



Oxybee

Oxalic acid-based varroa treatment
with glycerol, sucrose and essential oils

Suitable for organic

Beekeeping*



Distributed by:

Véto-pharma
Committed to apiculture

*Oxalic acid is approved by the EMA (European Medicines Agency) as an active ingredient for organic varroa treatments. Please contact your local organic certifier if you have any question related to the use of your mite treatment



Suitable for organic²

Beekeeping 

OXYBEE®

Oxalic acid-based medicine with glycerol, sucrose and essential oils



Oxybee is an innovative varroa mite treatment based on oxalic acid, sucrose, glycerol and essential oils (anise and eucalyptus), suitable for organic beekeeping.²

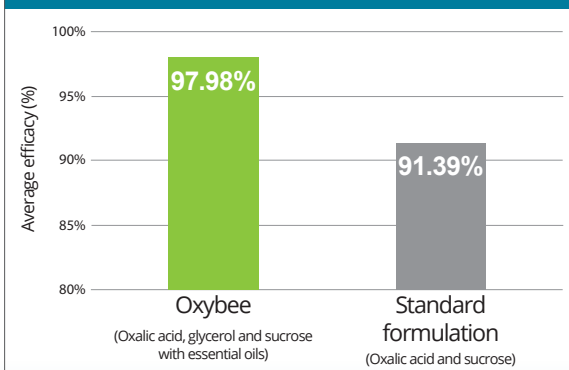
The combination of sucrose and glycerol in the oxalic acid solution is a key advantage of Oxybee.³

The formulation of oxalic acid in combination with sucrose and glycerol increased the mortality of varroa mites in laboratory tests.³⁻⁴

The formation of small droplets of solution that last longer in the colony (increased hygroscopy) is assumed to be the cause of this effect, enabling a better distribution of oxalic acid solution in the hive.³⁻⁴

As a result, field data have shown a higher efficacy of Oxybee compared to a standard formulation of oxalic acid and sucrose.⁵

Field trials have shown a higher efficacy of Oxybee compared to the standard formulation of oxalic acid and sucrose.⁵



1 - European Union, except Austria.

2 - Oxalic acid is approved by the EMA (European Medicines Agency) as an active ingredient for organic varroa treatments.

Please contact your local organic certifier if you have any question related to the use of your mite treatment.

3 - CVMP assessment report for Oxybee (EMEA/V/C/004296/0000) - 2017

4 - Milani (2001) - Activity of oxalic acid and citric acids on the mite Varroa destructor in laboratory assays - Apidologie 32 (2001) 127-138 © INRA/DIB-AGIB/EDP Sciences, 2001

5 - Poster G. Braun et al., DVG-Fachgruppentagung "Parasitologie und parasitäre Krankheiten", Hannover, Germany, Juni 12-14, 2017.

HIGH EFFICACY in naturally and artificially brood-free colonies

Oxybee should be trickled only on brood-free colonies, as the treatment acts quickly and only targets the phoretic mites.

TREATMENT IN WINTER ON BROOD-FREE COLONIES

Use at the end of autumn or in winter, when the queen stops laying eggs and the bees form a winter cluster.

WHAT TO DO IF YOU HAVE BROOD IN YOUR HIVES

If you wish to use Oxybee but there is brood in your hives (either in winter in the Southern countries, or during the season when there are no supers on your hives) you have to create an artificial brood-break:

- Either by caging the queen for 25 days before applying the treatment (which is a widely used method in Italy).
- Or by a complete brood removal, or splitting the colonies.

Thanks to these methods, beekeepers can pick their preferred timing for an Oxybee application depending on the type of operation they run as well as the local climate and seasonality.

Oxybee® field trial conducted in Spain in Nov/Dec 2018¹

Mean efficacy **97.94%**

- Product applied in compliance with instructions.
- Study conducted on 10 Layens hives.
- Complete brood removal
- 1 application (trickling) in December 2018

References:

- 1 - Veterinario Asociación Cacereña de Apicultores, Spain (2018) - Ensayo de eficacia de campo del producto antiparasitario Oxybee.
- 2 - Médicaments de lutte contre Varroa - Tests d'efficacité 2017 - FNOAD - La Santé de l'abeille n°285, Mai-Juin 2018
- 3 - When there is no supers on the hives
- 4 - Oxybee SPC - § 4.9

EVALUATION OF AN OXALIC ACID-BASED TREATMENT AFTER QUEEN CAGING

In 2017, a trial was carried out in France on 24 colonies to test the effectiveness of oxalic acid as a late summer treatment.²

- Queen caged for 25 days
- Application of oxalic acid by trickling
- Counting of natural mite fall for 15 days

The oxalic acid solution killed over 95% of varroa mites within 6 days, and achieved 99% effectiveness within 15 days after application.

Queen caging is therefore an effective method allowing the use of oxalic acid in season (without honey supers).³



Example of a queen cage to attach on a frame

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USING OXYBEE®⁴

- ✓ Always use without honey supers, and above 3 °C.
- ✓ Only apply to brood-free colonies.
- ✓ One treatment per generation of bees.
- ✓ Use on hives with accessible vertical frames from above.
- ✓ Respect the maximum dose of 54ml per colony:
The application of a higher concentrated oxalic acid dihydrate solution can lead to a significantly reduced over-wintering strength of the treated hives.



