

## Bee Virus Identification - Kirsty Stainton - NBU

### SBV (Sacbrood virus)



#### Symptoms

Larvae become tough, leathery, fluid-filled sacs, yellow or brown in colour. They have a characteristic banana shaped appearance. Later in infection, brown/black dry scales are present.

#### Treatment

The condition is usually self-limiting but consider re-queening if infection persists into summer. Replacing combs may help break the cycle as virus persists in honey and pollen.

### BQCV (Black queen cell virus)



#### Symptoms

Dark, blackened larvae or pupae in queen cells.

#### Prevention

Keep colonies well fed and rotate combs every 3-4 years.

#### Treatment

No treatment: only prevention of transmission by sanitising all tools and equipment if infection is present and removal/destruction of diseased individuals.

### DWV (Deformed wing virus)



#### Symptoms

Deformed wings, shortened and bloated abdomens in adults, death of pupae.

#### Prevention

Keep *Varroa* levels low with an integrated approach to treatment (visit Beebase for advice).

Control	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Open mesh floor												
Drone brood removal												
Queen comb trapping												
Formic acid/MAQS												
Apiguard/Apilife VAR/ Thymovar												
Apistan/Bayvarol/Apivar												
Lactic/Oxalic Acid												

#### Treatment:

No known treatment for DWV

### CBPV (Chronic bee paralysis virus)



#### Symptoms

Type 1: Trembling wings/bodies, dislocated wings/ K-wings, flightless, bloated, displaced, dysentery.

Dead bees in front of the hive

Type 2: Hairless, black bees that look greasy, infected bees are subjected to nibbling attacks

#### Prevention

Reduce overcrowding, regular comb replacement, minimise movement of frames/material between colonies and apiaries.

#### Treatment

Destroy all dead bees and replace/destroy infected colonies, use fresh wax and foundation (CBPV persists in faeces) and isolated infected colonies from uninfected colonies. Meticulous sanitising of tools and equipment.