REVIEW OF THE NEOTROPICAL GENUS EUAGONA DALLAS (HEMIPTERA: HETEROPTERA: COREIDAE: SPARTOCERINI) WITH DESCRIPTION OF ONE NEW SPECIES

HARRY BRAJOVSKY

Departamento de Zoología. Instituto de Biología UNAM, Apdo Postal 70–153, México D.F., 04510, México (e-mail: coreidae@ibiologia.unam.mx)

Abstract.—A new species of the genus Euagona belonging to the coreid tribe Spartocerini is described from Bolivia and Peru under the name *E. hamata*, new species. Redescription of the genus and known species as well as illustrations, new distributional records, and a key to *Euagona* taxa are provided.

Key Words: Insecta, South America

DOI: 10.4289.0013-8797.112.1.253.1

The spartocerine coreid genus *Euagona* was proposed by Dallas (1852) to accommodate the species *Euagona diana* 1852, from Bolivia. Subsequently, Stål (1870) and Walker (1871) listed *E. diana* from Bolivia. Distant (1881) described *Euagona junio* collected in Peru. Lethierry and Severin (1894) included *Euagona* in their catalogue. The only other reference to *Euagona* is to Blôte (1936), which lists additional records of *E. diana*. The genus is peculiar in having the humeral angles expanded into wing-like projections, the antennal segments II and III cylindrical, not compressed, and the body length longer than 20 mm.

Packauskas (1994) produced a general key to subfamilies and tribes of the New World Coreidae including the characters to split the tribe Spartocerini.

In this contribution, *Euagona* is redescribed, a new species collected from Bolivia and Peru is described, all previously known species are redescribed with supplemental distributional records, and a key to known species is given.

MATERIALS AND METHODS

The following acronyms are used for the institutions cited in this paper: BMNH (The Natural History Museum, London, U.K.); CASC (California Academy of Sciences, San Francisco, California, USA); EGER (Joe Eger Collection, USA); FSNC (Florida State Collections of Arthropods, Gainesville, Florida, USA); LACM (Los Angeles County Museum, California, USA); PUCE (Pontificia Universidad Católica del Ecuador, Quito, Ecuador); ROMO (Royal Ontario Museum, Toronto, Ontario, Canada); TAMU (Texas A&M University, Insect Collection, College Station, Texas, USA); UCDA (University of California, Davis, USA); UNAM (Colección Entomológica, Instituto de Biología, Universidad Nacional Autónoma de México); USNM (United States National Museum, Smithsonian Institution, Washington, D. C., USA); USUL

* Accepted by Michael W. Gates
(Utah State University, Logan, Utah, USA).
All measurements are given in millimeters.

RESULTS AND DISCUSSION

Euagona Dallas

Euagona Dallas, 1852: 370.

Diagnosis.—This genus is distinguished from other genera of Sparto-
cerini by the following combination of characters: humeral angles expanded
into wing-like projections; antennal segments II and III cylindrical; abdo-
men not dilated; and body length longer
than 20 mm.

