



Banana Lace Bug

Stephanitis typica

By Alfred Daniel Johnson and Robert F. Bevacqua

Agriculture & Natural Resources Program

Fact Sheet EXT-08-2025

Scientific name: *Stephanitis typica* (Distant)
Family: Tingidae
Order: Hemiptera
Host crops: Coconut palms, bananas, taro, soursop

Introduction

The banana lace bug (*Stephanitis typica*) is an invasive insect first recorded feeding on banana in Guam in May 2025 (Fig. 1). This fact sheet documents the pest's first occurrence on the island. Banana lace bug poses a serious threat to economically and culturally important crops and has the potential to become a major agricultural pest. It is distributed throughout India, Sri Lanka, Southeast Asia, and the Tropical West Pacific and has recently been reported in O'ahu, Hawai'i (CABI, 2017; Ocenar & Matsunaga, 2021).

Damage

Lace bugs, which have piercing-sucking mouthparts, feed on the sap from the underside of leaves. This feeding causes stippling or chlorotic spots on the upper surface, giving leaves a bleached or scorched appearance (Fig. 2). Heavy infestations can lead to yellowing, browning, and premature leaf drop. Over time, the damage reduces the photosynthetic area, weakens plant vigor, and, in severe cases, lowers yields in fruiting plants.

Lace bug can also be a vector for pathogens such as Phytoplasma, which is responsible for causing coconut root wilt disease.

Lace bug has a broad host range. In Guam, it is likely to infest coconut palm (*Cocos nucifera*), banana (*Musa spp.*), taro (*Colocasia spp.*), soursop (*Annona muricata*), and other crops.



Figure 1. A banana leaf severely infested by banana lace bug.



Figure 2. A close-up of chlorotic symptoms caused by the feeding damage of banana lace bug.

Life cycle

There are three stages (Fig. 3) to the lace bug life cycle:

- 1) Egg – laid singly on the underside of the leaf, often inserted into the tissue and then covered with black excrement (Fig. 4).

- 2) Nymph – found in clusters on the underside of the leaf, they are wingless, oval, spiny, and whitish (Fig. 4). Often times, you can see cast skins of the nymphs as they grow (Fig. 5).

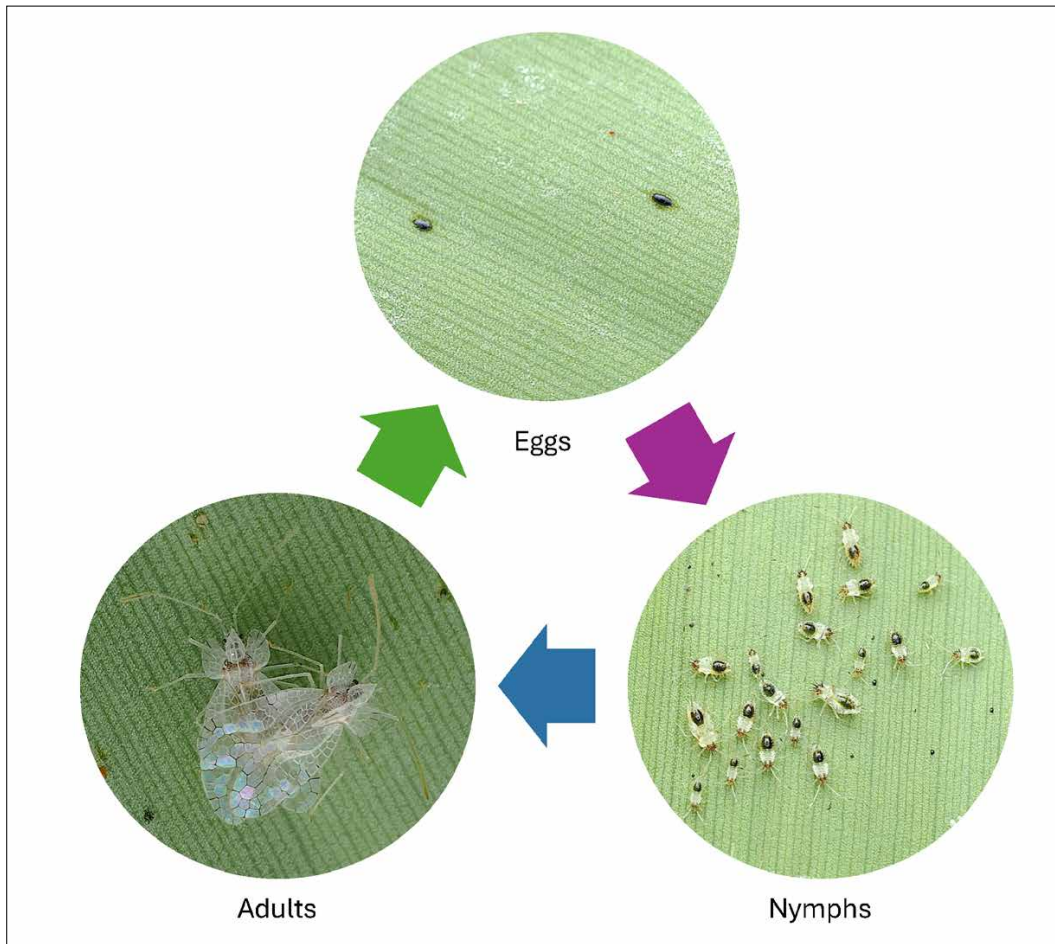


Figure 3. The life cycle of a banana lace bug.



