

Research Note

THE AVOCADO LACEWING BUG, *PSEUDACYSTA PERSEAE* (HEIDEMANN) (HEMIPTERA:TINGIDAE), IN PUERTO RICO¹

The avocado lacewing bug, *Pseudacysta perseae*, was described by Heidemann (1908)² from Florida in the genus *Acysta*. Blatchley (1926)³ transferred the species to the genus *Pseudacysta*. *Pseudacysta perseae* occurs in Florida, Louisiana and Texas. It is also found in Mexico, where it has been collected from *Persea carolinensis*, *P. americana* as *P. gratissima* and *Camphora officinalis* (Drake and Riehoff, 1965).⁴

Heidemann (1908)² described the adult (fig. 1) as a shiny black and yellowish sharply contrasting species. Eyes dark brown, strongly faceted. Antenna slender, fourth joint dusky towards tip; rostrum yellowish. Thorax black and shiny, strongly punctured, moderately convex, pronotum without a hood and with only one median carina; membranous lateral margins of thorax nearly obliterated, visible only as two very small earlike expansions near shoulders, translucent yellowish, bearing a few minute round cells. Hemelytra oblong-oval much longer than abdomen, translucent, yellowish white, with a transverse black band near the middle becoming broadest in the discoidal areas; highly iridescent, attaining tip of abdomen. Body black, shining, sparingly pubescent; metasternum black, highly shiny, transverse flat. Last abdominal segment in female broadly rounded at apex, oblong in male. Legs yellowish white, claws blackish; length 2.0 mm.

The eggs (fig. 2) are deposited on the underside of leaves, upright in irregular rows; of an irregular, distorted barrel-shaped form, a dull yellow, with a white rim to the egg lid. The female covers each egg with a thick dark sticky secretion.

The body of the last instar nymphs oblong, oval, dark yellowish; toward base of abdomen the color lighter with scattered small reddish spots. Prominent features of this stage: head with lateral processes yellowish white at end. Head brown; thorax with dark patches, lateral margins yellowish white, nearly transparent; wing pads entirely translucent except for a blackish streak at base. Dorsal part of abdomen more or less speckled reddish and brown.

The avocado lacewing bug, *Pseudacysta perseae*, was first collected in Puerto Rico by Harold Browning 28 March 1990 in Juana Díaz, at the Fortuna Agricultural Experiment Station Farm. It was attacking the leaves of avocado, *Persea americana* Mill. Most of the avocado trees in the variety orchard are infested by this insect. The damage to the leaves (fig. 3) is conspicuous; chlorotic spots and dry areas result from the feeding of the nymphs and adults of *P. perseae*. Severe damage is characterized by brownish, tan or dead irregular areas along the blade of the leaf mainly near the central vein. Fecal drops are deposited on the leaves, and are sometimes confused with

¹Manuscript submitted to Editorial Board 21 August 1990.

²Heidemann, Otto, 1908. Two species of North American Tingitidae (Hemiptera:Heteroptera). *Proc. Entomol. Soc. Wash.* 10 (1-2): 103-08.

³Blatchley, W. S., 1926. Heteroptera or true bugs of eastern North America with special reference to the fauna of Indiana and Florida. *Nature Publ. Co.*, pp. 1116.

⁴Drake, Carl J. and Florence A. Ruhoff, 1965. Lacewings of the World, a catalog, (Hemiptera:Tingidae). Smithsonian Institution, *Mus. Nat. Hist. Bull.* 243: 1-634.