Redescription.—Body elongate, nearly parallel-side. Head wider than long, quadrature, non-declivert, dorsally
flat; tylus unarmed; juga produced forward as a medium-sized conical
tubercle; antennifersous tubercles un-
armed, large, prominent, situated close
together, projecting anteriorly to tylus;
 antennal segment I robust, cylindrical,
thickest, slightly curved outward, longer
than head, and basally curved and
broad; antennal segments II and III
cylindrical, slender, IV fusiform; anten-
nal segment IV shortest, I longest, and II
longer than III; ocelli near to eye; procoecellar pit obliquely deep; eyes
hemispheric, protuberant; postocular
 tubercle indistinct; mandibular plate
unarmed; bucculae hemispheric, elon-
gate, raised, entire, reaching middle
third of eyes; rostrum robust, reaching
middle third of mesosternum; rostral
segment III shortest, I longest, and II
longer than IV; ventrally and area
behind bucculae without tubercles. Tho-
rax: Pronotum wider than long, slightly
declivert; collar wide; anterior margin
smooth, nearly straight; frontal angles
obtuse; anterolateral margins obliquely
straight, uniformly nodulose; each hu-
meral angle expanded into long, taper-
ing, acute, curved spine, directed up-
ward and forward, reaching laterally
and anteriorly to the head or just the
middle third of pronotal disk; outer
and inner margins of each humeral angles
uniformly nodulose; posterolateral margins
and posterior margin smooth or
with scarce scattered, wide tubercles;
collar region smoother than posterior
lobe, not tuberculate; posterior lobe of
pronotal disk, including wide surface of
each humeral expansion, abruptly or
finely tuberculate; triangular process
absent. Prosternum deeply concave,
posterior third in front of the area
between fore legs produced into narrow,
acute projection; mesosternum wide,
trapeziform, gently convex; metaster-
num wide, rectangular; middle third of
posterior margin of metasternum con-
spicuously produced into large and
broad hemispheric expansion; posterior
border of metapleurura straight, truncated;
 anterior lobe of metathoracic peritreme
raised, large, earlike, and posterior lobe
short, elongate to subacute, and flat;
evaporative area well developed. Legs:
Unarmed; distance between hind coxae
equal to distance from coxa to lateral
margin; fore and middle femora rela-
tively slender; hind femur slender to
nearly swollen; tibiae sulcate. Scutellum
triangular, as longer as wide, or slightly
wider than long, flat, apically subacute;
lateral margins emarginated; scutellar
disk transversely striated. Hemelytra
macropeterous, reaching or extending
beyond apex of last abdominal segment;
posterior angles of connexival segments
unarmed or with a tiny tubercle; ab-
dominal spiracle circular, closer to
anterior edge, and far from lateral edge
of each sternite; posterior margin of
abdominal sternite II at middle third
convex, raised. Integument. Antennal segment I to III clothed with short, erect to semidecumbent silvery setae; antennal segment IV with mixed erect and decumbent silvery setae; head, pronotum, scutellum, connexivum, thorax, and abdominal sterna densely clothed with decumbent golden to silvery pubescence; clavus and corium almost glabrous; legs and male genital capsule clothed with short, erect, golden pubescence; abdominal sterna III to VI lateral to middle line densely clothed with a longitudinal stripe of appressed, decumbent, silvery pubescence, sometimes irregularly and not well defined. Male genital capsule: Simple; posteroventral edge straight, slightly exposed. Paramere: Simple, elongate, slightly curved (Figs. 2–3). Female genital plates: Abdominal sternite VII with plica and fissure; plica rectangular, covering 1/3 of the sternite; gonocoxae I enlarged anteroposteriorly, subtriangular, in caudal view closed, upper margin rounded; paratergite VIII triangular, spiracle visible; paratergite IX squarish, shorter than paratergite VIII. Head, pronotum, and ventrally clothed with dull yellow setae; legs with short erect to decumbent golden setae.

Discussion.—Euagona resembles Menenotus de Castelnau, 1832, in general aspect; these genera have the humeral angles expanded into winglike projections (crescent-shaped), antennal segments II and III cylindrical and not compressed and dilated, and body length longer than 20 mm. Euagona, recorded from Bolivia, Ecuador, and Peru, is distinguished by having the scutellum as long as—wide or slightly wider than long, and the abdomen not dilated. In Menenotus, recorded from Brazil and Paraguay, the scutellum is conspicuously wider than long, and the abdomen is clearly dilated.

Euagona hamata Brailovsky, new species (Figs. 7–9)

Diagnosis.—Hemelytral membrane pale yellow with basal angle and apical border dark brown; clavus yellow with only the claval suture dark brown; humeral angles expanded into long and stout winglike projections, with outer and inner margins strongly nodulose.

Description.—Holotype male: Measurements: Male: Head length 2.12; width across eyes 2.35; interocular space 1.36; intercellar space 0.70; length antennal segments: I, 5.16; II, 4.71; III, 3.95; IV, 3.80. Pronotum: Length 6.53; width across apex of humeral angles 8.85. Scutellar length 2.58; width 2.58. Body length 23.67.

