

Scintillocoris, a new genus of Myodochini from Mexico
(Hemiptera: Lygaeidae)

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Abstract

Scintillocoris is described as a new genus of rhyparochromine lygaeid in the tribe Myodochini based on a new species *Scintillocoris kolenetoides* from Mexico. Comparison is made with *Kolenetrus* Barber and a discussion of its cladistic position discussed. New locality data is given for *Kolenetrus plenus* (Distant). Figures are included of anatomical details.

Introduction

This paper describes and discusses a new genus of Myodochini from Mexico. It is of particular importance because it appears to be the most plesiomorphic taxon of this large and diverse tribe.

Harrington (1980) revised the world genera of the lygaeid tribe Myodochini and established criteria for plesiomorphic and apomorphic character states in members of the tribe. Her cladogram treated the genus *Kolenetrus* Barber as the sister taxon of all other genera and thus representing the most plesiomorphic member of the group.

The genus *Scintillocoris* described below is closely related to *Kolenetrus* to which genus it will key at couplet 15 in Harrington (1980). It agrees with *Kolenetrus* in general habitus, in lacking an anterior pronotal collar, having very slightly carinate lateral pronotal margins, lack of a prominent transverse pronotal impression (fig. 4), lack of a scutellar carina, ocelli placed very near the compound eyes (fig. 4), 3 rows of claval punctures, a similar small metapleural evaporative area (fig. 2) around the scent gland auricle, phallic type I (see Harrington 1980 fig. 9) and a

sharp or subsharp genital capsule Harrington 1980 fig. 5)

Scintillocoris is readily distinguishable from *Kolenetrus* by the elongate buccular groove that extends posteriorly to a V-shaped point that reaches the middle of the eye (fig. 1), the lack of scalloping along the anterior margin of abdominal sternum 2 (fig. 6), by not having fore femoral spines confined to a single row, and by lacking the strongly protrudent eyes of *Kolenetrus*.

Most of the characters listed above are considered plesiomorphic by Harrington (1980). The elongate V-shaped buccular condition of *Scintillocoris* is an additional plesiomorphic feature. Thus this genus would seem to be important as representing the sister taxon of all of the other genera of Myodochini.

Scintillocoris, new genus

DESCRIPTION: Body surface shining, finely and evenly punctate. Buccular junction elongate, tapering, extending posteriorly to level of middle of eye, terminating in a V-shaped end (fig. 1). Eyes in contact, or nearly in contact, with anterior pronotal margin.

Pronotum lacking an anterior collar; lateral pronotal margins with very slight indication of a carina, almost rounded; pronotum somewhat compressed dorso-ventrally; lacking a transverse impression. Metathoracic scent gland auricle small, with very small evaporative area present immediately around auricle, leaving most of metapleuron free (fig. 2). Three complete even rows of claval punctures. Mesoepimeron enclosed. Forefemoral spines, not confined to a single row. Anterior margin of abdominal sternum 2 not scalloped. Genital capsule with opening of "sharp" or "subsharp" type. Phallic type I, with elongate parenthesis-like holding sclerites. Spiracles of abdominal segments 2,3 and 4 dorsal. No inner laterotergites (fig. 9).

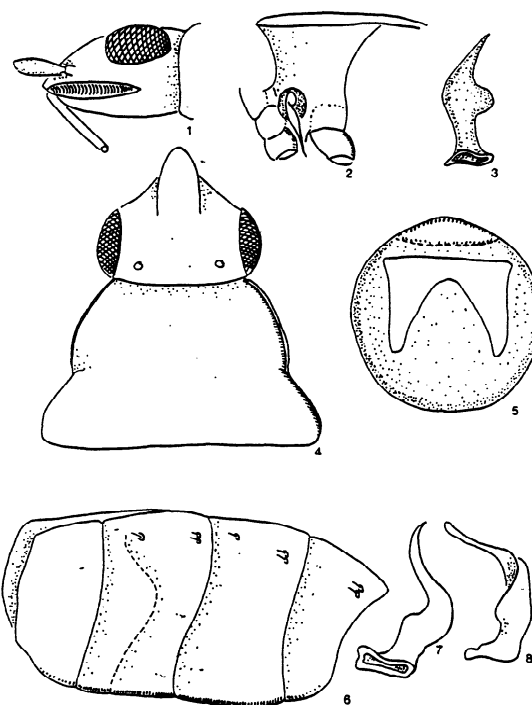
TYPE SPECIES: *Scintillocoris kolenetoides* new species. Monobasic.

