



VARROA TREATMENT ADVICE

The label instructions for products that can now be sold in Australia are largely adapted from the New Zealand label instructions. Most of the usage instructions are appropriate although there are differences in the environments that will affect treatment patterns.

Honey seasons in New Zealand are typically very short, only a few months, and in many cooler areas there are brood breaks or at least periods of low brood volume. This makes for a more forgiving varroa environment. New Zealand Beekeepers have until recently been able to treat in Spring and Autumn and have not needed to monitor mite levels. Due to a number of reasons, including high stocking rates and increased varroa virulence, two calendar treatments are now often not enough. In many cases, Beekeepers are treating 3 times per year.

Monitoring mite levels is a critical tool in hive health, and although it will take extra resource it can be the difference in hives producing a strong crop or dying.



Our key points on varroa control are;

1. Follow label instructions. In particular;
 - I. Use the full dose – underdosing will create sub-lethal conditions and encourage the development of resistance in mites
 - II. Use for the correct amount of time – using product longer than label conditions will create sub-lethal conditions and encourage the development of resistance in mites
 - III. Rotate treatments – constantly using one treatment type will encourage the development of resistance in mites
2. For Beekeepers who have long honey collection periods i.e. over 3 months, regular mite level monitoring is needed to ensure mites don't reach critical levels
3. Rather than calendar driven treatment regimes in Spring and Autumn, Beekeepers may need to create treatment windows of no honey collection through the year to reduce mite levels
4. Periods of brood break, whether natural or induced, will improve treatment results

Always read the label and if the label differs to the permit conditions then follow the permit. This information is specifically relevant to NSW as Varroa has not been identified in any other jurisdiction at time of print.

*Ensure you read the label and adhere to the Personal Protective Equipment requirements and miticide storage requirements of each product.

Monitor hives & Report results

Based on technical expert advice provided to AHBIC beekeepers can follow some basic treatment principles to get through the initial wave of spread. This information includes discussions regarding Varroa treatment, which are only currently permitted within NSW as no Varroa detections have occurred in other states and territories.

Table 2. Treatment thresholds depending on colony phase/season and # of Varroa found per hive in an alcohol wash, soapy water wash, or sugar shake (adapted from NSW DPI Factsheet: Varroa mite management options for NSW.)

| COLONY PHASE | VARROA # Wait - immediate control not needed | VARROA % URGENT - Control immediately |
|--|--|---|
| DORMANT (broodless period, typically Winter) | LESS THAN 3 MITES FOUND | 3-5 MITES FOUND |
| POPULATION INCREASE (typically Spring) | LESS THAN 6 MITES FOUND | 6-9 MITES FOUND |
| PEAK POPULATION (typically Summer) | LESS THAN 6 MITES FOUND | 9+ MITES FOUND* |
| POPULATION DECREASE (typically Autumn) | LESS THAN 6 MITES FOUND | 6-9+ MITES FOUND |