

Alcohol Wash Method for Varroa Mites

Materials

1. Dishpan
2. ½ cup 70% rubbing alcohol
3. Mite wash jar
4. Tea strainer or fine mesh



Directions

1. Prepare a glass jar lined with a tea strainer or mesh so you can strain the bees from the mites later.
2. Remove a single frame of bees that contain open brood and adult worker bees. **Note: make sure the queen is not on the frame.**
3. Shake bees from the frame into dishpan
4. Scoop about ½ cup of bees (about 300 bees) from the dishpan and pour them into the mite wash jar filled with the alcohol. Put the leftover bees back into the hive.
5. Swirl the jar to fully submerge the bees and allow for a quick death.
6. Swirl consistently for 1-2 minutes to allow for mites to drop to the bottom
7. of the jar.
7. Strain the bees from the jar so you are only left with the mites at the bottom.
8. Carefully count the number of mites. **Tip: hold the jar against a piece of white paper to see the mites more clearly**

Interpreting the Results

After counting the number of mites, determine the level of infestation by dividing the total number of mites by 3.

For example: If you count 10 mites per 300 bees, then your infestation level is 3.33%.

Researches have developed an action threshold to help inform beekeepers on when to make a treatment decision. **The action threshold for Varroa mites is 3%.** If your alcohol wash test reveals an infestation rate at or above 3%, you should consider treating your bees.

The action threshold takes into account the cost of treatment and the survivorship of the colonies.