

Surrey Beekeepers' Association AGM 2021

Bee Disease Insurance (BDI) report

This is the insurance company for beekeepers in England and Wales run by beekeepers and established in 1936. Current BDI-funded research projects are as follows:

Varroa resistance is increasing

A four-year research project funded by BDI into Varroa resistance, carried out by Professor Stephen Martin and PhD student Isobel Grindrod at the University of Salford, describes how bees are evolving to remove the mite. The paper, published in August 2021, is in the Royal Society journal Proceedings B, <https://doi.org/10.1098/rspb.2021.1375>

Whole apiary shook swarm trial

BDI, in conjunction with the National Bee Unit (NBU), is funding a two-year trial of Whole Apiary Shook Swarming 2021-22. The new Whole Apiary Shook Swarm trial is offered for all colonies and equipment (eg frames, comb etc) stored in the infected apiary when at least one colony has been confirmed as having European foulbrood (EFB) by an Authorised Bee Inspector (ABI). The beekeeper must check that he/she has insurance cover for all colonies and let the ABI know his/her intention to proceed with a Whole Apiary Shook Swarm within 24 hours of field confirmation of disease. The Whole Apiary Shook Swarm must be completed within two weeks of confirmation of disease. Queenless colonies or those with a virgin queen must be united with colonies headed by a queen in full lay.

The National Bee Unit states: *"Trials have shown that shaking bees onto new foundation and then destroying the old combs can be beneficial when controlling EFB. This procedure is known as Shook Swarming and it may also be beneficial in controlling Nosema spp., chalk brood and Varroa mite populations. Colonies treated in this way often become the strongest and most productive in an apiary. Some beekeepers are now using this system to replace all the old brood combs in a beehive within a single procedure."*

Hygienic bees research supported by BDI

Since the arrival of the Varroa mite from Asia, millions of honey bee colonies have died. For decades, beekeepers have continued to control Varroa populations by the use of chemicals and other invasive methods. However, throughout Africa and most of South and Central America mite-infested colonies survive without any form of mite-control. This has been linked with poor mite reproduction, although what causes this has remained unknown. Throughout Europe, the USA and Wales an increasing number of naturally evolved, mite-tolerant colonies are being discovered.

Professor Stephen Martin and his team of researchers at the University of Salford - supported by BDI and the BBKA - aims to understand why some honey bee colonies have become naturally tolerant to Varroa and to see if this information can provide beekeepers with a long-term solution to the problem.

BDI is supporting Deformed Wing Virus (DWV) research using cell lines

At BDI's AGM on June 4, 2021, Dr Kirsty Stainton from The Pirbright Institute talked about honey bee viruses. She introduced the scope of a PhD studentship starting in October 2021, jointly sponsored by BDI and the BBKA, which will use cell lines for comparative analysis of DWV strains.