

CHARACTERISTICS AND DESCRIPTIONS OF COMMON MITICIDES TREATMENTS

Use chemicals in the hive with care, choosing natural products wherever possible. Chemicals applied by the beekeeper can interact synergistically with agricultural pesticides, fungicides and herbicides with highly toxic results for the bees.

APIGUARD

Active ingredient: Thymol in a slow release gel form. Thymol is derived from the thyme plant.

Temperature range: Over 59 degrees F (15 degrees C) and under 100 degrees F.

Efficacy: about 85 to 95%, on average about 93%. The higher the temperature the more effective it is.

Thymol is also effective against the tracheal mite.

Treatment duration: Four weeks, 2 weeks for the first tray followed by 2 weeks for the second tray

Risk to colony: Apiguard is not harmful to the queen, the brood, the bees or the beekeeper.

Apiguard should not be used when honey supers are on the hive.

There is no withdraw time before placing honey supers on a hive

Resistance: Mites are not presently resistant to the Apiguard and resistance is not expected

Ease of application: Apiguard is very easy, safe and quick to use. It is placed on top of the upper brood box

Extra equipment: A shim (rim or spacer) is placed above the upper super to allow room for the aluminum tray

READ AND FOLLOW THE PACKAGE ENCLOSURE DIRECTIONS CAREFULLY WITH ALL TREATMENTS

APIVAR

Apivar is approved for use in Pennsylvania.

Active ingredient: Amitraz

Effectiveness: Kills up to Approx. 99% of mites

Honey supers: Cannot be used when honey supers are on the hive

Treatment strips must be removed from hive for at least 14 days before placing supers

Treatment duration: 42 days minimum. Must be removed before 56 days maximum

Timing: Can be used in spring and fall

Safety: Does not harm the queen, brood or the bees

Use chemical resistant gloves when handling strips

Dosage: Two amitraz impregnated strips are used for each brood chamber. Colonies with 2

Brood chambers will require 4 strips.

MITE-AWAY QUICK STRIPS MAQS

Active ingredient: Formic acid

Temperature range: works best when temp. is between 50 and 92 degrees F. (10 to 33 degrees C)

The favorable characteristics:

- Treatment duration is only 7 days

- Kills mites while they are still under the capping
- No resistance is expected to develop
- Placing two strips between the brood chambers is easy to do.
- Residual material left after the treatment can be removed by the beekeeper or left for the bees to remove
- Can be used when a nectar flow is in progress and the honey supers are on the hive
- The formic acid does not leave any residue in the beeswax.
- Efficacy is about 95%
- A half dose treatment can be used when only treating a single brood chamber

The unfavorable characteristics

- Dangerous for the beekeeper to handle
- Do not breathe the fumes. Use of chemical resistant gloves is highly recommended
- Use of a respirator with the appropriate filter element is highly recommended
- Use of protective clothing is recommended
- If the temperature goes above 92 degrees F, brood mortality and absconding are likely during the first few days of treatment.

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API LIFE VAR

Active ingredients: Thymol , eucalyptus oil, menthol and camphor

Temperature range: Works best when daytime temperatures are between 60 and 70 degrees

Temperatures below 54 degrees will result in lower effectiveness

Temperatures above 90 degrees may result in increased brood and bee kill

Treatment duration: 26 to 32 days; requires four hive openings to complete a treatment.

Insert miticide, replace in 7-10 days, replace again in 7-10 days, and remove residual after 12 days

Efficacy: About 95% if treated within the recommended temperatures.

Mite kill results vary significantly with variations in the amount of hive ventilation

Resistance to miticide: Resistance by the mites to this product has not been found so far

Honey supers: Honey supers cannot be on the hive when treatments are in progress and must be

removed at least one month before placing honey supers on the hive.

Do not harvest honey from the brood chambers.

Ventilation of hive: All ventilation holes must be taped shut, the entrance should be reduced and the tray

below the bottom board should be in place.

Special care required: Do not breathe the vapors or handle the product without chemical resistant gloves.

Do not get it in your eyes or on your clothes.

APISTAN

Active ingredient: Fluvalinate, a synthetic pyrethroid

Treatment time: 6 weeks

Honey supers: Do not use when honey supers are on the hive. There is no withholding period.

Temperature: Daytime temperature should be at least 50 degrees for best distribution.

Dosage: Two strips are used in each brood chamber. With two hive bodied 4 strips are required.

Consideration: Apistan is one of the first miticides. It has been around for a long time and the mites have built up a resistance to it. If Apistan has not been used in an apiary for several years it may be effective again for a few years.

HOPGUARD

Notes:

Can be used with the honey supers on the hives

- Two strips are required for each brood chamber. Four for a two deep super hive
- Does not harm the queen, brood or the bees

Hopguard should only be used to reduce the phoretic mite load temporarily until another treatment can be applied. The strips dry out and are only effective for a few days and must be replaced with four more strips to continue killing the phoretic mites.

Compiled by Brooke Binder