Reducing overwinter mortality with Apivar

In winter mortality monitoring, with more than 20,000 hives over 7 years, Apivar significantly reduced mortality compared with other organic and conventional treatments.

Regional study report "Pertes hivernales 2014-2015 en Alsace". Chamber of Agriculture of the Alsace Region Ballis A. - June 2015

Wintertime losses according to anti-Varroa medications used over 7 years of study in Alsace, France (2009-2015) Apivar is a product of Véto-pharma, a French pharmaceutical company that develops and markets innovative products to help beekeepers prevent and control **hive diseases and infestations** for more than 20 years.

> Apivar is manufactured in a dedicated facility operated to the highest standards in pharmaceutical manufacturing.

Formulated by beekeeping experts for beekeepers

As a result, beekeepers around the globe can be confident that each Apivar strip is consistent, safe for bees and humans, and meets or exceeds stringent pharmaceutical quality standards.

Véto-pharma is dedicated to developing products that benefit bees and beekeepers. Our passion for bees and beekeeping is reflected in our good relationships with beekeepers and beekeepers' organizations all around the globe.

www.veto-pharma.eu



TEAM SPIRIT CUSTOMER SERVICE HONEY BEE HEALTH **TECHNICAL SUPPORT** VARROA EXPERTISE PHARMACEUTICAL STANDARDS NUTRITION CONFIDENCE ASIAN HORNET EFFICACY MADE IN EUROPE **WORLD LEADER** #STOPVARROA RELIABLE PARTNER High quality products for healthy bees

PASSION

APIVAR® 500 mg Amitraz Bee-hive strips for honey bees. Indication(s) for use: Treatment of varroosis due to Varroa destructor sensitive to amitraz in honey bees. Contraindication(s): Do not use in case of known resistance to amitraz. Withdrawal period(s): Honey: zero days. Do not use during honey flow. Do not extract honey from the brood chamber. Do not harvest honey when the treatment is in place. Brood combs should be replaced with new foundation at last every three years. Do not recycle brood frames as honey frames. Read carefully the instructions on the product booklet label before use. Special precautions to be taken by the person administering the veterinary medicinal product to animal: This veterinary medicinal product contains amitraz which can lead to neurological side-effects in humans. Take particular care in case of concomitant treatment with monoamine oxidase inhibitors, hypotensive treatment or if you have diabetes. Amitraz may cause skin sensitization. Avoid contact with skin. In case of contact, wash thoroughly with soap and water. Avoid contact with eyes. In case of contact, rinse with plenty of water immediately. Usual beekeeping protective clothes including impervious gloves should be worn when handling the product. Do not eat, drink or smoke whilst handling the product. Keep children away during application of the product. Wash hands after use. Do not inhale or ingest. If side effects are noted, seek immediate medical assistance and show the label to the physician. v0917. Apivar is a veterinary medicinal product. Please ask advice to your veterinarian, pharmacist or sanitary organization. In case of persistence of clinical signs, consult with your veterinarian.

OXYBEE powder and solution for 39,4 mg/ml bee-hive dispersion for honey bees. Indication(s) for use: For the treatment of varroosis (Varroa destructor) of honey bees (Apis mellifera) in brood free colonies. Contraindication(s): None. Withdrawal period(s): Honey: zero days. Do not use during honey flow. Read carefully the instructions on the product label before use. Special precautions to be taken by the person administering the veterinary medicinal product: This veterinary medicinal product is highly acidic and could have irritating and corrosive effects on the skin, eyes and mucous membranes. Avoid oral exposure, including hand-to-mouth contact. Avoid direct skin and eye contact, as well as hand-to-eye contact. Personal protective equipment consisting of protective clothing, acid-proof gloves and safety glasses should be worn. Wash hands and exposed skin with soap and plenty of water immediately. Do not eat, drink or smoke whilst handling and applying the veterinary medicinal product. Remove contaminated clothing immediately. Used measuring devices and empty containers should be disposed of immediately in a proper way. In case of accidental ingestion, clean the mouth with water and drink water or milk, but do not induce vomiting. In case of eye contact, immediately rinse the eye thoroughly with water (remove contact lenses first). Seek medical advice immediately and show the package leaflet or the label to the physician V0917. Oxybee is a veterinary medicine. Please ask advice to your veterinarian, pharmacist or sanitary organization. In case of persistence of clinical signs, consult with





One single application, up to 99% efficacy¹ long period of protection



Safe for honey Safe composition of amitraz

and plastic strip only²



Not harmful to brood and bees³



Proven • Trusted •

leader countries



million colonies treated per year



1 - Efficacy tests: Anti-varroa treatments - FNOSAD [National Federation of Departmental Apiarian Health Organizations] 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015 and 2016 - France // 2 - Amitraz residue transfer into honey from Apis mellifera hives treated with Apivar® - Jeff Pettis, USDA-ARS, Beltsville, MD USA - 2013) // 3 - Apivar registration dossier (2015). Study 2026-2015 - Testapi

