

PRODUCT INFORMATION SHEET

SPIDER MITE PREDATORY MITE: Phytoseiulus persimilis

Product:

1,000 or 2000 adult *Phytoseiulus persimilis*, mixed in vermiculite with no prey included. 3,000 mixed *Phytoseiulus persimilis* on bean leaves may contain spider mites. Adult females are approximately 0.5mm long, pear shaped and red in colour. Immatures and males are smaller and lighter in colour. About 80% are females. At optimum temperatures, *P. persimilis* can develop from egg to adult in 7 days and live for up to one month. The sex ratio is 4 females / 1 male. Population increase is 44x in generation time of 17 days. (They breed twice as fast as spider mites at 70°F (20°C), therefore can quickly gain control!) A well fed female will lay about 50 eggs in her life-time. Prey consumption is up to 7 adult spider mites, or 25 eggs or 20 immatures per day.

Target:

Phytoseiulus persimilis feeds voraciously and reproduces only on two-spotted mites (*Tetranychus urticae*) and other web spinning spider mites (red spider) in the family Tetranychidae.

Release:

Predators are highly perishable. Release immediately upon arrival! (If not possible, then lay vial on its side in fridge for up to one day at 40°F (4°C). To release from bottle, mix predators into vermiculite by slowly and gently rolling the vial 30 or so times. The mites are fragile - so do not shake! Remove the tape on cap and gently tap onto dry foliage. Each tap will release about 10 mites.

Rate:

Release rates are dependant on crop, level of infestation and desired speed of control. Best results are obtained when pest levels are low. Average rate is 1 predatory mite per ft² (10/m²), 2000 per 3000 ft² (289m²) of greenhouse area, or 10 per infested leaf. A reduction in spider mites should be obvious in 2-3 weeks, and usually complete control in 4-6 weeks. Monitor the new growth for control as the webs formed from the dead spider mites will remain on the foliage and damage already done will stay the same.

Temperature:

Ideal temperature range is 70 - 85°F (20 -30°C), with relative humidity of 70 - 80%. Minimum temperature for activity is 50°F (10°C). *P. persimilis* is best adapted for greenhouse and shadehouse uses, as well as moderate outdoor environments. This product is not appropriate for use in hot, dry climates with temperatures greater than 90°F (35°F) and humidity below 40%. ** We do carry other types of predator mites for hotter temperatures! *Persimilis* is also available in bottles with vermiculite, and also on bean leaves. Please ask us!

Note:

- Begin releases at first sign of spider mites. Using more predators gives faster control !!
- *P. persimilis* must have spider mites in order to survive, as they do not feed on pollen nor plants. They are not cannibalistic ie/ they do not consume each other.
- Do not release immediately before or after pesticide applications. Request pesticide compatibility information for residual effects!

NIC TIP

If you had spider mite issues last autumn than try one tube of *Stratiolaelaps scimitus* (Ss) for every area that had persistent spider mite pressure. 15 ml at the base of every post, every plumbing and electrical intersection, and a tube for every 100 feet of perimeter wall. The Ss will feed on overwintering spider mites and will save hundreds of dollars in later *persimilis* and *Stethorus* purchases, lost plants, lost productivity, and time.

Please let NIC know within 24 hours upon receipt if there are any problems with your live insect order. Phone: 905-382-2904; Email: info@nicniagara.com

For further Information Contact: **NATURAL INSECT CONTROL**, 3737 Netherby Road, Stevensville, Ontario, L0S 1S0

905-382-2904; 905-382-4418 (Fax); info@nicniagara.com

For further Information on all NIC Beneficial Insects go to www.naturalinsectcontrol.com

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