



The cicada genus *Selymbria* Stål, 1861 (Hemiptera: Cicadidae: Tibicininae: Selymbriini): redescription including ten new species and a key to the genus

ALLEN F. SANBORN

Department of Biology, Barry University, 11300 NE Second Avenue, Miami Shores, FL 33161-6695, USA.

E-mail: asanborn@barry.edu

Table of contents

Abstract	401
Introduction	402
Materials and methods	402
SYSTEMATICS	402
Family Cicadidae Latreille, 1802	402
Subfamily Tibicininae Distant, 1905a	403
Tribe Selymbriini Moulds & Marshall, 2018 (in Marshall <i>et al.</i> 2018)	403
Genus <i>Selymbria</i> Stål, 1861	403
<i>Selymbria ahyetios</i> Ramos & Wolda 1985: 178.	404
<i>Selymbria boliviaensis</i> n. sp.	405
<i>Selymbria chevauxensis</i> n. sp.	409
<i>Selymbria cinctifera</i> n. sp.	412
<i>Selymbria danieleae</i> Sanborn, 2011	417
<i>Selymbria ecuadorensis</i> n. sp.	417
<i>Selymbria guatemalensis</i> n. sp.	421
<i>Selymbria guianensis</i> n. sp.	425
<i>Selymbria iguazuensis</i> n. sp.	429
<i>Selymbria loretoensis</i> n. sp.	432
<i>Selymbria madredeiosensis</i> n. sp.	436
<i>Selymbria pandora</i> Distant, 1911	440
<i>Selymbria pluvialis</i> Ramos & Wolda, 1985	441
<i>Selymbria puntarenasensis</i> n. sp.	442
<i>Selymbria stigmatica</i> (Germar, 1834)	445
<i>Selymbria subolivacea</i> (Stål, 1862)	445
Key to species of <i>Selymbria</i>	446
Acknowledgements	447
References	447

Abstract

The cicada genus *Selymbria* Stål, 1861 is redescribed along with ten new species. *Selymbria boliviaensis* n. sp. is described from Bolivia, *S. chevauxensis* n. sp. and *S. guianensis* n. sp. are described from French Guiana, *S. cinctifera* n. sp. is described from Panama and Costa Rica, *S. ecuadorensis* n. sp. is described from Ecuador, *S. guatemalensis* n. sp. is described from Guatemala, *S. iguazuensis* n. sp. is described from Argentina and Brazil, *S. loretoensis* n. sp. and *S. madredeiosensis* n. sp. are described from Peru, and *S. puntarenasensis* n. sp. is described from Costa Rica. The current sixteen species of *Selymbria* are listed along with their synonymies and the known distribution of each species. A key to the species of *Selymbria* is provided.

Key words: Taxonomy, new species, Neotropics, Central America

Introduction

The genus *Selymbria* Stål, 1861 was erected for cicadas with characteristics including eyes a little wider than the mesonotum, a swollen postclypeus and exposed timbals (Stål 1861). Species of the genus are relatively rare in collections even though they have been reported across the Neotropics from Guatemala in the north, across Central America, to French Guiana, Peru, Brazil and Argentina in South America (Metcalf 1963; Sanborn 2013; 2014; Sanborn & Heath 2014). Stål (1861) transferred two species to the genus with the generic description (although one was not described officially until the next year). It was almost another 50 years until the next species was described (Distant 1911). The species composition of the genus remained constant for more than 70 years until two Panamanian species were described (Ramos & Wolda 1985). The last new species to be described was from French Guiana (Sanborn 2011) finalizing the six known species more than 25 years later.

The higher taxonomy of the genus has a confused history. Species that at one time were or are now classified in *Selymbria* are currently members of three subfamilies (Cicadinae Latreille, 1802, Cicadettinae Buckton, 1890, Tibicininae Distant, 1905a), five tribes (Fidicinini Distant, 1905a, Cicadini Latreille, 1802, Prasiini Matsumura, 1917, Taphurini Distant, 1905b, Selymbriini Moulds & Marshall, 2018 (in Marshall *et al.* 2018)), and four genera (*Cicada* Latreille, 1802, *Ollanta* Distant, 1905a, *Sapantanga* Distant, 1905c, *Selymbria*). Recently, the genus has been shown to exhibit structural characteristics that are found only species of the more primitive Tettigarctidae Distant, 1905d (Marshall *et al.* 2018). The uniqueness of these characters resulted in the description of a new tribe to contain the genus along with movement to a different subfamily within the Cicadidae (Marshall *et al.* 2018).

A number of new species were sent to the author for determination or found in undetermined material by the author at various institutions. These new species are described here. A redescription of the genus is provided as well to clarify the taxonomy of *Selymbria* as it has been shown to exhibit unique morphology within the Cicadidae, the higher taxonomy has a varied history, and the genus has included species from what are now three different subfamilies (Marshall *et al.* 2018) demonstrating the need for this review.

Materials and methods

Morphological terminology for the new species follows Moulds (2005; 2012) and Marshall *et al.* (2018) with the higher taxonomy presented following Marshall *et al.* (2018). Specimens of the new species were found among the undetermined cicadas or provided to the author for determination by the Florida State Collection of Arthropods, Gainesville (FSCA), Georgia Museum of Natural History, Athens (UGCA), Louisiana Arthropod Museum, Baton Rouge (LSAM), Max S. Moulds Collection, Kuranda (MSMC), Monte L. Bean Life Science Museum, Brigham Young University, Provo (BYUC), Texas A & M University Entomology Collection, College Station (TAMU), University of Delaware, Newark (UDCC), M.T. James Entomological Collection, Washington State University, Pullman (WSUC), Société entomologique Antilles-Guyane (SEAG), Daniel Rojas Lanús, Trelew, Argentina, and Marc Thouvenot, Lyon, France (MTC). Type material was studied in the Natural History Museum, London (BMNH), the Naturhistoriska Riksmuseet, Stockholm (NHRS), the Smithsonian Institution, National Museum of Natural History, Washington, D.C. (USNM), the author's collection (AFSC), specimens sent from the Ramos Collection at North Carolina State University, Raleigh (NCSU), and images of the Germar holotype on the website (http://zoomus.lviv.ua/en/germar_collection/) of the Zoological Museum, Ivan Franko National University of Lviv, L'viv, Ukraine (ZMD). Vouchers are found in the AFSC unless the example was an individual and not part of a series. Measurements were made with Vernier calipers sensitive to ± 0.05 mm. Species distributions were determined from the cicada bibliographies containing references to species of *Selymbria* (Metcalf 1963; Sanborn 2013) and more recent literature (Sanborn 2014; 2018; Sanborn & Heath 2014; Marshall *et al.* 2018).

SYSTEMATICS

Family Cicadidae Latreille, 1802

REMARKS. All extant species of cicadas are members of the family Cicadidae except for the two Australian species

of *Tettigarcta* White, 1845. Cicadidae are distinguished from the Tettigarctidae by the pronotum that is smaller than the mesonotum and does not expand over the dorsal mesonotum, the presence of a distinctive cruciform elevation, fore wing radius posterior arising from node, fore wing anal veins 2 and 3 are fused, males generally possess timbal organs and an abdominal resonating chamber, both sexes possess tympana, male sternite VII shielding genitalia ventrally, and the male pygofer with basal lobes present (Moulds 2005).

Subfamily Tibicininae Distant, 1905a

REMARKS. Species of the Tibicininae can be distinguished by the metanotum being entirely concealed on the dorsal midline, the fore wing cubitus posterior and anal vein 1 are unfused (except in the Platypediini Kato, 1932), hind wing radius posterior and median veins unfused at their bases, male opercula distinctively S-shaped with deeply concave lateral margin not reaching posterior margins of tympanal cavities (except in the Selymbriini Moulds & Marshall, 2018 (in Marshall *et al.* 2018)), males without abdominal timbal covers or with partially recurved rim, the male pygofer exhibiting undeveloped distal shoulder, pygofer upper lobes absent (present in some of the Selymbriini), uncus very long, non-retractable within pygofer, claspers absent, aedeagus with ventrobasal pocket, restrained by a tubular encapsulation below uncus, apical theca with a pair of leaf-like lateral lobes (Moulds 2005; Marshall *et al.* 2018).

Tribe Selymbriini Moulds & Marshall, 2018 (in Marshall *et al.* 2018)

Selymbriini Moulds & Marshall 2018 (in Marshall *et al.* 2018): 53.

TYPE GENUS. *Selymbria* Stål 1861: 615.

REMARKS. The genus *Selymbria* was recently moved from the Taphurini to this new monogeneric tribe (Marshall *et al.* 2018). The basal position of the genus in the multi-gene tree suggests it is an ancient lineage and it is the only genus of Cicadidae to show similarity in the aedeagus structure to the species of *Tettigarcta* White, 1845 of the Family Tettigarctidae Distant, 1905d (Marshall *et al.* 2018). The Selymbriini differ from the other Tibicininae by the supra-antennal plate almost meeting the eye, the lack of an accessory auditory structure in the males, the male opercula generally covering the tympanal cavity completely, the distal aedeagal basal plate is undulated rather than right-angled, the very short theca is laterally expanded into a broad, flat distal end ornamented with triangular wings similar to species of the Tettigarctidae, pygofer upper lobes usually present, and an exceedingly long, undivided uncus that is not retractable within the pygofer (Marshall *et al.* 2018).

GENERA INCLUDED. The tribe is represented currently only by the genus *Selymbria* Stål, 1861.

Genus *Selymbria* Stål, 1861

Selymbria Stål 1861: 615.

TYPE SPECIES. *Cicada signifera* Germar 1830: 44. (Brazil)

REMARKS. The characteristics given for the tribe also distinguish the only currently assigned genus, *Selymbria*, within the Selymbriini. Particularly the triangular head when viewed from the dorsal side, prominent eyes wider than the lateral angle of the pronotal collar, recurved ridge on the posterior timbal cavity, and the long uncus are obvious structures to identify members of the genus.

SPECIES INCLUDED. The genus is represented currently by the following 16 species: *S. ahyetios* Ramos & Wolda, 1985, *S. boliviaensis* n. sp., *S. chevauxensis* n. sp., *S. cinctifera* n. sp., *S. danieleae* Sanborn, 2011, *S. ecuadorensis* n. sp., *S. guatemalensis* n. sp., *S. guianensis* n. sp., *S. iguazuensis* n. sp., *S. loretoensis* n. sp., *S. madredediosensis* n. sp., *S. pandora* Distant, 1911, *S. pluvialis* Ramos & Wolda, 1985, *S. puntarenasensis* n. sp., *S. stigmatica* (Germar, 1834), and *S. subolivacea* (Stål, 1862).