No evidence of resistance - Effectiveness proven by various studies in different countries

France (from 2007 to 2016)

Mean efficacy on more than 100 colonies per year in different apiaries located in different regions of France

National Effectiveness Monitoring of the French Federation of Sanitary Beekeeping Organizations (FNOSAD) of 2007-2016



Alberta - Canada (2011)

17 242

Apilife Var®

20 %

Efficacy of Apivar® on the Varroa mite, Varroa destructor, in Alberta Canada

Apivar® Apiguard® Apistan® MAOS® Homemade Amitraz

48

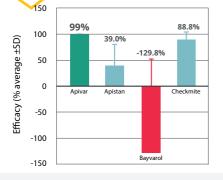
1 215

formic acid (cardboard and

6 695

6 541

Nasr et al, 2012, Canadian Pest Surveillance Branch, Research and Innovation Division, Agriculture and Rural Development.



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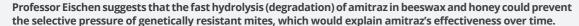












EISCHEN FA, GRAHAM RH (2014). Amitraz Resistance by Varroa destructor in US colonies - Journal of Economic Entomology

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A unique amitraz based product

Apivar's **slow release technology**

Safe for bees and for honey

> Simple and safe composition of two ingredients

Amitraz is a miticide that paralyzes Varroa mites. Varroa cannot keep holding on to the bees and fall to the bottom of the hive, leading to their starvation.

Plastic polymer strip:

Specially designed to ensure a regular release of amitraz on the surface of the strip after its placement in the hive. The polymer strip was chosen for its rigidity and its ability to continuously release the active ingredient over a minimum six-week period.

• Safe for honey •

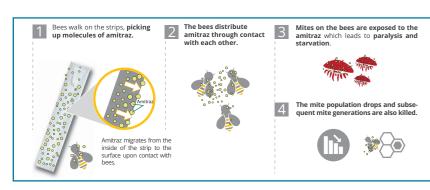
- No temperature constraint
- Safe formulation for the beekeepers •

Apivar Apivar By Véto-pharma

Not harmful to brood and bees

> How it works in the colony

Apivar works by contact: the active ingredient is continuously delivered over time. As bees walk on the strip's surface, they pick up molecules of the active ingredient and then distribute them throughout the colony.



> One single application, long period of protection

No knock-down effect: it is normal not to always see a high fall in the first days of the treatment

Varroas fall through the duration of the treatment.

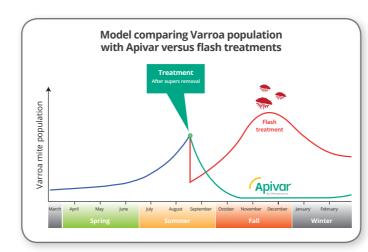
At the end of the treatment, Apivar efficacy is up to 99%.

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. This is normal, and do not means the treatment is ineffective.

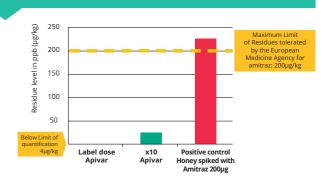
As illustrated by the chart on the right, flash treatments may seem effective in the beginning of the treatment but do not control the overall infestation of the colony.

> A long-acting treatment like Apivar kills several successive generations of Varroa mites during the treatment period. As a result, the colony remains clean for the long term.



Apivar is safe for bees and products hives thanks to the high quality of its components and its controlled-release technology.

This recent study proves that Apivar is safe for honey, even in colonies treated with 10 times the recommended dosage.



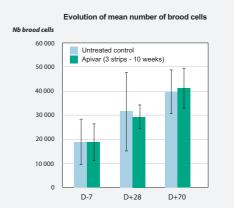
Amitraz residue transfer into honey from Apis mellifera hives treated with Apivar® leff Pettis, USDA-ARS, Beltsville, MD USA - 2013

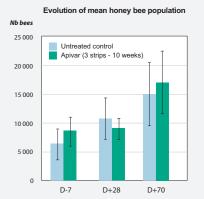
MRL EMA: Maximum Limit of Residues tolerated by the European Medicine Agency for amitraz, its residues, and its metabolites in honey for human consumption.



> No negative effect for brood or bees

Total population before and after a ten-week treatment with 1.5 times the dosage of Apivar Apivar registration dossier (2015). Study 2026-2015 - Testapi





Unique Proven Trusted



Want to become a Varroa mite expert? Download our Varroa guide on www.veto-pharma.eu