

## Simple IPM for Varroa

---

This sheet gives an Integrated Pest Management programme to control varroa, based on methods used in Central Europe. It should be reinforced with regular mite level monitoring but will generally be effective.

---

### 1. Monitor Mite Levels.

To be effective any pest control work relies on knowledge of the level of infestation. This is best carried out in a bee colony by finding the natural daily mite drop. It is necessary to average this over a ten to fourteen day period for a representative result. It is easier to see and count mites if you check the floor tray on a two or three day basis, clean it off, record the number and take a mean average over two weeks. When checking frequently there is less detritus on the floor making mites easier to see. If the daily mite drop is greater than 30 immediate action must be taken: supers removed and a control or varroacide used. There is no need to monitor continuously, about four times in the season will probably suffice, e.g. early spring, late spring, mid to late summer and in October after the autumn treatment. When not monitoring remove the tray and leave the open mesh floor open. Checking drone brood infestation rates can easily indicate infestation levels in spring and early summer, saving floor tray checking at this time. Further details can be found in the CSL/DEFRA leaflets ‘Varroa Jacobsoni: monitoring and forecasting mite populations within honey bee colonies in Britain’, ‘Managing Varroa’ and the handout ‘IPM & Varroa’.

*If you do not monitor intermittent success may be possible using the controls listed in the heavy infestation table overleaf.*

### 2. Slow Mite Population Growth.

Use Open Mesh Floors and Drone Brood Culling to reduce mite population growth. If carried out correctly they will halve the projected mite population at the end of the season. This will enable the less effective varroacides to give a reliable result. See FAQ 11 ‘Open Mesh Floors’ & faq 14 ‘Using Drone Brood as a Varroa Control’.

### 3. Remove honey and treat.

Remove the honey crop in early August and if necessary use an effective approved varroacide. Winter bees may be damaged if treatment is delayed.

### 4. Early Winter Check.

In late October or November monitor mite levels; if greater than four a day use an appropriate varroacide not being the same as that used in August. See FAQ 23 ‘Organic Acids’ in relation to the tables overleaf.

**The plans overleaf relate to light, medium, or heavy background infestation levels. Currently it is better to assume that background levels are high and maintain awareness.**

*No mention of alternative products should be taken as an endorsement or a recommendation to treat. The method is referred to as it is commonly used in Europe.*

National Bee Unit

Food and Environment Research Agency

Sand Hutton, York. YO41 1 LZ

Telephone 01 904 462 510 e mail [nbu@fera.gsi.gov.uk](mailto:nbu@fera.gsi.gov.uk)

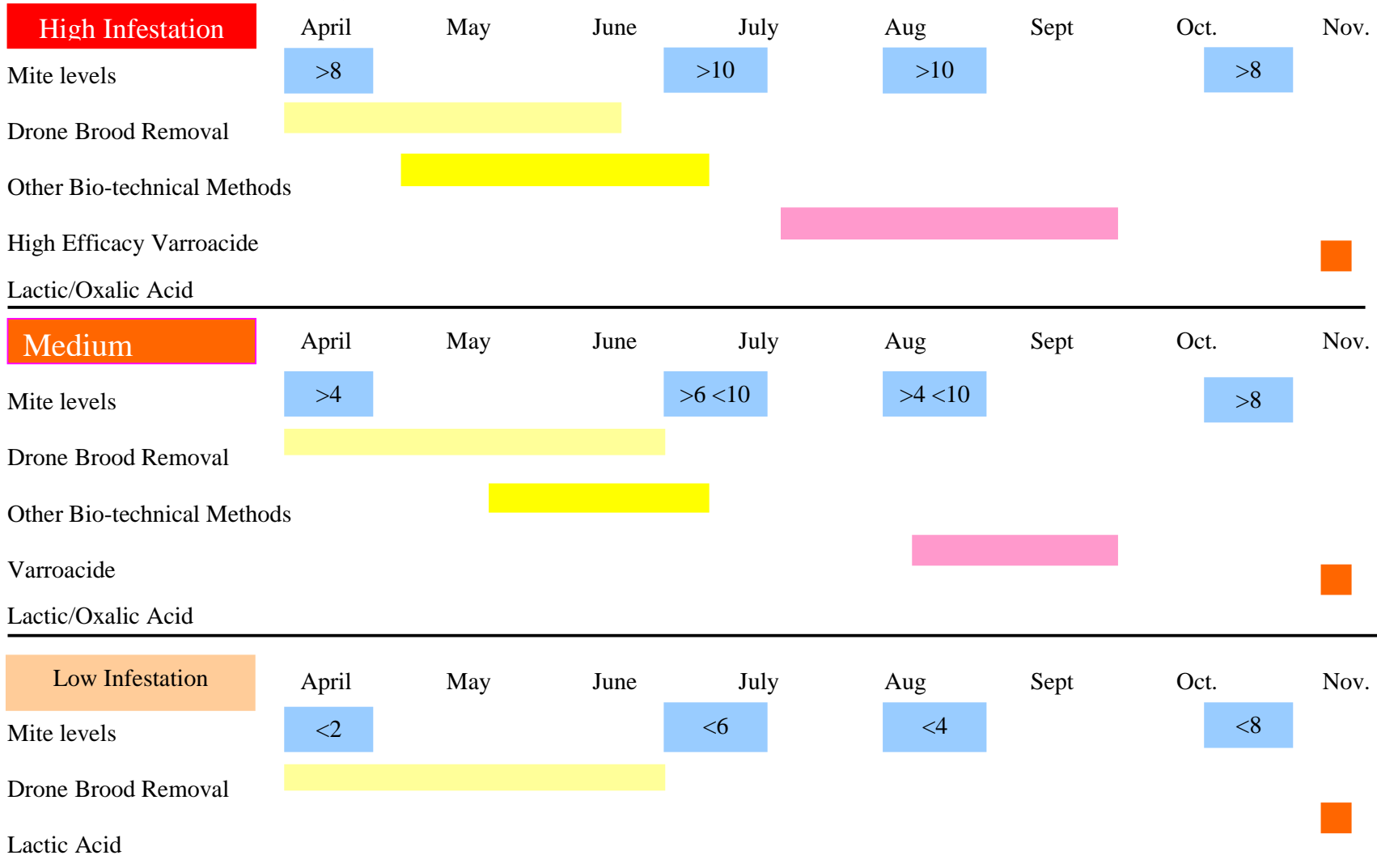
NBU Web Site: [www.nationalbeeunit.com](http://www.nationalbeeunit.com)

January 2010

© Crown copyright. This sheet, excluding the logo, may be reproduced free of charge provide that it is reproduced accurately and not used in a misleading way. The material must be acknowledged.

# Control Based on Mite Mortality

Illustrating different methods, dependant on mite levels and the time of year, as used in many European Countries



Mite Levels refer to natural average mite drop per day.

If more than 30 per day, an effective varroacide should be used, whatever the month, removing honey if necessary. Check manufacturers instructions.