Dorsal coloration: Head and scutellum dark reddish brown; antennal segments I to IV shiny chestnut orange; pronotum dark reddish brown with a yellowish orange stripe along the posterolateral margins, most distinct near the posterior margin, gradually becoming fainter towards lateral corners; clavus yellow with claval commissure dark brown; corium yellow; hemelytral membrane pale yellow with basal angle and apical border close to apical margin of corium pale to dark brown; connexivum dark reddish brown; dorsal abdominal segments III to VI dark orange, VII dark orange with posterior margin dark reddish brown. Ventral coloration: Head reddish brown with posterior margin of bucculae dark yellow; rostral segments dark castaneous (apex of rostral segment IV black); thorax reddish brown with posterior margin of metapleura dark yellow; anterior and posterior lobe of metathoracic peritreme yellow; coxae, trochanter, and femora dark reddish brown; tibiae and tarsi shiny reddish orange; abdominal sterna II to VII and genital capsule dark reddish brown.
Figs. 4–6. *Euagona junct* Distant. 4, Dorsal view. 5–6, Paramere.
Structure: Humeral angles expanded into long and stout winglike projections, with outer and inner margins densely nodulous. Paramere slender, weakly curved (Figs. 8–9).

Female: Head length 2.20; width across eyes 2.35; interocular space 1.36; interocellar space 0.68; length antennal segments: I, 5.01; II, 4.71; III, 3.95; IV, 3.65. Pronotum: Length 6.15; width across apex of humeral angles 6.60. Scutellar length 2.96; width 2.96. Body length 25.77.

Coloration similar to male holotype. Connexival segments VIII and IX dark reddish brown; dorsal abdominal segments dark orange with black to dark brown marks; genital plates dark reddish brown with gonocoxae I usually dark orange.

Variation: Dorsal abdominal segments shiny orange or dark orange with dense or scattered black marks.


Etymology.—The specific epithet is derived from the Latin, hamatus, meaning curved like a hook, referring to the shape of the humeral angles of pronotal disk.

Euagona diana Dallas
(Figs. 1–3)

Euagona diana Dallas, 1852: 371.

Diagnosis.—Hemelytral membrane pale yellowish white with a complete dark to pale brown margin; claval yellow with distal third black; humeral angles produced into a long, tapering, curved horn, apically slender and acute.

Redescription.—Male: Measurements: Head length 2.05; width across eyes 2.35; interocular space 1.21; interocellar space 0.69; length antennal segments: I, 6.00; II, 5.85; III, 4.86; IV, 4.78. Pronotum: Length 5.39; width across apex of humeral angles 7.06. Scutellar length 1.90; width 1.97. Body length 22.96.

Dorsal coloration: Head, pronotum, and scutellum black; antennal segments I to IV pale yellowish orange; claval yellow with distal third black; corium yellow; hemelytral membrane pale yellowish white with dark to pale brown margins; connexivum yellow; dorsal abdominal segments yellow with shiny orange reflections. Ventral coloration: Head and thorax black; rostral segments I and II black, III and IV dark yellow with apex of IV black; legs and anterior and posterior lobe of metathoracic peritreme yellow; abdomen with middle third of sterna II to VI black and laterally yellow with pink and orange reflections; abdominal sternite VII yellow with pink orange reflections, and an irregular black transversal stripe close to posterior margin; genital capsule yellow with pink and orange reflections.

Structure: Humeral angles produced on each side into long, tapering, acute curved spine, directed upwards and forwards, with apex slender and acute (Fig. 1). Paramere. Simple and slightly curved (Figs. 2–3).

Female: Head length 2.05; width across eyes 2.58; interocular space 1.36; interocellar space 0.78; length antennal segments: I, 6.46; II, 6.00; III, 4.94; IV, 4.78. Pronotum: Length 5.92; width across apex of humeral angles 6.84. Scutellar length 2.35; width 2.20. Body length 26.47.
Coloration similar to male. Connexival segments VIII and IX, and abdominal segments VIII and IX dark yellow; genital plates dark yellow with reddish to black reflections.

