

# Pests that can infest a bee colony



**Varroa mites** (*Varroa destructor*) are small, reddish-brown tick like pests which feed on the hemolymph (“blood”) of the honey bees. The reproductive cycle of the mites are directly tied to the reproductive cycle of the honey bees. Mites will gravitate to Drone cells more often because of the time period in which it is

capped. Mites exit with newly hatched bees and will create cuts on the bees that can gain infection as well as transmit viruses. The virus that persists after the colonies have been treated is what poses the real threat to colony health. It takes a few generations of brood rearing for virus levels to reduce. It is best to know your mite count before you begin treating. Mites have been able to develop a resistance to some of the products on the market. If you know your mite count before and after you have treated, you can determine if you were successful.



**Wax Moths** are a very destructive pest in the beehive. The mated females will fly into a colony 1 to 3 hours after dark and lay masses of light colored eggs. The larva will eat away at the comb and create a webbing between frames. A strong colony can defend itself against wax moth. A heavy infestation is a sign of other problems within the hive.



**Tracheal mites** are microscopic mites which reproduce in the trachea (*airways*) of the bee. Tracheal mites will physically obstruct the airway and feed on the walls of the trachea causing scarification of the tracheal tubes.



**Small hive beetles** are small uniform dark brown to black beetles about 5-7mm long with “clubbed” antennae. The larva will feed on the honey and pollen. If the infestation is severe enough the bees will abandon the hive. Beetles will hide in cracks and crevices of hive where they will lay their eggs.

*Please Note: The information in the table below is to provide guidance about the various treatment options. For complete application instructions, please refer to the directions provided on the product's label.*

Medication	Uses	Application	Treatment Period	Notes
Api Life VAR	Varroa Mites	Break one wafer into 4 pieces and place on the corners of the brood nest. <i>Apply 3 times every 7-10 Days</i>	30 Day Treatment. Temperatures must be between 64-95°F	Supers can be installed after treatment but cannot be harvested for 30 days.
MiteAway Quick Strips	Varroa Mites	Apply two strips near the edges of the brood nest.	7 Days. Daytime temperatures must be 50-92°F	Treatment can be done with honey supers on the hive. Strips are compostable.
ApiVar	Varroa Mites	Hang one strip per every 5 frames of brood. Typically two strips per hive.	Anytime when the bees are able to move about the hive. Not suitable during Honey Flow.	Supers can be installed 2 weeks after treatment.
Apistan	Varroa Mites	Hang two strips in the brood nest for 45 days	Anytime when the bees are able to move about the hive. Not suitable during Honey Flow.	Supers can be installed after treatment. There are pockets of resistance to the active ingredients, therefore, make sure the treatment is working.
Checkmite	Varroa Mite and Small Hive Beetle	Varroa: Hang two strips in the middle of the brood nest for 45 days. Small Hive Beetle: Staple half a strip to corrugated plastic and place at back of bottom board	Anytime when the bees are able to move about the hive. Not suitable during Honey Flow	Supers cannot be installed for 2 weeks after treatment. Pockets of resistance to active ingredients.
Fumagilin B	Nosema	Mix with sugar water and feed to bees. Dosage varies for spring and fall.	Cannot be fed during or right before Honey Flow.	Effective against Nosema Apis and Nosema Carenae
Terramycin	American Foulbrood	Following the outline of brood nest, dust top of frame bars three times on a 4-5 day interval.	Must be removed six weeks prior to honey flow.	Pockets of resistance to active ingredients. Once started, continue using on regular basis.
Menthol	Tracheal Mites	50 Grams of Menthol is applied over brood nest for 28 days.	Day time highs need to be over 70°F	Supers cannot be added for 14 days after treatment.
Gardstar	Small Hive Beetle	Applied to the ground around the hive(s) in 16-24" wide band.	Summer treatment when larva are leaving the hive to pupate.	Should be applied in the evening when bees are secluded to hive.