Guidelines

Guidelines for working with the predatory mite Stratiolaelaps scimitus against Varroa destructor.

Number of mites per hive: 5,000. If you have several hives, buy the mites in larger quantities, for example 25,000 pieces for 5 hives. Shake the sachet well, weigh and divide by 5.

In order for the predatory mites to do their job as well as possible, they need a good habitat under the beehive. The compost box under the beehive must be in direct contact with the soil. This video shows the compost box for the Warré beehive. These boxes are of course easy to adapt to your own beehive size. This link contains an updated version of the compost box for the Warré beehive.

If you work with this method you need to make sure your flying board is adjusted. If you work with a flying board that contains a Varroa mesh, this is not a problem, the mesh can remain. You do have to remove the slide and close the grooves so that the predatory mites can easily enter the cupboard. They don't like to take obstacle.

Compost

You start with a steamed, fairly fine compost, for sale in the trade, or take a compost of mushroom manure that you mix with a green compost 50%/50%. This compost does not contain much bio-life and so the predatory mites start looking for the Varroa mite in the beehive more quickly. Because the compost area has direct contact with the soil, bio-life is quickly restored in the compost. And also the humidity level remains ok. This is necessary, because if there is not enough Varroa left in the beehive, the predatory mites must be able to find food in the compost.

When do you introduce predatory mites?

You can introduce predatory mites all year round as long as the temperature is above 5 degrees.

How do you introduce the predatory mites?

If you have received the predatory mites, enter them as soon as possible. If necessary, you can store the predatory mites in the refrigerator for a few days. Empty the contents of the bag into the bottom tray (on top of the compost), preferably directly under the flying board. You can work them in slightly by hand if you cannot enter them directly under the flying board.

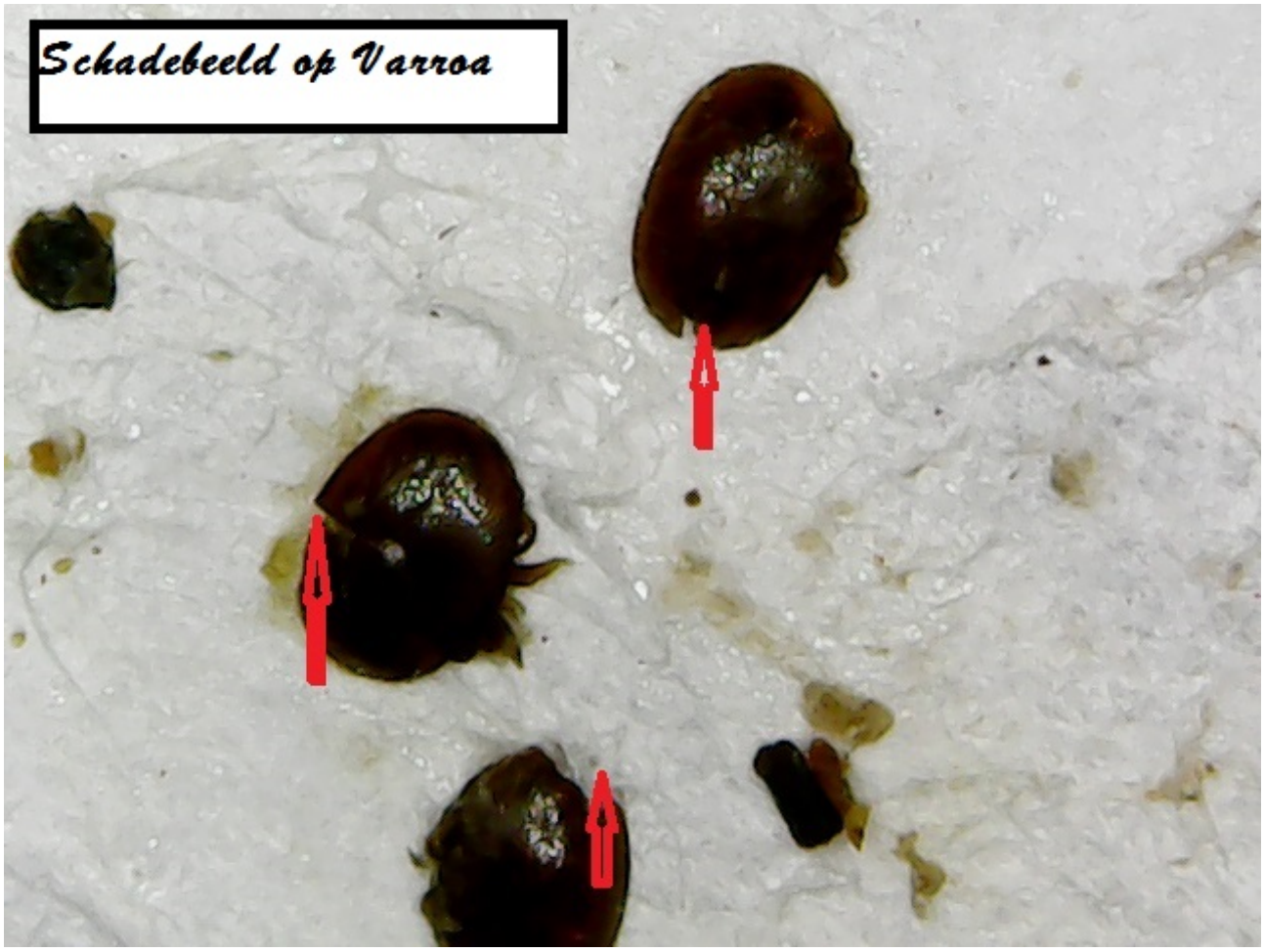
Inspection of the predatory mite

Monthly checking is necessary to check the condition of the predatory mites. You do this all year round, every month. If you neglect this and you have no control over your predatory mites, things will go wrong at some point.

How do you inspect your predatory mites?
Take a sample of the compost under the hive and place it in a small jar. Look at this sample under the microscope. There are various microscopes for sale. On this link you will find a microscope that you can connect to your computer. There are also macro lenses for your mobile for sale, for example this one, or this one. You can also buy microscopes that you connect directly to your mobile. For example here. (We just looked on the internet and have no cooperation with these parties).

You should be able to count at least 5 to 10 adult predatory mites and also a number of nymphs. If you see this, your predatory mite population is OK.

Place a white sheet at the bottom of the hive for 24 hours to see the natural fall of Varroa. This is also done in classic beekeeping. What you should see on this sheet:
max a few Varroa mites alive, you may also see predatory mites walking on the sheet and usually you see the nymphs. The dead Varroa that you see shows a typical damage pattern as you can see in the image below.



If you see all that, everything is fine. In addition, you can also use the powdered sugar method to test the possible amount of Varroa. This is certainly advisable if the checks performed are negative.

Negative inspection

What do you do if the check turns out negative? Then you repeat the test. If the result is still negative, take one of the following actions:

- Definitely do the powdered sugar method
- Order and enter new predatory mites as follows:
  If the Varroa pressure is very high, place a cardboard on top of the frames, this cardboard should cover 1/3 of the surface. Sprinkle the contents of the sachet onto the cardboard. The adult predatory mites will travel down through the hive. Meanwhile, they will attack any Varroa mite they come

across. After 12 hours, sprinkle what is left on the cardboard in the compost box. Do a check again after 2 weeks (put a sample of the compost and a white sheet in the cupboard as described earlier.)