFB infection (left) and an AFB infected brood frame with a spotty brood pattern, sunken cell caps and the coffee/chocolatey brown brood.

## To Swab for European Foulbrood (EFB):

Many symptoms of EFB are similar to signs you’d see in a hive infected with AFB. The brood in an EFB-infected hive can appear a pale yellow color and look melty in the cell. The larvae may also look “twisted” in the cell, compared to the C-shape that you normally see in healthy brood. Larvae with EFB will die before their cells are capped, while AFB infected larvae will be capped before they die, hence the sunken, oozy caps being a sign of AFB as mentioned above. Like with AFB, swab from several different brood cells exhibiting these symptoms.

# Instructions for European Foulbrood/American Foulbrood Sample Collecting



Source: Tal Reichert / quora.com

Source: Robert Snyder / BeeInformed.org

FIGURES 3 AND 4. Example of healthy “C-shaped” brood (left) compared to the deformed brood of an EFB-infected colony (right).

Once you have swabbed your sample, carefully wrap the end with the aluminum foil and place in your shipping envelope. Refrain from reinforcing with plastic wrap or a plastic bag- this may trap in moisture and encourage fungal growth on your sample. Place your sample and the filled out submission form in your envelope. Address it to:

New Jersey Department of Agriculture  
Division of Plant Industry  
PO Box 330  
Trenton, NJ 08625