### **ADVANTAGES**

- High quality standard
- ✓ Full safety for the consumer, bees and beehive products
- High EFFECTIVENESS AND TOLERABILITY
- ✓ Allowed in organic beekeeping
- ✓ Powder easily soluble in sugar solution at room temperature
- Double possible ways of administration (by trickling and vaporisation)



- API-Bioxal bag 35g (for the treatment of 10 beehives)\*
- API-Bioxal bag 175g (for the treatment of 50 beehives)\*
- API-Bioxal bag 350g (for the treatment of 100 beehives)\*

# Api-Bioxal







Acaricide soluble powder based on Oxalic Acid against Varroa





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<sup>\*</sup>considering 10 frames full of bees (administration by trickling)

# Api-Bioxal

Api-Bioxal is an acaricide soluble powder based on **oxalic acid** for the fight against Varroa.

OXALIC ACID is one of the most common and best natural acaricides used against varroa.

Api-Bioxal is authorised in Italy like Veterinary Medicine.

The product could be used as a treatment among others within an Integrated **Pest Management program**;

**API LIFE VAR®** (Thymol, Menthol, Eucaliptus, Menthol) and **APIBIOXAL** used in different periods of the year assure an excellent control of the varroa infestation during all the year.

### PHARMACEUTICAL FORM

Acaricide soluble powder

100 g of product contains 88,60 g of **Oxalic Acid Dihydrate** (Active substance)

### **PERIOD OF USE**

The Oxalic acid works best on colonies that are broodless.

The presence of brood may reduce noticeably the efficacy of API-Bioxal.

### **ADVICE FOR USE**

- To obtain a higher efficacy, use the product in colonies broodless.
- Do the treatments without supers.
- All colonies in the same apiary should be treated simultaneously to avoid reinfestations.
- When handling powder product (both during vaporisation phase and pre-treatment phases) wear protective mask type FFP2, gloves and protective glasses.
- Do not use simultaneously with other acaricides.
- Possible overdose can trouble the future colonies development.

### **SAFE PRODUCT**

Oxalic acid, the active ingredient of API-Bioxal, is a natural honey constituent and its concentration in honey depends on the botanical source. No increase of oxalic acid residues over the natural content of honey is to be expected as a consequence of proper API-Bioxal administration.

Oxalic acid is NOT subjected to a maximum residue limit (MRL) in the honey (Reg. UE n° 37/2010 Tabella 1)

Api-Bioxal is authorised in Italy like Veterinary Medicine.

### WITHDRAWAL PERIOD

Honey: Zero days

### **Organic beekeeping**

Api-Bioxal is allowed in organic beekeeping (Reg. CEE 2092/91 and following modifications).

### **EFFECTIVENESS**

Api-Bioxal ensures HIGH EFFECTIVENESS (see graphics) and GOOD TOLERABILITY for bees

### **POSOLOGY AND METHOD OF ADMINISTRATION**

### A) Posology and method of administration by trickling:

Open the sachet of API-Bioxal and dissolve all the powder in the indicated amount of syrup (water and sucrose in a 1:1 ratio).

- API-Bioxal bag 35g: dissolve in 500 ml of syrup.
- API-Bioxal bag 175g: dissolve in 2.5 l of syrup.
- API-Bioxal bag 350g: dissolve in 5.0 l of syrup.

The treatment should be made in a single administration, dropping the solution on the frames with a syringe, **in dose of 5 ml** for frame full of bees.



Administration by trickling

### B) Posology and method of administration by vaporisation

- Fill with 2.3 g of API-Bioxal the pan of the vaporizer
- Seal the entrance of the hive to avoid escape of bees and smoke.
- Power the vaporizer following the manufacturer's directions for about 3 minutes and keep the hive shut for another 10 minutes.
- Cool down and clean the vaporizer after every use



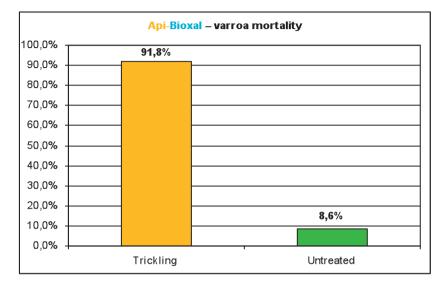
Administration by vaporisation

### **EFFECTIVENESS**

### Field Trial – Summer 2010

## Administration by trickling CRA-API Bologna

Dr Antonio Nanetti – Dr Andrea Besana – Dr. Roberto Romanelli



Field trial - winter 2010

### Administration by vaporisation and trickling

CRA-API Bologna

Dr Antonio Nanetti – Dr Andrea Besana – Dr.ssa Elisa Gianessi

