







Leanne Pundt

leanne.pundt@uconn.edu

Carla Caballero carla.caballero@uconn.edu

Rosa E. Raudales rosa@uconn.edu

Volume 12 Number 32 August 2023

A Sticky Subject: Yellow Sticky Cards

In this Alert, we provide some tips for using yellow sticky cards, including proper card placement and identification, to promptly detect pest outbreaks and enhance pest management in greenhouses.

Do not miss the instructional video for proper card utilization and identification of the common insect pests caught on the sticky cards at the end of this Alert to train and re-train your staff. This video is available in English and Spanish.

Sticky cards are an important tool for early detection of pests and an important component of an effective scouting program.

Sticky cards will only trap winged insect pests like thrips, whiteflies, fungus gnats, leafminers, leafhoppers, shore flies, and winged aphids (Figure 1).

Random plant inspections are still needed to scout for nonwinged pests or stages such as immature whitefly nymphs, thrips larvae, spider mites, broad mites, scale insects, wingless aphids, and mealybugs crawlers.

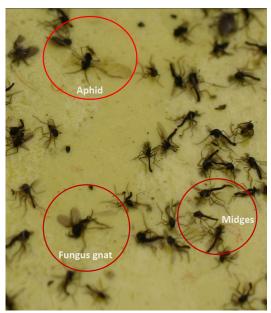


Figure 1. Winged Insects trapped on a sticky card.



Reprint with permission from the author(s) of this e-GRO Alert.

www.e-gro.org



Tips for Using Yellow Sticky Cards:

- Inspect the cards regularly in combination with plant inspections to detect pest outbreaks early and allowing for prompt action (Figure 2). Most greenhouse growers use 3" x 5" sticky cards. Yellow sticky cards work best for general pest monitoring. Change the cards weekly.
- Place cards just above the plant canopy (Figure 3). Use three to four cards per 1,000 sq. ft. or a minimum of one card per 1,000 sq. ft. with additional cards placed near entrances, vents, sidewalls, and areas where pests are likely to enter the greenhouse (Figure 4). You can also place extra cards over especially problem-prone species or cultivars.
- As more growers are using biological controls, the use of sticky cards needs to be adjusted. Many biological control agents have a winged stage that can be caught on the cards. (Figures 5 and 6). Make sure the sticky cards are not up the evening you are releasing winged biological control agents. Wait one or two days before putting the cards up again. Talk with the biological control supplier to get suggestions on the use of sticky cards with the specific biological control agents you use.
- As an example, growers producing poinsettias will soon be releasing *Eretomocerus sp.* or *Encarisa formosa*, the host specific parasitic wasps for whiteflies. These growers may prefer that more of the employee's scouting time is spent inspecting poinsettias for whitefly nymphs, signs of parasitism, and host feeding by the parasitic wasps being released. Therefore, they may decide to reduce the number of sticky cards the place around the greenhouse.



Figure 2. Employee monitoring a sticky card.



Figure 3. Place cards just above the plant canopy.



Figure 4. Yellow sticky card near vents.

www.e-gro.org



Figure 5. Insidious flower bug trapped on a sticky card.



Figure 6. Parasitic wasp trapped on a sticky card.

Training and retraining the staff every season is also an important part of an effective integrated crop management. Use the following videos to train and re-train your staff about the proper use of sticky cards and how to correctly identify the common insects caught on the sticky cards.

English: <u>https://youtu.be/ofJ8fPBqBF0</u>

Spanish: <u>https://youtu.be/Q_XhWv2ijNE</u>.

Prevention is key when it comes to managing pests in the greenhouse. By integrating yellow sticky cards into the scouting program, we can better detect pest problems early resulting in better management.

e-GRO Alert - 2023

e-GRO Alert

CONTRIBUTORS

Dr. Nora Catlin Floriculture Specialist Cornell Cooperative Extension Suffolk County nora.catlin@cornell.edu

Dr. Chris Currey Assistant Professor of Floriculture Iowa State University ccurrey@iastate.edu

Dr. Ryan Dickson Greenhouse Horticulture and Controlled-Environment Agriculture University of Arkansas ryand@uark.edu

Thomas Ford Commercial Horticulture Educator Penn State Extension <u>tgf2@psu.edu</u>

Dan Gilrein Entomology Specialist Cornell Cooperative Extension Suffolk County dog1@cornell.edu

Dr. Chieri Kubota Controlled Environments Agriculture The Ohio State University kubota.10@osu.edu

Heidi Lindberg Floriculture Extension Educator Michigan State University wolleage@anr.msu.edu

Dr. Roberto Lopez Floriculture Extension & Research Michigan State University rglopez@msu.edu

Dr. Neil Mattson Greenhouse Research & Extension Cornell University <u>neil.mattson@cornell.edu</u>

Dr. W. Garrett Owen Sustainable Greenhouse & Nursery Systems Extension & Research The Ohio State University <u>owen.367@osu.edu</u>

Dr. Rosa E. Raudales Greenhouse Extension Specialist University of Connecticut rosa.raudales@uconn.edu

Dr. Alicia Rihn Agricultural & Resource Economics University of Tennessee-Knoxville <u>arihn@utk.edu</u>

> Dr. Debalina Saha Horticulture Weed Science Michigan State University <u>sahadeb2@msu.edu</u>

Dr. Beth Scheckelhoff Extension Educator - Greenhouse Systems The Ohio State University scheckelhoff.11@osu.edu

> Dr. Ariana Torres-Bravo Horticulture / Ag. Economics Purdue University <u>torres2@purdue.edu</u>

Dr. Brian Whipker Floriculture Extension & Research NC State University <u>bwhipker@ncsu.edu</u>

Dr. Jean Williams-Woodward Ornamental Extension Plant Pathologist University of Georgia jwoodwar@uga.edu

Copyright ©2023

Where trade names, proprietary products, or specific equipment are listed, no discrimination is intended and no endorsement, guarantee or warranty is implied by the authors, universities or associations.

Cooperating Universities

Cornell**CALS** College of Agriculture and Life Sciences

Cornell Cooperative Extension Suffolk County



INSTITUTE OF

GRICULTURE

THE UNIVERSITY OF TENNESSEE

UCONN



MICHIGAN STATE









In cooperation with our local and state greenhouse organizations

