

AN INNOVATIVE, 100% BIOLOGICAL SOLUTION AGAINST FRUIT FLIES

DURABLE CONTROL WITH A SMARTER APPROACH

Targeted action

High efficacy

Self-propagating action

Unique patented solution



NOVAPROTECT®



BIOINSECTICIDE

MANGO

NOVAPROTECT®

BIOINSECTICIDE

NOVAPROTECT® is an innovative self-disseminating solution against fruit flies (*Ceratitis* spp., *Bactrocera* spp.) based on the fungus *Metarhizium acridum* strain E01. The product combines a specific attractant with an entomopathogenic fungus: the flies are attracted, become infected upon contact with the spores, and then spread the infection within their population. The fungus penetrates the cuticle, kills the insect, and sporulates on the carcass, creating a new source of infection. This eco-friendly, targeted technology—which uses no chemical insecticides—enables a sustainable reduction in fruit fly populations and reproduction, ensuring a long-lasting control.

ADVANTAGES

- Targeted control of fruit flies.
- Protects beneficial insects.
- Wide range control with self-dispersion.
- Sustained reduction of adult populations (males & females).
- No chemical pesticides.
- Compatible with organic farming.
- Natural and innovative mode of action.
- Enhanced safety for the operator and the environment.
- Reduces the risk of resistance.
- Ideal solution for demanding export markets.
- Zero residues & 0 MRL

*For more details and safety precautions, refer to the label.

BENEFITS



Cost-effectiveness
Long-lasting effectiveness



Safety
No toxicity, ecotoxicit



Performance
Effective at all life stages of the pest



Natural
100% organic

CROPS / PESTS	DOSE	APPLICATION	PHI(D)*
Mangoes <i>Ceratitis</i> spp. <i>Bactrocera</i> spp.	20 devices/ha Equivalent to 4.55×10^{10} spores/ha	Replace the release devices every 6 weeks - Hang each device from a sturdy branch, 1.5 m above the ground	0

*PHI (Pre Harvest interval) - D = Days

Wear gloves and a mask when handling the product. Keep out of reach of children.

COMPOSITION

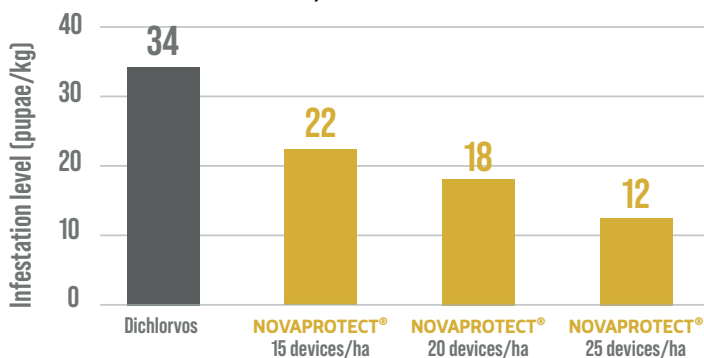
Pheromone-based attractant +
Patented *Metarhizium acridum* strain E01.

PACKAGING

Spore coated gauze (4.33×10^9 CFU/gauze) + specific attractant, packaged separately for optimal effectiveness and shelf life.

MORE INFORMATION

Efficacy trials against *Bactrocera dorsalis* and *Ceratitis cosyra* on mango
Ivory Coast 2024



NOTES

NOVAPROTECT®

Mode of action



Attraction

The attractant food lure or male lure draws adults to the device; residual effectiveness lasts for 12 weeks.



Contamination

Contact between the adult and the treated gauze inside the device causes the spores to adhere to the fly's surface.



Mass mortality of flies observed after 3-10 days depending on environmental conditions (heat, humidity).



Horizontal transmission (self-spread)

The infected fly emerges from the device and infects other individuals through direct contact.



Marketing

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