

## A Jumping Plant Louse, *Katacephala tenuipennis* (Homoptera: Psyllidae)<sup>1</sup>

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**INTRODUCTION:** The psyllid, *Katacephala tenuipennis* Tuthill, is a seldom reported but locally common pest of *Eugenia* spp. in southern Florida and in Cuba. It causes the developing tip leaves on shoots to curl and become depauperate (fig. 1,2). Infested plants pose a problem to nurserymen, home owners, and caretakers of subtropical parks in southern Florida.



Figures 1-2. Spanish stopper, *Eugenia foetida*; young leaves curled into gall-like linear pockets harboring the psyllid, *Katacephala tenuipennis*.

**HOSTS:** Tuthill (1944) in his original description of *K. tenuipennis* listed "guairaje", *Eugenia axillaris* (Sw.) Willd., as the host plant. It also is called white stopper and wattle, and is a small evergreen tree (Myrtaceae) native to southern Florida, the Bahamas, and West Indies. The Florida State Collection of Arthropods (FSCA), in addition to having at least one Florida record on *E. axillaris*, has a recent record (5/30/90; L. D. Howerton & H. von Wald, at Tavernier) of a very heavy infestation on Spanish stopper (boxleaf eugenia), *Eugenia foetida* Pers. (= *E. buxifolia*, *E. myrtoides*). This evergreen tree or shrub is native to southern Florida, including the

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Keys, the Bahamas, West Indies, Central America, and Yucatan, Mexico. It is very desirable for tall hedges and as a tub plant in patios (Morton, 1974).

**DESCRIPTION:** (based on Tuthill (1944) and personal observations). Length to tip of folded wings 2.50-2.75mm. Color generally light green when alive, brownish yellow when dead. Forewings with smoky brown margin from apex to clavus (fig. 3-5). Body with short pubescence. Head narrower than thorax, very strongly deflexed, somewhat retrorse; vertex roundly swollen, nearly straight on caudal margin, narrowed anteriorly to prominent frons; genal processes large, swollen, 0.6X as long as vertex, smoothly joined to vertex, contiguous except basally; antennae 1.33 times as long as width of head, brownish yellow, fuscous at tip. Thorax very strongly arched, young adults often lacking conspicuous dark brown marks, but mature specimens, anteriorad to a transverse groove, have a pair of linear oblique fuscous spots equidistant from a short linear median dark mark (fig. 5). Posteriorad of transverse groove there are 6 fuscous, parallel, longitudinal stripes; pronotum and scutellum yellowish, unmarked. Forewings 2.5X as long as wide, broad basally, tapering to slender rounded tips. For illustrations of forewing venation and male and female terminalia, see Tuthill (1944). Nymphs as in fig. 6, liberally adorned with conspicuous setae.

