

May 28, 2007

General

Formic acid is a natural substance found in plant nectar and in ants who use it as a defense mechanism against predators. Synthetic formic acid is used as flavouring in foods. Beekeepers use a 65% concentration to treat Varroa and tracheal mites. The acid is **corrosive to skin and eyes** and hazardous material sheets must be read before handling. When handling formic acid, use acid resistant gloves. Use only in open air to prevent inhalation. Have water and an eye wash station (running hose) nearby in case of spillage. See www.honeybeecentre.com for links.

Testing for Varroa

Testing for Varroa before and after treatment is suggested to ensure the product is used effectively.

- Place sticky mat on bottom board of untreated colony for exactly three days (72 hours).
- Remove mat and count the number of trapped mites
- Divide the number of mites by the number of days the mat was left in the colony to determine the natural mite drop per day

How to Treat

MiteGone pads – One application

Beginning of April - Staple one half-pad per five frames of bees onto the inside of the brood box wall. If you are applying two pads, place them side-by-side on the same wall, opposite end of the feeder. Check in 10 days to ensure that approximately half of the acid has been evaporated (should weigh about 100 grams by that time). Remove before the honey flow.

August 15 – Staple three x half-pads per super.

MiteWipes – Multiple applications

Place one soaked (not dripping) MiteWipes pad onto the centre of the top bars. Replace every fourth day, five times (20 days overall).

Flash – (requires screened bottom board) – Two to four applications

Place one paper towel on the bottom slider board. Pour 30 ml of 65% formic acid on the towel and replace the slider into the bottom board. Acid will vaporize quickly. Repeat in 7 to 10 days. Over time, formic acid decays galvanized screens.

When to Treat

August 15	no matter what.
September 15	if mite levels are greater than 1 drop per day
April 15	if mite levels are 8 drops per day or greater
July 15	if mite levels are 25 drops per day or greater

Honeybee Centre (HBC) notes are written for beekeepers in the Lower Mainland and Fraser Valley of British Columbia, Canada. Although these notes apply to virtually all beekeepers in North America, different climates and government regulations may require slightly different honeybee management practices.