As noted above *Scintillocoris* is most closely related to *Kolenetrus* Barber.

Scintillocoris kolenetoides, new species

DESCRIPTION: Head, anterior pronotal lobe, scutellum, basal one-half of first antennal segment and fore femora dark reddish to chocolate brown. Anterior margin of pronotum and entire posterior lobe, hemelytra, all tibiae and tarsi, posterior one-half of fore acetabula and middle and hind femora dull yellow tan. Distal ends of all femora, distal one half of first antennal segment and all of antennal segments 2 and 3 white. Antennal segment 4 pale yellow. Pleural and sternal surfaces bright reddish brown. Membrane hyaline. Dorsal surface with closely set fine punctures. Clothed with short, semi-decumbent silvery hairs.

Head slightly declivent; vertex moderately convex; eyes small only slightly curving beyond lateral margins of head and almost in contact with anterolateral pronotal margins (fig. 4); tylus almost attaining distal end of first antennal segment. Length head 0.38, width 0.50, interocular space 0.30. Pronotum slightly depressed across middle; lateral pronotal margins feebly sinuate; posterior margin straight; area of calli very slightly elevated above level of posterior lobe. Length pronotum 0.42, width 0.74. Scutellum lacking a median carina. Length scutellum 0.38, width 0.40. Lateral corial margins nearly straight; apical margin slightly convex, but becoming slightly concave near inner angle. Length claval commissure 0.20. Midline distance apex clavus-apex corium 0.40. Midline distance apex corium-apex abdomen 0.30. Forefemora very strongly incrassate. First segment of

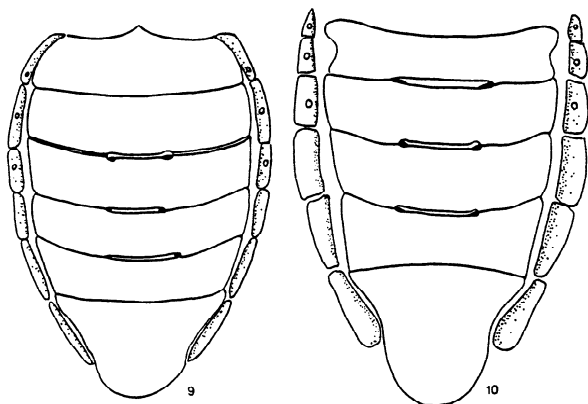


Figures 1-6. *Scintillocoris kolenetoides* new species. 1). Head semi-ventral view. 2). Metapleuron. 3). Paramere. 4). Head and pronotum dorsal view. 5). Genital capsule posterior view. 6). Abdomen lateral view. **Figures 7-8.** *Kolenetrus plenus* Barber, parameres.

hind tarsus much longer than length of segments 2 and 3 combined. Labium extending between metacoxae. Length labial segments I 0.34, II 0.36, III 0.24, IV 0.24 (from female paratype). Antennae very slender, terete, fourth segment narrowly fusiform. Length antennal segments I 0.16, II 0.28, III 0.24, IV 0.32. Total body length 2.02. Parameres with very elongate slender blade and twisted but little produced inner "projection." Phallus with helicoid process present, vesica 7 coiled. Sperm reservoir ovoid elliptical with laterally projecting wings. Arms of cup-like sclerite of genital capsule widely separated and dorsal margin straight (fig. 5).

HOLOTYPE: Male MEXICO: Guerrero: Bejucos. 6.VI.1984. (Ernesto Barrera & Harry Brailovsky). In Instituto de Biología UNAM.

PARATYPES: MEXICO: 1 male, 1 female same data as holotype. 1 female Guerrero: Estacion Microondas,



Figures 9-10. 9). *Scintillocoris kolenetoides* new species, abdomen, dorsal view. 10). *Kolenetrus plenus* Barber, abdomen, dorsal view.

