

> KEY RULES FOR AN EFFECTIVE TREATMENT

- During the autumn treatment, **treat as soon as possible after removing supers** (after the last honey harvest).
- Treat all of your colonies **simultaneously** to avoid re-infestation.
- **The recommended dosage is 2 strips per deep brood box full of bees**
 - Effectiveness is not guaranteed with a lower dose.
 - A higher dose may increase the risk of leaving residues.

Number of frames covered with bees	<5	6-10	11-15	>16
Number of strips	1	2	3	4

- **Place the strips in the heart of the brood** (not on the edge). Do not hesitate **to check the strips' position during the treatment** (brood moving) and reposition if needed. If propolis begins to coat the surface, **do not hesitate to scrape the strips**.



Brood center



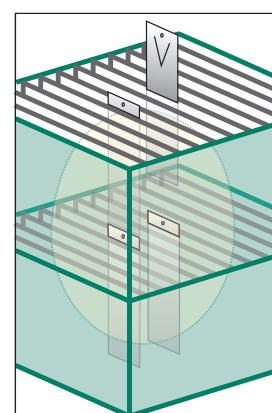
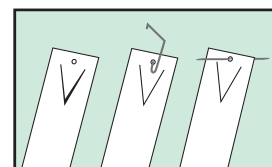
Brood edge

- **Respect the duration of treatment.** To avoid encouraging the development of resistance, do not leave the strips in place throughout the winter season.

> INSTALLING APIVAR STRIPS

Installing Apivar in the hive is easy. Just tear open the foil pouch, remove the double rigid strips, and follow these steps:

- 1 Remove honey supers before applying Apivar.
- 2 Separate the double rigid strips.
- 3 Use the strips' die-cut triangle as hanging hooks, or use a toothpick.
- 4 Hang each strip between 2 comb frames in the brood area or the bee cluster, with a minimum distance of 2 frames between strips. Suspend Apivar strips in the brood chamber so bees can walk on both sides of the strips.
- 5 Leave strips in the hive for a minimum of 42 days, and then remove. **DO NOT** re-use the strips.

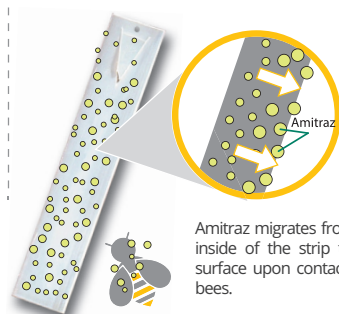


> MODE OF ACTION

Apivar works by contact only. **It is very important to position the strips in an area of high bee activity, typically in the center of the brood area.** This ensures that bees will come in frequent contact with the strips, thereby distributing amitraz throughout the hive. Some practices, such as bee feeding, can increase activity.

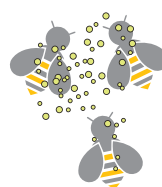
To ensure an effective treatment, it is also important to respect Apivar dosage. If a reduced number of strips is used, honey bees will have less contact with amitraz, and the treatment may not be effective.

1 Bees walk on the strips, picking up molecules of amitraz.



Amitraz migrates from the inside of the strip to the surface upon contact with bees.

2 The bees distribute amitraz through contact with each other.



3 Mites on the bees are exposed to the amitraz which leads to paralysis and starvation.



4 The mite population drops and subsequent mite generations are also killed.



> HOW TO OBSERVE MY TREATMENT

APIVAR'S SLOW-RELEASE TECHNOLOGY

- No knock-down effect
- Varroa fall rises through the six weeks of treatment

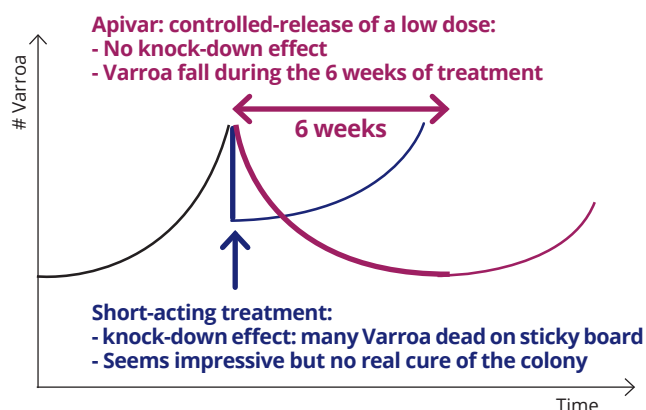
The plastic polymer of Apivar strips has been developed to continuously release amitraz over at least 6 weeks, killing several successive generations of Varroa mites.

Therefore Varroa falls in the beginning of Apivar treatment may be lower than in a flash treatment, such as Taktic (not authorized for use in bees). This is normal, and does not mean the treatment is ineffective.

As illustrated by the chart below, flash treatments may seem effective in the beginning of the treatment but do not control the overall infestation of the colony. **A long-acting treatment like Apivar kills several successive generations of Varroa mites during the 42-day treatment period. As a result, the colony remains clean for the long term.**

At the end of the 6 weeks treatment, Apivar efficacy is between 97% and 99%.

Model comparing the release of amitraz in Apivar versus flash treatments



SOME ADVICE TO IMPROVE APIVAR'S EFFICACY

Reposition the strips for optimum results

If the bee cluster moves away from the strips, reposition the strips into the bee cluster, and leave them in place for 14 more days before removal.

In case of heavy infestation

During heavy infestations, the strips can be left for up to 56 days, but must be removed after this period.

A question about your treatment ?

Phil Craft, Apivar's U.S. technical advisor, can answer your questions. Contact him at phil.craft@vetopharma.com