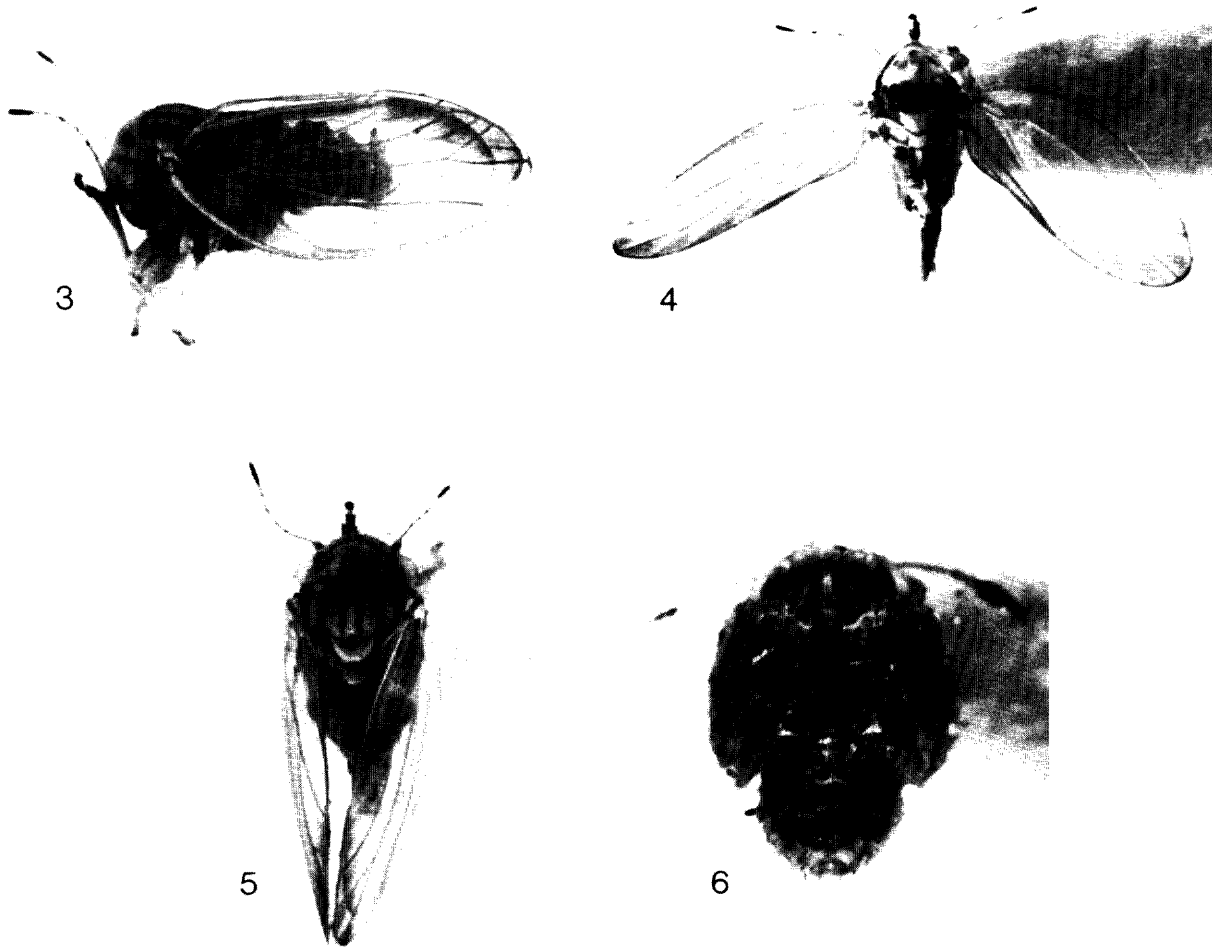
**IDENTIFICATION:** Only 2 other species of *Katacephala* are known. One of these, *K. arcuata* Crawford, is a rarely reported Mexican species (Jalapa). The other, *K. grandiceps* Crawford, has nearly the same Florida-Cuban range as that of *K. tenuipennis*. The latter has antennae 1.3X as long as width of head, whereas in *K. grandiceps* the antennae are not longer than width of head. *K. grandiceps* has very strongly rhomboidal shaped forewings, whereas *K. tenuipennis* has the forewing more elongate and gently curving (fig. 3,4). The genae of *K. arcuata* are about as long as the vertex, but those of *K. tenuipennis* are only about 0.6X as long.

**DISTRIBUTION:** Cuba and southern Florida, as far as known. Type series from Wajay and Santiago de las Vegas, Habana, Cuba, A. R. Otero collector. Tuthill (1945) reported a specimen from Santiago de Cuba, Oriente Province, collected October 4, 1928. The U. S. National Museum of Natural History (Russell, 1990) and FSCA have the following southern Florida records: Homestead and Naranja, Dade County; Ft. Lauderdale, Broward County; Ft. Pierce, St. Lucie County; and Bonefish Key, Vaca Key, and Tavernier (Florida Keys), Monroe County. Russell (1990) could find no specimens of *K. tenuipennis* collected at Key West by Schwarz, as Tuthill (1944) stated. Florida records of *K. tenuipennis* include the months of February, March, April, May, and October; Cuban records include February, April, May, and October.

