

Information Sheet - Varroacides

This is an appendix to the Information sheet on Integrated Varroa Management.
Refer for full information to “Managing Varroa” by FERA 2015 via
<http://www.nationalbeeunit.com/index.cfm?pageid=167>

The use of chemicals to kill mites (or otherwise reduce their numbers) are applied directly on adult bees, as fumigants, contact strips or by evaporation. These include **authorised** treatments approved by “**Veterinary Medicines Regulations (VMR)**” and **unauthorised** generic substances that are ‘illegal’ to use. North London Beekeepers only recommend the use of “**authorised**” treatments.

Record your use of medication: You are required to keep a record of all treatments that you use on your bees. The link to the BBKA below is for a standard ‘record’ form. Bee Disease Inspectors may ask to see your records when they visit you, so it is best to conform!!

http://www.bbka.org.uk/local/southgloucestershire/bm~doc/veterinary_medicine_administration_record.pdf
<http://www.nationalbeeunit.com/index.cfm?sectionid=110>

Pyrethroid strips – “Apistan or Bayvarol” authorised by VMR

These products have been used in the UK for the last 23 years (up to 2016) with good success, but Varroa mites have become resistant to pyrethroid treatments and IVM is being developed to help reduce mite populations within bee colonies to an acceptable level without them. Apistan & Bayvarol will remain as one of the methods to treat colonies in non-resistant areas (London now has a high level of resistance and pyrethroids are unlikely to be effective).

Apiguard & Api Life Var (thymol based) **authorised by VMR**

Supplied packaged, follow manufacturers’ instructions, both take approximately 4 weeks and can cause the Queen to stop laying during this time.

Do not apply when there is honey (for extraction) on the hive.

Shown to be between 74% & 99% effective. It is important to close off the ventilation in roof and floor (not the entrance!). Ideal outside temperature should be between 15deg C and 25deg C.

This treatment may also be useful against acarine.

Formic Acid - its fumes will penetrate capping and therefore kill mites within, as well as on bees. Formic acid **may** be applied when there is honey (for extraction) on the hive. This acid is very corrosive and needs handling with extreme care. During the treatment the queen may stop laying, and it may be useful against acarine.

Formic acid – authorised by VMR treatment – used in pad form - **MAQS** Beehive Stripa pre-packed formic acid pads, ready to use. All the above advantages, for full details see Thorne’s catalogue Use 2 strips per **full** sized colony, proportionally less for smaller colonies. Treat for 1 week only. **A very effective treatment, although the bees don’t like it!**

60% formic acid – unauthorised treatment – It should be dispensed in a “Nassenheider” acid evaporator with a wick. Size of wick depends on the expected outside temperature. Replace the wick with each use with beer mats cut to size. (Follow the instructions that come with the evaporator.)

Oxalic Acid – this is mixed with sugar syrup and dribbled between the brood frames **when there is no brood**. Best used either side of the New Year after a cold spell. Summer use on newly hived swarms or after a Shook Swarm.

Api-Bioxal – **authorised by VMR** treatment – sold as a powder that you mix in syrup, is 4.2% strength. Smallest pack is for 10 colonies.

Trickle 2 – unauthorised treatment – sold by Thorne's (also in 500ml & 1ltr bottles) is 3.2% strength. This is a readymade solution in sugar syrup. Ideal for beekeepers with only a few colonies.

Mixed acid + syrup has very short shelf life, if it turns yellow or darker, don't use it.

Thornes has oxalic acid crystals in its catalogue, together with dispensers, but has no recommended dosage or instructions! Dangerous to use.

Lactic Acid - unauthorised treatment – Not available in the UK, and has now gone out of fashion.

NB: It is stipulated that when using any of the above, except with Formic acid, honey must be removed to avoid it becoming contaminated.

Health & Safety: The chemicals used in all these treatments can be dangerous and the instructions must be complied with in this respect.

Prepared by John Hauxwell (revised March 2016) Reference from the CSL of the National Bee Unit, Managing Varroa.