

# Atheta

ATHETA CORIARIA



## The scorpion of biological control against fungus gnats



A single *Atheta coriaria* will typically consume between 10-20 prey per day. This predator when stressed or disturbed exhibit their trademark 'upward curving' of their abdomen, in a way resembling a scorpion. These beneficial insects move quite quickly and are capable of flight when needed.

### Target

- Young larvae and adult Fungus Gnats (Sciaridae)
- Pupae to adult Western Flower Thrips (*Frankliniella occidentalis*)
- Shore Flies (Ephydriidae)

### Unit of Packaging

Pack size: 1 L tube with 1,000 rove beetles and a 5 L bucket with 5,000 rove beetles. Both packs use peat as a medium.

### When to use Atheta?

Atheta is most effective when introduced preventatively, prior to the pest population establishment.

### How Atheta works?

Atheta is a soil-dwelling species of rove beetle with an aggressive appetite that is attracted to the decomposing of biological matter where their prey is typically found. As they can travel readily within the environment they are released into, they can easily populate and colonize their release area.

### Application

The beetles should be applied right away upon receipt, though if necessary can be held at 50°C for up to 7 days. Typically, one application at the beginning of the growing cycle, and a small re-application at each transplant is sufficient to enable Atheta populations to establish effectively. To increase likelihood of reproduction, release at least 50-100 beetles at each application site.



### Best working conditions for Atheta

They are well suited for release into a variety of growing situations, (ex. beds, pots, seedling/cutting propagation areas, etc.). Due to their ability to move quickly, fly when needed, these predatory rove beetles can be monitored by scraping back the top 1-2 cm. of the growing media. Adults are non-diapausing under greenhouse light conditions. Population will fluctuate throughout the growing season, depending in large part on the prey population density.

### Appearance

*Atheta coriaria* are typically light to dark-brown – in many cases almost black – in color. The adult beetle can be anywhere between 3-4 mm. long. They have an elongated, slender body shape, and they have wing coverings along their backside.

### Life cycle

The complete life cycle of Atheta takes about 21 days (at about 70°C). The sex ratio will typically be equal, 1:1 females to males. Eggs hatch in 3-4 days to begin their larval stages. Larvae resemble adult form, and their pupal chambers are constructed out of silk.

### Handling

Biological beneficials have a very short life expectancy and therefore need to be introduced to the crop as soon as possible after receipt. Failure to do so can have a negative impact on their quality. In case you do need to store Atheta, please follow the instructions below. Koppert B.V. is not liable for any loss of quality if the product is stored for longer than recommended and/or under incorrect conditions.

- Storage after receipt: No more than 7 days
- Storage temperature: 50-55°F
- In the dark
- Provide ventilation to prevent CO<sub>2</sub> accumulation

### Dosage

The information given below is merely indicative. Tailored advice requires detailed information on local factors, such as the crop itself, climate conditions and the level of infestation. To ensure a correct approach, please consult a Koppert specialist or a recognized distributor of Koppert products.

Atheta	preventive	light curative	heavy curative
ft <sup>2</sup> /unit	1/10 ft <sup>2</sup>	5-10/10 ft <sup>2</sup>	10-15/10 ft <sup>2</sup>
interval (days)	At 1 <sup>st</sup> potting and each transplant		

**Important!** Only use products that are permitted in your country/state and crop. Check local registration requirements. Koppert Biological Systems cannot be held liable for unauthorized use.