Tuxpan-Iguala 24.V.1986. (H. Brailovsky). In Instituto Biologia UNAM and J.A. Slater collections.

REMARKS: Although the holotype has a bicolored pronotum and tan corium and clavus the paratypes from the same locality are much darker, both lobes of the pronotum being black with at most a narrow brown stripe along the anterior and posterior margins. The corium of these paratypes is also black except for a calloused brown stripe adjacent to the claval suture. The calloused stripes on the clavus are brown giving a contrasting appearance to the clavus relative to the black corial color. The pleural and sternal surfaces and first labial segment and all of the femora are also black in these specimens, with strongly contrasting white distal ends to the femora. The antennal coloration is as in the holotype. This dark coloration gives these paratypes an appearance more similar to that of *Kolenetrus plenus* (Distant) than does the holotype.

Kolenetrus plenus (Distant)

Rhyparochromus plenus Distant 1882, p. 216.

This species was originally described from Guatemala and placed in *Kolenetrus* by Barber (1918). It occurs in the western states and northeastward into New England and Canada. These eastern specimens resemble Distant's figure closely. However, the Mexican specimens noted below differ in having the dark apical corial coloration reduced and in having dark

rather than reddish legs. Submacroptery is common. Two thirds of the Mexican specimens show wing reduction as does the specimen listed below from Colorado. Sweet (1964) has summarized what is known of the biology.

MATERIAL EXAMINED: MEXICO: **Oaxaca:** 4 males, 5 females. 21 km. N. Villa Diaz Ordaz. 3100 m. 7.IX.1990 (R. Baranowski). 1 male 78 km N. Oaxaca City, hwy 175. 2800 m. 2.X.1990 (R. Baranowski). 1 female. 80 km. N. Oaxaca City, hwy 175. 2900 m. 13.IX.1990 (R. Baranowski). 1 male, 1 female Parq. Nac. Miguel Hidalgo 3.XI.1973. 2 females Edo, Lamirasol 7 km. S.W. Santiago de Tianguistengo 2.XI.1973 (C.W. O'Brien). 2 males, 2 females same locality but 2800 m. 1 male, 1 female. 19 km. W. Rio Frio 1.XI.1973 (C.W. O'Brien). 1 female 9 km. E. Amecameca 4.XI.1973 (C.W. O'Brien). 1 male, 1 female Eda 6 km. W. Pasodode Cortez 4.XI.1973 (C.W. O'Brien). 1 female 13 km. E. Ixtapaluca hwy. 150 21.VI.1977 (A.N. Garcia). 1 female Dgo. 28 mi. W. El Salto 8400' 18.VIII.1974 (C.W. & L. O'Brien & Marshall). 1 male Ocoyoacac 28.X.1973 (C.W. O'Brien). **NEVADA:** 1 male Mineral Co. 5 mi. W. Marietta 6300' 6.VI.1980 (D. Giuliani). **COLORADO:** 1 male Hinsdale Co. Martin Ranch Weminuche Valley 14-21.VIII.1977 (Fred G. Andrews). **NEW YORK:** 4 males, 4 females. Warren Co. Warrensburg 25.VIII.1955 (J.A. Slater). In Zoological Museum Lund University, Sweden and J.A. Slater collections.

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Literature Cited

- Barber, H.G.** 1918. Concerning Lygaeidae--No. 2. J. N.Y. Entomol. Soc. 26: 49-66.
- Distant, W.L.** 1882. Insecta. Rhynchota. Hemiptera-Heteroptera Vol. I. Biol. cent.-amer. London Lygaeidae pp. 173-220.
- Harrington, B.J.** 1980. A generic level revision and cladistic analysis of the Mydochini of the World (Hemiptera, Lygaeidae, Rhyparochrominae). Bull. Amer. Mus. Nat. Hist. 167: 49-116.
- Sweet, M.H.** 1964. The biology and ecology of the Rhyparochrominae of New England (Het.: Lygaeidae). Parts I & II. Entomol. Americana 43: 1-124, 44: 1