Product data sheet

Mirical

Macrolophus pygmaeus | Predatory bug



- Generalist predator with a preference for whitefly
- Also has an effect on *Tuta absoluta*
- Especially for use in tomatoes

Use for

Pests

Greenhouse whitefly (*Trialeurodes vaporariorum*), Tobacco whitefly (*Bemisia tabaci*), eggs and caterpillars of tomato leaf miner moth (*Tuta absoluta*) and other moths. Also feeds on two spotted spider mites (*Tetranychus urticae*), aphids and leaf miner larvae (*Liriomyza* spp.).

Crops

Especially tomato (can cause damage to other plants).

How it works

Mode of action

Adult predatory bugs and nymphs actively search for their prey and suck them out. The skin is left behind in its original form.

Appearance

- Adults are 3-3.5 mm in size, bright green, slim build with long legs and antennae
- Nymphs look similar, but are smaller and wings are not yet fully developed
- Eggs are not visible to the naked eye. They are laid in plant tissue and only a small pennant projects from the leaf



Macrolophus pygmaeus nymph



Macrolophus pygmaeus adult



Macrolophus pygmaeus adult preying on whitelfy

Visual effect

Macrolophus pygmaeus sucks out the body contents of its prey leaving only the empty skin.



Watch the biological control video of Mirical

Product specifications

Pack size

500 adults and nymphs.

Presentation

100 ml bottle.

Developmental stage

Nymphs and adults.

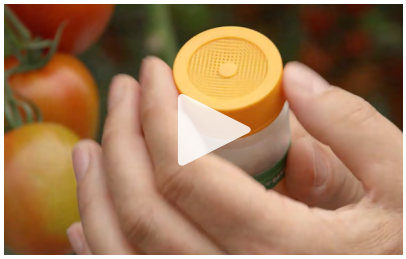
Carrier

Wood chips and buckwheat hulls.

Directions for use

Application

- Introduce Mirical at the beginning of the growing season and provide Entofood and/or Artefeed as food source, as the predatory bug population needs time to establish and develop. Mirical can also survive on plant saps, however absence of animal prey slows down the population build-up significantly. Sprinkle material on clean, dry rock wool slabs, in Diboxes or on leaves. Make sure the material is not disturbed for at least a few hours
  Introduce in clusters of at least 50 predatory bugs
- Create 6-10 distribution points per bottle
- Spread material thinly (maximum 1 cm thick) to enable the predatory bugs to get out of the carrier materia



Watch the Application video of Mirical

Dosage
The dosage of Mirical depends on climate, crop and expected pest density and should always be adjusted to the particular situation. Start introduction preventively. Introduction rates typically range from 0.25-5 per m^2/release. Releases should be repeated after 2 weeks. Consult a Koppert advisor or a recognized distributor of Koppert products for advice on the best strategy for your situation.

Environmental conditions
Optimal temperatures for Mirical are above 20°C/68°F, lower temperatures slow down the development of *Macrolophus pygmaeus* significantly.

Combined use
Should be used in combination with whitefly parasitoids.

Side effects
Pesticides can have (in)direct effects on biological solutions. Find out which pesticides have side effects on this product.

Product handling

Storage time after receipt
Apply as soon as possible after receipt. If necessary, the product can be stored for 1-2 days.

Storage temperature
8-10°C/47-50°F.

Storage conditions
In the dark, bottle horizontally.

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