

Alcohol Wash & Mite Thresholds

Count before you treat · 300 bees = ½ cup · mites per 100 bees — Section IV

An alcohol wash on 300 nurse bees is the only mite count accurate enough to make a treatment decision. Sugar shakes under-report; sticky boards drift with hive strength. Kill 300 bees to save 40,000.

THE WASH — EIGHT STEPS

1. Choose a frame of open brood from the centre of the nest. Confirm the queen is NOT on it.
2. Shake the bees into a tub, then scoop a level half-cup (about 300 nurse bees) into the wash jar.
3. Cover with 70% isopropyl alcohol or windshield washer fluid — enough to submerge fully.
4. Shake hard for 60 seconds, then let it stand 30 seconds.
5. Pour through the screen into a white pan. Rinse and shake twice more; mites keep coming.
6. Count every mite in the pan against the white background.
7. $\text{Mites} \div 3 = \text{mites per 100 bees}$ (your percentage), when using a 300-bee sample.
8. Record: date, yard, colony ID, count, percentage. Untracked counts are wasted bees.

THRESHOLDS BY MONTH — SIMILKAMEEN VALLEY

Month	Treat above	Comment
March – April	1% (3 mites/300)	Any mites this early means a heavy autumn carry-over. Oxalic while broodless.
May – June	2% (6 mites/300)	Build-up phase; mite population doubles roughly monthly.
July	3% (9 mites/300)	THE decisive count. Above 3% now, winter bees will be virus-loaded.
August	3% (9 mites/300)	Treat immediately after supers come off. Non-negotiable.
September	1% (3 mites/300)	Winter bees are being raised now. Above 1% = intervene.
Oct – Nov	<1% target	Broodless oxalic dribble or vapour as the clean-up pass.

TREATMENT ROTATION — BY MODE OF ACTION, NOT BRAND

Product	Temp window	Brood	Supers on?
Formic (pads / strips)	10–29.5 °C	Kills mites under cappings	Some formats yes — read label
Thymol gel	15–30 °C	Surface mites only	No
Oxalic dribble / vapour	Above 0 °C, best broodless	Surface mites only	No
Amitraz strips	Per label	Surface, 42-day contact	No

Rotate modes of action year to year. Never repeat a synthetic twice in one season. Follow Health Canada label directions — the label is the law, including honey-super restrictions and temperature limits.