DESCRIPTION. Body size variable (15.6–27 mm body length). Head slightly wider than lateral angles of pronotum and wider than mesonotum, frons narrow, angled ventrally to frontoclypeal suture, its lateral margins not reaching

angle of postclypeus, vertex at area of ocelli as long as or a little longer than frons, eyes projecting beyond the anterior angles of the pronotum, ocelli closer to each other than to eyes; postclypeus inflated, with rounded apex when viewed from the dorsal side, with broad central sulcus on ventral postclypeus, transverse grooves not reaching lateral ends of transverse ridges, rostrum length species specific, reaching the middle coxae or trochanters. Pronotum shorter than mesonotum, lateral margins amplified, rounded, lacking lateral tooth; mesonotum to base of cruciform elevation about as long as head and pronotum together, not as wide as lateral pronotal collar, cruciform elevation with shallow, smoothly curved posterior margin; metanotum extends laterally beyond wing groove and posteriorly beyond cruciform elevation. Fore wings and hind wings hyaline with eight and six apical cells, respectively, infuscation may be present, pterostigma present, basal cell longer than broad, costal vein and radius & subcostal veins close as are the subcostal vein and radius anterior 1, cubitus anterior 1 longer beyond crossvein than proximal to crossvein, radial and radiomedial crossveins generally parallel. Hind wing anal vein 3 curved at distal end, anal lobe broad. Fore femora with elongated, angled primary spine, upright secondary spine, and a small tertiary spine, tarsi three-segmented. Male opercula generally with rounded posterior margin, barely covering tympanal cavity or extending to middle of sternite II, opercula separated along midline separated basally by bulbous sternite I, not encapsulating meracanthus except in *S. boliviaensis* **n. sp.**, meracanthus triangular, either broadly triangular or tapering to a point, not reaching to middle of operculum, female operculum with transverse posterior margin, smaller extending medially only to medial base of meracanthus, meracanthus generally of similar shape to male for each species extending to or beyond posterior margin of female operculum. Abdomen about as long as the distance between apex of head and posterior of cruciform elevation, lateral margins parallel at base until the abdomen begins narrowing posteriorly to the genitalia, epipleurites reflexed toward dorsal surface but not producing an obvious channel on the lateral margins of the abdomen. Timbal cover reduced, recurved posteriorly forming a ridge along the posterior timbal cavity, timbal completely exposed in all but *S. iguazuensis* **n. sp.**, extending below wing bases, tympana concealed by opercula in all but male *S. chevauxensis* **n. sp.** Male sternite VIII broadly U-shaped. Female sternite VII with deep medial notch and semicircular, arched or sinuate lateroposterior margin. Pygofer distal shoulder not developed, dorsal beak present, roughly triangular or spine-like but variable in size, pygofer basal lobe moderately developed, pygofer upper lobe may be present, uncus long, undivided and not retractable with the pygofer, male aedeagus with basal plate fused, theca very short, curving in a gentle arc, distally expanding to broad, rounded apex in lateral view, with two pairs of flat triangular lobes dorsally, no conjunctival claws or pseudoparameres present. Female abdominal segment 9 with dorsal beak well defined, posterior margin generally sinuate but straight in *S. iguazuensis* **n. sp.**, ovipositor sheath not extending to length of dorsal beak.

MEASUREMENTS (MM). Length of body: 15.6–27.0; length of fore wing: 20.8–32.6; width of fore wing: 6.75–11.1; length of head: 3.05–4.2; width of head including eyes: 6.6–9.0; width of pronotum including suprahumeral plates: 5.8–8.7; width of mesonotum: 4.8–8.0.

DIAGNOSIS. The tribal characters also distinguish the genus of this monogeneric tribe. Obvious unique characters of the genus among the other Tibicininae are the head being wider than the lateral angles of the pronotal collar, the male opercula extending to or beyond the posterior tympanal cavity, the presence of an upper pygofer lobe, the undulated rather than right-angled distal aedeagal basal plate, and the very short theca that is laterally expanded into a broad, flat distal end ornamented with triangular wings.

DISTRIBUTION. Species of the genus have been reported from Argentina, Brazil, Costa Rica, French Guiana, Guatemala, and Panama (Metcalf 1963; Sanborn 2011; 2013; 2018; Sanborn & Heath 2014). Pogue (1996) listed an undetermined species from Peru. The first records for Bolivia and Ecuador are provided here.

LIST OF *Selymbria* SPECIES

Selymbria ahyetios Ramos & Wolda 1985: 178.

Selymbria ahyetios Ramos & Wolda, 1985

Selymbria sp. H2 Wolda 1977: 239.

Selymbria stigmatica non Germar Wolda 1984: 451.

TYPE LOCALITY. Barro Colorado Island, Panama.

REMARKS. Type material is in the USNM, STRI, and the Ramos collection (NCSU) (Ramos & Wolda 1985).

The species can be distinguished from all but *S. pandora* and *S. subolivacea* by the lack of infuscation on the apex of the fore wing. This species is slightly smaller (body length about 18.5–19.5 mm, wing span about 52.5–53.5 mm vs. 21–22 mm and 55–57 mm in *S. pandora*), with the dorsal head marked with piceous rather than being mostly piceous, general body coloration ochraceous rather than tawny, abdominal tergites fuscous rather than testaceous, and basal area of the wings grayish and piceous rather than red. The Brazilian, *S. subolivacea* can be distinguished by its primarily greenish tawny coloration, green basal areas of the wings and larger body size (body length 27 mm, wing span 78 mm). If the specimen has infuscation in the apex of the fore wing, this is the only species to have the infuscation restricted to distal to the ambient vein.

Contrary to the description (Ramos & Wolda 1985), the four paratypes studied had infuscation on the fore wing apex that extended across the ambient vein into the distal apical cells. It can be distinguished from *S. chevauensis* n. sp., *S. cinctifera* n. sp., *S. guatemalensis* n. sp., *S. guianensis* n. sp., and *S. pluvialis*, the species with only apical fore wing infuscation, by the diamond shaped widening of the postclypeus central sulcus near the postclypeus ventral apex, sinuate apex of the secondary spine of the fore femur, the ovipositor sheath extending to the level of the dorsal beak, female operculum extending to sternite II with a posteromedial notch, female sternite VII posterior extension with parallel margins, an uncus with a curved posterior margin that is wider than the anal styles with recurved spines on either side, the wide notch in the posterior of male sternite VIII, the aedeagus with two short spines medially with larger extensions forming lateral wings. The infuscation of the fore wing is found on the apex of the fore wing and on basal apical cells 1–3 and/or on the radiomedial cross vein in *S. boliviaensis* n. sp., *S. danieleae*, *S. ecuadorensis* n. sp., *S. iguazuensis* n. sp., *S. loretoensis* n. sp., *S. madredediosensis* n. sp., *S. puntarenasensis* n. sp. and *S. stigmatica* distinguish these species from examples of *S. ahyetios* with apical infuscation.

The Panamanian species can be distinguished by the fore wing length being greater than 25 mm, an uncus with curved lateral margins, and a fore femoral apical spine about half the length of the secondary spine in *S. cinctifera* n. sp., the diamond shaped widening of the postclypeus central sulcus near the postclypeus ventral apex, an uncus with a curved posterior margin that is wider than the anal styles with recurved spines on either side, the wide notch in the posterior of male sternite VIII, and the parallel medial margins of the notch in female sternite VII in *S. ahyetios*, and the fore wing length being less than 25 mm, an uncus with straight lateral margins, and a small fore femoral apical spine, the expanding central sulcus to the posteroventral postclypeus, the constricted and rectangular uncus terminus, male sternite VIII without a terminal notch, and the posteriorly widening notch in female sternite VII in *S. pluvialis*.

DISTRIBUTION. The species is known only from Panama (Sanborn 2013, 2018). Panamanian specimens were collected in lowland forest on Barro Colorado Island at 120 m altitude (Ramos & Wolda 1985; Wolda 1977; 1988; 1989; 1993; Wolda & Ramos 1992).

MATERIAL EXAMINED. “PANAMA—BCI / Lights I / 25 III 1981 / Henk Wolda // paratype (blue label) / Selymbria / ahyetios Ramos / & Wolda” paratype female (NCSU); “PANAMA—BCI / Lights I / 26 III 1981 / Henk Wolda // paratype (blue label) / Selymbria / ahyetios Ramos / & Wolda” paratype female (NCSU); “PANAMA—BCI / Lights I / 24–25 I 1983 / Henk Wolda // paratype (blue label) / Selymbria / ahyetios Ramos / & Wolda” paratype female (NCSU); “PANAMA—BCI / Lights III / 28 XII 1978 / Henk Wolda // paratype (blue label) / Selymbria / ahyetios Ramos / & Wolda” paratype male (NCSU).

***Selymbria boliviaensis* n. sp.**

(Fig. 1)

TYPE MATERIAL. Holotype. “BOLIVIA: Santa Cruz, 3.7 km / SSE Buena Vista, Hotel Flora / & Fauna, 430 m; 5–15–XI–2001 / coll. M.C. Thomas & B. Dozier / tropical transition forest, BLT” male (FSCA). Paratypes. Same data as holotype, one male (FSCA), one male (AFSC); “BOLIVIA / Guanay, Coroico, / La Paz Prov. / Nov. 1994 / A. Ugarte P.” one female (MSMC).

ETYMOLOGY. The name is a combination of *bolivia*—for the country of origin of the type series and—*ensis* (L. suffix denoting place).

DESCRIPTION. Ground color of head and thorax greenish tawny marked with piceous, abdomen piceous marked with castaneous and greenish. Female tawny and castaneous possibly due to chemical discoloration.

Head. Head wider than pronotal collar lateral angles and mesonotum, dorsal head piceous except for triangular spot on posterior epicranial suture and triangular spot on posterior cranial depression, supra-antennal plates

and small triangular mark on anterolateral vertex posterior to supra-antennal plate that are ground color, piceous posterior to eye. Long silvery pile posterior to eye, short golden pile on vertex, white pubescence lateral to lateral ocelli, in epicranial suture, on posterior cranial depression and posterior to eye. Ocelli red, rosaceous in one paratype, eyes testaceous. Ventral head piceous except transverse fascia ventral to supra-antennal plate continuous with dorsal mark but not reaching eye, posterior margin of gena, anterior and lateral margin of lorum ground color, long silvery pile ventral to eye, on gena and on lorum, white pubescence on ventral head. Postclypeus with nine transverse grooves, central sulcus narrow at apex expanding laterally on posteroventral surface, ground color with dorsal surface posterior to transverse grooves, within expanded region of central sulcus, within transverse grooves and ventroposterior piceous, first three dorsal transverse groove piceous connected medially by fascia lateral to central sulcus, white pubescence laterally and posteroventrally, short silvery pile on ventral surface. Anteclypeus piceous, covered with white pubescence, denser in paratypes. Mentum ground color, medial labium castaneous, lateral and distal labium piceous, tip reaching to middle leg trochanter, with sparse short silvery pile, denser near tip. Scape and proximal pedicel ground color, distal pedicel and flagellar segments piceous.

