



Tarnished Plant Bug

Authored by Theresa A. Dellinger, Diagnostician, and Eric Day, Lab Manager, Insect ID Lab, Department of Entomology, Virginia Tech

Introduction

Tarnished plant bug, *Lygus lineolaris* (Palisot de Beauvois), is a true bug in the family Miridae in the order Hemiptera. It is also known as the lygus bug and is a common pest of a wide range of fruits, vegetables, field crops, and ornamental plants.

Description

The adult is a small insect, about 6 mm (0.25 inch) in length. It is light brown with white, yellow, reddish brown to brownish black markings that give the insect a tarnished appearance (Fig. 1). Some individuals are much darker than others. There is a distinct yellow V- or Y-shaped marking on the wings. Like other species in the insect family Miridae, the lower third of the tarnished plant bug wings slants down toward the tip of the abdomen.



Figure 1. Adult tarnished plant bug (Scott Bauer, USDA Agricultural Research Service, Bugwood.org).

Immature tarnished plant bugs, called the nymphs, are smaller than the adults but similarly shaped. The body is a greenish yellow and the

legs and antennae are brown (Fig. 2). There are multiple black dots on the back of the insect. Nymphs have wing pads instead of wings.



Figure 2. Tarnished plant bug nymph (Scott Bauer, USDA Agricultural Research Service, Bugwood.org).

Life History

Tarnished plant bug has an incomplete life cycle of egg, nymphal, and adult stages. The adults and older nymphs hibernate under leaf litter, rocks, and in other protected sites. These individuals become active during the first warm days of spring when they feed on early buds and shoots of their host plants. Eggs are generally laid on the midrib of leaves and sometimes are inserted into the plant buds. Nymphs hatch in ten days and usually remain on or near the plant where they hatch. Adults have wings and readily move from host to host, often from weeds to

economically important crops. There are multiple generations each year.

Common Host Plants

Tarnished plant bug has a very wide host range and is a pest of strawberries, vegetables, tree fruits, field crops, and ornamental flowers.

Distribution

Tarnished plant bug can be found throughout the eastern half of the United States and west into the Great Plains.

Damage

Tarnished plant bugs favor young, rapidly growing, nutritious plant tissue such as buds, shoots, and developing fruits. Both nymphs and adults injected a toxin substance in their saliva as they feed. This toxin discolors, distorts, and sometimes kills plant tissue.

Adult tarnished plant bugs emerge in the spring and attack swelling overwintering buds on trees and shrubs. Their feeding causes leaf deformities and bud loss, which may lead to bushiness. Shoots may be distorted or stunted if the attack occurs after shoot elongation. Later in the growing season, both tarnished plant bug nymphs and adults are present and feeding.

On flowers, tarnished plant bugs puncture the terminal shoots beneath the bud, which usually causes the flower to wilt and die. On leaf buds, feeding causes spotting and a general bronzing effect on the leaves.

A condition called “catfacing” can occur on tree fruits and vegetables when the tarnished plant bug feeds on small, developing fruit. At maturity, this fruit exhibits sunken, deformed, or scarred areas. If the fruit is too heavily damaged, it may be aborted and dropped to the ground. Catfaced fruit can be consumed safely but is not marketable. Similar feeding damage on strawberries is called “buttoning” and results in seedy, underdeveloped, nubby fruit.

Control

Minor tarnished plant bug injury is tolerable but unsightly. Some plant varieties with fruits covered by many plant hairs may be resistant to tarnished plant bug.

Controls are necessary for severe infestations of tarnished plant bug. See the Virginia Pest Management Guides for current chemical control recommendations for tarnished plant bug and other true bugs. Consult Home Grounds and Animals ([VCE 456-018](#)) for gardens and tree fruit; Horticultural and Forest Crops ([VCE 456-017](#)) for commercial strawberries and cane fruit; and Mid-Atlantic Commercial Vegetable Recommendations ([VCE 456-420](#)) for row crops. As with all pesticides, follow the label instructions carefully with regards to rates and precautions.

Often insecticide treatments for tarnished plant bugs are only partially effective. Plant bugs are active and move about freely. They can disperse from an area about to be sprayed and then return as soon as the treatment dissipates and is no longer effective. Also, tarnished plant bugs have a wide host range, including many weedy species that may serve as a reservoir host before they move into more valued host plants. Reducing or mowing weedy hosts around plantings may lower tarnished plant bug populations in the immediate area.

Revised

Theresa A. Dellinger, November 23, 2021.

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