



Animal &
Plant Health
Agency

Voluntary Sentinel Apiary (VSA) Scheme Equipment

Firstly, I would like to thank you for taking part in the UK sentinel apiary scheme. Sampling from honey bee colonies around England and Wales is an integral part of our first line defence against exotic pest incursions. Currently the notifiable exotic pests are small hive beetle (*Aethina tumida*) (SHB) and *Tropilaelaps* spp. mites.

Each sample submitted to the Laboratory at Defra Science Ltd. is examined in detail, not just for complete exotic pests, but for any part of them.

In addition, the National Bee Unit (NBU) inspects imports and colonies in risk areas, including those at enhanced sentinel apiaries three times per season. It can be seen that great importance is placed on finding any exotic pest incursions as early as possible.

However, we do recognise the considerable commitment you put aside to prepare, collect, and send samples in June and September each year. Also, a great deal of NBU time is spent arranging the provision of equipment to the beekeepers who take part, and laboratory time analysing the samples.

At the end of each season the number of VSAs and their samples submitted are communicated to senior Defra managers. The expectation is that each region will have a minimum of 15 VSAs, all of which submit two samples annually. The analysis of these is given great importance, hence those who take part in the scheme are sometimes contacted by their local inspectors if samples are not received.

Another task at season-end has been to request a list of equipment required for the following year. Requests are varied and this exercise is sometimes seen as an unnecessary layer of bureaucracy by beekeepers. Going forward a refresher kit will be automatically sent.

The 2024 Season onwards

A standard issue of equipment will be provided to enable samples to be posted to the Defra Laboratory but to cut down on printing documents will be emailed to beekeepers participating in the VSA scheme. A printed copy will be sent to those beekeepers who do not have an email address.

In addition, the relevant documents, including how to use the equipment are detailed on the BeeBase website 'sentinel apiaries' page.

[Sentinel Apiaries » APHA - National Bee Unit - BeeBase](#)

However, if you require a printed copy, or any additional equipment please contact your local Seasonal or Regional Bee Inspector (SBI), details of which can also be found on the BeeBase website contacts page.

[Contact Us » APHA - National Bee Unit - BeeBase](#)

The equipment sent to those joining the scheme will continue as before, but it should be expected that your SBI will also demonstrate how to complete an exotic pest inspection and the correct use of the SHB traps. This is especially important for those joining the scheme.

To ensure that the different type of SHB traps only go to those that use them we will request which is being used, this preference will be indicated after BeeBase apiary name whilst it is being used for VSA sampling. This is normally done by an inspector with 'B' meaning the Beetle Blaster oil trap, and 'C' for the black Correx floor trap. In this way we will only send out the trap type used.

Equipment Usage

Small Hive Beetle (SHB) traps: Two types of beetle trap are included in the initial kit issue. The first is an oil trap which is placed between the frames within the hive and is designed to drown any beetles that enter. The second is a Correx trap that is inserted onto the floor below the frames via the entrance. SHB can use the Correx flutes to hide from the bees and lay their eggs. If the Correx insert is too big or gets in the way, it can be cut down with scissors to fit along the rear of the floor.

It is preferable to fit traps to weaker colonies as they will be more vulnerable and therefore more attractive to SHB. Under normal circumstances VSAs are only expected to use one type of trap per designated apiary, but both types can be used if they will be installed and monitored.

Envelopes: Two types of envelope are supplied. A white (or brown depending on availability) envelope for containing floor debris and a Jiffy padded envelope for postage. Samples are best preserved in paper rather than plastic bags when going through the postal system, hence the use of envelopes. If an Eppendorf tube is sent through the post, please place this inside the white envelope with sender/sample labels attached within the padded jiffy envelope.

Labels: Three labels are supplied in the equipment kits.

The first is a pre-paid postage label so no stamps are required. This label is attached to the padded jiffy envelope for sending the sample within the white envelope.

The second is a duplicate of your address label and is attached to the white sample envelope to identify where the sample originated. Your BeeBase number is also printed after your name.

The third is the sample label is one which you need to complete before postage. This sample label assists the Lab to identify the apiary where and when it was taken, and the type e.g., debris or other before it is opened.

Plastic Bags: Under normal circumstances two single clear plastic bags should be sufficient for each season, one for the June sampling inspection and the other for September. However, if sterilised they can be reused.

Plastic bags are supplied so that the Correx beetle traps can be placed inside prior to shaking/tapping when examining for beetles. Using the plastic bags in this way will contain any dislodged SHBs and, depending on the clarity of the bag, sometimes allow a photograph to be taken of the insect. The bag can be kept sealed (to stop the SHB flying away) and placed in the freezer whilst the NBU is alerted.



7" Wire: A piece of wire is included in the initial kits to clear blockages from the Correx flutes i.e., clearing wax or propolis.

Uncapping Fork: This is provided to uncap pupae to examine for *Tropilaelaps* spp. mites. We include an uncapping fork in the initial start-up kits.

Eppendorf Tubes: These are supplied in the initial kits and are used for containment of suspicious insect samples or diseased larvae. If you suspect foulbrood or an exotic pest you must immediately inform your Regional Bee Inspector (RBI), SBI, or the NBU Office. Use the tube to keep any insect or larvae which has removed manually from the comb safe. Do not post them before speaking to an inspector as they may wish to visit to see it, conduct tests on-site and inspect the colonies affected.

Suspicious live insects should not be posted in case the package is lost or damaged giving the occupant an opportunity to escape. Place in a freezer and notify your RBI, SBI or NBU Office.

Feedback from the Defra Laboratory suggests Eppendorf tubes are rarely used in connection to the VSA scheme.

The Routine Sampling Method

Most samples received at the Laboratory consist of debris from a varroa insert or solid floor. In the case of the former, it is inserted at least a week before the sample is required. It is requested that VSA beekeepers also examine their colonies specifically for exotic pests, at least in June and September. If you're unsure how to do this contact your SBI or RBI.

Debris that falls from the hive may include dead or alive exotic pests or body parts thereof. It may also include their eggs.

Debris is scraped with a dry hive tool into a white (or brown) A5 envelope. Debris from more than one hive in the same apiary can be placed in the same envelope, but if it gets too full use a second in case it bursts open in the post. Make sure all envelopes are identified with the sender's details and have completed sample labels attached.

Samples must be apiary specific so if you have more than one listed on the programme use a different envelope for each. A sample label is attached to the envelope, which is then placed in a jiffy envelope with a post-paid sticker on it. All these items are provided annually.

When the sample label is fully completed no other paperwork is required but please make a note of the hive numbers concerned in your records.

Once analysed the Laboratory will send you an email confirming the result.

Asian Hornet Monitoring

For general surveillance, the use of non-killing traps is encouraged. Instructions for making such a non-killing trap is on BeeBase but other types can be adapted to separate the liquid bait from the insects. However, these traps require examination every day to release by-catch. If you are in a high-risk area near to previous Asian hornet outbreaks, contact your RBI or SBI to discuss whether the risk justifies the use of killing traps if you are unable to commit to releasing by-catch daily.

Thank you again for supporting the sentinel apiary scheme.

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