Thorax. Dorsal thorax ground color. Pronotum ground color, lightly castaneous on either side of midline, with transverse piceous marks on anterior disks on either side of anterior midline and between anterior sutures, transverse mark on posterior disk with angled medial margin extending laterally to posterior lateral fissure, ambient fissure piceous from anterior lateral fissure to posterior mark, longitudinal piceous fascia on lateral scutes, curved piceous and castaneous mark on scute between central paramedian fissure and posterior lateral fissure connecting to posterior transverse mark. Pronotal collar lightened ground color. Mesonotum ground color, piceous on disk lateral to lateral sigillae, medioanterior and the middle of the lateral margin of the lateral sigillae, between lateral and submedian sigillae diverging and extending along medial margin of lateral sigilla almost to posterior margin and medially to spot on disk, curved marks along medial submedian sigillae margins connecting to parapsidal suture expanded into triangular mark on anterior terminus, between posterior submedian sigillae and scutal depressions, curving fascia between anterior arms of cruciform elevation extending anteriorly along midline forming triangular, ground color mark on midline anterior to cruciform elevation, piceous mark on disk extends anteriorly as a triangle on midline terminating anterior to posterior margin of submedian sigillae, scutal depressions surrounded by circular region of ground color, posterior mesothorax piceous. Cruciform elevation ground color with piceous mark posterior to anterior arm of cruciform elevation, wing groove ground color with piceous spot on anteromedial margin. Metanotum piceous with ground color posterior margin. Long silvery pile in posterior wing groove, silvery pile on posterior margin, white pubescence and silvery pile on area lateral to lateral sigillae, on lateral cruciform elevation, anteriorly between the arms of the cruciform elevation, and dorsally posterior to submedian sigillae in paratype. Ventral thoracic segments testaceous except piceous all but lateral basisterna 2 and 3, covered with white pubescence.

Wings. Fore wings hyaline with eight apical cells, hind wings hyaline with six apical cells. Cubitus anterior 1 of the fore wing straight between the split with cubitus anterior 2 and the mediocubital crossvein. Venation ochraceous except piceous anal vein 2 + 3, becoming piceous in apical cells except for radius anterior 2, ambient vein piceous. Basal cell longer than broad, hyaline with slight greenish tint along radius & subcostal vein and at base. Pterostigma present. Infuscation on distal radius anterior 2 and distal radius posterior, infuscation extending onto ambient vein anterior to radius posterior and onto wing margin, extending to wing apex in paratypes, second infuscation within distal ulnar cells 1 and 2, and proximal apical cells 1–3 and covering the distal half of radius anterior and radius posterior along ulnar cell 1, proximal half of radius anterior 1 and proximal third of radius anterior 2 along apical cell 1 proximal base of radius posterior and median vein 1, median vein 1 proximal to radiomedial crossvein, and entire radial and radiomedial crossveins. Basal membrane of fore wing gray with dark gray posterior margin. Venation of hind wing tawny ochraceous, ambient vein and distal veins greenish piceous, anal veins 2 and 3 castaneous. Anal cell 3 and anal cell 2 along anal vein 3 gray, anal cell 2 along anal vein 2 gray, gray area margined with infuscation in anal cells 2 and 3, spot of infuscation on wing margin distal to apical cells 1 and 2, only distal to apical cell 2 in some paratypes.

Legs. Legs ochraceous, darker coxae and trochanters, dark castaneous marks on medial and lateral hind coxae, distal tibiae dorsal metatarsus and mesotarsus, distal pretarsus piceous. Fore femora proximal spine ground color with castaneous tip, longest spine, forming acute angle to femur, secondary spine ground color with castaneous distal half, elongate, slightly angled to femoral axis with curved tip, upright, and small, slightly angled, castaneous apical spine, more than half as long as secondary spine which is large for the genus, long silvery pile radiating from ridge with spines. Tarsal claws dark castaneous with piceous tips, tibial spurs and comb castaneous with darker tips. Legs covered with long and short silvery pile.

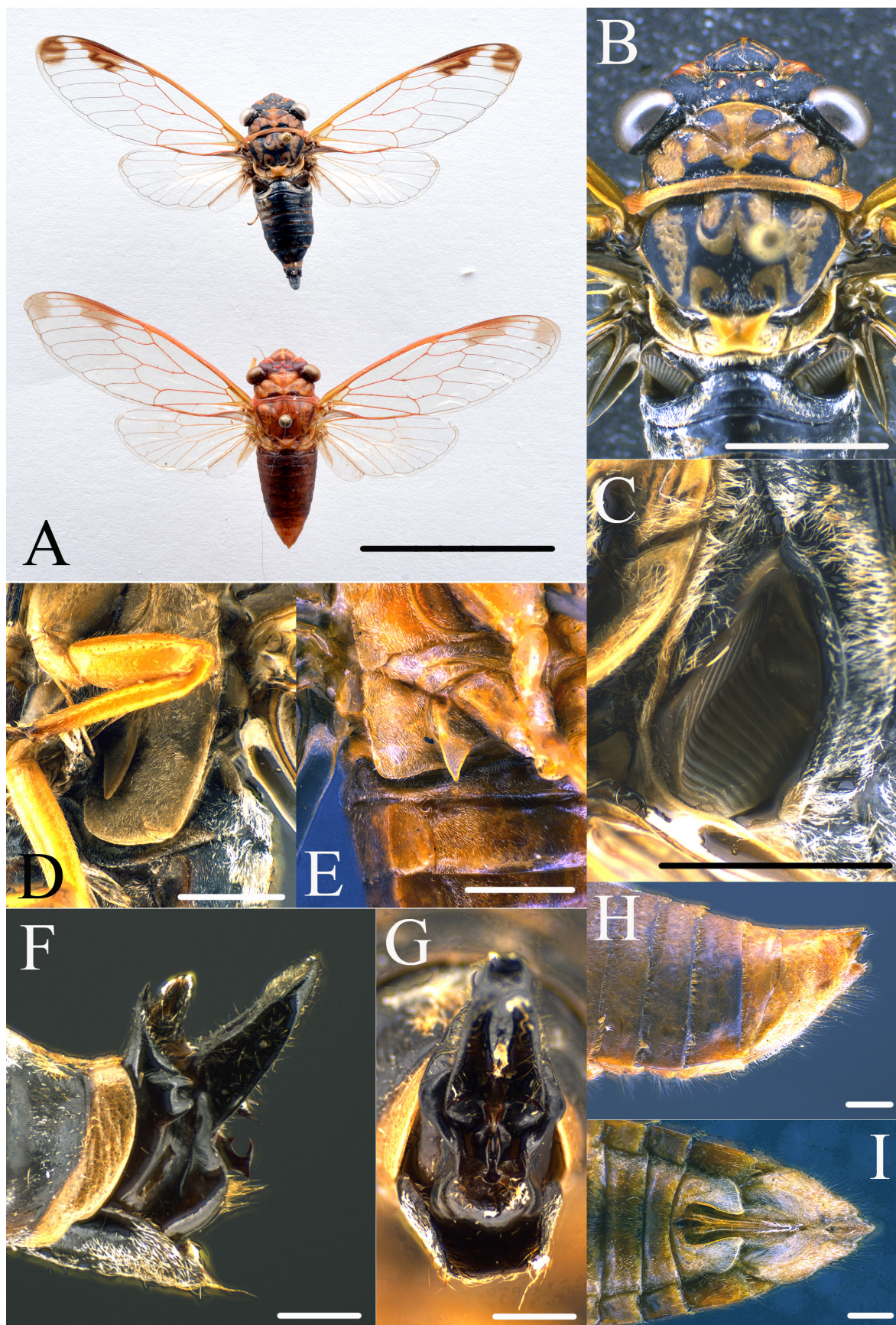


FIGURE 1. *Selymbria boliviaensis* n. sp.: A, holotype male and paratype female habitus; B, holotype male dorsum; C, holotype male timbal cover; D, paratype male operculum; E, paratype female operculum; F, holotype male lateral view of genitalia; G, holotype male posterior view of genitalia; H, paratype female lateral view of genitalia; I, paratype female ventral view of genitalia. Scale bar: A, 2 cm; B, 5 mm; C–E, 2 mm; F–G, 1 mm; H–I, 2 mm.

Operculum. Male operculum dark ochraceous with piceous spots on medial base, lateral base, and anteromedial corner, lateral margin angled mediad joining to smoothly rounded posterior margin, posterior medial margin straight, angled slightly mediad, curving anteromediad to base which is at medial meracanthus, almost reaching to anterior margin of sternite II covering tympanal cavity completely. Medial margin extending to medial margin of tympanal cavity. Meracanthus ochraceous with castaneous spot on medial base, broadly triangular with straight tip but curved lateral margin, reaching to posterior of sternite I. Female operculum ochraceous with piceous spot on lateral base, lateral margin straight slightly angled mediad, curved posterolateral and posterior margins, terminating medially at middle of meracanthus, reaching to middle of sternite II. Female meracanthus ochraceous with castaneous medial mark, curving mediad, pointed with straight tip, longer than operculum extending to posterior of sternite II. Opercula lightly covered with white pubescence, denser at base, radiating silvery pile in paratype.

Abdomen. Male tergites piceous with castaneous lateral margins, tergite 1 with greenish spot on dorsal timbal cavity margin, tergite 2 with greenish spot on ventral timbal cavity margin, greenish on dorsolateral tergite 7 with thin transverse castaneous fascia anterior to greenish posterior margin, thin anterior piceous transverse fascia, mostly castaneous and wider green posterior margin in tergite 8, female tergites castaneous, dark castaneous on lateral posterior margin of tergite 8, auditory capsule piceous, castaneous in female. Timbal cover recurved exposing timbal dorsally, piceous. Timbal with twelve long and eleven intercalary ribs. Female abdominal segment 9 castaneous with darker stigma and dorsal beak, covered with long golden pile on ventral and ventrolateral surfaces. Posterior margin of female abdominal segment 9 slightly sinuate. Sternite I dark castaneous, sternite II dark castaneous with lighter ventrolateral region and lateral anterior margin, sternites III–VI dark castaneous medially forming central fascia within lighter castaneous lateral regions, sternite VII dark castaneous with tawny posterolateral margins, sternite VIII U-shaped with transverse posterior margin, radiating long golden pile. Female sternites similarly marked. Epipleurites castaneous. Female sternite VII with a deep medial notch almost reaching anterior margin, V-shaped anteriorly, an oblique angle forms a short straight region before curving to converging straight extension to posterior margin, posterior margin of sternite smoothly arched to lateral surface, posterior half of posterior extension lighter. Long silvery pile radiating from sternites, white pubescence on male sternites I and II, lateral sternites and epipleurites III–VI.

Genitalia. Male pygofer dark castaneous with piceous dorsum, dorsal beak and posterior, with short silvery pile on dorsal beak, longer and denser on ventral surface, distal shoulder small, ochraceous, forming a right angle, curving smoothly to dorsal beak, dorsal beak triangular with pointed apex, arching to terminus when viewed from the side. Pygofer basal lobe angled laterally from base, swelling and bending mediad at right angle past half distance then tapering to rounded apex adpressed against pygofer, extending to about half pygofer length, pygofer upper lobes small flattened extending along dorsal terminus of basal pygofer lobe producing a small ridge almost perpendicular to pygofer. Anal styles piceous radiating short silvery pile, extending well beyond dorsal beak, anal tube dark ochraceous. Uncus lobe large, piceous, dorsally concave except for small convex region near terminus, small recurved spine on either corner of terminus, terminus transverse when viewed from above, ventrally concave with medial carina, lateral portion folded ventrally from dorsal surface forming roughly triangular shape not reaching apex when viewed from the side, slightly widening from base before reducing width towards terminus. Dorsal, lateral and ventral surfaces radiating long silvery pile. Aedeagus dark castaneous, with curving spine-like lateral extensions near terminus.

Female gonocoxite IX and gonapophyses light castaneous. Gonocoxite X light castaneous almost extending to length of dorsal beak but not as far as anal styles, with radiating golden pile. Anal styles castaneous, anal tube ochraceous.

