

A NEW SPECIES OF *EUSCHISTUS* DALLAS FROM
MEXICO (HETEROPTERA: PENTATOMIDAE:
PENTATOMINI)

J. E. EGER, JR.
Senior Research Biologist
Agricultural Products Department
Dow Chemical U.S.A.
5100 West Kennedy Blvd., Suite 450
Tampa, FL 33609 USA

and
Research Associate, Florida State Collection of Arthropods
Florida Department of Agriculture & Consumer Service
Gainesville, FL 32602 USA

ABSTRACT

Euschistus (*Euschistus*) *rolstoni* n. sp. from Mexico is described and figured. A key is provided to separate this species from its nearest congener, *E. (E.) stali* Rolston, and to facilitate recognition of both species in Middle America.

RESUMEN

Euschistus (*Euschistus*) *rolstoni* n. sp. de Mexico es descrita e ilustrada. Una clave se provee para separar esta especie de su congénero más próximo, *E. (E.) stali* Rolston, y para facilitar reconocer estas dos especies en el centro de las Américas.

The species of *Euschistus* occurring in Middle America were revised by Rolston (1974). Recently, a small series of an undescribed species, near *E. stali* Rolston, from Mexico came to my attention. The species is described here and key couplets are provided to supplement Rolston's 1974 key.

Euschistus (*Euschistus*) *rolstoni* Eger, NEW SPECIES

Dorsum light brown to brown; punctuation dense, black. Venter pale yellow to greenish-yellow; concolorously punctate. Length 9.0-9.5 mm.

Head slightly longer at meson (2.1-2.2 mm) than wide across eyes (1.9-2.0 mm); lateral margins of juga subparallel for middle third of distance from eyes. Tylus slightly longer than juga. Antennae light brown, apical 2 segments somewhat darker than proximal 3; black dots present on first segment; much smaller, inconspicuous dots occasionally present on segments 2 and 3, segments 4 and 5 immaculate; length of segments 1-5: 0.5-0.6; 0.7-0.9; 1.1-1.4; 1.3-1.4; 1.4-1.5 mm. Bucculae obtusely lobed anteriorly, evanescent posteriorly, first labial segment lying entirely between bucculae. Rostrum extending to metacoxae; length of segments 1-4: 1.9-2.0; 2.3-2.4; 1.0-1.1; 0.9-1.1 mm.

Pronotum 2.1-2.3 mm long at meson, 5.7-6.2 mm wide across humeri. Anterolateral margins concave, denticulate along anterior two-thirds; denticles somewhat paler than disk. Humeri moderately produced, apices

angulate to obtusely lobed. Disk with slight impression posterolaterad of cicatrices.

Scutellum subequal in width and length (3.2-3.3 mm); small fovea present in basal angles, surrounded by sparsely punctate area; apex concolorous with disk or narrowly pale yellow. Punctuation of hemelytra smaller and more dense on embolium; membranes fumose, veins simple or furcate. Connexiva black laterally, becoming light castaneous mesially; pale yellow area present in middle of each segment along lateral margin and at anterior margin; pale punctuation dense, coarse.

Thoracic pleura with 5 small black dots present on each side. Femora and tibiae with well defined black dots. Basal angles of each abdominal sternite with small black dot. Spiracles concolorous with surrounding surface.

Ventral margin of pygophore strongly produced caudad in lateral aspect (Fig. 2). Posterior margin of pygophore broadly and deeply concave, exposing inferior ridge (Fig. 5), with mesal notch in dorsal and ventral aspects (Fig. 4, 6). Floor of genital cup impressed caudad of inferior ridge; inferior ridge with median notch; superior ridge produced above proctiger, broadly concave (Fig. 4). Proctiger with preapical denticles flanking broad and moderately deep concavity (Fig. 10, 11). Apex of parameres angled dorsad, surface shagreened (Fig. 9). Conjunctiva with single pair of appendages, these sclerotized at apex. Penisfilum with basal sclerotized cap (Fig. 7). Theca with 3 distinct lobes, one laterally on each side and one medially. Thecal processes relatively short, thin (Fig. 8).