Figure 4. Nymph and adult lace bugs on the underside of a banana leaf. Black excrement is also visible, which is covering the eggs.



Figure 5. The skins shed by the nymphs as they grow. These are a common sign that a plant is infested with banana lace bugs.

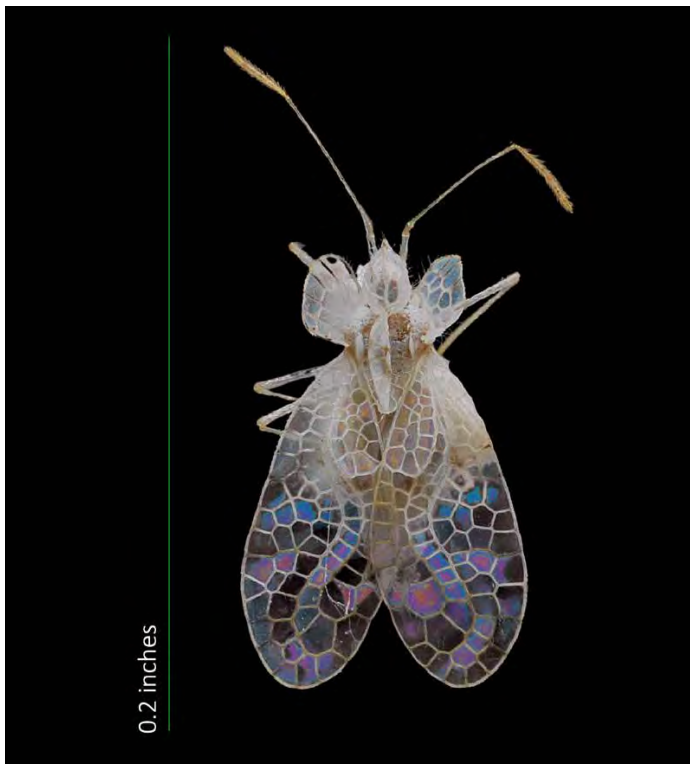


Figure 6. An adult banana lace bug with a scale bar. Its wings give it a “lacy” appearance.

- 3) Adult – delicately structured body with transparent veined wings that give the insect a “lacy” appearance (Fig. 6).

Natural enemies

Cheilomenes sexmaculata of the Coccinellidae family — commonly known as the six-spotted zigzag ladybird — are predatory beetles that may reduce pest populations (Fig. 7). Similarly, larvae of the Chrysopidae family, commonly known as green lacewings, may feed on lace bugs. (Please note lacewings are different from lace bugs. The former is a beneficial insect as a predator and the latter is a pest. Also, a naturally occurring fungal pathogen also infects lace bugs (Fig. 8).

Control measures

Some pest management strategies are to:

- Maintain good plant health to enhance natural resistance.
- Remove and destroy heavily infested leaves.
- Avoid moving infested green waste to new areas.
- Encourage natural enemies.

For assistance

For assistance in managing the threat of lace bug, contact Alfred Daniel Johnson, extension entomologist at the University of Guam, at johnsona17274@triton.uog.edu.



Figure 7. The ladybug, *Cheilomenes sexmaculata*, is a naturally occurring predator of lace bugs in Guam.



Figure 8. An adult banana lace bug infected with a naturally occurring fungus in Guam.

For further reading

- **Hosts and distribution map**
PlantwisePlus Knowledge Bank
<https://plantwiseplusknowledgebank.org/doi/full/10.1079/pwkb.species.51545>
- **Photos and worldwide observations**
iNaturalist.org
<https://www.inaturalist.org/taxa/604449-Stephanitis-typica>
- **“Natural Enemies of Banana Lacewing Bug, *Stephanitis typica*, in India”**
Munis Entomology & Zoology Journal, Vol. 14, No. 1 (January 2019)
<https://www.munisentzool.org/yayin/vol14/issue1/vol14issue1-4802515.pdf>

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Ocenar, J.R., & Matsunaga, J.N. (2021). *Banana lacewing bug* (Bulletin No. 21-03). Plant Pest Control Branch, Department of Agriculture, State of Hawaii. Available from: HDOA.PPC@hawaii.gov

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PUBLICATION CREDITS

WRITTEN BY	Alfred Daniel Johnson, Ph.D. Extension Entomologist University of Guam
	Robert F. Bevacqua, Ph.D. Extension Horticulturalist University of Guam
REVIEWED BY	Jesse P. Bamba, M.S. Extension Agent II of Plant Production University of Guam
	Bindu Poudel-Ward, Ph.D. Extension Agent III of Plant Pathology University of Guam
EDITED BY	Jackie Hanson
LAYOUT BY	Conrad Calma
PHOTOS BY	Alfred Daniel Johnson



University of Guam Land Grant | Extension Service
College of Natural & Applied Sciences
University of Guam
303 University Dr.
Mangilao, GU 96923-9000
(671) 735-2003/2060
www.uog.edu/landgrant

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