MEASUREMENTS (MM). N = three males or one female, mean (range). Length of body: male 20.97 (20.6–21.6), female 21.0; length of fore wing: male 24.75 (25.7–25.7), female 26.0; width of fore wing: male 8.50 (8.3–8.8), female 8.3; length of head: male 3.70 (3.6–3.9), female 3.7; width of head including eyes: male 7.77 (7.6–7.9), female 7.8; width of pronotum including suprahumeral plates: male 7.07 (6.8–7.3), female 7.2; width of mesonotum: male 6.77 (6.6–6.9), female 6.4.

DIAGNOSIS. A unique feature is the male operculum encapsulates the meracanthus. *Selymbria ahyetios*, *S. pandora* and *S. subolivacea* can be distinguished from this species by the lack of infuscation on the apex of their fore wing. The infuscation of the fore wing is found only on the apex of the fore wing in *S. ahyetios*, *S. chevauxensis* **n. sp.**, *S. cinctifera* **n. sp.**, *S. guatemalensis* **n. sp.**, *S. guianensis* **n. sp.**, and *S. pluvialis* which distinguishes these species from *S. boliviaensis* **n. sp.** The infuscation is restricted to the radiomedial crossvein in the fore wing of *S.*

danieleae without extending onto the basal apical cells 1–3. The infuscation found on the apex of the fore wing is restricted to the apex of apical cell 2 crossing the ambient vein onto the wing margin in *S. stigmatica*. The piceous region on dorsal head is reduced between the lateral ocelli and eye and the medial margin to notch in female sternite VII curves laterad toward the posterior in *S. puntarenasensis* **n. sp.** Tergite 3 in the male is wider than tergite 2, and the medial margin of the notch in female sternite VII curves posterolaterad and distinguishes *S. stigmatica*. *Selymbria ecuadorensis* **n. sp.** can be distinguished by the rounded terminus of the male uncus and the slightly constricting posterior notch in female sternite VII. The extension of male tergite 2 over the posterolateral tibial cavity, the concave ventral terminus of the uncus, and the straight medial margins in female sternite VII that widen slightly distinguishes *S. iguazuensis* **n. sp.** from this new species. The male uncus is as wide as the pygofer and the medial margins of the posterior extension of female sternite VII smoothly curve medially forming a sharp acute angle at the apex that almost meet over the gonapophyses at the posterior sternite in *S. madredeiosensis* **n. sp.** The male uncus lacks a lateral expansion near the terminus and the medial margins of the posterior notch female sternite VII with are parallel in *S. loretoensis* **n. sp.**

DISTRIBUTION. The species is known only from the type series collected in Bolivia.

Selymbria chevauxensis **n. sp.**

(Fig. 2)

TYPE MATERIAL. Holotype. “FRENCH GUIANA / Montagne des Chevaux / Automatic Light Trap / Gemlight 25–V–2013 / Soc. Ent. Antilles-Guyane coll.” male (FSCA). Paratypes. “FRENCH GUIANA / Montagne des Chevaux / Automatic Light Trap / Gemlight 31–VIII–2013 / Soc. Ent. Antilles-Guyane coll.” one female (AFSC).

ETYMOLOGY. The name is a combination of *chevaux*—for the type locality and—*ensis* (L. suffix denoting place).

DESCRIPTION. Ground color of head and thorax tawny marked with piceous in male, ochraceous marked with piceous and fuscous in female, male abdomen castaneous and ochraceous, female abdomen ochraceous. Color may be chemically altered from a more greenish or greenish-tawny in fresh or live specimens.

Head. Head wider than pronotal collar lateral angles and mesonotum, frons piceous, lateral ocelli surrounded by piceous, mark extending anteriorly along anterior arm of epicranial suture and posteriorly lateral to epicranial suture to posterior margin of head, triangular piceous mark extending and widening from anterior terminus of anterior arm of epicranial suture onto vertex and posteromedial supra-antennal plate, marks reduced in paratype so that anterior arm of epicranial suture is ground color, fuscous transverse mark on posterior head except across posterior epicranial suture, absent in paratype, piceous medial and anteromedial margin to eye, posterior to eye piceous, posterior eye edged in piceous in paratype. Long silvery pile posterior to eye. Ocelli rosaceous, eyes testaceous. Ventral head tawny, piceous fascia expanding medially from margin of eye, reduced to spot along eye margin in paratype, piceous from posterior eye terminating on ventral eye, long silvery pile on lorum and gena. Postclypeus tawny with a castaneous fasciae along midline of central sulcus expanding anteriorly, reduced in paratype, piceous triangular mark on dorsal postclypeus, with nine transverse grooves, most dorsal transverse groove piceous, second and third transverse grooves piceous in lateral half, next three transverse grooves with medial castaneous fasciae, long silvery pile on lateral postclypeus. Anteclypeus with transverse castaneous fascia across posterior carina, small piceous spots in posterolateral corners, covered with silvery pile. Mentum and proximal half of lateral labium tawny, castaneous medial labium becoming piceous distally except for castaneous tip, tip not reaching to posterior of middle leg coxae, with sparse short silvery pile, denser near tip. Scape and proximal pedicel tawny, distal pedicel and flagellar segments piceous, castaneous in paratype.

Thorax. Dorsal thorax tawny, ochraceous in paratype. Pronotum with triangular piceous mark on either side of anterior midline extending along anterior margin through ambient fissure to obtusely angled mark extending to posterior paramedian fissure, extends laterally onto entire lateral part of pronotal collar, dark castaneous within lateral fissures, dark castaneous mark near anterior paramedian fissure extending posterolaterally onto scute, longer sinuate mark extending posteriorly from middle of paramedian suture across scute, fasciae lighter in paratype. Pronotal collar tawny, piceous in ambient fissure expands onto medial pronotal collar lateral angle, lateral part of pronotal collar piceous, only lateral margin marked in paratype, pronotal collar with short silvery pile on lateral portions of pronotal collar lateral angles and lateral part of pronotal collar. Mesonotum tawny, ochraceous in paratype, angled

piceous fasciae along anteromedial submedian sigillae, mottling along lateral portion of lateral sigillae, curved Y-shaped mark enclosing posterior submedian sigilla extending parallel to midline and curving laterad posterior to light castaneous scutal depression before terminating on distal anterior arm of cruciform elevation, mark lighter and extends lateral to parapsidal suture in paratype, castaneous fascia along lateral mesonotum not reaching posterolateral curve, only along anterior half of mesonotum in paratype. Cruciform elevation ground color, left lateral margin piceous in holotype, unicolorous ochraceous in paratype, wing groove ground color with piceous spots on anteromedial and anterolateral margins. Metanotum ground color with piceous spot at hind wing base. Silvery pile on lateral margin, on lateral cruciform elevation and anteriorly between the arms of the cruciform elevation. Ventral thoracic segments tawny, ochraceous in paratype, with small piceous spot on medial anepisternum 2, covered with sparse silvery pile.

Wings. Fore wings hyaline with eight apical cells, hind wings hyaline with six apical cells. Cubitus anterior 1 of the fore wing is curved rather than being straight between the split with cubitus anterior 2 and the mediocubital crossvein. Venation tawny except piceous anal vein 2 + 3 and piceous ambient vein of apical cell 8. Basal cell longer than broad, hyaline. Pterostigma present. Infuscation on distal wing veins and ambient veins of apical cells 1–4, infuscation expanding on wing margin from anterior to distal to apical cell 4. Basal membrane of fore wing gray with dark gray posterior margin. Venation of hind wing tawny proximally, becoming piceous in apical cells and crossveins, cubitus posterior piceous, proximal anal veins 2 and 3 piceous. Anal cell 3 and anal cell 2 along anal vein 3 gray, anal cell 2 along anal vein 2 gray. Light infuscation along outer edge of wing margins.

Legs. Legs tawny, ochraceous in paratype, distal posterior margin of fore trochanter piceous, short, curving piceous fascia on proximal posterior fore femur, distal tibiae and tarsi castaneous except proximal metatarsus of fore leg. Fore femora proximal spine castaneous, thin, elongate and adpressed against femur, secondary spine piceous, triangular, upright, large for the genus, and small, piceous, angled apical spine. Tarsal claws tawny castaneous at base becoming castaneous with piceous tips, tibial spurs and comb castaneous with darker tips. Legs covered with long and short silvery pile.

Operculum. Male operculum tawny with piceous spot on lateral base, lateral margin parallel to body axis joining to smoothly rounded posterolateral margin, posterior margin transverse not covering tympanal cavity. Medial margin rounded, extending to medial meracanthus. Meracanthus tawny, pointed, reaching to anterior of sternite II. Female operculum ochraceous with castaneous lateral margin at base, with straight lateral margin curved posterolateral margin and straight posterior margin forming an obtuse angle with the lateral margin, terminating medially at middle of meracanthus, reaching to middle of sternite II. Female meracanthus ochraceous, pointed, almost as long as operculum. Opercula with long silvery pile.

Abdomen. Abdominal tergites castaneous with tawny anterior and posterior margins except castaneous not reaching midline of tergite 2 and anterior of castaneous region piceous extending along timbal cavity and enclosing auditory capsule in male, castaneous lighter and piceous absent in paratype female, anterior auditory capsule edged in castaneous, tergites with short silvery extending from posterior of tergites. Timbal cover recurved exposing timbal, piceous, short golden pile radiating posteriorly from timbal cover. Timbal with eleven long and ten intercalary ribs. Female abdominal segment 9 ochraceous with castaneous dorsal beak, stigma, and short fascia on anterolateral margin, covered with long, silvery pile. Posterior margin of female abdominal segment 9 sinuate. Sternites tawny with transverse castaneous mark on medial sternites becoming larger in posterior segments, covering the complete medial sternites VI–VII, forming a medial castaneous fascia, sternite VIII U-shaped, radiating long silvery pile. Female sternites with similar castaneous marks beginning on sternite IV and castaneous mark laterally. Epipleurites tawny. Female sternite VII with a deep medial notch, V-shaped anteriorly, lateral angle increasing about half way to posterior margin. Long silvery pile radiating from sternites.

Genitalia. Male pygofer castaneous with piceous dorsal beak, with long, silvery pile ventrolaterally and at base of dorsal beak, with rounded distal shoulder, dorsal beak elongated, pointed, slightly curved when viewed from the side. Pygofer basal lobe indistinct, radiating golden pile medially, pygofer upper lobes absent. Anal styles piceous, extending beyond dorsal beak, anal tube castaneous. Uncus lobe dark castaneous, flattened, lateral surfaces parallel at base, expanding laterally before angling to slightly rounded terminus. Aedeagus dark castaneous, terminus hidden in holotype.

Female gonocoxite IX castaneous with piceous lateral margin, gonapophyses castaneous. Gonocoxite X castaneous extending to length of dorsal beak but not as far as anal styles, with radiating silvery pile. Anal styles ochraceous.

