



Varroa Treatment - Organic Acids

Practical Fact Sheet

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Please note: This series of MBKA Fact Sheets are intended to accompany practical sessions and demonstrations at members' apiaries during the season.

Of course, there is no "right way" to keep bees and most objectives can be achieved in several different ways.

The advice presented in these notes is therefore selective, representing the method or methods used commonly and generally accepted as "best practice".

They should be regarded as guidance notes. It is expected that revisions will be frequent in the early phase of their production!

Since the arrival of resistance to the pyrethroid varroacides back in 2007, beekeepers have been able to keep on top of varroa only by using Integrated Pest Management (IPM). This approach uses multiple attacks on the mite, at different times of the year - typically

- an autumn treatment with Apiguard or ApiLife Var (thymol-based)
- and a winter treatment with an organic acid

This approach should be reasonably reliable, though it must be appreciated that any scheme may need modification to suit individual colony conditions, nothing is ever likely to be 100% reliable.

The rationale for this approach is that, if mite numbers are REALLY LOW at the start of the season, colonies will normally be okay until the autumn and can be treated after removal of the honey. Organic acids are used during the broodless period in Nov/Dec/Jan and can achieve good efficacy. They are relatively cheap.

Oxalic Acid – available as a pre-prepared solution of oxalic acid in syrup. (Limited shelf-life). Now also available as Oxuvar (ex Thornes) – oxalic acid in water, mix with sugar just before use; this overcomes stability problem. Toxic acid but should be okay if used strictly as directed; use a suitable respirator. (Use of electrical sublimator cannot be recommended – very hazardous to beekeeper.)

Lactic Acid - acid is diluted with water, good shelf-life. Non-toxic.

Formic Acid – very unpleasant material to handle, MAQS is the commercially available preparation.

Application – work with a second beekeeper, this will considerably speed up the operation and minimise any effects of chilling. Remember, there should be little or no brood to chill, just adult bees. Choose a still day, temperature above 4°C, probably less than 10°C,

Oxalic Acid – using a calibrated syringe, dribble 5ml solution over each "seam" of bees in the brood box, between the combs. Single application.

Lactic Acid – using a pre-calibrated hand-sprayer, apply 5ml of a 15% lactic acid solution to the bees on each side of occupied frames. Repeat 3-6 days later.

Formic acid – MAQS – use according to label

Legal Note: Organic acids (apart from MAQS) are not approved varroacides, nonetheless they may be used if prescribed by a vet, something they can do without seeing the bees. As with any "Veterinary Medicine", you are obliged to keep records for 5 years, detailing dates, treatments and hives treated.