Nomu-Protec

Metarhizium rileyi* for the control of several lepidopteran insect pests

* Previously known as Nomuraea rileyi
Nomu-Protec contains the insect specific fungus *Metarhizium rileyi*

The active agent *Metarhizium rileyi* (> $1 \times 10^9$ spores/g), is a naturally occurring entomopathogenic fungus that infects and controls lepidopteran pests, especially those from the Noctuidae family. The host-range includes the economically important Fall armyworm (*Spodoptera frugiperda*) and African Bollworm (*Helicoverpa armigera*) amongst others. Nomu-Protec’s unique formulation prevents the fungal spores from drying out and enhances penetration and infection of the pest.

In numerous field trials, Nomu-Protec proved to be very effective against bollworm, revealing a significant decrease in the pest population (see table below). Nomu-Protec also shows effective reduction in feeding damage comparable with a registered standard control.
**Mode of Action**

*Metarhizium rileyi* has the ability to infect certain lepidopteran larvae, especially Noctuids. With its unique dual mode of action, *Metarhizium rileyi* spores can either penetrate through the cuticle or enter the larvae through ingestion during feeding (see figure below). Once inside the larvae, the fungus grows and multiplies, eventually killing the larvae by internal tissue destruction. Between 2 – 4 days after the initial infection the larva stops feeding and dies 5 – 7 days later. Once the larva has died the fungus will sporulate, therefore having the ability to remain in the environment, re-infecting the next generation of pests.

**Method of Application**

- Mix with water at recommended rate (300 – 600 g/ha) and apply as a full cover spray every 3 – 14 days depending on crop and severity of pest.
- Preferably apply product when humidity is high, and UV is low – i.e. late afternoon.
- Good spray coverage is essential.
- Wetters and other adjuvants are not needed unless recommended.
- Ensure areas where pests are habitually found are covered – i.e. underside of leaves or in leaf folds.
- Avoid the use of broad spectrum fungicides for at least three days before and after Nomu-Protec applications.
Nomu-Protec

✔ Unique formulation
✔ Control of various lepidopteran pests, especially Noctuids
✔ No residues and no withholding period after application