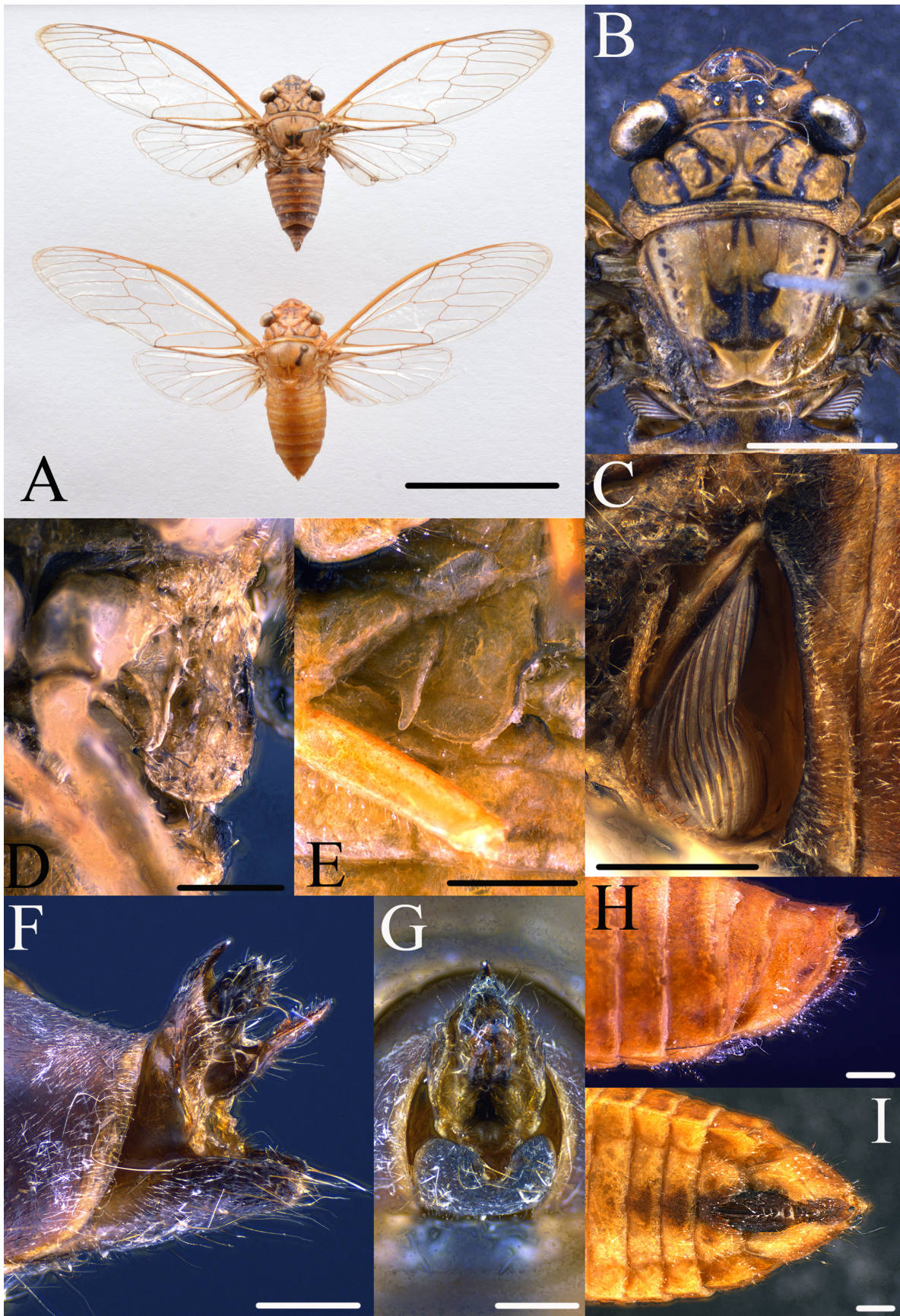


FIGURE 2. *Selymbria chevauxensis* n. sp.: A, holotype male and paratype female habitus; B, holotype male dorsum; C, holotype male timbal cover; D, paratype male operculum; E, paratype female operculum; F, holotype male lateral view of genitalia; G, holotype male posterior view of genitalia; H, paratype female lateral view of genitalia; I, paratype female ventral view of genitalia. Scale bar: A, 2 cm; B, 5 mm; C–E, 2 mm; F–G, 1 mm; H–I, 2 mm.

MEASUREMENTS (MM). N = one male or one female, mean (range). Length of body: male 23.5, female 24.1; length of fore wing: male 32.2, female 32.6; width of fore wing: male 11.1, female 10.9; length of head: male 4.2, female 4.2; width of head including eyes: male 8.6, female 8.5; width of pronotum including suprahumeral plates: male 8.1, female 8.3; width of mesonotum: male 6.85, female 6.7.

DIAGNOSIS. This is the only known species of *Selymbria* where the fore femur primary spine is adpressed to the femur rather than being angled above it, cubitus anterior 1 of the fore wing is curved rather than being straight between the split with cubitus anterior 2 and the mediocubital crossvein, and the male operculum does not cover the tympanal cavity completely. In addition, *Selymbria ahyetios*, *S. pandora* and *S. subolivacea* can be distinguished from this species by the lack of infuscation on the apex of their fore wing. The infuscation of the fore wing is found on the apex of the fore wing and on basal apical cells 1–3 and/or on the radiomedial cross vein in *S. boliviaensis* **n. sp.**, *S. danieleae*, *S. ecuadorensis* **n. sp.**, *S. iguazuensis* **n. sp.**, *S. loretoensis* **n. sp.**, *S. madredediosensis* **n. sp.**, *S. puntarenasensis* **n. sp.** and *S. stigmatica*. The meracanthus tip is straight, the uncus is thin and reaching just past the anal styles and the notch in female sternite VII is angled laterally along the entire length in this species which distinguishes it from *S. ahyetios*, *S. cinctifera* **n. sp.**, *S. guatemalensis* **n. sp.**, *S. guianensis* **n. sp.**, and *S. pluvialis*.

The shape of the meracanthus can distinguish the three species found in French Guiana. The meracanthus is broadly triangular in *S. danieleae*, the extended tip is straight in *S. chevauxensis* **n. sp.** and the extended tip is curved mediad in *S. guianensis* **n. sp.**

DISTRIBUTION. The species is known only from the type series collected in French Guiana. *Selymbria danieleae* has also been collected on Montagne de Chevaux in May but as a smaller species that is obviously marked with piceous.

Selymbria cinctifera **n. sp.**

(Fig. 3)

Selymbria pluvialis (in part) (non Ramos & Wolda) Sanborn 2018: 59–60.

TYPE MATERIAL. Holotype. “PANAMA: Darién Prov. / P.N. Darién Rancho / Frio Station, 90m / 8.0198°N, 77.7322°W / VI-1-9-2015, E. Riley, UV // TAMU—ENTO / X1229760” one male (TAMU). Paratypes. “PANAMA: Darién Prov. / P.N. Darién Rancho / Frio Station, 90m / 8.0198°N, 77.7322°W / VI-1-9-2015, E. Riley, UV // TAMU—ENTO / X1229745” one male (AFSC); “PANAMA: Darién Prov. / P.N. Darién Rancho / Frio Station, 90m / 8.0198°N, 77.7322°W / VI-1-9-2015, E. Riley, UV // TAMU—ENTO / X1229733” one male (TAMU); “PANAMA: Darién Prov. / P.N. Darién Rancho / Frio Station, 90m / 8.0198°N, 77.7322°W / VI-1-9-2015, E. Riley, UV // TAMU—ENTO / X1229412” one male (TAMU); “PANAMA: Darién Prov. / P.N. Darién Rancho / Frio Station, 90m / 8.0198°N, 77.7322°W / VI-1-9-2015, E. Riley, UV // TAMU—ENTO / X1231090” one male (TAMU); “PANAMA: Darién Prov. / P.N. Darién Rancho / Frio Station, 90m / 8.0198°N, 77.7322°W / VI-1-9-2015, E. Riley, UV // TAMU—ENTO / X1229244” one male (TAMU); “PANAMA: Darién Prov. / P.N. Darién Rancho / Frio Station, 90m / 8.0198°N, 77.7322°W / VI-1-9-2015, E. Riley, UV // TAMU—ENTO / X1229425” one female (TAMU); “PANAMA: Darién Prov. / P.N. Darién Rancho / Frio Station, 90m / 8.0198°N, 77.7322°W / VI-1-9-2015, E. Riley, UV // TAMU—ENTO / X1229429” one female (TAMU); “PANAMA: Darién Prov. / P.N. Darién Rancho / Frio Station, 90m / 8.0198°N, 77.7322°W / VI-1-9-2015, E. Riley, UV // TAMU—ENTO / X1227995” one female (TAMU); “PANAMA: Darién Prov. / P.N. Darién Rancho / Frio Station, 90m / 8.0198°N, 77.7322°W / VI-1-9-2015, E. Riley, UV // TAMU—ENTO / X1229926” one female (TAMU); “PANAMA: Darién Prov. / P.N. Darién Rancho / Frio Station, 90m / 8.0198°N, 77.7322°W / VI-1-9-2015, E. Riley, UV // TAMU—ENTO / X1229955” one female (TAMU); “PANAMA: Darién Prov. / P.N. Darién Rancho / Frio Station, 90m / 8.0198°N, 77.7322°W / VI-1-9-2015, E. Riley, UV // TAMU—ENTO / X1230202” one female (TAMU); “PANAMA: Darién Prov. / P.N. Darién Rancho / Frio Station, 90m / 8.0198°N, 77.7322°W / VI-1-9-2015, E. Riley, UV // TAMU—ENTO / X1230351” one female (TAMU); “PANAMA: Darién Prov. / P.N. Darién Rancho / Frio Station, 90m / 8.0198°N, 77.7322°W / VI-1-9-2015, E. Riley, UV // TAMU—ENTO / X1229395” one female (TAMU); “PANAMA: Darién Prov. / P.N. Darién Rancho / Frio Station, 90m / 8.0198°N, 77.7322°W / VI-1-9-2015, E. Riley, UV // TAMU—ENTO / X1230721” one female (TAMU); “PANAMA: Darién Prov. / P.N. Darién Rancho / Frio Station, 90m / 8.0198°N, 77.7322°W / VI-1-9-2015, E. Riley, UV // TAMU—ENTO / X1229929” one female (TAMU); “PANAMA: Darién Prov. / P.N. Darién Rancho / Frio Station, 90m / 8.0198°N, 77.7322°W / VI-1-9-

2015, E. Riley, UV // TAMU—ENTO / X1229952” one female (AFSC); “PANAMA: Darién Prov. / P.N. Darién Rancho / Frio Station, 90m / 8.0198°N, 77.7322°W / VI-1-9-2015, E. Riley, UV // TAMU—ENTO / X1230456” one female (TAMU); “PANAMA: Darién Prov. / P.N. Darién Rancho / Frio Station, 90m / 8.0198°N, 77.7322°W / VI-1-9-2015, E. Riley, UV // TAMU—ENTO / X1229960” one female (TAMU); “PANAMA: Darién Prov. / P.N. Darién Rancho / Frio Station, 90m / 8.0198°N, 77.7322°W / VI-1-9-2015, E. Riley, UV // TAMU—ENTO / X1231069” one female (TAMU); “PANAMA: Darién Prov. / P.N. Darién Cerro Pirre / “Campo Plastico” 620m / 7.9973°N, 77.7129°W / VI-3-5-2015, E. Riley, UV // TAMU—ENTO / X1229328” one male (AFSC); “PANAMA: Darién Prov. / P.N. Darién Cerro Pirre / “Campo Plastico” 620m / 7.9973°N, 77.7129°W / VI-3-5-2015, E. Riley, UV // TAMU—ENTO / X1229735” one female (AFSC); “PANAMA: Darién Prov. / P.N. Darién Cerro Pirre / “Campo Plastico” 620m / 7.9973°N, 77.7129°W / VI-3-5-2015, E. Riley, UV // TAMU—ENTO / X1229559” one female (TAMU); “PANAMA: Darién Prov. / P.N. Darién Cerro Pirre / “Campo Plastico” 620m / 7.9973°N, 77.7129°W / VI-3-5-2015, E. Riley, UV // TAMU—ENTO / X1290568” one female (TAMU); “PANAMA: Darién Prov. / P.N. Darién Cerro Pirre / “Campo Plastico” 620m / 7.9973°N, 77.7129°W / VI-3-5-2015, E. Riley, UV // TAMU—ENTO / X1229271” one female (TAMU); “PANAMA: Darién Prov. / P.N. Darién Cerro Pirre / “Campo Plastico” 620m / 7.9973°N, 77.7129°W / VI-3-5-2015, E. Riley, UV // TAMU—ENTO / X1229582” one female (TAMU); “PANAMA: Darién Prov. / P.N. Darién Cerro Pirre / “Campo Plastico” 620m / 7.9973°N, 77.7129°W / VI-3-5-2015, E. Riley, UV // TAMU—ENTO / X1229308” one female (TAMU); “COSTA RICA, Alajuela / Rio San Carlos, / near Tres Amigos / 1, 2 August 1995 / P.J. Landolt, coll.” one male (WSUC).

