

Effective use in Commercial Cannabis cultivation:

Rates with Orius in cannabis seem to vary a little from what the traditional, registered rates would indicate. Instead of treating in meters, and as a row crop, we recommend that each plant have direct attention paid to them, for optimal results. The climate fluctuation and temperature and humidity variations, along with the plant's rapid growth pattern, necessity to ensure proper air movement, and hairiness/stickiness of the plant all combine to make cannabis a complex and difficult crop to treat.

For Commercial Cannabis Rates, please fill out our [Commercial Cultivation Inquiry](#) for a discrete, personalized Chemical-Free Pest Management plan.

For Best Results

Keep storage containers out of direct sunlight, store between 43-50° until application can be made.

Apply in cool weather – in the morning or evening in order to avoid bright sunlight.

Keeping container horizontal while opening, and distribute contents evenly onto leaves throughout crop, gently shaking and rotating the bottle.

Description

Orius is a minute pirate bug. It is commonly used as a thrips predator, but also feeds on mites, aphids, caterpillars, and small insect eggs. In the absence of prey, it is also capable of feeding on pollen and plant excrement.

Orius insidiosus is a native natural predator to North America, specializing on thrips, aphids and spider mites. They are found predominantly on the stems and foliage of plants, and spread quickly with prey availability. Adults are 3-4 mm in length, flat and conspicuously marked with alternating black and white; the juveniles are small, tear-drop shaped and yellow/orange colored. Adults and all juvenile stages are predatory, equipped with a long beak for piercing and sucking the fluids from prey.

Biological Control

Orius spp. are a standard in biological control, as they occur naturally in high numbers to control small pests in any ecosystem. They are the only biological agent that will attack all life stages of thrips; an adult Orius may consume as many as 80 thrips per day and a nymph may consume as many as 30. They will feed on many different species of thrips and aphids, as well as the immature stages of many other small insects.

Life Cycle

Females lay small eggs within the plant tissues where they are not easily seen, and when the nymphs emerge they begin searching out prey immediately. They are fast-moving and develop rapidly in warm temperatures with plentiful food supply, completing development from

hatchling to adult in approximately 20 days. A healthy population of Orius will produce 3-4 generations during a Pacific Northwest growing season, more in greenhouses.

It takes 4-6 weeks to establish a population.

Introduction Rates

Suggested: Make four small introductions each week to create overlapping generations.