Winter varroa treatment

It is mid-October and the bees are tucked up for winter but out of sight is not out of mind. If you applied Apivar in mid-August, you will be looking for a weather window to remove these strips in the next week or two. Remember, the maximum treatment period is 10 weeks. Apivar is very effective, killing up to 95% of mites. To maintain its efficacy, it is important to prevent varroa becoming resistant to amitraz, the active ingredient, so that the beekeeper and the bees can continue to make use of this effective synthetic varroacide. That means removing the strips after the recommended treatment period.

Why treat again only a month or two later?
The winter period presents another opportunity to reduce the mite population and give the colony the best possible start to the following season. The end of season treatment applied in August at best would have been 95% effective and the remaining mites will have reproduced in the brood produced over the autumn, albeit at much lower levels.

By November/December, the queen's laying rate will reduce significantly and may stop altogether, particularly if there is a cold spell. This period provides a short window when the colony is likely to be broodless, before the queen starts laying again after the winter solstice. During any broodless period, all varroa mites will be on the body of the bee and unprotected by the capping of a brood cell. The exposed mites are vulnerable to treatment with an approved oxalic acid-based product which can be administered either by trickle or sublimation.

How can I tell if my colony is broodless?
With milder winters, it is impossible to say with certainty that colonies are broodless at all over the winter months other than by opening the hive and checking, which is not recommended unless you are confident that you can do so smoothly and efficiently. You will need a windless day on or around mid-November to prise off the crown board, peel apart the centre frames of the cluster and peer down the sides of the partially exposed frames – a head torch is helpful. Avoid the temptation to lift out any of the frames.

Alternatively, by placing the varroa inspection tray below the mesh floor for a few days at a time over the coming weeks, you can “read” the cappings.

Darker cappings are from sealed brood that is emerging, and also “measures” the breadth and position of the broodnest. White, wax coloured cappings are from capped stores.

Sometimes, your treatment date can only be based on what is happening weatherwise in your area. Broodless periods often coincide with the end of the first protracted cold period. In December 2023, there was a cold snap at the beginning of the month so treatment was administered 3 weeks later. You can see from the inspection board of the same colony inserted on 22nd December after treatment, evidence of a very satisfactory varroa drop!

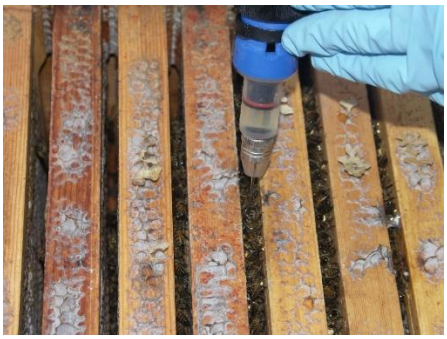
What treatment can I use?
Oxalic acid is the treatment of choice during broodless periods. It can be administered by trickle or by sublimation.

Approved oxalic acid-based products include:

Apibioxal powder can be used for sublimation, or for preparing a solution for trickle.

Oxybee and *Oxuvar* are only available to apply using the trickle method.

Treatment can be applied as a trickle



or by sublimation using a sublimation device such as a Varrox vaporiser.

Caution:
When handling oxalic acid, wear appropriate PPE including acid resistant gloves and protective glasses.

If you are applying by sublimation, a respirator mask that protects against organic acids must be worn.

DSBA has 2 Varrox sublimation devices which are available to members who have attended the health and safety training briefing. We are holding a training session on Sunday 27th October at DSBA apiary. The training session will be a mock demonstration so there is no need for you to bring any equipment with you. This session is also open to members who have not attended a training session for some time and would like to refresh their knowledge. Please register here.

The Bee Healthy Team
October 2024

Email the Bee Health Team. We would love to know about any topics you would like covered in future Bee Healthy bulletins.
You can read previous bulletins and find useful links on the DSBA Bee Healthy web page.
Remember the DSBA Mentoring Team can be contacted via the 'Members Only' section of the website for further advice.