ETYMOLOGY. The name is in reference to the transverse white pubescence forming a transverse stripe near the posterior abdomen (*cinctum*, L. belt, girdle, —*fera*, L. carry, bear).

DESCRIPTION. Ground color of head and thorax greenish tawny marked with piceous, abdomen piceous marked with castaneous. Fresh specimens are probably green based on the variability in the intensity of green and tawny in the type series.

Head. Head wider than pronotal collar lateral angles and mesonotum, dorsal head piceous except for spot on posterior epicranial suture, triangular spot on posterior cranial depression, supra-antennal plates, except for piceous posteromedial piceous corner, and anterolateral vertex posterior to supra-antennal plate ground color, piceous posterior to eye. Long silvery pile posterior to eye, short golden pile on vertex. Ocelli red, rosaceous in some paratypes, eyes testaceous. Ventral head piceous except transverse ground color fascia ventral to supra-antennal plate continuous with dorsal mark but not reaching eye, posterior margin of gena, anterior and lateral margin of lorum ground color, long silvery pile ventral to eye, on gena and on lorum, white pubescence on ventral head. Postclypeus with eight transverse grooves, central sulcus narrow at apex expanding laterally on posteroventral surface, ground color with dorsal surface posterior to transverse grooves, within expanded region of central sulcus, except for longitudinal fascia on either side of midline, within transverse grooves and ventroposterior piceous, first three dorsal transverse groove on left and first two on right piceous connected medially by fascia lateral to central sulcus, first two or first three connected in paratypes, white pubescence laterally and posteroventrally, short silvery pile on ventral surface. Anteclypeus piceous with ground color carina, mark on carina reduced to posterior half or expanding onto lateral surfaces in some paratypes, covered with white pubescence and long silvery pile. Mentum ground color, medial labium castaneous, lateral and distal labium piceous, tip reaching to posterior of middle leg trochanter, with sparse short silvery pile, denser near tip. Scape and majority of proximal pedicel ground color, distal pedicel and flagellar segments piceous.

Thorax. Dorsal thorax ground color. Pronotum ground color, lightly castaneous on either side of midline in some paratypes, with transverse piceous marks on anterior disks on either side of anterior midline and between anterior sutures, mark triangular and extending posteriorly to connect to posterior mark in some paratypes, transverse mark on posterior disk with angled medial margin extending laterally to posterior lateral fissure, ambient fissure piceous from anterior lateral fissure to posterior mark, longitudinal castaneous fascia on lateral scutes in some paratypes, curved castaneous mark on scute between central paramedian fissure and posterior lateral fissure in some paratypes. Pronotal collar lightened ground color with radiating golden pile on lateral margin of lateral portion of pronotal collar. Mesonotum ground color, piceous on disk lateral to lateral sigillae not reaching posterior of lateral sigillae, medioanterior corner of lateral sigillae, between lateral and submedian sigillae diverging and extending along medial margin of lateral sigilla almost to posterior margin, mark along medial lateral sigillae incomplete posteriorly in some paratypes, and medially to spot on disk, curved marks along medial submedian sigillae margins connecting to parapsidal suture expanded into triangular mark on anterior terminus in some paratypes, between

posterior submedian sigillae and scutal depressions, curving fascia between anterior arms of cruciform elevation extending anteriorly along midline forming elongated triangle on midline terminating anterior to posterior margin of submedian sigillae with more angled base, base curves between anterior arms of cruciform elevation to include scutal depressions, curved mark separated from scutal depressions or extending onto anterior midline of cruciform elevation in some paratypes, posterior mesothorax piceous. Cruciform elevation ground color with L-shaped piceous mark posterior to anterior arm of cruciform elevation, wing groove piceous with ground color spot in center. Metanotum piceous with ground color posterior margin. Long silvery pile in posterior wing groove, silvery pile on posterior margin, silvery pile on lateral margin in some paratypes, on lateral cruciform elevation, and anteriorly between the arms of the cruciform elevation. Ventral thoracic segments testaceous except piceous all but lateral basisterna 2 and 3, covered with dense white pubescence.

Wings. Fore wings hyaline with eight apical cells, hind wings hyaline with six apical cells. Cubitus anterior 1 of the fore wing straight between the split with cubitus anterior 2 and the mediocubital crossvein. Venation ground color at base except piceous anal vein 2 + 3 and ferruginous costal margin and radius & subcostal vein to node, becoming ferruginous in middle and piceous distally in apical cells, subcostal vein piceous distal to node, ambient vein piceous. Basal cell longer than broad, hyaline with slight greenish tint at base and along arculus. Pterostigma present. Infuscation on ambient vein extending from distal subcostal, radius anterior 1, radius anterior 2 veins not reaching distal radius posterior, infuscation extending onto wing margin to wing apex. Basal membrane of fore wing gray with dark gray posterior margin. Venation of hind wing similarly colored, median and radius posterior veins green, anal veins 2 and 3 castaneous. Anal cell 3 and anal cell 2 along anal vein 3 gray, anal cell 2 along anal vein 2 gray, gray area margined with infuscation in anal cells 2 and 3, spot of infuscation on wing margin distal to apical cell 2, also distal to apical cell 2 in some paratypes.

Legs. Legs ground color, fore femora striped with castaneous posteriorly, majority of middle of tibiae castaneous, distal tibiae, tarsus, and tarsal claws piceous. Fore femora proximal spine castaneous with ground color base and piceous tip, forming acute angle to femur, secondary spine longest, narrower than primary spine, piceous with castaneous tip, elongate, greater acute angled to femoral axis than primary spine, and small, castaneous apical spine, castaneous with a piceous tip, about half as long as secondary spine which is large for the genus, parallel to secondary spine, long silvery pile radiating from ridge with spines. Legs covered with long and short silvery pile.

Operculum. Male operculum ground color with piceous spots on medial and lateral base, castaneous anterolateral margin, straight lateral margin angled mediad angle increasing slightly at about half length, joining to smoothly rounded posterior margin, posterior medial margin semicircular, angled mediad at midline to anteromedial base slightly medial to medial meracanthus, reaching to anterior margin of sternite II covering tympanal cavity completely. Medial margin extending to lateral trochanter covering tympanal cavity medially. Meracanthus ground color with piceous spot on medial base, broadly triangular with curved lateral and medial margins, reaching to middle of sternite I. Female operculum ground color with piceous spot on lateral base, light castaneous on medial base, castaneous anterolateral margin, lateral margin straight slightly angled mediad, posterolateral margin straight, curving medially to base, terminating medially beyond middle of meracanthus, reaching to middle of sternite II. Female meracanthus similar to male, longer than operculum extending to posterior of sternite II. Opercula covered with dense white pubescence.

Abdomen. Male tergites piceous with castaneous lateral margins, tergite 1 with ground color fascia along dorsal timbal cavity margin, tergite 2 with ground color spot on ventral timbal cavity margin, tergite 7 with posterior margin castaneous, tergite 8 castaneous with piceous anterior margin, female tergites similarly colored, lateral tergite 8 piceous in some paratypes, auditory capsule piceous, castaneous in female. Dense golden pile on tergites, transverse fascia of white pubescence on anterior tergite 3 in male, widening dorsolaterally, transverse fascia on posterior female tergite 1, lateral female tergite 2, dorsolateral and lateral female tergite 3, and anterior tergite 7 in both males and females. Timbal cover recurved exposing timbal dorsally, castaneous with piceous margin. Timbal with ten long and nine intercalary ribs. Female abdominal segment 9 castaneous with piceous dorsolateral surface, ventral margin anterior to medial extension over gonapophyses, stigma and fascia near posterior margin, covered with long golden pile on ventral and ventrolateral surfaces. Posterior margin of female abdominal segment 9 straight. Sternite I piceous, sternite II piceous medially, castaneous with ground color ventrolateral region and lateral anterior margin, sternites III–VI dark castaneous medially forming central fascia within lighter castaneous lateral regions, sternite VII similarly colored with transverse posterior margin, sternite VIII U-shaped with transverse posterior margin, radiating long golden pile. Female sternites similarly marked. Epipleurites castaneous. Female sternite VII with a deep

medial notch, V-shaped anteriorly, an oblique angle forms a short transverse region before another oblique angle to straight extension continuing to posterior margin, posterior margin of sternite semicircular to lateral surface, lateral margin sinuate constricting posterior extension in middle of lateral margin. Long silvery pile radiating from sternites, white pubescence on male sternites I and II, transverse fascia on posterior of female sternite 1, lateral sternites and epipleurites III–VI with dense white pubescence.

Genitalia. Male pygofer dark castaneous with piceous dorsum, dorsal beak and posterior, with short silvery pile on dorsal beak, longer and denser on ventral surface, distal shoulder small, ochraceous, forming a right angle, curving smoothly to dorsal beak, dorsal beak triangular with pointed apex, arching to terminus when viewed from the side. Pygofer basal lobe elongated, flattened, terminus expanding mediad and folding mediad around pygofer margin with transverse terminus margin, lighter colored and curving mediad, basal half angled laterad, increasing lateral angle and reducing thickness before changing angle to become anteroposterior at terminus, pygofer upper lobes small flattened forming a ridge along dorsal terminus of basal pygofer lobe. Anal styles piceous with lighter ventral surface and ground color deep lateral regions, radiating short silvery pile, extending well beyond dorsal beak, anal tube dark ochraceous. Uncus lobe large, piceous with dorsal castaneous fascia not reaching terminus, dorsal carina terminating in small convex region near terminus, terminus rounded when viewed from above, ventrally concave with medial carina, lateral portion folded ventrally from dorsal surface reducing in width towards apex when viewed from the side, lateral margin arching laterally from base to apex, widest in the middle. Dorsal, lateral and ventral surfaces radiating long golden pile. Aedeagus dark castaneous, blunt, rounded terminus with three small projections, elongated spine-like lateral extensions with bent terminus above terminal aedeagus base.