HOLOTYPE: ♂, labelled MEXICO: Colima. 9 mi. NE Comala. 17-18 July 1983. Kovarik, Harrison, Schaffner. Deposited in the United States National Museum of Natural History. Type number: 100946.

PARATYPES: 4 ♂, same data as holotype. One retained in the author's collection and one each deposited in the following collections: Texas A&M University, College Station, TX; L. H. Rolston collection, Louisiana State University, Baton Rouge, LA; Universidad Nacional Autonoma de Mexico, D. F., Mexico.

DISTRIBUTION: Known only from the type series from the state of Colima, Mexico.

COMMENTS: This species is closely related to *E. stali*. Interestingly, 10 specimens of the latter species in the Texas A&M collection bear collection data that is identical to that of the type series of *E. rolstoni*. The 2 species are readily separated by a number of characters. The following couplets may be inserted into the key provided by Rolston (1974) to allow separation of these 2 species from each other and from other species found in Middle America:

- | | | |
|----------|--|-------------------------|
| 23(22). | Posterior margin of pygophore conspicuously protruding in lateral view (Fig. 2 and 3); spiracles black or concolorous with surrounding area of supporting sternite | 23.1 |
| 23.' | Posterior margin of pygophore smoothly contoured from lateral view; spiracles concolorous with surrounding area of supporting sternite | 24 |
| 23.1(23) | Spiracles usually black; black dots on antennal segments 2 and 3 large, conspicuous; humeri slightly produced, rounded | <i>E. stali</i> Rolston |
| 23.1' | Spiracles concolorous with surrounding area of supporting | |

