

Management information: *Varroa destructor*

Preventative measures:

The Central Science Laboratory, UK advice to beekeepers is that, since varroa cannot be eradicated, every beekeeper with infested colonies must practice effective mite control. CSL, 2003 in its [Managing Varroa Leaflet](#) advises beekeepers that they can control the mite to harmless levels by prompt treatment and by following these pointers:

- Monitoring of colonies for varroa, even if they think it is not there.
- Treating mites when found. Doing nothing is not an option.
- Colonies are lost if not treated and form a serious source of infestation for their neighbours.
- Success depends upon routinely monitoring for mites and applying timely control.

There is a Statutory Infested Area (SIA) that includes all of England and Wales. Beekeepers intending to ship bees or used hive parts to other areas of the UK from this SIA must seek permission first. There is a separate SIA in Scotland. Imports of bees into Northern Ireland are prohibited.

Varroosis is a notifiable disease under the Bee Diseases Control Order 1982. All new suspected cases in England and Wales must be reported to the Central Science Laboratory National Bee Unit (NBU). Samples should be sent for confirmation, together with the beekeeper's name and address, apiary name and location (Ordnance Survey grid reference).

Chemical:

The control method Bessin (2001) suggests is the use of Apistan® strips for detection and control of *V. destructor*. However, these strips contain the miticide fluvalinate and are not to be used during honey flow, or when surplus honey is present in the colony that may be removed for human consumption at a later date; country or state

regulations may apply to the use of this pesticide. According to Denmark *et al.* (2000) the U.S. Environmental Protection Agency originally approved Apistan® strips for the control of *V. destructor*. For earlier unexposed mites, this treatment is 99.8% effective, and if the colony is not exposed to heavy reinfestation, treatment should be effective for 12 months. Experience has shown, however, that resistance by mites has occurred in many areas. This was first seen in Europe (Italy and France), but now has been confirmed in parts of the United States. Because of this, it is important for beekeepers to monitor whether this or any treatment works.

In southern Europe (i.e. Italy) products using thymol are widely used and throughout Europe, oxalic acid dripping is a major tool. There has been a revival of ecological methods in recent years because of the spread of acaricide resistant mites both in Europe and the US. The most widely used acaricide world wide is probably Apistan (a.i. tau-fluvalinate), a pyrethroid that does not harm bees. Coumaphos (in CheckMite and Perizin) is an organic phosphorous compound also used both in the US and in Europe - in some areas mites are resistant to this chemical too. Amitraz is also used, at least in southern Europe.

MAF, New Zealand has released various guidelines for the control of varroa:

[A Guide to bee keepers for the control of Varroa](#)

[ApistanO sticky board test.](#) The aim of this trial was to determine the proportion of dead varroa that do not remain on the sticky board, when ApistanO is placed in the hive for 24 hours during an ApistanO sticky board test.

[A Review of Treatment Options: For control of varroa mite in New Zealand.](#)

[Sensitivity of ApistanO as a Diagnostic Test.](#)

[Destruction of managed and feral honey bee \(*Apis mellifera*\) colonies.](#)

[Oxalic acid guidelines.](#)

[Formic acid guidelines.](#)