

Technology

Animal Health

Oxavar - Organic Antiparasitic Agent



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#acaricide | #antiparasitic | #organic | #varroa | #apiculture | #oxalic acid

<https://www.argentina.gob.ar/inta/tecnologias/antiparasitario-organico-oxavar>

Varroosis, a disease caused by the *Varroa destructor* (Anderson and Trueman 2000) mite, generates serious economic losses in beekeeping. The Varroa mite chiefly affects *Apis mellifera* L., consuming fat bodies and hemolymph of bees, thus impairing hive evolution and performance. Reports indicate that varroa is a vector of a virus and bacteria complex that contribute to increase their virulence. When the mite colonizes an apiary, beekeepers are required to apply different treatments to control it and avoid colony death. Prior to the development and launch of this product, most control treatments in Argentina were performed with synthetic acaricides with a certain degree of success in their control.

An organic acid like oxalic acid (OA) is a dicarboxylic acid found in plants in variable quantities. According to European regulations (Regulation EEC No. 2377/90), oxalic acid is under Annex II, on safe, non-toxic veterinary medicinal substances, not subject to maximum residue limits (MRL).

Oxavar® organic external antiparasitic agent comes in a pouch with wettable salt formulation for dilution in distilled water that can be applied by sprinkling or spraying on the hive frames. Each pouch allows treatment of 50 beehives. The acaricide action is produced by contact.

Issues or needs addressed by the product:

Fully organic varroa control.

High acaricide efficacy in the absence of offspring.

Excellent tool to incorporate in the Integral Management of Varroosis.

No residues in honey.

The lowest cost in the market of acaricides for beekeeping.

The main active ingredients adopted were pyrethroids (fluvalinate, flumethrin), phosphorates (coumaphos) and formamidines (amitraz), which promoted inadequate use and excessive residue traces in honey, wax and propolis and resistance in the mite population.

Eradicating Varroa is impossible, therefore, beekeepers are required to develop management strategies that enable to mitigate the effects produced by incorrect apiary practices. Such issues led to research on alternative control methods, like the use of organic acids and essential oils.

Transferred product.