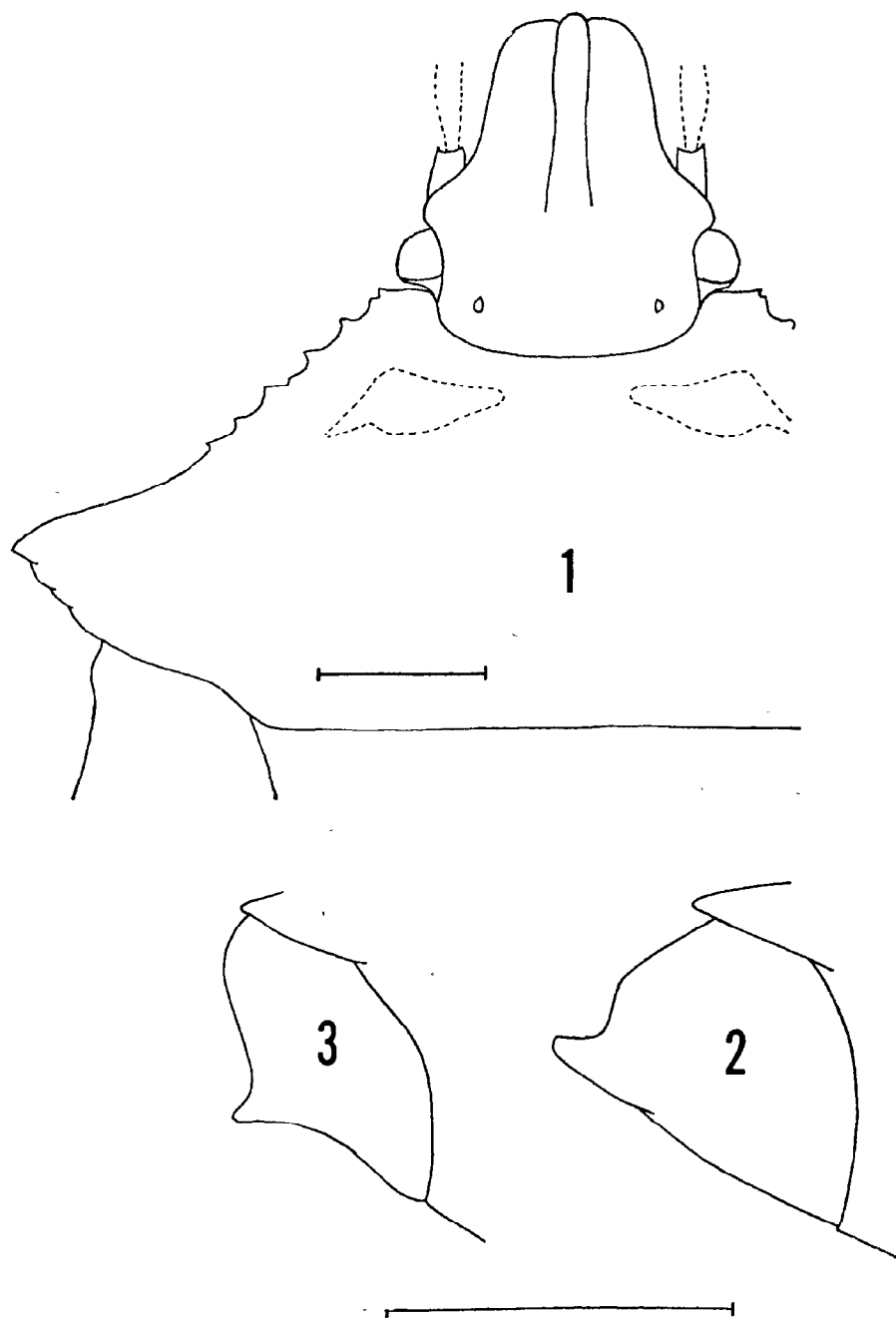


Fig. 1-2. *Euschistus (Euschistus) rolstoni*. 1.) Head and pronotum. 2.) Profile of pygophore, right lateral aspect. 3.) *E. (E.) stali*. Profile of pygophore, right lateral aspect. Dimensional lines equal 1.0 mm.

