

## Press Release – Mite-AwayII™

Author: David VanderDussen, President, NOD Apiary Products USA Inc.

Date: to be released when EPA approval is received

to whom: beekeeping industry press

Mite-AwayII™ - A new varroa and tracheal mite treatment product has been granted Section 3 registration from the United States Environmental Protection Agency. State registrations are underway.

Mite-AwayII™ is effective in hives with brood, giving a  $93.31 \pm 5.50\%$  varroa control<sup>1</sup>. It is a single application treatment, remaining in the hive for 21 days. Studies have shown no problem with queen loss. There is no known way for resistance mites to develop. Supers can be put on immediately after treatment period, though no honey can be harvested for two weeks.

Mite-AwayII™ works by turning the hive into a fumigation chamber, releasing formic acid vapors into the hive in a controlled way. Hundreds of colonies have been involved in the development and testing of Mite-AwayII™, and thousands of colonies have been effectively treated. Formic acid is the active ingredient, but success of this product comes from its formulation and packaging.

Beekeepers have had two concerns with Mite-AwayII™: 1) the need for a spacer rim and 2) brood kill at the beginning of the treatment period. Nobody wants to have any extra equipment to deal with, but the rim is required to accommodate the Mite-AwayII™ pad on the top of the hive, and it is part of forming the vapor column needed to distribute an effective concentration of formic acid vapors through the colony. Beekeepers can modify their covers so the rim is built in, eliminating the need to handle an extra piece of equipment.

The treatment achieves good efficacy while minimizing impact on the colony. When it occurs the sight of brood kill is unpleasant, sometimes shocking to the beekeeper. However, the brood rearing rebounds quickly, all other colony activities remain normal, and no losses in productivity have been documented, when Mite-AwayII™ has been applied according to label.

### North to South

Treatments with Mite-AwayII™ under northern conditions are well defined. The extreme seasons focus treatment windows on each side of the honey flow. The bees also have specific seasonal physiological cycles, known as summer and winter bees<sup>2</sup>.

Each of the two populations of bees has a specific purpose to ensure colony survival. Each needs to be protected from varroa for the colony to prosper. If the summer bees are not protected, reduced honey crop and possible late summer collapse can occur. If the winter bees are not protected, the winter cluster will be so weak survival is questionable.

**The pattern for a northern treatment program:** Spring treatment can be applied when the temperatures reach the levels set out on the label: daily highs of 50 to 79° F. For beekeepers using screen bottom boards, be sure to remove it and replace with a standard Langstroth bottom board, or close over the screen, returning it to Langstroth standards<sup>3</sup>. Keep front entrances fully open. Even very low levels of varroa usually need to be treated because of the rapid build-up through the summer. Check with your State Apiarist for recommended spring treatment levels. After the 21 day of application period, remove the spent pad and perform the usual spring operations – reverse brood chambers if desired, make splits, re-queen, super, etc. Towards the end of summer, check your mite levels to see if mite treatment is required. If it is required, at the end of the summer,

remove the crop and apply the Mite-AwayII™ treatment right away. This is the most crucial application. The bees should still raise a full brood cycle after the Mite-AwayII™ pad has gone on. Those bees will be the stable core of the winter cluster. Time commitment for a Mite-AwayII™ program for the year should be about five minutes per hive, in a commercial beekeeping outfit.

Below are two pictures of colonies taken October 8-2004, in Ontario, Canada, 25 days after Mite-AwayII™ pads were put on the colonies. This is what you want to see. The colonies were fed during the application period, and the three plus frames of healthy brood will give them about 4-5 lbs. of winter bees to make up the cluster. These colonies are ready to winter, not just to survive but to come out strong in the spring. These colonies have relied on Mite-AwayII™ since 2002, and mite levels are being kept in check quite well. The bees are not from varroa resistant stock, since they were “mite farm” colonies used to provide varroa to run trials with. Even with highly susceptible bee stock, Mite-AwayII™ is shown to be a sustainable, stand alone treatment, when used to protect each cycle of bees.



**For control in the southern States** beekeepers can apply two treatments during the cooler months of the year. Applications could be three to five months apart, depending on temperature and honey flows. Two applications of Mite-AwayII™ should keep varroa mites at tolerable levels for the year, especially if the stock has some resistance.

For all climate zones, consult with your State apiarist to determine treatment windows and thresholds. Mite-AwayII™ is the safest way possible to use formic acid for mite control. It is a great tool for the IPM toolbox, controlling varroa and tracheal with no residue concerns. Always follow the label directions.

For more information: [www.miteaway.com](http://www.miteaway.com) or call 866-483-2929

---

<sup>1</sup> Skinner, A., Tam, J., Ross. S. OBA TTP report for 2002, *The Sting*, vol.21 no.4. Published by the Ontario Beekeepers Association

<sup>2</sup> H.R. Mattila et al, (2001) Timing of production of winter bees in honey bee (*Apis mellifera*) colonies. *Insectes Sociaux* 48: 88-93

<sup>3</sup> *The Hive and the Honey Bee*, ©1975 by Dadant & Sons Inc, Third Printing 1976, page 307