

CCD

Fall Dwindling Disease, Disappearing Disease, Fall Colony Collapse

UPDATE: The USDA has found the Israeli acute paralysis virus (a close relative of Kashmir bee virus) to be highly correlated with colonies diagnosed with CCD. This virus can be transmitted by the varroa mite.

PLEASE NOTE: They are not saying that the virus causes CCD at this time. Before such a claim can be made further work has to be done. To read the full USDA statement please visit: <http://www.ars.usda.gov/is/pr/2007/070906.htm>

Causative Agent: Unknown

Range: North America, possibly Europe

Diagnosis:

A healthy hive should have at least 2 workers for every capped cell. When this ratio changes to 2 capped cells for every 1 worker and there has been no obvious cause (pesticide poisoning, hive raided, cold snap.....) the hive is possibly being affected by CCD.

Life cycle/ Symptoms:

- Unknown, hives that are weak in the Fall seem to be at higher risk
- Apparently normal hives will disappear within 1-2 weeks and few dead will be found in or around the hive. Occasionally the queen and a small number of workers will be found alive but encapsulated in the hive.

Management:

- If you suspect one or more of your hives are experiencing CCD it is recommended that you :
 - Do not combine a weak colony with a strong one

- If a colony fails and you suspect CCD place the hive and frames in a place where other colonies cannot raid it
- Use Fumagillan in your sugar water if feeding
- If you suspect CCD in a failing colony use Terramycin to treat for European Foulbrood
- If mites become a problem use soft chemicals, such as Apiguard, Apilife VAR, or MiteAway II to suppress populations.

Misconceptions:

Other Useful Sites:

<http://maarec.cas.psu.edu/ColonyCollapseDisorder.html>

<http://www.ars.usda.gov/Services/docs.htm?docid=15325>

<http://www.ars.usda.gov/is/pr/2007/070906.htm>

References used:

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

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