Greenhouse Pest Message April 22, 2022
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Monitor for **Spider Mites** on Incoming Tropical Plants by looking on the underside of the leaves for mites, mite eggs and active mites. Suffoil X works well provided you can obtain good coverage to the underside of the leaves and follow all plant safety concerns: https://bioworksinc.com/wp-content/uploads/products/suffoil-x/suffoil-x-label.pdf

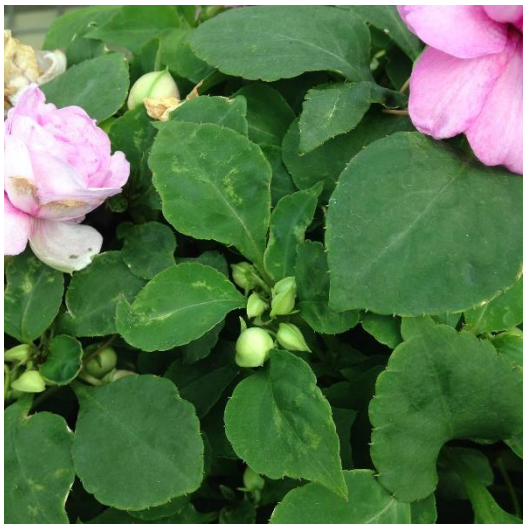

Figures 1 & 2: Spider mite damage to tropical plants. Photos by L. Pundt.

Thrips
I have not seen very much thrips feeding damage with the growers who are managing thrips **preventively.** Preventive drenches of Mainspring GNL to ornamental plants with well-developed roots seem to be working well. Preventive releases of the mini sachets of *N. cucumeris*, which will last for 4 weeks as they feed upon the first instar thrips larvae have also been working well. They can be combined with preventive sprenches of beneficial nematodes for thrips pupae (as well as fungus gnats) in the growing media.

Because thrips are notorious for developing resistance to insecticides, this is why more growers are using biological controls, but they must be used **preventively**, so once you seen damage, it is not the time to start biological controls.

Thrips are very hard to control due to their wide host range, very high reproductive rate (which increases 3 fold when plants are in flower and they have a source of pollen), and tendency to hide deep within buds so they are difficult to contact with sprays.


Figures 3 & 4: Use of mini sachets of *N. cucumeris* for thrips biological control. Photos by L. Pundt



Figures 5 & 6: Thrips scarring to gerbera daisy and garden impatiens. Photos by L. Pundt

When relying on chemical treatments, here ae some points to keep in mind:

- Long rotations are better than shorter rotations
- Rotate among Mode of Actions (MOA).

Here are some options for **greenhouse ornamental plants**, that the IR4 program reported good to excellent results when used as foliar sprays:

- **Aria** (flonicamid) (29) provides good to excellent control, however, certain varieties of pansy and viola may be sensitive. It has contact, systemic and translaminar activity.
- **Overture** (pyridalyl) consistently exhibited good to excellent control of western flower thrips. However, it is a slower acting insecticide, and it

may take up to seven days to see reductions in adult numbers. It is also labeled for greenhouse use only. (Overture is unclassified by the IRAC). It works by contact, ingestion and has translaminar activity.
Pylon (chlorfenapyr) (13) – provided good to excellent control. For greenhouse use only. Phytotoxicity is likely following application to Dianthus, Kalanchoe, Roses, Salvia, and Zinnia. Tank mixing with crop oils, surfactants and fertilizer adjuvants is also not recommended. It works by contact with translaminar activity.
Pedestal SC (novaluron) (15) is an insect growth regulator for use against thrips immatures. It works by contact with translaminar activity.

- **Pradia** (cyclaniliprole and flonicamid) ((28 & 29) provided good to excellent control in two trials. It has contact, systemic and translaminar activity). Certain varieties of pansy and viola may be sensitive.
- **Mainspring GNL** (cyantraniliprole) (28) provided good to excellent control. Works by contact with systemic and translaminar activity.
- **Flagship** (thiamethoxam) (4A) in general provided good to excellent control but there were a few experiments where little impact on populations was noted. It works by contact, with systemic and translaminar activity,
- **Safari** (dinotefuran) (4A) typically provided excellent control of western flower thrips. It works by contact, with systemic and translaminar activity.
- **Hachi – Hachi SC** (tolfenpyrad) (21A) works by contact and generally gave good to excellent control of thrips but on impatiens control was variable and phytotoxicity occurred. Do not apply to Salvia, Impatiens, Gysophilia, and New Guinea impatiens due to potential plant injury.
- **XXpire** (spinetoram and sulfoxaflor) (5 and 4C) provided good to excellent efficacy in 4 out of 6 trials. It works by contact with systematic and translaminar activity.

Avid (abamectin) (6) was reported to provide variable efficacy against western flower thrips so the standard Avid and Azatin treatments may not be working as well for you. Conserve (spinosad) (5) also provided variable control.

From: The IR-4 Project: Thrips Efficacy -2020
https://www.ir4project.org/ehc/researchsummary/efficacy/thrips-efficacy-2020/

For options on what to use on vegetable transplants, see the New England Vegetable Management Guide Insecticides labeled for Insects and Mites on Vegetable Transplants: https://nevegetable.org/table-20-insecticides-labeled-insects-and-mites-vegetable-transplants

For options on what to use on herb bedding plants, see Insecticides and Miticides labeled for use on Herb Bedding Plants https://uconn.sharepoint.com/sites/CAHNRExtension/Shared%20Documents/IPM/Greenhouse/2020herbtablesinsecticicidesfinaltNovember13.pdf

For a complete list of products, see the New England Greenhouse Floriculture Guide online at https://greenhouseguide.cahnr.uconn.edu/

Consult and follow pesticide labels for registered uses and plant safety information. To avoid potential phytotoxicity problems, spot test before widespread use. No discrimination is intended for any products not listed.

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