Female gonocoxite IX piceous with castaneous margin radiating golden pile. Gonapophysis IX dark castaneous. Gonocoxite X piceous extending past posterior abdominal segment 9 but not as far as dorsal beak or anal styles, with radiating golden pile. Anal styles piceous, anal tube ochraceous.

MEASUREMENTS (MM). N = nine males or 10 females, mean (range). Length of body: male 21.18 (20.0–21.75), female 19.81 (18.0–21.0); length of fore wing: male 27.09 (26.15–28.1), female 27.03 (25.3–28.6); width of fore wing: male 9.03 (8.6–9.8), female 8.71 (8.2–9.0); length of head: male 3.71 (3.6–3.85), female 3.82 (3.7–3.95); width of head including eyes: male 8.24 (7.8–8.5), female 8.15 (7.45–8.65); width of pronotum including supra-humeral plates: male 7.65 (7.35–8.0), female 7.57 (6.85–7.95); width of mesonotum: male 6.50 (6.2–6.7), female 6.48 (5.75–6.9).

DIAGNOSIS. *Selymbria ahyetios*, *S. pandora* and *S. subolivacea* can be distinguished from this species by the lack of infuscation on the apex of their fore wing. The infuscation of the fore wing is found on the apex of the fore wing and on basal apical cells 1–3 and/or on the radiomedial cross vein in *S. boliviaensis* **n. sp.**, *S. danieleae*, *S. ecuadorensis* **n. sp.**, *S. iguazuensis* **n. sp.**, *S. loretoensis* **n. sp.**, *S. madredeiosensis* **n. sp.**, *S. puntarenasensis* **n. sp.** and *S. stigmatica*. *Selymbria ahyetios* can be distinguished by the diamond shaped widening of the postclypeus central sulcus near the postclypeus ventral apex, female operculum extending to sternite II with a posteromedial notch, an uncus with a curved posterior margin that is wider than the anal styles with recurved spines on either side, the wide notch in the posterior of male sternite VIII, and aedeagus with two short spines medially with larger extensions forming lateral wings. *Selymbria chevauxensis* can be distinguished by the fore femur primary spine is adpressed to the femur rather than being angled above it, the curved cubitus anterior 1 of the fore wing between the split with cubitus anterior 2 and the mediocubital crossvein. The fore wing length greater than 25 mm, uncus with curved lateral margins, and fore femur apical spine about half the length of the secondary spine distinguishes this species from *S. guatemalensis* **n. sp.** and *S. pluvialis*. The castaneous rather than piceous abdomen, the straight lateral uncus margins rather than reducing near the tip, and the angled medioposterior of the female sternite VII rather than smoothly curving to the posterior margin distinguishes *S. guianensis* **n. sp.**

The Panamanian species can be distinguished by the fore wing length being greater than 25 mm, an uncus with curved lateral margins, and a fore femoral apical spine about half the length of the secondary spine in *S. cinctifera* **n. sp.**, the diamond shaped widening of the postclypeus central sulcus near the postclypeus ventral apex, an uncus with a curved posterior margin that is wider than the anal styles with recurved spines on either side, the wide notch in the posterior of male sternite VIII, and the parallel medial margins of the notch in female sternite VII in *S. ahyetios*, and the fore wing length being less than 25 mm, an uncus with straight lateral margins, and a small fore femoral apical spine, the expanding central sulcus to the posteroventral postclypeus, the constricted and rectangular uncus terminus, male sternite VIII without a terminal notch, and the posteriorly widening notch in female sternite VII in *S. pluvialis*.

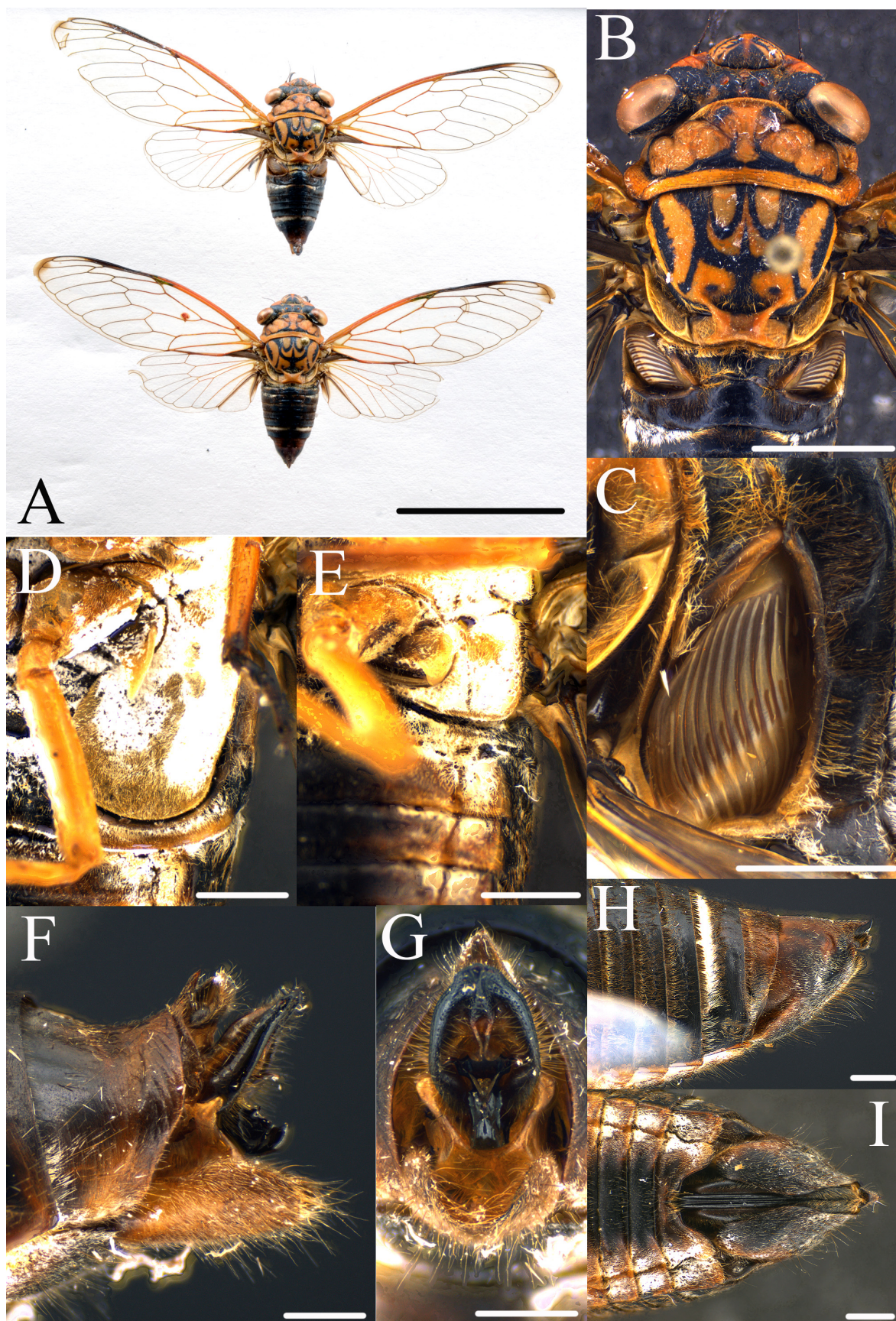


FIGURE 3. *Selymbria cinctifera* n. sp.: A, holotype male and paratype female habitus; B, holotype male dorsum; C, holotype male timbal cover; D, paratype male operculum; E, paratype female operculum; F, holotype male lateral view of genitalia; G, holotype male posterior view of genitalia; H, paratype female lateral view of genitalia; I, paratype female ventral view of genitalia. Scale bar: A, 2 cm; B, 5 mm; C–E, 2 mm; F–G, 1 mm; H–I, 2 mm.

DISTRIBUTION. The species is known only from the type series collected in Panama and Costa Rica. The range extends from southernmost Province of Panama to one of the northern border provinces of Costa Rica. The distribution may be extended to both the north and south with additional collecting efforts.

Selymbria danieleae Sanborn, 2011

Selymbria danieleae Sanborn 2011: 402.

TYPE LOCALITY. Belizone, Montagues de Tortue, 427 m, 4°14'42"N 52° 35'06"W, French Guiana.

REMARKS. Type material is in the UGCA and AFSC. *Selymbria ahyetios*, *S. pandora* and *S. subolivacea* can be distinguished from this species by the lack of infuscation on the apex of the fore wing. The infuscation of the fore wing is found only on the apex of the fore wing in *S. ahyetios*, *S. chevauxensis* n. sp., *S. cinctifera* n. sp., *S. guatemalensis* n. sp., *S. guianensis* n. sp., and *S. pluvialis*. The infuscation of the fore wing is found on the apex of the fore wing and on basal apical cells 1–3 and on the radiomedial cross vein in *S. boliviaensis* n. sp., *S. ecuadorensis* n. sp., *S. iguazuensis* n. sp., *S. loretoensis* n. sp., *S. madredeiosensis* n. sp., *S. puntarenasensis* n. sp., and *S. stigmatica* but is restricted to the radiomedial crossvein in *S. danieleae*.

The shape of the meracanthus can distinguish the three species found in French Guiana. The meracanthus is broadly triangular in *S. danieleae*, the extended tip is straight in *S. chevauxensis* n. sp. and the extended tip is curved mediad in *S. guianensis* n. sp.

DISTRIBUTION. The species is only known from French Guiana (Sanborn 2011). The faunal studies of SEAG continue to provide new distribution records for French Guiana including the new localities listed below which have expanded the known distribution of the species in the country. *Selymbria chevauxensis* has also been collected on Montagne de Chevaux with the emergence times overlapping in May.

