

Deformed Wing Virus (DWV)

Causative Agent: RNA Virus

Range: Worldwide

Life cycle/ Symptoms:

- DWV tends to remain in low levels in healthy colonies and exists as a low-grade infection with no symptoms.
- If the colony becomes stressed the virus load increases and adults emerge from the cell with deformities proportionate to their viral load
 - stubby, useless wings
 - shortened, rounded abdomens,
 - miscoloring
 - paralysis
- Deformed adults are quickly driven from the hive and die within 48 hrs.
- Infected queens may be able to pass the virus to her offspring/eggs.

Management:

- Varrora mites harbor the virus and can have viral loads far exceeding the most heavily infected bees. Controlling Varrora populations can reduce transmission and stress on the colony

Misconceptions:

- Colonies infected with Deformed Wing Virus do not become more aggressive.
- Kakugo virus is closely related to Deformed Wing Virus but only found in guard bees where it increases the aggression levels. Kakugo virus can only be isolated from the head of the bees

Other Useful Sites:

References:

<http://www.virologyj.com/content/pdf/1743-422X-3-61.pdf>