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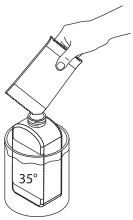
+



Easy-to-use solution for trickling
35g oxalic acid dihydrate
1000g reconstituted solution

One 750g bottle
containing 35g of
oxalic acid dihydrate

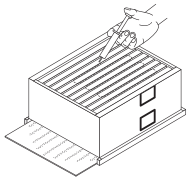
Two 125g sachets
of sucrose powder
(with Anise and
Eucalyptus essential oils)



- Write the date of opening on the bottle. Place the bottle with oxalic acid dihydrate solution in lukewarm water (30-35°C) to warm up the liquid. The bees will thank you!
- Pour all the sucrose powder (2 sachets) into the oxalic acid dihydrate solution bottle. A funnel can be helpful!



- Close the bottle tightly and shake it until the powder is fully dissolved.



- Open the hive and remove propolis bridges so you can easily see the bees and reach them. Use a syringe or a drenching gun to dribble 5-6ml of solution per seam occupied by bees. You can use a plastic tube to fill the syringe by aspiration.

Storage recommendations:



BEFORE MIXING:

Shelf life of the veterinary medicinal product as packaged for sale is two years.



AFTER MIXING:

The ready-to-use solution can be stored for one year in a refrigerator (2°C – 8°C).

When re-using the bottle, warm it up a little bit, so the bees better accept the drops on them.

Thanks to its specific content of glycerol, Oxybee offers the best storage condition:

12 MONTHS IN THE FRIDGE AFTER BEING MIXED

Other registered products* must be used within 30 days after reconstitution, and all non-used product is wasted.

**Other registered products without glycerol*

Easy to use

Ready-to-use: You only have to mix the powder with the liquid solution of the bottle.¹

Avoid dosage mistakes.

No need to prepare a separate syrup.

Economical

After mixing the two sachets in the bottle, you can keep Oxybee in the fridge for one year, offering the best storage condition compared to the other registered products.²

Quality

Oxybee is produced in Germany with the highest quality standards.³

The purity and quality of active ingredients ensure Oxybee's safety for the bees.

Useful tips to better fight the mite



- ✓ **Regular monitoring of mite infestation throughout the year, beginning in spring** (at least four times a year)
- ✓ **Check your mite infestation BEFORE and AFTER treatment.**
This is the only way to know if your treatment was successful.
If you had 10 000 mites in your hive, the treatment could be 97% effective and you will still see a lot of mites after treatment.
- ✓ **Adapt your treatment strategy depending on your infestation** (do not stick to one treatment a year at the same date).
- ✓ **Stay informed about local infestation thresholds**
- ✓ **Renew brood comb every 2 or 3 years minimum**
- ✓ **Treat all colonies in an apiary at the same time** to prevent re-infestation
- ✓ **Rotate the active ingredients** (and not only the treatment!)
- ✓ **Use only registered treatments and respect the product labels and instructions**

What is a registered Varroa treatment?

A registered Varroa treatment is a veterinary medicine that has been approved by the competent authorities. A vet medicine is tested not only for efficacy, but also for its safety for the colony (bees, brood, queen), for the beekeeper and the final consumer of the hive products. Registered veterinary medicines have been tested at different concentrations and different applications (variation of the duration, posology, way of application) to find the best use. Please respect the instructions on the label and do not overdose to try to reach a higher efficacy. As your production will be part of the Human diet (honey, royal jelly, propolis), you must use only authorised treatments in your hives, to guarantee the safety and compliance of the hive products.

OXYBEE powder and solution for 39,4 mg/ml bee-hive dispersion for honey bees. Composition: 1 ml of mixed bee-hive dispersion contains 39,4 mg of oxalic acid dehydrate. **Indication(s) for use :** For the treatment of varroosis (*Varroa destructor*) of honey bees (*Apis mellifera*) in brood free colonies. **Withdrawal period(s) :** **Honey:** zero days. Do not use during honey flow. **Special precautions :** This veterinary medicinal product is highly acidic and could have irritating and corrosive effects on the skin, eyes and mucous membranes. Personal protective equipment consisting of protective clothing, acid-proof gloves and safety glasses should be worn. **Marketing authorisation holder:** Dany Bienenwohl GmbH, Geyserspergerstr. 27, 80689 Munich, Germany. **Distributed by:** Vétô-pharma, 12-14 avenue de la Croix Martre 91120 Palaiseau, France. **V0119**

Oxybee is a veterinary medicine. Please ask advice to your veterinarian, pharmacist or sanitary organization. In case of persistence of clinical signs, consult with your veterinarian. Read carefully the instructions on the product label before use.

Varroa monitoring

3 varroa monitoring methods to choose from

3 in 1



Alcohol wash



Sugar roll



CO₂ injection



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