Variation: Corium yellow with pale green reflections.

Distribution.—This species was described from Bolivia (without data) and subsequently has been reported from Peru (Puerto Inca, Rio Pachitea) (Blote 1936). Ecuador is a new country record.

Type material examined.—Euagona diana: HOLOTYPE: male, Bolivia (without data) (BMNH).


Euagona juno Distant
(Figs. 4–6)


Diagnosis.—Hemelytral membrane entirely black; humeral angles produced into a long lunate spine, apically slender and acute.

Redescription.—Male: Measurements: Head length 2.15; width across eyes 2.52; interocular space 1.37; interocellar space 0.63; length antennal segments: I, 6.53; II, 6.38; III, 5.32; IV, 4.94. Pronotum: Length 5.92; width across apex of humeral angles 6.38. Scutellar length 1.82; width 1.74. Body length 24.40.

Dorsal coloration: Head, pronotum, and scutellum black; antennal segments I to IV pale yellowish orange; clavus with basal half yellow, and apical half black; corium yellow; hemelytral membrane black; connexivum and abdominal segments shiny yellowish orange. Ventral coloration: Head and thorax black; rostral segments I and II black, III and IV dark orange with apex of IV black; legs anterior and posterior lobe of metathoracic peritreme, and evaporative area yellow; abdomen with middle third of sterna II to VI black, and laterally yellow with pale pinkish-orange marks;
genital capsule yellow with pinkish-orange marks.

Structure: Humeral angles produced into long lunate spine, directed upwards and forwards, with apex more slender and acute (Fig. 4). Parameres slender and weakly curved (Figs. 5–6).

Female: Head length 2.20; width across eyes 2.61; interocellar space 1.52; intercellar space 0.78; length antennal segments: I, 6.84; II, 6.65; III, 5.62; IV, 5.32. Pronotum: Length 6.84; width across apex of humeral angles 7.37. Scutellar length 2.43; width 2.35. Body length 29.48.

Coloration similar to male. Connexival segments III to IX, dorsal abdominal segments III to IX, lateral margins of abdominal sterna III to VI, and genital plates dark reddish orange; abdominal sternite VII dark reddish orange, with irregular black transversal mark near anterior margin.

Distribution.—This species was described and previously known only from Peru.

Type material examined.—Euagona junio: TYPE: male, Peru (without data) (BMNH).

Additional material examined.—New records. 1 ♀, Peru: Loreto Province, 80 km NE Iquitos, Explorama Lodge, 1 km from Amazon River on Rio Yanamono, 1-5-IX-1992, J. Castner and P. Skelley (FSCA). 1 ♂, 1 ♀, Peru: Loreto Province, Explorama Inn, NE Iquitos, 9-VII-1990, S. Dunkle (FSCA, UNAM).

KEY TO EUAGONA SPECIES

1. Hemelytral membrane black
   
   E. junio Distal

   Hemelytral membrane never black

2. Hemelytral membrane pale yellowish-white, with entire margin dark to pale brown; claval commissure dark brown, with only basal angle and apical border dark brown; clavus yellow, with only the claval commissure dark brown

   E. hamata, n. sp.

ACKNOWLEDGMENTS

I thank the following people and institutions for the loan of material: Norman D. Penny (CASC), Joe E. Eger (EGER), Julieta Brambila (FSCA), Brian Harris (LACM), Giovani Onore (PUCE), Brian Hubley (ROMO), Thomas J. Henry (USNM), Joseph C. Schaffner (TAMU), Steven L. Heydon (UCDA), and Wilford J. Hanson (USUL). I am especially grateful to Mick Webb (BMNH) for the loan of the type material of Euagona diana, and Euagona junio. I also wish to thank Albino Luna (UNAM) for the dorsal view illustrations and Ernesto Barrera (UNAM) and an anonymous referee for comments on the manuscript.

LITERATURE CITED


