



“ Elementary,
my dear Watson”

Final Confirmation: Sample to Beltsville, MD



Beltsville Honey Bee Diagnostic Lab
Free testing for AFB & EFB, Nosema, Varroa & Tracheal
Mites, Small Hive Beetle

See website for general instructions, how to send adult
and brood samples.

<http://www.ars.usda.gov/Services/docs.htm?docid=7473>

Bee Disease Diagnosis
Bee Research Laboratory
10300 Baltimore Ave.
BARC- East Building 306; Building 316
Beltsville, MD 20705



American Foulbrood	European Foulbrood
Coffee color, <u>ropey</u> with a fine thread about 1 inch	Can be slightly ropey with threads less than $\frac{3}{4}$ inch, but <u>usually not ropey</u>
<u>Odor</u> : sulfurous, “chicken house”	Odor: sour or <u>none</u>
Scale: brown to black, brittle	Scale: brown to black, rubbery
Stage of Brood: <u>after</u> capped	Stage of Brood: <u>before</u> capped
Appearance: chocolate brown to black, perforated cappings	Appearance: twisted, dull to yellow to dark brown, tracheal tubes often visible

Nosema Twins: Who's Who?

<i>Nosema apis</i>	<i>Nosema ceranae</i>
Wandering bees “crawlers” in front of hive	
K-wing	
Fecal spotting on outside of the hive	No fecal spotting on outside ; may be on inside of hive
Will feed on sugar syrup	Unwilling or reluctant to feed on sugar syrup
Slow spring build up	Can be found year round in all climates; often in summer
Dwindling population	Cause rapid colony loss within 8 days of exposure