THRIP PREDATOR
Neoseiulus cucumeris

Product: ***Neoseiulus cucumeris*** is a very small, tan coloured predatory mite, less than 0.5mm long. They have a characteristic tear drop shape and 8 long slender legs. They can be distinguished as small brown specks running across leaf surfaces. The mites are usually found on the underside of leaves, especially along leaf veins where the females lay their eggs on fine leaf hairs. The adult female can lay up to 35 eggs in her lifetime. The tiny nymphs hatch in 2-3 days and feed on pollen, spider mite eggs and the smallest thrips. The adult female mites consume an average of one thrip/day over a 30-day life span, and when thrip populations have been eliminated, they remain established in the greenhouse, feeding on leaf surface fungi, pollen & spider mites.

Target: The prey of *N. cucumeris* is primarily the immature stage of both eastern & western flower thrips, onion thrips, greenhouse thrips, and to a lesser extent broad & cyclamen mites. Thrips feed by scraping and rasping at tender leaf surfaces. The first symptoms of a thrip infestation are leaves that appear finely speckled with yellow spots. Later, a silvery metallic looking sheen may cover leaf surfaces, & black specks may be scattered about. Both larvae & adults appear similar, but adults have wings & can fly.

Release: Release the mites at sundown the day of receipt. Gently rotate the bag to distribute the mites evenly within the bran carrier and sprinkle form the bag. If using packets, cut a corner off the packet and distribute as outlined above. Concentrate the bulk of them at release points on or near the most heavily infested plants. Leave the bag / pack in the treatment area for 24 hours after release to ensure all mites have exited. *Supplying these predators with flowering and pollen producing plants, at or near the release site, may increase their laying activity!*

Rate: Rates vary depending on the infestation and the susceptibility of the plants, but the general range of recommendations is to release 10-200 predators per plant per week. Relatively *high introduction rates are required because thrips can reproduce nearly twice as fast as cucumeris*. Make additional applications of 10 to 50 predators per plant at 1-to-2-week intervals until no more thrips are seen, or the predator/prey ratio on plants is at least 1:2. Cucumbers & Tropicals: 1000 per 15-20m2(150-200ft2) every 3 weeks. Bedding/Potting Plants: 1000 per 300m2 (1000ft2) until infestation subsides.

- Optimal conditions consist of temperatures between 21-28oC (70-82oF) and relative humidities of 60 -80%- If the nighttime temperature in the crop is kept at 21oC (70oF) or above, then *cucumeris* can be used any time of year.
- It is essential to start releases of predator mites while thrips numbers are very low as it takes 3-4 weeks for Neoseiulus cucumeris to become established. Because *cucumeris* feeds on immature thrips stages, a decrease in adult populations will not occur for about 3 weeks.
- Use blue sticky cards (also available at NIC) to monitor thrips at a rate of 1 trap/50 plants. Cards should be checked weekly.
- Certain insecticides & fungicides can be integrated with cucumeris. Please ask for recommendations.
- Beneficial Nematodes (available at NIC), will help control thrips that drop to the soil to pupate.

Please let us know within 24 hours of receipt if there are any problems with your Live Insect Order

Bug Out! CLICK HERE to Give Your Insect Friends A New Home.

For further Information Contact: **NATURAL INSECT CONTROL**, 3737 Netherby Road, Stevensville, Ontario, L0S 1S0
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For further Information on all NIC Beneficial Insects go to **www.naturalinsectcontrol.com**