

## **Tp-Nema®** Biological Control of Oak Processionary Moth

### **Product**

Tp-Nema® contains the nematode *Steinernema feltiae* and approx. 275 g moisturizing additive. The nematodes are formulated in a wettable powder, enclosed in a Non-Water-Soluble pack.

Packaging size: 250 million nematodes for 250 litres of water

### **Storage**

Unopened package can be stored at 4°C - 8°C for max. 6 weeks. Do not freeze or expose to more than 30 °C. Use as soon as possible upon delivery.

### **Application time**

Start application as soon as the majority of the larvae have hatched from the eggs. In many regions, this occurs in April. Repeat the treatment after 10 – 14 days, so you can reach larvae that hatched at a later time. An advanced leaf development promotes the even distribution of the nematodes in the crown and thus the effect. Ideally only use up to the 3<sup>rd</sup> larval to protect non-target species.

### **Application conditions**

The most important factor for application is a wind-speed of less than 2 Beaufort. Spray in the evening or at night between 8:00 p.m. and 6:00 a.m., during this time the larvae migrate in the tree and are easy to reach.

It shouldn't rain heavily for the next 2 hours after application.

On the other hand, high humidity is of advantage. The temperature must be at least 8 ° C during application and two hours afterwards.

### **Application**

The recommended dose rate is 100 million nematodes plus approx. 110 g additive for 100 litres suspension (1 million nematodes/litre). Per tree 3-10 litres of suspension is required.

**The additive is needed to ensure the survival of the nematodes on the larvae.**

Trees < 9 meter: Treatable with and without leaves, 1-3 litres/tree, 30 trees/hour

Trees 9-18 meter: Treatable with and without leaves, 3-6 litres/tree, 15 trees/hour

Trees > 18 meter: Only treatable with foliage, 6-10 litres/tree, 10 trees/hour

### **Preparation of suspension**

- Rinse equipment with water before using Tp-Nema®
- Remove all filters and sieves
- Add ¾ water to the tank
- Switch on agitator
- Add additive to the tank and agitate for approx. 20 minutes
- Dissolve Tp-Nema® in 5 litres of water
- Fill suspension into the tank and agitate well
- Fill tank with water and start application

### **Application of suspension**

- Ensure that the tree canopy is completely wetted
- Remove all filters and sieves
- Use nozzles with a diameter of at least 0.8 mm
- The pressure should not exceed 5 bar

### **Mode of action**

Nematodes enter the larvae of the Oak processionary moth and release their symbiotic bacteria. The bacteria reproduce and kill the larvae within 10 days. Under good conditions and after a second application 80% of the larvae are dead. The nematodes control all larval stages. Because of the urticating hairs of the larvae an application after the 4<sup>th</sup> larval stage is not recommended

### **Safety/ Side effects**

Effects on humans, pets and plants are not known. However, the nematodes can also attack larvae of other butterfly species if they are hit during spraying. Two hours after spraying, there is no longer any risk for other species.

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#### **e-nema®**

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