

# OAV Protocol

## **List of Materials:**

1. Package of legally approved Oxalic Acid
2. Oxalic Acid Vaporizer (battery or a/c powered)
3. Battery – if battery powered vaporizer
4. Power source and extension cord if a/c vaporizer
5. Bucket of clean water
6. ¼ teaspoon measuring spoon
7. Towels or foam strips to seal hives
8. Respirator (rated for Oxalic Acid fumes)
9. Gloves
10. Safety Goggles
11. Bucket of clean water
12. Fire extinguisher
13. Accurate Timer
14. Tool for clearing debris from hive entrance
15. Old toothbrush to clean vaporizer
16. Lighted smoker to indicate wind direction.

## **Things to know:**

### **Dosage**

The recommended dosage is ONE gram per brood chamber. Most have two brood Chambers, so in that case use two grams (very close to ½ teaspoonful). You could use a ½ teaspoon measure in lieu of two one gram (¼ teaspoons). 2gm=1/2 t

The only Exception to this is when Vaporizing a Nucleus colony, and that is ½ gram. 1gm= 1/4t for a Double Nuc.

### **When to Use**

USE at the beginning of winter somewhere between Thanksgiving thru Christmas.

If it is unusually warm in November, apply at 37F-90F. Nov-Feb (3 TIMES 5 DAYS INTERVAL).

Another great time to use OAV is in late August/Early September when the mites are out-breeding the bees. What you are doing at that time is killing the mites that are emerging with brood and before they enter another brood cell about to be capped. During this time, you should vaporize 3 times at 5 day Intervals.

DON'T USE WITH HONEY SUPERS (DURING FLOW). USE A BARRIER of cardboard or plastic between supers and brood chambers.

## **The Process:**

You should be wearing gloves, safety goggles, and a respirator BEFORE starting.

- 1 SMOKE BEES-LOWER ENTRANCE FIRST – THEN USE SMOKER TO TRACK WIND DIRECTION SO YOU CAN KEEP AWAY FROM FUMES
- 2 CLEAR DEBRIS FROM HIVE ENTRANCE
- 3 INSERT LOADED VAPORIZER HALF WAY and SEAL ENTRANCE WITH MOIST TOWEL
- 4 Start **2.5 Min** TREATMENT TIME WITH OAV (Set Timer) – SEE NOTE BELOW
- 5 PROMPTLY REMOVE VAPORIZER AND RE-SEAL ENTRANCE WITH MOIST TOWEL
- 6 PROVIDE 2 Min COOLING OF VAPORIZER OR COOL VAPORIZER WITH WET RAG or WATER
- 7 KEEP HIVE CLOSED FOR TEN MINUTES

NOTE: Prior to using the vaporizer for the first time, you should test it. Carefully measure out ½ tsp. of Oxalic Acid and place it in the vaporizer. Be outdoors and wear gloves, goggles, and respirator. Start the vaporizer and use an accurate timer to determine exactly how long it takes to use up all of the Oxalic Acid. This will usually average around 2 ½ minutes for a quality vaporizer. Write down how long it took and use that time as the length of time that you power the vaporizer.

## **Personal Protective Equipment SAFETY**

Keep a smoker lit in the bee yard and stand up-wind from Oxalic Acid fumes.

DO NOT BREATHE THE VAPORS!

A 3M 5203 ACID GAS RESPIRATOR is sufficient, which filters both vapors and particulates. Oxalic Acid vapors very quickly re-crystallize to cover all the surfaces in the hive making the breathing of the vapors unlikely. However, there is always the chance of an accident, so please err on the side of safety!

SAFETY FIRST!!!

RESPIRATOR, GLOVES AND PROTECTIVE EYEWEAR ARE TO BE WORN!