







FELTIELLA-SYSTEM

Feltiella acarisuga

Feltiella is a predatory gall midge of spider mites. In greenhouses it is mainly used for the control of Tetranychus urticae (two-spotted spidermite) and T. cinnabarinus (carmine mite). Feltiella adults are strong flyers (>45 m) and once established can disperse through the entire crop. However dispersion will not occur until food in the original release point is scarce, so proper distribution in the greenhouse is key. Female midges have an excellent searching capacity, and can easily find spidermite colonies (even small ones) to lay their eggs in. One female can lay 25-35 eggs in her entire lifespan. Immediately after hatching, the larvae start sucking their prey empty. One larva can eat 30 spider mites in any developmental stage, including diapausing ones. Feltiella has 4 larval stages and can prey on as many as 5 times more spidermites per day than Phytoseiulus. Feltiella also works on dark, cloudy and cold weather, so it can be applied in autum/early spring and in strawberry production.

Product Specifications

Commercial name	Specifications	
Feltiella-System - 250	100% biodegradable container: 250 pupaeCarrier: shredded paper	

Storage

Use immediately upon receipt. If not possible, product can be briefly stored in at $43-46\,^{\circ}F$ (6-8 $^{\circ}C$).

Features

- · Voracious predatory midge
- Strong flyer with great searching capacity
- The larvae feed on all stages of various spider mites
- Feeds on diapausing mites
- · Adults feed on pollen and nectar
- Active even in cold and dark weather,
 e.g. in spring and autumn
- Contrary to some other gall midges, larvae of F. acarisuga do not feed on plant tissue, creating abnormal plant growths called galls

Targets

Spider mites

Crops

- Vegetables / Herbs
- Soft fruit / Strawberries
- Ornamental crops
- Tree and shrub nursery
- · Medicinal cannabis / Hemp



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Rates

Mode	Dosage	Area	Repeat
Low curative	1 cup per hotspot	Hotspots and surroundings	Minimum 3x weekly
High curative	10 ind./m² 10 cups/ha	Full field	3x weekly

Instructions

Release method and conditions

- 1. Use Feltiella in hotspots.
- 2. Place cup on hotspots, on top of slabs, on pots, tables or directly on the ground.
- 3. Protect from direct sunlight and water.
- 4. Remove the lid from the cup, so that the adult midges can escape after emergence.
- 5. Leave the cup in the crop for at least two weeks

It is recommended to use Feltiella-System in combination with other predatory mites such as P. persimilis or californicus for best results. For optimal control, a humid environment is required (RH>80%) with a temperature of 68-81°F (20-27°C).

Monitoring

- · Larvae can be found in or close to dense spider mite colonies
- Sometimes it is easier to spot the pupae (cocoons). They tend to pupate close to leaf veins on the underside of leaves.
- Adults are nocturnal, so during the day they may be spotted resting on the underside of leaves.

Life cycle and appearance

Egg	Larva	Pupa	Adult
Translucent light brown color	Predacious in this stage	White, fluffy cocoon	Mosquito like
• 0.25 mm	Brown-yellow color	• 1-1.5 mm long	Brown color
• Duration: 2-3 days*	Four larval stages	Usually found near the veins of	Short, segmented antennae
• Fecundity: 33 eggs	• 1.5-2 mm long	the leaf	• 2 mm long
	4 larval stages	Duration: 4-6 days*	Lifespan: 14 days*
	Duration: 4-6 days*		Adults feed on pollen/nectar
			and are not predatious

^{*}At an average temperature of 73°F (23°C). It requires high RH to complete its cycle, minimum 65%.