NATURAL ENEMIES
Chemical-Free Pest Management

Effective use in Commercial Cannabis cultivation:

Rates with Cucumeris 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.

Description

Cucumeris is a species of predatory mite that feeds on immature thrips. It also feeds on pollen, two-spotted mites (though will not control) and other species of mites. Adults are pear-shaped, tan in color, and less than 0.5mm long. Eggs are round, transparent, and 0.14mm in diameter.

Use in Biological Control

Cucumeris is mainly used to control western flower thrips on greenhouse cannabis, vegetable and flower crops. Cucumeris will also feed on pollen in the absence of thrips, which makes for great use as a preventative measure. Optimum conditions are 68-77°F (20-25°C) with relative humidity of 66-70%.

Life Cycle

The complete life cycle takes 10-12 days at 68°F. Cucumeris populations have somewhat more females than males (64% female). Females will lay 1-3 eggs per day, with an average of 35 eggs over a lifetime. Eggs are laid on leaf hairs along the veins on the lower surface of leaves. They will hatch in about 3 days. Newly hatched larvae do not feed until they molt at 2 days old. They feed for another 7 days before becoming adults. Adults live for up to 30 days and eat an average of 1 thrips per day. While outdoor populations of cucumeris in northern climates will diapause in response to short days, the cucumeris sold for greenhouse use are non-diapausing strains that may be used year round.

For Best Results:

Wherever persimilis is being used for control of spider mites, avoid heavy applications of cucumeris. Cucumeris feed on spider mite eggs, which may limit the food supply for immature persimilis, and reduce their effectiveness. Use cucumeris, along with other thrips predators, such as Orius spp., on flowering plants and Stratiolaelaps to control thrips pupae in the growth media.

Shaker Tube (Bulk): To release, rotate the canister (to evenly distribute the mites inside), then open the lid and remove the filter paper. Place the lid back on, and tap the mites out of the canister evenly onto the foliage of the plants, concentrating release points around high infested areas. The cucumeris that fall to the soil will climb onto the plants nearest them. Leave the canister and filter paper in the treated area to ensure the release of all of the mites. Release

during the day when there is no direct sunlight within 5 days of receipt. Store canister on its side at 55-65° F.

Do not refrigerate!

Apply 5-50 each per square foot of garden space.

Relatively high introduction rates are required because thrips can reproduce nearly twice as fast as cucumeris, who also only feed on immature thrips (not adults).

Slow Release Sachets: Application should be to the undercarriage of the plant or canopy concentrating release points around infested areas. The cucumeris that fall to the soil will climb onto the plants nearest them. Leave the empty bag in the treated area to ensure the release of all of the mites. Release during the day when there is no direct sunlight within 5 days of receipt.

Do not refrigerate!

General Introduction Rate:

5-50 each per square foot every 3 to 4 weeks, depending on crop.

1 sachet per 5 plants, every 1-2 weeks until there is one on every plant in infested areas. Sachets should not be exposed to direct sunlight or overhead watering. Do not tear open prepunched sachets, as they will become too dry.

Establishment of cucumeris requires 4-8 weeks, so it should be applied before a thrips problems develops. Because cucumeris feeds only on immature thrips, a decrease in future adult thrips populations will not occur for about 3 weeks. Adult thrips have a long life-cycle (30+ days) and will continue to cause damage. Adult thrips should be controlled by releases of Orius spp., or by using sticky traps.