



# Sound Horticulture

**SCIENCE, NATURE & SERVICE**

info@soundhorticulture.com

360.739.9095

## Lifestyles of Predatory Mites

### For Pest Mite Control

#### **PREDATORY MITES:**

Predator mites can be used to treat a wide variety of pest mites, from two-spotted spider mite, to broad mite, rust mite, cyclamen mite and others. This chart is a quick reference to the beneficial mites used for pest mites, but does not include the other beneficial mites that are commonly used to treat other pests like fungus gnats, shore fly and some other pests that live part of their life in soil systems. Please inquire for more detail on those predators if you are interested. **Remember:** Not all beneficial mites play well together, so inquire for further explanation.

#### **USES:**

<b>Predatory Mite</b>	<b>For Use In</b>	<b>Temps</b>	<b>Humidity</b>	<b>Controls</b>	<b>Suppresses</b>
<i>Neoseiulus californicus</i>	Greenhouse, Field Crop, Vineyard, & Trees	50-110° F	40-60%	Two-spotted Mite; Pacific Mite	Willamette Mite; Avocado Brown Mite
<i>Neoseiulus fallacis</i>	Greenhouse, Field Crop, Vineyard, & Trees	70-100° F	40-90%	Two-spotted Mite; Pacific Mite; Tumid Mite; European Red Mite; Bank's Grass Mite	
<i>Galendromus occidentalis</i>	Greenhouse, Field Crop, Vineyard, & Trees	50-115° F	30-60%	Two-spotted Mite; Pacific Mite; Willamette Mite	Cyclamen Mite; Eriophyoid Mites
<i>Mesoseiulus longipes</i>	Hot & Dry Greenhouse; INDOOR ONLY	80-95° F	30-80%	Two-spotted Mite; Pacific Mite	
<i>Phytoseiulus persimilis</i>	Greenhouse & Field Crops	70-80° F	70-90%	Two-spotted Mite; Pacific Mite	

**AS A GENERAL RULE:**

Most of the time, “indoors under lights” need the *Neoseiulus californicus* and *Mesoseiulus longipes*. The *Mesoseiulus longipes* are for “hot spots.” They work fast, but don’t stay around very long. That’s where the *Neoseiulus californicus* come in: they are very hardy and will not go anywhere as long as there is food (spider mites!)

For a 3-5 ft plant that is infested, you will need 1,000 or 1 shaker. Once you have them maintained, you will only need 1,000 for every 2 plants and every 2-3 weeks.

**OTHER TIPS FOR MITE CONTROL:**

Talk to us about threshold levels before attempting a pest mite control program. It is always best to have a low level, or fresh clean stock plants to begin a program. Young plants should be free from significant pest pressure when introducing predatory mites. Let’s discuss the appropriate means with which to reduce pest levels as safely as possible before introducing beneficial mites. Toxic residues from many pesticides can hamper the smooth start of a biocontrol program. The impact to beneficials must always be a consideration. Safer sprays can be used to level the playing field before introducing beneficial mites. These sprays can include biopesticides that are based on fungi.

After pesticides have been sprayed, it is very common to experience a resurgence of pest mites that are resistant to the pesticides that have been used. Miticides are notorious in this regard. Let us talk you through a program that fits your operation.

Talk to us about the best way to introduce them into your system. Some considerations may include:

- What the grower has previously applied, whether sprays or biologicals, and when these materials were applied.
- Whether or not a carrier material is a good idea or NOT, and what your options are.
- If Banker plants or trap crops of potted beans may be helpful in your growing areas.
- Time of year you are applying, and stage of crop.
- Overlapping of successive crops and potential for vectoring of pests in your system.
- Whether reintroduction intervals will be necessary, and what is typical for your crop system.