



### Greenhouse Pest Message, March 22, 2024 Leanne Pundt, UConn Extension

**Aphids** seem to have been the primary pest issue so far this spring, as you can tell from my previous pest messages of [February 2](#), [February 9](#), and [March 1](#).

Thank you to those of you who continue to read the pest messages, and I have received some grower feedback that the new 25B product from BioWorks, EpiShield has also been working well:

*We tried the EpiShield late last week and I was pretty impressed with the knockdown! Also smells great!!*

*We're getting control of aphids with repeat sprays of EpiShield, Biowork's new insecticide. No REI or PHI, minimal PPE. We just snuffed an aphid outbreak on veggie seedlings last week with two sprays spaced 3 days apart. I'm impressed so far.*

For more information: [EpiShield from Bioworks:](#)

EpiShield is also labeled for **spider mites**, which have also been more of an issue earlier this season than usual, due to the warmer "winter" weather. Keep in mind EpiShield works by contact, so good coverage to the underside of the leaves would be needed for its use against spider mites

### Thrips Management

Unfortunately, there aren't any new active ingredients for use against thrips but there are some products under development that may be available in the future.

But, some updates:

Met 52 is now sold under the trade name of [Lalguard M52 OD](#). This bioinsecticide contains spores of the fungus *Metarhizium brunneum* strain F52 for use against thrips, whiteflies, mites. It is also compatible with IPM programs using beneficial insects. Thrips biological controls have been working well during spring production in recent years.

To review:

*Neoseilus cucumeris* is available in **slow release mini-sachets** that consist of bran, whitish mold mites (that feed upon the bran), and *N. cucumeris* which prey upon the mold mites.

Research has shown that these mini-sachets are **best placed in the plant canopy** where they are protected from bright sunlight. If the mini-sachets are placed in bright sunlight, high temperatures and low relative humidity in the sachets adversely affects the reproduction and egg hatch of the predatory mites. (Eggs will shrivel and die at low relative humidity).

If mini-sachets are placed within the plant canopy, the temperature peaks less, with higher relative humidity needed for the reproduction of these predatory mites.



Figures 1 & 2: Mini-sachets placed in hanging baskets so they are shaded from full sun and slow-moving mold or food storage mite. Photos by L. Pundt

### Tips for Using *Neoseiulus (Amblyseius) cucumeris* mini-sachets

- If using mini-sachets, check periodically for living predatory mites (*N. cucumeris* will be tan in color. The [mold mites](#) will be white.
- If you need to store the sachets for a short period of time, place them under benches in the greenhouses, where it would be more humid, than in an office with drier humidity levels.
- Predatory mites should emerge from the sachets for 4 weeks or so onto the crop. The emergence hole is large enough, you do not need to make it larger.
- Place 1 mini-sachet per hanging basket or 1 to 4 mini-sachets per shuttle tray. With very large hanging baskets, you may find 2 sachets work well.
- Place the sachets in your **most thrips- prone crops or cultivars**. You do not need to place them in all your plants in the greenhouse.

Here are some examples of plants prone to thrips, you may be growing others:

- **Key Bedding Plants Affected by Thrips** : Ageratum, alyssum, basil, bacopa, begonia, calibrachoa (especially yellow flowered varieties), calendula, celosia, chrysanthemum, dahlia, dianthus, dracaena spikes, eggplant, fuchsia, herbs (many especially tarragon), gazania, geraniums (ivy), gerbera daisy, *Ipomoea*, marigolds, New Guinea Impatiens, petunia, pepper, portulaca, primula, salvia, snapdragon, tomato, verbena, and zinnia.
- **Key herbaceous perennials affected by Thrips**: *Alcea*, *Asclepias*, *Aster*, *Campanula*, *Centurea*, *Chrysanthemum*, *Coreopsis*, *Crococsmia*, *Digitalis*, *Echinacea*, *Eupatorium*, *Lamium*, *Lupinus*, *Malva*, *Monarda*, *Penstemon*, *Platycodon*, *Polemonium*, *Phlox*, *Rudbeckia*, and *Tanacetum*.

- Place mini-sachets in the plant canopy so they are **shaded**.
- Place mini-sachets so they are in the plant canopy. These blind predatory mites use smell and touch to detect their prey (primarily first instar thrips larvae) and cannot travel far.
- Optimum conditions are temperatures between 75 and 85° F and relative humidity levels greater than 65% (ideally 75%).
- Consult with your supplier for information on recommended release rates.

Next week's weather forecast seems to be for cloudy, overcast weather. So, be sure to follow **preventive measures to prevent Botrytis Blight and Botrytis stem canker** on susceptible plants.

For more, see previous pest message of [March 5, 2024](#).

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