

Maintenance and improvement of varroa control methods

Tjeerd Blacquièrè, Bram Cornelissen, Coby van Dooremalen & Sjef van der Steen

The recommended method for varroa control in the Netherlands is explained in the [brochure](#) "Effectieve bestrijding van varroa" from 2010. This brochure has been distributed among all beekeepers which are members one of the Dutch beekeeping associations (as well as to interested beekeepers from Belgium). In agreement with the beekeepers it was decided not to release a new edition in 2013, since the 2010 edition still satisfies and not so many new developments needed to be incorporated. Good cooking is also possible using recipes from a three years old cookbook. Success emerges by practising and good ingredients!

We did make a second edition of the brochure, with some corrections of typo's and small errors and with one small addition. Now it is possible to provide all new beekeepers with the up to date brochure in the next years

Demo

A nice recipe is something, but the proof that it results in a good product is in the eating. Therefore we did two 'demonstration' experiments, in which the recipe was applied. In 2011-12 Bram Cornelissen and Coby van Dooremalen applied the recipe from the brochure in two bee management approaches: the accepted 'Aalster' method and in a 'rotation'- method. In both groups the loss of colonies in winter was low (~10%).

In 2012-13 Sjef van der Steen applied together with 25 experienced hobby beekeepers the control of varroa 'by the book' with three colonies per beekeeper. From the colonies bee samples were taken for analysis of the mite infestation by bees@wur. Also in the beekeepers practice the method turned out to work well: at the 25 beekeepers' apiaries winter losses were low (11%). This was by the way not different from the national winter mortality percentage of 2013 (~15%). The more mites were found in the October bee samples, the higher the chances of colony loss during winter. Beekeepers who started early with the control of varroa and continued attention during the season had lower losses (6%).

Where do we stand now?

Dutch beekeepers have at their disposal a working and practical method for varroa control, which is explained in an accessible [brochure](#). Based on that it is in principle possible to keep varroa under control.

Nevertheless it is a weakness that there are only few methods and chemicals available that work well. If in some cases the method does not work so well it would be nice to have some alternative possibilities. Therefore we hope new methods will come available. Because there is no real registration of oxalic acid as a veterinary medicine it has still to be considered as a home remedy.