



The Lady Beetle News



The Ohio State University (OSU) Integrated Pest Management (IPM) Program
September 2003

It's That Time of Year Again!

Last year we had a welcomed reprieve from the Multicolored Asian Lady Beetle (MALB). The smaller population last fall was most likely due to a combination of the limited food supply (aphid populations were low), lack of water and a weather pattern that did not provide a warm up after the early autumn frosts. Whatever the cause, the MALB population was much smaller last year. However this does not mean that the beetles are gone never to return. We are writing this newsletter to inform you of the current situation and give you the knowledge and tools to take action if you wish.

The soybean aphid returned to Ohio fields this summer and large populations of other aphids provided an excellent food source for the MALB. Reports from the field and our trapping data indicate that the MALB population is growing. It is difficult at this time to predict when the beetles will start their migration and how large the invading population will be. We do not expect as many beetles as there were in 2001 but there will be more than we saw last year. For more information about beetle migration go to the NC IPM Center site www.pmcenters.org/northcentral/MALB.

There have been reports that the beetles started moving out of the soybean fields beginning the week of September 8th. We are looking to find the MALB next on fruit (apples, peaches, grapes and berries) as they do a form of carbohydrate loading before their winter hibernation. This migration to fruit is a relatively new phenomenon, which the OSU IPM program is interested in studying. Please report any occurrence of MALB feeding on fruit to the IPM Program by mail at 1680 Madison Ave. Selby Hall Wooster, Oh 44691 or by e-mail to harper.202@osu.edu. Let us know when and where the observation was made, in

what type of fruit and if the MALB has been a problem in this fruit before.



Being Prepared is the Best Defense

Sealing and screening all of the holes and vents in your home and applying a pesticide its exterior remain the best options to avoid a MALB invasion into your home. To help you better identify places that provide the beetle easy access to your home we will post on our website (<http://ipm.osu.edu>) by the end of the month pictures of many of the problem areas in a home.

Insecticides remain a popular preventative measure against the MALB. Previously we reported on some efficacy trials we conducted on some of the pyrethroid pesticides that can be used by licensed professionals to treat your home. Those results, shown below, gave the percent of lady beetles killed within 24hrs. when exposed to a surface 21 days after the insecticide treatment was applied.

Demand (10% lambda-cyhalothrin	96%
Suspend (5% deltamethrin)	95%
Talstar (8% bifenthrin)	84%
Tempo (12% cyfluthrin)	55%
Demon 25% (25% cypermethrin)	40%

We have since conducted the same study using some of the homeowner products available. Those results are listed below.

Terro Ant Killer (0.2% permethrin)	96%
Bayer Advanced Home Pest Control (0.1% cyfluthrin)	92%
Ortho Home Defense Indoor/Outdoor Insect Killler (0.05% bifenthrin)	56%

Bonide Household Insect Control (0.02% deltamethrin)	46%
Enforcer Ant Killer (0.2% permethrin)	44%
No Pest Home Insect Control (0.03% tralomethrin)	44%
Ortho Bug-B-Gone (0.425% esfenvalerate)	4%
Water	0%

Remember when applying a pesticide you don't need to blanket the entire house with the chemical. The most important areas to cover are around the windows and doors, around the foundation, under the soffet and along the roofline. Timing is also important. We still look for the first warm (over 65° F) day after the first frost as the trigger for swarming and migration. So watch the weather and check out website for updates.



Interesting Information

- In the general population, 50% of MALB are males and 50% female. On house 66% are female and 34% are male.
- 40% of beetles have 16+ spots.
- 23% of beetles have less than 2 spots.
- Of the beetles with 19 spots, 82% are female. Of the beetles without spots, 85% are male.
- Beetles with dark red color are more likely to have fed on aphids as adults.
- Beetles with yellow color are more likely to have fed on plant material as adults.
- Beetles like to eat fruit. Their preferences include cantaloupe, watermelon, peach, apple and grapes.



Do They Really Bite?

Many of you know the answer is YES! However, a survey of 35 MALB Extension and USDA publications from around the country tells a different story. 26% of the fact sheets say that the MALB does NOT bite, while 23% say that they do and another 11% mention that they pinch. An additional 10% of the publications report that the beetles are harmless and cause no injury and 31% make no mention of biting at all. The OSU IPM staff has documented that approximately 30% of the overwintering population are bitters. If these beetles break the skin and are allowed to continue, they will feed on the wound for as long as 30 minutes!



Trap Updates

The OSU IPM Staff continues to work on developing an affordable trapping devise for use in the home. Pictures and details about our homemade trap can be found on our website (<http://ipm.osu.edu>) or write to us at the address below for more information. In our tests, the homemade trap caught about 70% of the released beetles in a room. We also found that an incandescent bulb works as well as a black light tube. However a black light incandescent bulb does not work well at all. Finally, the homemade trap works better if you paint the funnel and collecting container (both plastic milk jugs) black.