

## Tarnished plant bug

Compiled by Robert Mensah (NSW DPI)

### What is Tarnished plant bug?

The Tarnished plant bug, *Lygus lineolaris*, was first described from North America, and has a host range of at least 130 species of economic importance, including cotton. It is not present in Australia.

The Tarnished plant bug has the potential to develop pesticide resistance.

### What does it look like?

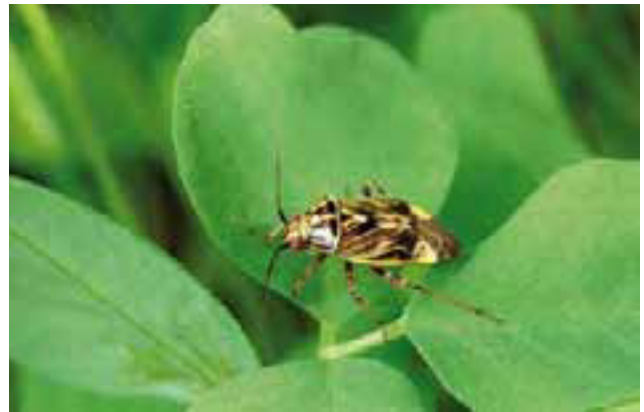
Adults are approximately 0.6 cm in length, and although they are true bugs, they have a flat, 'beetle-like' appearance. They fly readily when disturbed. Colour patterns vary considerably, ranging from greenish-yellow to brown, with the body marked with white, yellowish-brown, reddish-brown and black markings. The eggs hatch into nymphs that gradually become more like adults in appearance with each moult. Nymphs are yellow to green in colour and have extensive and variable dark-red, red-brown or brown markings. Larger nymphs can be recognised by a distinctive pattern of five dots on the back.

### What can it be confused with?

Tarnished plant bug looks similar to several other *Lygus* species. However, all such species are exotic to Australia so the presence of any bug fitting the description above should be reported.

### What should I look for?

Tarnished plant bug infests the leaves, squares, bolls and blooms of cotton, where they can cause considerable yield loss. Economic damage to cotton occurs during the period from first square through to early bloom. The damage is caused primarily by feeding resulting in squares aborting ('blasted squares') leaving a scar.



Brown and yellow coloured adults grow up to 0.6 cm in length

Scott Bauer, USDA Agricultural Research Service, Bugwood.org



External black markings on cotton bolls as a result of feeding damage

Barry Freeman, Auburn University, Bugwood.org



'Crazy cotton' growth pattern as a result of Tarnished plant bug feeding

Ronald Smith, Auburn University, Bugwood.org





High Tarnished plant bug populations can further reduce yields by delaying maturity and altering fruiting patterns. Feeding on the bolls themselves may cause seed damage, discolouration of lint and decreased lint weight. Heavy infestations can sometimes kill terminal shoots, resulting in numerous secondary terminals ('crazy cotton').

### How does it spread?

Abandoned crop fields and roadsides are favourite breeding habitats, although it can also breed in crops. The Tarnished plant bug adult's flight is aided by wind, and severe infestation can occur after storms. Damage to cotton is intensified when adults migrate to cotton from weed hosts that are no longer in flower. Although the Tarnished plant bug can reproduce on cotton, reproduction is slower on this crop compared to certain weed hosts.

### Where is it now?

Tarnished plant bug is found throughout the USA, Canada, and Mexico.

### How can I protect my farm from Tarnished plant bug?

Check your farm frequently for the presence of new pests and unusual symptoms. Make sure you are familiar with common cotton pests so you can tell if you see something different.

**If you see anything unusual, call the Exotic Plant Pest Hotline**



Feeding damage on a boll. Noting the dark sunken spots and the brown immature seeds

Bary Freeman, Auburn University, Bugwood.org



Stem damage as a result of Tarnished plant bug egg laying activities

Ronald Smith, Auburn University, Bugwood.org



Tarnished plant bug developmental stages, from the first instar nymph (on left) through to the adult

University of Georgia Archive, Bugwood.org

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