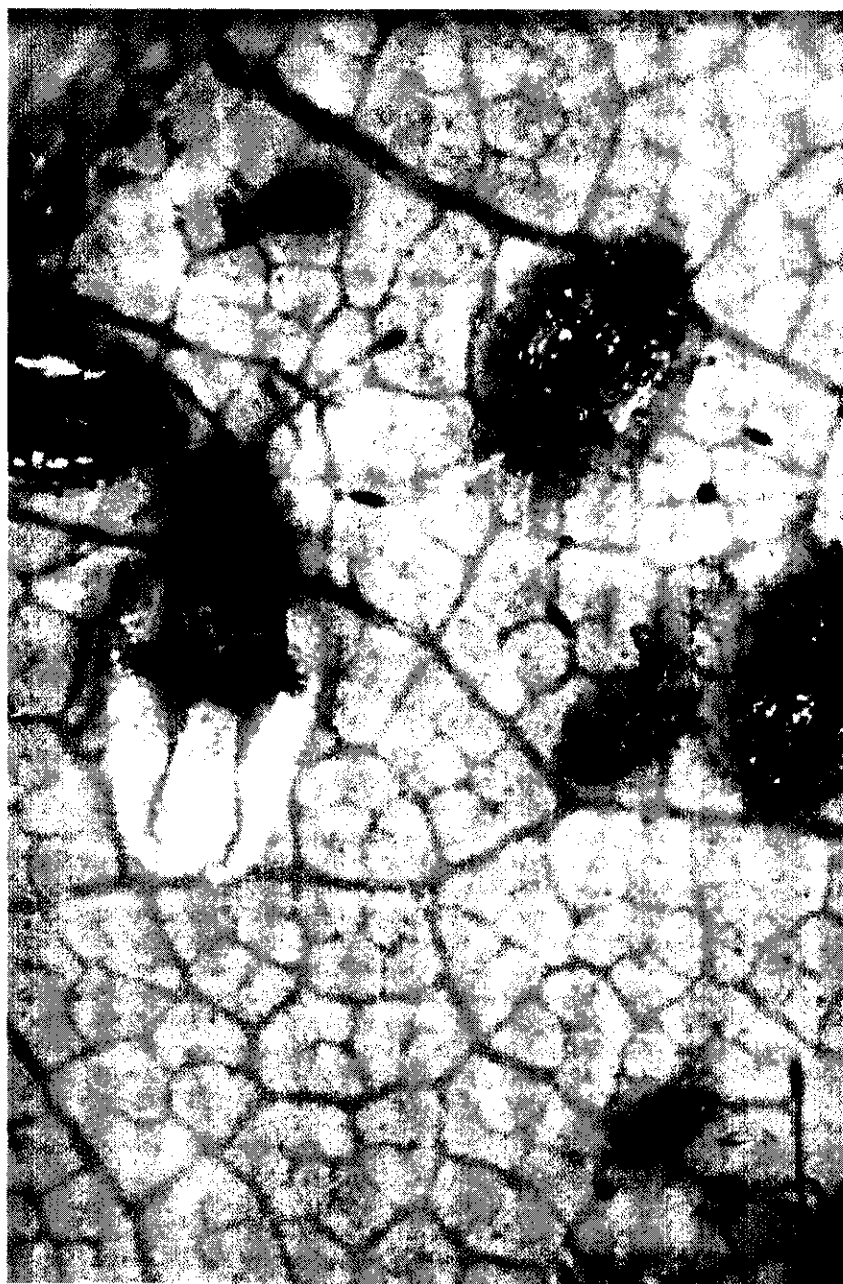


Fig. 1.—*Peudacysta perseae* (Heidemann) the avocado lacewing; adults and nymphs.

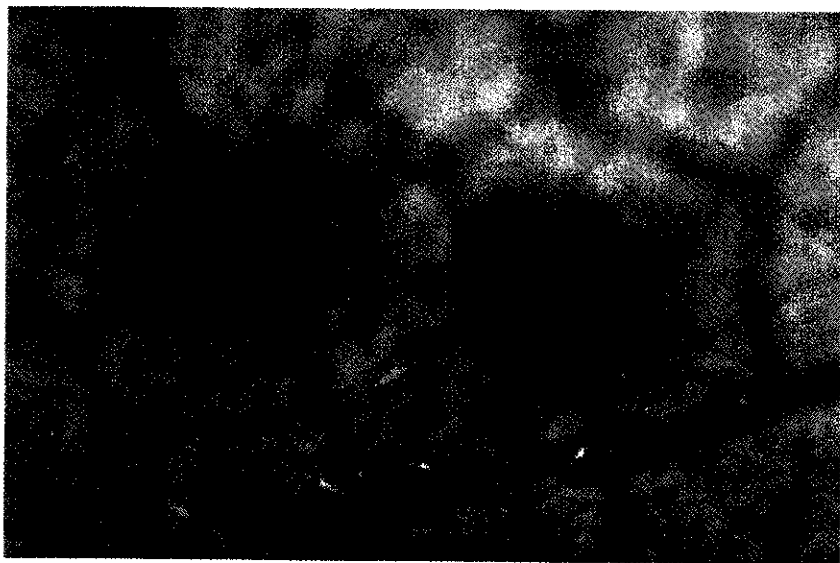


Fig. 2.—*Pseudacysta perseae* (Heidemann) eggs.

the dark covered eggs of this species.

Voucher specimens, P. R. Acc. No. 9-90, were collected by the authors in the same place the same day that H. Browning collected the first specimens of this lacebug in Puerto Rico. Additional specimens of this species were collected in Coamo at Paco Sella farm, from *P. americana* leaves; on 21 August 1990; S. Medina-Gaud, F. Gallardo and E. Vargas (P. R. Acc. No. 216-90). Specimens are deposited in the Museum of Entomology at the Agricultural Experiment Station at Río Piedras. Precautions must be taken to avoid spreading this species, especially on grafting material or grafted trees from Fortuna Agricultural

Experiment Substation, to other areas in Puerto Rico.

The authors wish to express their thanks to Drs. Harold Browning and Fred D. Bennett from the University of Florida at Gainesville for the identification of the species.

Silverio Medina-Gaud

Entomologist

Department of Crop Protection

Alejandro E. Segarra-Carmona

Associate Entomologist

Department of Crop Protection

Rosa A. Franqui

Research Assistant

Department of Crop Protection