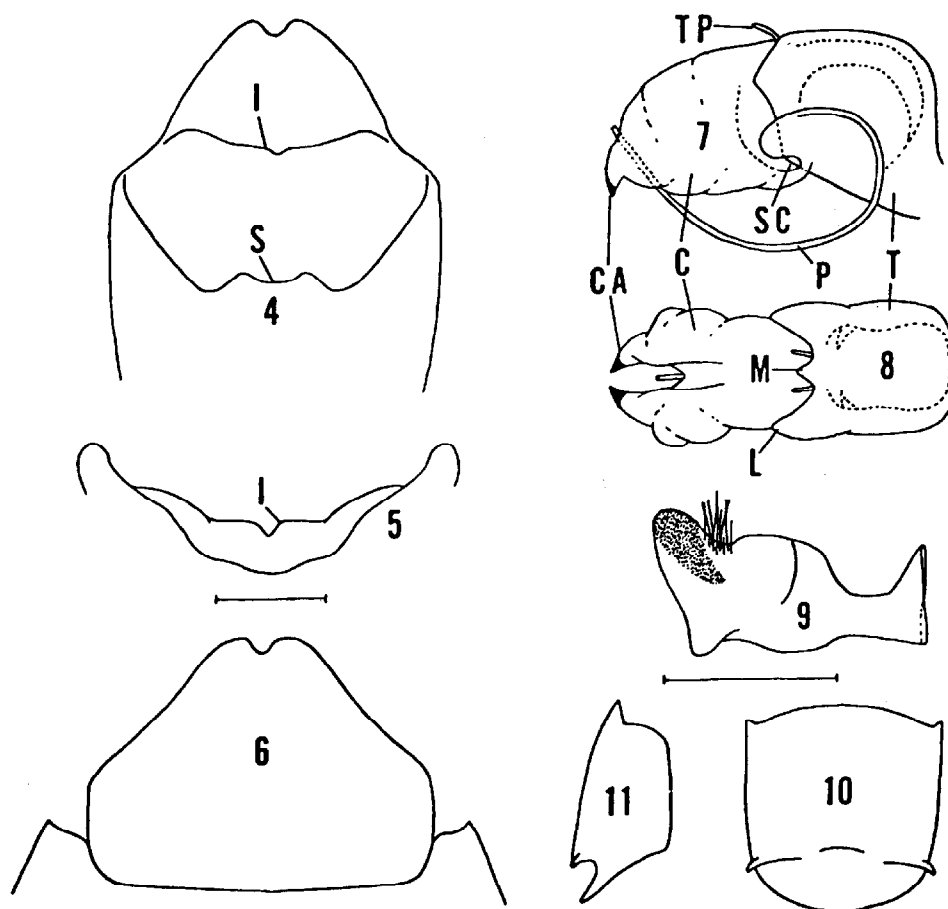


Fig. 4-11. *Euschistus* (*Euschistus*) *rolstoni*. 4.) Genital cup, dorsal aspect, omitting parameres and proctiger, inferior ridge (I), superior ridge (S). 5.) Posterior margin of pygophore and dorsal margin of inferior ridge, caudal aspect. 6.) Pygophore, ventral aspect. 7.) Aedeagus, lateral aspect, conjunctiva (C), conjunctival appendages (CA), penisfilum (P), sclerotized cap (SC), theca (T), thecal processes (TP). 8.) Aedeagus, dorsal aspect, lateral lobes (L), median lobe (M). 9.) Right paramere, lateral aspect. 10.) Proctiger, caudal aspect. 11.) Proctiger, lateral aspect. Dimensional lines equal 0.5 mm.

sternite; black dots on antennal segments 2 and 3, if present, small and inconspicuous; humeri moderately produced, angulate or obtusely lobed *E. rolstoni* Eger n. sp.

It is an honor to be able to dedicate this species to Dr. L. H. Rolston who has contributed so much to our knowledge of this genus and the family Pentatomidae.

ACKNOWLEDGEMENTS

I am indebted to Dr. J. C. Schaffner of Texas A&M University for providing the specimens on which this species is based and to Dr. L. H. Rolston for confirming my suspicion that the species was undescribed and for his comments and suggestions.

REFERENCES CITED

- ROLSTON, L. H. 1974. Revision of the genus *Euschistus* in Middle America (Hemiptera, Pentatomidae, Pentatomini). Ent. Americana 48: 1-102.

STRUMIGENYS ROGERI, AN AFRICAN DACETINE
ANT NEW TO THE U.S.
(HYMENOPTERA: FORMICIDAE)

MARK DEYRUP
Archbold Biological Station
P. O. Box 2057
Lake Placid, FL 33852 USA
AND

JAMES TRAGER
Archer Road Entomology Lab
University of Florida
Gainesville, FL 32611 USA

ABSTRACT

The African dacetine ant *Strumigenys rogeri* is reported from 3 localities in Broward Co. and Highlands Co., Florida. *S. rogeri* is illustrated and a key to the known *Strumigenys* species in Florida is provided.

RESUMEN

La hormiga africana "dacetine" es reportada en 3 lugares en los condados de Broward y Highland de la Florida. Se ilustra *S. rogeri* y se provee una clave de la especie *Strumigenys* ya conocida en la Florida.

Members of the dacetine ant genus *Strumigenys* may be recognized by their very long porrect mandibles with apical tines (Fig. 1-3). *Strumigenys* species are small (under 3 mm), slow-moving ants, almost never seen in the open. These ants are predators of small soil arthropods, particularly Collembola. *Strumigenys* species may occasionally be numerous enough to affect detritivore populations, but they are of no economic importance.

One widely distributed native *Strumigenys*, *S. louisianae*, is known from Florida; two apparently exotic neotropical species, *S. eggersi* and *S. gundlachi*, have been reported from southern Florida (Smith 1979). We first collected *S. rogeri* in 1982, at the Archbold Biological Station in Highlands County.

Strumigenys rogeri is a tramp species of African origin now found in the West Indies, British Guiana, various Pacific Islands, and greenhouses in Britain (Brown 1962). The Florida population is presumably derived from West Indian stock.

The ecological relationships between *S. rogeri* and other Florida dacetines remain obscure. *S. rogeri*, like other Florida dacetines, feeds primarily