Sacbrood



Range: Worldwide

Life cycle:

- This disease is more often a problem in the spring or after a substantial loss of workers.
- Larvae are infected and die on their backs with the head slightly elevated.
- The internal structures of the larva break down however the exoskeleton remains uncompromised making it a "sack" of sorts.
- Progression of color: white \rightarrow yellow \rightarrow brown \rightarrow dark brown.
- Cadavers if not removed by the workers deflate uniformly, dry into a dark "scale". Unlike American Foulbrood the scale is not adhered to the cell and can be easily removed.
- Consistency of dead brood is watery and granular inside the tough leathery "sack"

Management:

- Sacbrood is most common a few weeks after a colony looses a high number of the adult workers due to pesticides or other causes. If a cause can be identified, steps should be taken to avoid it reoccurring in the future.
- Weak colonies can be reinforced with additional workers, a new queen, or improved environmental conditions

Misconceptions:

Odor is not a reliable method of distinguishing this disease

Irregular brood pattern can be a sign of a problem (but not necessarily Sacbrood)

Other Useful Sites:

Information and Pictures of American, European and Sac brood Diseases

Mid-Atlantic Apiculture Research & Extension Consortium Disease Control

References used:

Root, A. I. (1990) The ABC & XYZ of bee culture 40^{th} ed. A.I Root Co. Medina, OH.

Morse, R.A. & R. Nowogrodzki (eds). 1990. <u>Honey bee pests, predators and diseases</u>. Cornell University Press Ithaca, NY.



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