SEDQ Healthy crops in our hands

SEDQ Healthy Crops S.L.
Carrer Llull, 41
08005 Barcelona – Spain
Tel. +34 93 719 04 71 | Fax +34 93 719 47 90
comercial@sedq.es | **www.sedq.es**

Tutatec

Use in mating disruption to manage the tomato leaf miner *Tuta absoluta*

The tomato leaf miner, *Tuta absoluta* (Lepidoptera: Gelechiidae) is a moth that causes damage to tomato, eggplant and other Solanaceae. It is a pest native to South America which is widely spread in Europe and Africa.

In warm areas, it may have between 10 to 12 generations, persisting thoughout the year. Temperature affects considerably the development of this species. The life cycle can last 29 days at 30ºC and extend until 89 days at 15ºC. Low temperatures affect drastically the survival of this species.
Females can lay 40-50 eggs up to 260 during their lifetime. Larvae can attack fruit, leaves or stems. They bore into the leaf consuming the mesophyll creating as a result irregular galleries that can necrose. The damage is therefore detected in the form of galleries in stem, flower and fruit. Once the fruit is injured by this species, it can be secondarily attacked by other pests or diseases.

Tuta absoluta
Lepidoptera: Gelechiida

CONTROL MANAGEMENT

The management of this species is mainly carried out by the application of chemical treatments. There are a few phytosanitary products which are efficent but the use of these chemicals is limited due to the facility of this species to develop resistance.
It is therefore recommended to apply an integrated management combining different techniques to control this species. So besides chemical treatment it is proposed mating disruption as an alternative tool. This technique consists of creating a saturated atmosphere with sex pheromone of the target insect to confuse males and therefore avoid or diminish the number of matings. Mating disruption is especially effective when pest pressure is not high. In case population is important, it is recommended the application of a complementary treatment in order to reduce the pressure, anyhow the use of this technique decreases the amount of chemicals applied.

FORMULATION

Dispensers

The product TUTATEC is a dispenser comprising the blend of two compounds (E,Z,Z)-(3,8,11)-tetradecatrienyl acetate and (E,Z)-(3,8)-tetradecadienyl acetate. These compounds are described as components of the sex pheromone of *Tuta absoluta.*
The material of the dispenser is permeable to vapors and allows the emission of the different products at a controlled rate.
In regular weather conditions, the field life of the dispenser is around 180 days, although it may be reduced at high temperatures or strong winds.

APPLICATION

▪ Dispensers should be put in the plot a few days before the planting or in the very beginning.
▪ Each dispenser should be put directly in the overhead support wire (approximately at 1.6-2 m high, depending of the height of the wire) or tied to a string at 1.6-2 m high. The number of dispensers per hectare recommended is 300 placed in an alternate homogeneous distribution.
▪ It is advisable to monitor the pest by the deployment of 2-3 monitoring traps. The trap recommended to be used is the water trap with the corresponding dispenser for monitoring (TUTALAB LT). This dispenser should be put into the basket which will be fixed in the middle of the water trap. Each trap should be placed 30 cm above the ground. The captures observed in the monitoring traps determine the correct efficacy of the technique.
▪Monitoring traps should be kept full of water with some droplets of odorless detergent. Also it is convenient to remove the insects captured in the traps regularly in order to avoid saturation of the devices.
▪It is also recommended to do regular damage assessments. Depending on the number of captures in the monitoring traps and level of damage it might be considered necessary to apply an additional treatment.

HANDLING AND STORAGE

TUTATEC dispensers are supplied in packages of 200 units. The material of the packing is impermeable to vapors of the different products. It is recommended to keep the product in its original packaging, unopened in the freezer until ready to use. Under these conditions, the product can be stored for at least two years.
With the usual handling of the product, there is no risk of toxicity on people, animals or plants. The product is a dispenser that emits to the air vapors of the active substance at a controlled rate.
For the same reason, risk of water and soil pollution may be excluded. It is recommended the use of gloves in the handling of the dispensers. The dispensers used and their packaging must be managed according to current legislation for residues disposal.

www.sedq.es
comercial@sedq.es