**SURVEY AND DETECTION:** Look for young leaves of *Eugenia* spp. to be curled and reduced in size similiar to an aphid attack (fig. 1, 2). The edges of an infested leaf curl downward and inward to form a nearly closed linear pocket where the nymphs develop. Nymphs are covered with a whitish, transparent, mucilaginous substance.

**CONTROL:** Extension entomologists at the University of Florida suggest malathion 57% EC, 2 teaspoons/gal of water or Sevin 50% wettable powder 2 tablespoons/gal water. Follow label directions and precautions.

**ACKNOWLEDGEMENTS:** Sincere appreciation is extended to Miss Louise M. Russell, Research Entomologist, USDA, Systematic Entomology Lab., Beltsville, Maryland, for confirming the identification of *K. tenuipennis* from Tavernier, Monroe County, Florida, and for providing details on specimens of *Katacephala* in the U. S. National Museum of Natural History. Thanks also are extended to Mr. Jeffrey W. Lotz for the photographs (Negative No. 90071, Bureau of Technical Assistance, FDACS, Div. Plant Industry).



Figures 3-6. 3) *Katacephala tenuipennis* Tuthill, left lateral view; 4) *K. tenuipennis*, showing both pairs of wings, dorsal view; 5) *K. tenuipennis*, dorsal view; 6) *K. tenuipennis*, late instar nymph, dorsal view.

#### LITERATURE CITED:

- Crawford, D. L. 1914. A monograph of the jumping plant-lice or Psyllidae of the New World. U. S. National Museum Bull. 85(i-ix): 1-186, 30 p., 541 fig.
- Morton, J. F. 1974. 500 plants of south Florida. E. A. Seemann Pub. Co., Miami, Florida, 163 p., illus.
- Russell, L. M. 1990. Personal correspondence, July 17, 1990.
- Tuthill, L. D. 1944. On some Cuban Psyllidae (Homoptera). Ent. News 55(4): 93-96, 6 fig.
- Tuthill, L. D. 1945. Further observations on the Psyllidae of Cuba (Homoptera). Ent. News 56(9): 235-38.

**CORRIGENDA:** This paragraph replaces the identification paragraph on page 2.

**IDENTIFICATION:** Only 3 other species of *Katacephala* are known. Two of these are rarely reported species from Mexico: *K. arcuata* Crawford from Jalapa, and *K. fasciata* Jensen from Durango. *K. grandiceps* Crawford has nearly the same Florida-Cuban range as that of *K. tenuipennis*. The latter has antennae 1.3X as long as width of head, whereas *K. grandiceps* has antennae not longer than width of head. *K. grandiceps* has very strongly rhomboidal shaped forewings, whereas *K. tenuipennis* has forewings more elongate and gently curving (fig. 3,4). The genae of *K. arcuata* and *K. fasciata* are about as long as the vertex, but those of *K. tenuipennis* are only about 0.6X as long. *K. fasciata* is much larger than *K. tenuipennis* and lacks the conspicuous dark brown stripes on the dorsum. Jensen (1952) wrote that all except *K. grandiceps* have a similar dark band along the anal margin of the forewing. *K. fasciata* is more related to *K. arcuata* than the other species. The prescutum of *K. arcuata* is nearly horizontal along its dorsal surface and long in relation to its width, whereas in *K. fasciata*, the prescutum is convex and is twice as wide as its greatest length. The pronotum of *K. arcuata* is vertical and long and the head is directed strongly backward.

#### ADDITION TO LITERATURE CITED:

- Jensen, D. D. 1952. The Euphyllurini of Mexico (Homoptera: Psyllidae). Wasmann J. of Biol. 10(1):37-44, 2 pls.