

Varroa Mite-Wash Field Guide

How to do an alcohol wash, record it, and understand your result. A free monitoring tool by BeesFriend.

Before you start — three things to know

1. **This complements official reporting — it doesn't replace it.** If you find Varroa, you are legally required to report it to Agriculture Victoria (Exotic Plant Pest Hotline **1800 084 881**). This tool is a monitoring aid, not a government system.
2. **Your data is handled carefully.** Your exact location is never published or shared; findings are anonymised and regional only; you can have your data removed any time. Detail: beesfriend.com.au/varroa-surveillance/data-privacy/
3. **Every wash counts — even a clean one.** A zero result is as valuable as a high one. Please record every wash.

What you'll need

- A wash cup or shaker designed for alcohol washes, with a **built-in counting chamber** (or a sealed jar with a mesh insert)
- Washing fluid: methylated spirits, isopropyl alcohol, or windscreen washer fluid
- A measure for roughly **300 bees** (about half a standard cup, or a dedicated 300-bee scoop)
- Your phone, to open the form at the apiary

How to do an alcohol wash

The alcohol wash is the standard, most reliable way to measure your mite load.

- 1 **Pick a brood frame** — choose a frame with open brood, where mites concentrate. Make sure the **queen is not on it** before you shake the bees off.
- 2 **Collect about 300 bees** into your wash cup — shake the frame's bees into a tub first, then scoop your sample.
- 3 **Add the alcohol** to cover the bees.
- 4 **Swirl firmly for at least 60 seconds.** This dislodges the mites from the bees.
- 5 **Strain and count** the mites that drop through the mesh into the counting chamber. The bees in the sample will not survive — this small loss gives an accurate, life-saving read on the whole colony.
- 6 **Repeat the wash** on the same bees once or twice more — a second and third wash catches mites the first missed, for a more accurate count.

If you've never done an alcohol wash, Agriculture Victoria and your local club run demonstrations. The method here follows the standard SOP.

Recording it in the tool

Open the form at beesfriend.com.au/mite-wash — it works on your phone, in the field.

Getting started

Confirm consent, then enter **your identifier** (BeeMAX ID, email, or operator code — lets us recognise your repeat submissions without double-counting). Contact details are separate and optional.

Where & when

Let your phone capture the **apiary GPS** (places your data in the right region; anonymised, never published), plus region, date and time.

About the colony

Your apiary/colony codes, queen age and source, brood frames and boxes, **brood status** (the action threshold changes with brood phase), any visible disease signs (or "None"), and management in the last 90 days (or "None").

The wash

Device, alcohol type/strength, bee-count method, number of washes, and **mites in wash 1, 2, 3**. The form shows your running rate after each wash and calculates your **mites per 100 bees** automatically.

What your result means

The tool gives a plain-language read based on your colony's brood phase. The threshold is stricter with little/no brood, higher when brood is active.

✓ **No mites detected** — none dropped this wash. Keep monitoring regularly.

Monitor closely — mites present but below the action threshold for your phase. Watch closely, test again soon.

Treatment recommended — at or above the action threshold for your phase. Time to act and plan which treatment to use.

These are guides, not a diagnosis. When in doubt, call a Bee Biosecurity Officer (136 186) or Agriculture Victoria.

Checking whether a treatment worked

This is the most useful thing you can record. With resistance now confirmed in Victoria, you can't assume a treatment worked — you have to check. The form asks which treatment you're checking, when you applied it, and the mite level before. It then tells you:

✓ **Mites now below threshold** — your treatment appears to have worked. Keep monitoring.

Mites still above threshold — hasn't brought the load down enough. Consider re-treating with a **different chemical group**, and report a suspected failure.

Mites did not fall — little or no reduction. May point to resistance. Rotate chemical group and report it.

When many beekeepers record before-and-after checks, an honest regional picture of which treatments still work — and where resistance is emerging — becomes visible. No single beekeeper sees that alone. Your records build it.

Reporting — at a glance

If you...	Do this
Detect Varroa for the first time	Report to the Exotic Plant Pest Hotline 1800 084 881 (legally required)
Want to record inspections (positive or negative)	Use BeeMAX
Suspect a treatment has failed	Report to Agriculture Victoria, and record it here
Need advice	Bee Biosecurity Officers 136 186 · agriculture.vic.gov.au/varroa

Thank you for taking part. Every wash you record helps protect bees across the region — together.

BeesFriend · Ethical no-kill bee rescue, South East Melbourne · beesfriend.com.au