

Integrated Pest Management Program

Department of Plant Science and Landscape Architecture UConn Extension

Greenhouse Pest Message January 27, 2023 Leanne Pundt, UConn Extension

Not all thrips are Western Flower thrips!

Western flower thrips has been the dominate thrips species in ornamental greenhouses since the mid 1980" s. But not all thrips are western flower thrips! I have recently received questions about both *Echinothrips americanus* and *Thrips parvispinus*.

Echinothrips americanus is also known as the Poinsettia thrips (I have not seen it on poinsettias) or impatiens thrips (also have not seen it on impatiens either). Echinothrips has a broad host range and has spread via the trade on many different tropical foliage plants. Below 32 F, it cannot survive for more than a few hours, so *Echinothrips* does not overwinter outside in temperate climates.

Unlike western flower thrips whose pupal and pre-pupal stages are found in the growing media, all life stages of *Echinothrips* are found on plant leaves. (So, the beneficial nematodes *S. feltiae* that are used against western flower thrips pupae in the growing media would not be effective).

Adults are dark brown with red bands between their abdominal segments. Their dark wings also have distinctive white patches at their base which most thrips species do not have. Adults are not strong fliers, so may not always be found on yellow sticky cards. Look on the leaves, especially along the midvein, for the distinctive adults and their black fecal spots. As they feed, they pierce the cells, and suck out the cell contents resulting in silver-gray patches on the leaves. Damage may be more prevalent on the lower leaves. *Echinothrips* larvae and pupae are white or light yellow in color. Look along leaf veins or underside of leaves for all stages of *Echinothrips*.



Figure 1 & 2: Silvering of foliage (left) and Echinothrips along main vein. Photos by L. Pundt

UCONN | COLLEGE OF AGRICULTURE, HEALTH AND NATURAL RESOURCES



Figure 3 & 4: Adult Echinothrips with distinctive white patches. Photos by L. Pundt

Amblyseius swirskii or *A. limonicus* are commercially available predatory mites that may be used against *Echinothrips* according to research at Wageningen University in the Netherlands. *A. cucumeris* and *Orius* tend to be ineffective against *Echinothrips* in greenhouse ornamentals. BotaniGard WP or NoFly WP are reported to be compatible with *swirskii*.

Controlling *Echinothrips* in Ornamentals without Pesticides: News from the Netherlands. https://onfloriculture.com/2018/01/10/controlling-echinothrips-in-ornamentals-

without-pesticides-news-from-the-netherlands/

Echinothrips americanus UF IFAS Featured Creatures <u>https://entnemdept.ufl.edu/creatures/ORN/THRIPS/Echinothrips_americanus.html</u>

The latest Thrips Efficacy 2022 IR 4 Project summary does not include *Echinothrips*. <u>https://www.ir4project.org/ehc/researchsummary/efficacy/thrips-efficacy-2022/</u>

The Florida Department of Agriculture and Consumer Services issued an alert regarding the Tropical Tobacco Thrips or *Thrips parvispinus* in August 2020. This was the first report of this species in the continental US. It was found on Hoya and Anthurium growing in Florida greenhouses. *Thrips parvispinus* has a broad host range. Damage to Dahlia, Chrysanthemum, Gardenia, Dipladenia, Ficus, Schefflera arboricola, and mandevilla is also reported. *Thrips parvispinus* is not known to transmit tospoviruses.

As you see, the damage resembles broad mite injury. On Schefflera, you can see the brown scarring and distorted young leaves. On mandevilla, you can see the brown streaking and distortion of the young leaves. Photos below are from: Onfloriculture Blog: <u>https://onfloriculture.com/category/insect-pests/thrips-parvispinus/</u>

UCONN COLLEGE OF AGRICULTURE, HEALTH AND NATURAL RESOURCES



Figure 5 & 6: Thrips parvispinus damage on Schefflera (on left) and mandevilla (on right). Photos from Onfloriculture Blog.

The latest Pest Talks enewletter by JC Chong discusses more on the biology and management of thrips parvispinus. https://www.growertalks.com/Newsletters/View/?article=4078

Pest Alert: Thrips parvispinus (Karny) https://www.fdacs.gov/content/download/93435/file/PESTALERT-Thripsparvispinus%28Karny%29.pdf

Tropical Thrips Species Intercepted on Plant Material in Ontario: <u>https://onfloriculture.com/category/insect-pests/thrips-parvispinus/</u>

Funding provided by USDA NIFA CPPM grant 2021-70006-35582.

Disclaimer

The information in this document is for educational purposes only. The recommendations contained are based on the best available knowledge at the time of publication. Any reference to commercial products, trade or brand names is for information only, and no endorsement or approval is intended. UConn Extension does not guarantee or warrant the standard of any product referenced or imply approval of the product to the exclusion of others which also may be available. The University of Connecticut, UConn Extension, College of Agriculture, Health and Natural Resources is an equal opportunity program provider and employer.

UCONN COLLEGE OF AGRICULTURE, HEALTH AND NATURAL RESOURCES