

Oxalic acid anti varroa treatments

“How To”

Oxalic acid dehydrate is a dry powder generally sold as wood bleach.

Available from most hardware shops at about \$15-\$20 for 500gr.

Pending application method, treatment per hive 2 to 4gr.

Treatment cost per hive based on above: 4 – 10 cents

1: Oxalic acid dribble

HOW DOES IT WORK?

Oxalic acid drip method is an excellent winter treatment to broodless hives, giving them a clean start in spring. The effectiveness of the treatment varies between **90 and 99%** if done correctly.

SAFETY MEASURES

Use gloves and safety goggles.

PRECONDITIONS for a good result

If closed brood is present, the efficiency can be up to 50% lower. In mid-winter, the probability of capped brood is the lowest. The outside temperature should be above 0°C.

TOOLS

Dribble solution

Syringe (minimum 50 ml)

METHOD

1. Open the hive.
2. Count the number of frame gaps occupied with bees.
3. Spread per gap 5 ml of the solution in between the frames, directly onto the bees.
4. In the case of a double brood box, treat the bottom box the same way.
5. Close the hive.

Storage warning:

Oxalic acid solutions will change colour to brown after prolonged storage at room temperature and turns toxic to bees.

Therefore, we recommend make up what you need for the hives to be treated and use only freshly prepared solutions.

If needed, you could store it for a maximum of 6 months at a storage temperature between 5 and 15°C.

HOW TO MAKE AN OXALIC ACID SUGAR/ SYRUP SOLUTION.

What you need:

- . Measuring cup
- . Scales
- . Hot tap water
- . White sugar
- . Oxalic acid powder (oxalic acid dehydrate)
- . Latex gloves
- . Spoon

Method:

To make 1 litre (20 Hives)

- . Fill the measuring cup with 600 ml of hot tap water.
- . Add 600 grams of sugar and stir until dissolved.
- . Mix 36 grams of oxalic acid powder into the sugar water.

Dosage:

(Use the table for the correct amount, pending apiary size).

Hives	Water	Sugar	Oxalic Acid
5	150 ml	150 gr.	9 gr. (To make 1/4 Litre)
10	300ml	300gr.	18gr. (To make 1/2 Litre)
20	600ml.	600gr.	36gr. (To make 1 Litre)



How to, Oxalic Acid Dribble Treatment

<https://youtu.be/-ISlid2etjk>

2: Oxalic acid vaporizer

HOW DOES IT WORK?

“Vaporization” involves heating up a small amount of oxalic acid dehydrate within the hive

The oxalic acid powder first liquefies and then becomes a gaseous vapour which permeates the whole hive.

The vapour quickly re-crystallizes on all the inner surfaces of the hive and the bees as a fine coating of oxalic acid crystals. These crystals are deadly to mites. In a heavily infested hive you can expect a drop of over 1000 mites in the first 24hr, but the treatment will remain effective for up to a week and you will see a continued but diminishing drop over the next few days.

SAFETY MEASURES

Use gloves and safety goggles.

PRECONDITIONS for a good result

Treat in mid-winter, when the probability of capped brood is the lowest.

If closed brood is present, the efficiency can be up to 50% lower.

The outside temperature should be above 0°C.

TOOLS

A vaporizer.

Oxalic Acid powder.

A 1g measuring spoon.

A 12v battery for powering the vaporizer.

Determine wind direction if any and make sure you stay “upwind” when vaporizing.

METHOD

1. Close / plug all entrances and ventilation gaps with damp cloths or foam.
2. Make sure to close an open mesh floor by inserting the mite count sheet and close the sheet entrance.
3. Please remember: use a timer
4. Use one gram of oxalic acid per brood chamber (most hives have two brood chambers).
5. Place the oxalic acid in the heating element pan.
6. Put the pan into the hive entrance under the brood frames.
7. Connect the vaporiser leads to a 12 volt battery.
8. Start the timer and only vaporise for 2 mins from a fully charged battery.
9. After the 2 mins disconnect from the battery.
10. Leave the hive closed for a further 10 mins to let the vaporiser cool down.
11. Remove cloth and closures from all entrances and ventilation gaps.
12. Remove your vaporiser.



Oxalic Acid Vaporizer - How to use

<https://www.youtube.com/watch?v=ca1ibcFzMxw>