



Orius insidiosus

Target pests

- Thrips
- White flies
- Aphids
- Some mites and other soft-bodied insects.

Target crops

Orius insidiosus is primarily used in:

- Vegetable crops (cucumber, pepper, tomato, etc.)
- Fruit crops (raspberry, strawberry, etc.)
- Ornamental plants (both indoor and outdoor)

Orius insidiosus, or minute pirate bug, is an essential biocontrol agent for integrated and organic pest management. This heteropteran stands out for its rapid dispersion and strong ability to detect infestation hotspots.

Adults, dark brown to black with well-developed membranous wings, actively hunt, while nymphs, yellow to orange and wingless, move across foliage in search of prey.

Eggs are inserted into plant tissues, offering them greater protection.

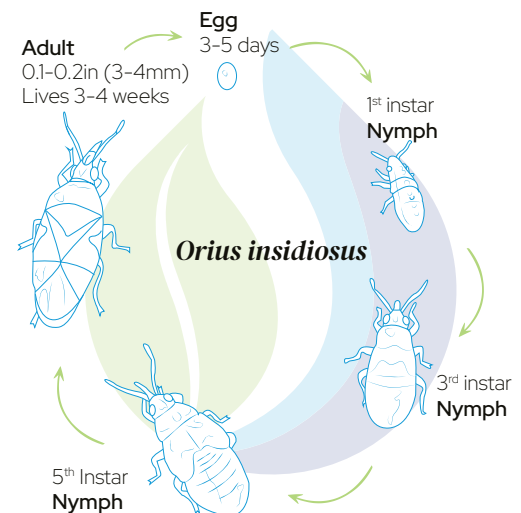
An aggressive insect, *Orius* kills more prey than it consumes: an adult feeds on about 12 thrips per day and kills over 45. For maximum effectiveness, *O. insidiosus* is often paired with other beneficials like *Amblyseius swirskii* or *Neoseiulus cucumeris* to achieve a synergistic reduction of pest populations.

Life cycle

- **Life Cycle:** Lasts 3-5 weeks depending on conditions.
- **Optimal Conditions:** Temperature: 68-86°F (20-30°C), relative humidity of 60-70% and light ventilation.
- **Sex Ratio:** Approximately 45% females and 55% males.
- **Diapause:** *Orius* enters diapause with less than 12 hours of light.
- **Reproduction:** Females lay 2 eggs per day, totaling about 30 eggs in their lifetime.

Introduction rate

Introduction	Quantity	Frequency	Duration
Preventive	10.8-53.8 ft ² (1-5/m ²)	14 days	2 introductions
	5k-10k/hectare	14 days	Until control
Curative	53.8-107.6 ft ² (5-10/m ²) or more	7 days	Until control
	50k-100k	14 days	Until control



Application

Handle containers carefully to avoid stressing or damaging the insects. Avoid direct exposure to sunlight or extreme temperatures during preparation.

Distribute the contents directly on or at the base of infested plants.

Avoid chemical treatments before and after releasing *Orius*, as some pesticides may be toxic to these insects.

Adults feed on pollen and can be applied preventively to flowering plants. Consider introducing reservoir plants, such as ornamental pepper or alyssum, to help them establish more quickly and boost their populations.

Recommended use: March to October.

Storage



Use the insects as soon as they are received. A mortality rate of less than 10% is normal.



Do not freeze or refrigerate.



Open the container. Sprinkle *Orius* on infested plants. *Orius* needs pollens and prey to establish itself.



If necessary, *Orius* can be stored at a temperature around 50-53.6°F (10-12°C). This temperature slows their metabolism and keeps them in a resting state, extending their viability. Do not store them for more than 2-3 days. Beyond this period, *Orius* may lose effectiveness, survival rates decrease, and they become less active.