

A BASIC OUTLINE FOR MITE TREATMENT BY EXTENDED RELEASE OXALIC ACID

Randy Oliver (scientificbeekeeping.com):

We like the handling characteristics and efficacy of the 1:1 (by weight) ratio.

- Swedish sponges make a great delivery matrix, but are pricey.
- OAE has the potential to take mite infestation rates down to zero, but it is a long-term treatment. It doesn't cause as rapid a reduction of mite levels as do most other treatments (formic is the quickest). It requires about two months to exhibit full efficacy.
- Very importantly, due to its slow action, highest efficacy is attained in yards where there is little mite immigration.
- Its efficacy does not appear to be affected by temperature or humidity (since broodnest environment is regulated by the bees).
- It's best applied *proactively* (early in the season), rather than *reactively* (waiting until the mite level gets high).
- It's easy on the bees and brood.
- It's not a worry as far as contamination of honey or the combs.
- Unfortunately, this application method is not yet approved by EPA, and I in no way encourage or endorse the use of it without a proper permit.

“Allow me to start with an excellent assessment by Bee Culture’s Phil Craft (BC July 2015):

Perhaps beekeepers who have come to the craft in the last few decades aren't aware of the effect varroa had when it first arrived on this continent and of how it earned its full name, Varroa destructor. Whatever the reason, every year, beekeepers all over the country lose colonies to mites and the viruses of which they are carriers, and they never know what hit them. They blame pesticides, or CCD, or habitat loss, and sometimes those really are causes, or at least significant factors. However, too, too often, the underlying cause is a lack of effective management, which allows a mite infestation to overwhelm a colony or weaken it to the point that it succumbs easily to other stressors. The most frustrating thing about these losses is that they don't have to happen.”

Practical application: There is only a small profit margin of in commercial beekeeping, so professional beekeepers try to avoid any unnecessary costs. This means that there is a strong financial disincentive to purchase high-priced *registered* miticides. Thus, the use of inexpensive illegal treatments results in an unlevel playing field, giving those who use unapproved treatments an unfair competitive advantage over those professional beekeepers willing to use only *approved* mite treatments. I don't want to break the law, but I also don't want to pay through the nose for a *registered oxalic product*.

Basic Ingredients:

Oxalic Acid

Glycerine

“Swedish” Cloths, eg Nature’s Circle

Processing and storage containers

Kitchen scale and stove top (pref. outside)

Baking Powder (to make up neutralizing solution: 10 heaping tablespoons/gallon water)

Safety glasses or goggles

Nitrile gloves

Honeyhouse Beekeeping, Glade (Laena Brown)

Nelson Farmers’ Supply (order in)

amazon.ca

Real Canadian Wholesale Store, Nelson

Useful and informative links:

<https://www.veto-pharma.com/resources-library/biology-of-the-varroa-mite/>. (Producers of Apivar)

<https://www.blog-veto-pharma.com/us/varroa-mite-infestation-impacts-the-bee-colonies-thermoregulation/>

<https://www.blog-veto-pharma.com/us/5-questions-to-guide-you-in-deciding-if-your-bees-are-ready-for-winter-2/>

<https://www.honeybeesuite.com/oxalic-acid-and-glycerin-for-varroa-mites/>

<https://scientificbeekeeping.com/instructions-for-extended-release-oxalic-acid/>

<https://scientificbeekeeping.com/7701-2/>. Randy Oliver

<https://scientificbeekeeping.com/mite-control-while-honey-is-on-the-hive-part-3/>

<https://scientificbeekeeping.com/2022-extended-release-oxalic-oe-update-part-2/>

<https://scientificbeekeeping.com/beyond-tactic/>. The problem with Apivar/Amitraz foreseen

<https://scientificbeekeeping.com/oxalic-crystals-on-bees-after-vaporization/>

Youtube mentors, a short list, text and Youtube:

Randy Oliver (Northern California biologist and commercial beekeeper)

Ian Stepler (Google: A Canadian Beekeeper's blog. Your buddy shows you round..)

Bob Binnie (Google) Good ol' Southern boy

Kamon Reynolds (Google) Good younger Southern boy

Michael Palmer Beekeeping Videos (Google)

Marla Spivak (University of Minnesota)

Paul Kelly, et al (University of Guelph Honeybee Research Centre)

So, here, for instance, is a place to start your winter viewing and planning..

<https://www.youtube.com/channel/UCkoAuqRakc1TtvXxL4Kr76Q> Tennessee's Bees

<https://www.youtube.com/watch?v=GH2GDoW8OYw>. (Kamon Reynolds) Queens! Plan ahead, anyone can do it!

<https://www.noemamag.com/how-to-speak-honeybee/> (Just pulled this off the web)

Notes

Make them, keep them, *read* them:

