

Integrated Pest Management Program

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Greenhouse Pest Message, June 16, 2023 Leanne Pundt UConn Extension

Although it has been the year of the aphid, during the summer months, thrips often migrate into the greenhouses from the outside, especially when growing summer crops in open roof greenhouses.

Consider mass trapping of thrips with yellow hopper tape to supplement your thrips management program.

Hopper tape is often used for mass trapping of leafhoppers in vineyards, so it may also be available from agricultural farm suppliers besides your traditional greenhouse or IPM suppliers.

If you are releasing biological control agents, predatory mites do not fly, so will not be trapped on the cards or tape.

But what about biological control agents that fly? Canadian researchers released high levels of *Orius* (minute pirate bugs) and *Dalotia coriaria* (rove beetles) and only found low levels on traps a week later.

If you are using chemical controls, the current lack of new active ingredients for thrips, with the potential of reduced effectiveness due to selection for the development of resistance may reduce the effectiveness of chemical controls. Plus, as temperatures increase, spray intervals need to be reduced. So, using hopper tape may reduce the number of adult thrips. Each female thrips can lay up to 300 eggs!

Canadian researchers caught an average of more than 150 thrips per 2 feet of tape every week. In their small research trial plots, they caught over 10,000 thrips from June to August during a year when there were high numbers of thrips flying in from outside! (For example, during periods of drought, as the outside grasses die, they are looking for new hosts to feed on).

Place hopper tape along the posts of the gutter connected greenhouses. This was found to be as effective as placement in the plant canopy keeping the tape out of workers way during routine greenhouse tasks. You can use tape brackets or holders for placing the tape on the posts. Keep the tape in refrigerator, so it is less sticky before use, just like you do for your sticky cards.

If you have side vents, keep the tape within 2 to 13 ft. of vent openings.

Place the larger sticky cards (16 inches by 8 inches) so they hang a few inches above the crop canopy. In pot mum crops, Canadian researchers placed 8 cards per 1000 ft2.

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Figures 1 & 2: Hopper tape along gutter posts (on left) and larger sticky cards (on right). Photos by L. Pundt

Sticky traps or cards catch the thrips when they first enter the greenhouse or during their two mass flights per day (in the morning and later afternoon).

Adult whiteflies, fungus gnats, shore flies, and leafminers will also be caught on the yellow traps or cards.

You can leave the cards or tape up about 8 weeks, before they lose effectiveness.

Thrips Control: Making the Case for Mass Trapping <u>https://www.greenhousecanada.com/inputs/biocontrols/thrips-control-</u> <u>making-the-case-for-mass-trapping-31854</u>

Sticking it to High populations of thrips in greenhouse crops: <u>https://onfloriculture.wordpress.com/2016/08/15/sticking-it-to-high-populations-of-thrips/</u>

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