MATERIAL EXAMINED. "FRENCH GUIANA / Belizone, Montagues de / Tortue, 427 m / 4°14'42"N 52° 35'06"W / 27 Jan.–6 Febr. 2003 / H. von Scmeling" female holotype (UGCA); "GUYANE FRANÇAISE / Saut DALLES / 24 août 1991 / Piège lumineux " male paratype (AFSC); "FRENCH GUIANA / Piste SAINTE ELIE / Km 25, 3-IV-1997 / M. Thouvenot coll." female paratype (AFSC); "GUYANE FRANÇAISE / Piste Risque Tout—PK 16 / 4 mai 1991 / Piège lumineux" one female (MTC); "GUYANE FRANÇAISE / Piste de Saint-Elie / 3 avril 1997 / Piège lumineux" one female (MTC); "FRENCH GUIANA / Montagne des Chevaux / Automatic Light Trap / Gemlight 25–I–2014 / Soc. Ent. Antilles-Guyane coll." one male (AFSC); "FRENCH GUIANA / Montagne des Chevaux / Automatic Light Trap / Gemlight 20–IV–2013 / Soc. Ent. Antilles-Guyane coll." two males (AFSC); "FRENCH GUIANA / Montagne des Chevaux / Automatic Light Trap / Gemlight 08–IV–2013 / Soc. Ent. Antilles-Guyane coll." one female (AFSC); "FRENCH GUIANA / Montagne des Chevaux / Automatic Light Trap / Gemlight 13–IV–2013 / Soc. Ent. Antilles-Guyane coll." one male (AFSC); "FRENCH GUIANA / Montagne des Chevaux / Automatic Light Trap / Gemlight 25–V–2013 / Soc. Ent. Antilles-Guyane coll." one female (AFSC); "FRENCH GUIANA / Montagne des Chevaux / Automatic Light Trap / Gemlight 14–IV–2013 / Soc. Ent. Antilles-Guyane coll." one male (AFSC); "FRENCH GUIANA / Montagne des Chevaux / Automatic Light Trap / Gemlight 20–IV–2013 / Soc. Ent. Antilles-Guyane coll." one male (AFSC); "FRENCH GUIANA / Montagne des Chevaux / Automatic Light Trap / Gemlight 13–V–2013 / Soc. Ent. Antilles-Guyane coll." one male (AFSC); "FRENCH GUIANA / La Désirée, Commune de / Matoury, 04–X–2014 / 4°50'42.34"N 52°20'54.12"W / Automatic Light Trap, PVB / Soc. Ent. Antilles-Guyane coll." one male (AFSC); "FRENCH GUIANA / Espérance, Commune de / St. Laurent, 15–V–2014 / 5°25'40"N 54°03'00"W / Automatic Light Trap, PVB / Soc. Ent. Antilles-Guyane coll." one female (AFSC).

Selymbria ecuadorensis n. sp.

(Fig. 4)

TYPE MATERIAL. Holotype. "ECUADOR: Prov. Napo / vic. Puerto Misahuali, / 1650–1900 ft, 6–19–IX / 1998 J. E. Eger, coll. // 1°2'4.2"S lat, / 77°39'49.2"W lon / Mercury vapor & / Ultraviolet lights" one male (FSCA). Paratypes. "ECUADOR: Napo Prov. / Estación Científica Yasuní / 00°40.28'S, 76°38.50'W / IX–5–10–1999, UV light / Coll.

E.G. Riley, 215 m.” one female (TAMU), one female (AFSC); “ECUADOR: Napo / Prov. 25km.e.Puerto / Napo, 450m. ix–1997 / B.&B. Valentine coll. // Jatun Sacha / Bio reserve / u-v light // Valentine / Coll’n / Rec. 2016” one female (FSCA); “ECUADOR: Napo Prov. / La Selva, E. of Limon / Cocha, 11–13–X–1988 / S. Dunkle” one female (AFSC); “1231EcuadorOrellana / Erwin Transect / Onkone Gare Camp / Reservea Etnica Waorani / 00 39’ 25.7”S 076 27’10.8”W / 7.x.95 T.L. Erwin *et al* / Fogging terre firme forest // ♀ // UDCC_TCN 00049033” one female (UDCC); “1716EcuadorOrellana / Erwin Transect / Onkone Gare Camp / Reservea Etnica Waorani / 00 39’ 25.7”S 076 27’10.8”W / 2.x.96 T.L. Erwin *et al* / Fogging terre firme forest” one male (AFSC); “1440EcuadorOrellana / Erwin Transect / Onkone Gare Camp / Reservea Etnica Waorani / 00 39’ 25.7”S 076 27’10.8”W / 5.ii.96 T.L. Erwin *et al* / Fogging terre firme forest” one female (AFSC); “1722 // 1722EcuadorOrellana / Transect Ent. 1 km S. Onkone Gare Camp / Reservea Etnica Waorani, 216.3 m / 00 39’ 25.7”S 076 27’10.8”W / 3.x.96 T.L. Erwin *et al* / Fogging terre firme forest” one female (UDCC).

ETYMOLOGY. The name is a combination of *ecuador*—for the country of origin of the type series and—*ensis* (L. suffix denoting place).

DESCRIPTION. Ground color of head and thorax greenish marked with piceous, abdomen piceous marked with castaneous and greenish. Green has faded or was chemically altered to tawny in holotype and half of the paratypes.

Head. Head wider than pronotal collar lateral angles and mesonotum, dorsal head piceous except for midline between median ocellus and frontoclypeal suture, expanding to encircle median ocellus partially or completely in some paratypes absent in one paratype, some paratypes with ground color mark along anteromedial margin of lateral ocelli, ground color spot on posterior epicranial suture, anterolateral vertex posterior to supra-antennal plate, and posterior cranial depression, expanded into transverse rectangular mark in some paratypes, supra-antennal plates ground color except for piceous spot near anterolateral corner, absent in some paratypes, piceous posterior to eye. Short silvery pile posterior to eye, short golden pile on vertex, denser in sutures. Ocelli red, rosaceous in some paratypes, eyes testaceous. Ventral head piceous except transverse fascia ventral to supra-antennal plate continuous with dorsal mark but not reaching eye or postclypeal margin, posterior margin of gena, anterior and lateral margin of lorum ground color, long silvery pile ventral to eye, on gena and on lorum, white pubescence on ventral head. Postclypeus with seven transverse grooves, central sulcus narrow at apex expanding laterally on posteroventral surface, ground color with dorsal surface posterior to transverse grooves, within expanded region of central sulcus except for anterior region near apex, within transverse grooves and ventroposterior piceous, first three dorsal transverse groove connected medially by piceous fascia lateral to central sulcus, ventroposterior transverse grooves 5–8 partially or completely ground color in some paratypes, white pubescence laterally and posteroventrally, long silvery pile on ventral surface. Anteclypeus piceous with small, ground color longitudinal fascia on posterior carina, covered with white pubescence. Mentum ground color, medial labium castaneous, lateral and distal labium piceous, tip reaching to posterior of middle leg coxae, with sparse short silvery pile, denser near tip. Scape and proximal pedicel ground color, distal pedicel and flagellar segments piceous, ground color region of pedicel expanding in some paratypes.

Thorax. Dorsal thorax ground color. Pronotum ground color, with triangular piceous marks on anterior disks on either side of anterior midline, reduced to curved mark or absent in some paratypes, extending posteriorly as fascia to connect to posterior mark, piceous anterior disks between sutures, transverse mark on posterior disk with angled medial margin extending laterally to posterior lateral fissure, ambient fissure piceous from anterior lateral fissure to posterior mark, longitudinal piceous fascia on lateral scutes, longitudinal piceous mark on scute between paramedian and lateral fissures connecting to posterior transverse mark that also extends anteromedially to paramedian fissure anterior to middle, mark reduced to anterior and posterior triangular marks on either side of midline in some paratypes. Pronotal collar lightened ground color, short golden pile radiating from lateral margin of lateral part of pronotal collar in some paratypes. Mesonotum ground color, piceous on disk surrounding sigillae including anterior margins of sigillae, medioanterior and the middle of the lateral margin of the lateral sigillae, mark between lateral and submedian sigillae diverging and extending along medial margin of lateral sigilla almost to posterior margin and medially angling posteriorly median lanceolate mark on disk that narrows anteriorly between submedian sigillae, curving transverse fascia between anterior arms of cruciform elevation extending to, encircling and filling scutal depressions, lateral margin and posterior mesothorax piceous, marks reduced, less dense and not connected completely in some paratypes. Cruciform elevation ground color with piceous mark posterior to anterior arm of cruciform elevation, wing groove ground color with piceous spot on anteromedial margin and posterolateral piceous fascia. Metanotum piceous with ground color dorsum and posterior margin. Short golden pile on disk, denser

in some paratypes, long silvery pile in posterior wing groove, silvery pile on posterior margin, silvery pile between anterior arms of cruciform elevation, on lateral cruciform elevation in paratypes. Ventral thoracic segments ground color except piceous on all but lateral basisterna 2 and 3, covered with white pubescence.

Wings. Fore wings hyaline with eight apical cells, hind wings hyaline with six apical cells. Cubitus anterior 1 of the fore wing straight between the split with cubitus anterior 2 and the mediocubital crossvein. Venation ground color at base along with costal margin and radius & subcostal vein to node and subcostal vein distal to node, remaining venation ferruginous except piceous anal vein 2 + 3, becoming piceous in distal veins between apical cells 4–8, ambient vein piceous between apical cells 2–8. Basal cell longer than broad, hyaline with slight greenish tint along radius & subcostal vein and at base, infuscation along base and anteriorly along radius & subcostal vein, infuscation absent in some paratypes. Pterostigma present. Infuscation on distal subcostal vein, radius anterior 1, radius anterior 2 and distal radius posterior, infuscation extending onto ambient vein anterior to radius posterior extending to wing apex, mark reduced not reaching radius posterior in some paratypes, second infuscation expanding from middle of subcostal vein across pterostigma, proximal apical cells 1–3 and anterior half of proximal apical cell 4, distal ulnar cells 1 and 2 not reaching bifurcation of median veins 1 and 2 but including entire radial and radiomedial crossveins, reduced to ulnar cell 1 and apical cells 1–2 and radial crossvein in some paratypes, expanded anterodistally to connect to distal spot in some paratypes. Basal membrane of fore wing gray with dark gray posterior margin. Venation of hind wing similarly colored with anal vein 2 castaneous and anal vein 3 piceous, anal vein 3 castaneous in some paratypes. Anal cell 3 and anal cell 2 along anal vein 3 gray, anal cell 2 along anal vein 2 gray, gray area margined with infuscation in anal cells 2 and 3, spot of infuscation on wing margin distal to apical cells 1 and 2.

Legs. Legs ground color, dark castaneous marks on lateral base of middle coxae and lateral hind coxae, distal tibiae edged in castaneous, dorsal metatarsus and mesotarsus, distal pretarsus piceous. Fore femora proximal spine forming acute angle to femur with wider base than secondary spine, secondary spine narrower, upright to femoral axis with slightly curved tip, about as long as primary spine, and small, slightly angled apical spine, all spines piceous, long silvery pile radiating from ridge with spines. Tarsal claws dark castaneous with piceous tips, tibial spurs and comb castaneous with darker tips. Legs covered with long and short silvery pile.

Operculum. Male operculum ground color with piceous spots on lateral base and larger spot on anteromedial corner, anteromedial spot reduced in paratype, lateral margin curving slightly mediad from base, joining to smoothly rounded posterior margin, medial margin smoothly curved to base, medial margin barely covering medial tympanal cavity, posterior margin barely reaching to anterior of sternite II covering tympanal cavity completely. Meracanthus ground color with castaneous spot on base, triangular with straight tip but curved lateral margin, reaching to anterior of sternite II. Female operculum ground color with piceous spot on lateral base, straight lateral and posterior margins, lateral margin slightly angled mediad, posterolateral corner forming acute angle, terminating medially at medial meracanthus, reaching almost to posterior of sternite II. Female meracanthus ground color with castaneous medial spot, triangular, curving mediad, as long as or slightly longer than operculum. Opercula covered with white pubescence, denser at base, radiating silvery pile.

Abdomen. Tergite 1 with castaneous posterolateral region and ground color posterolateral margin along timbal cavity margin, tergite 2 piceous with castaneous lateral margin and ground color spot on ventral timbal cavity margin, tergites 3–7 piceous with castaneous lateral margins, ground color fascia on posterolateral margin of tergite 7, tergite 8 piceous with ground color dorsolateral and lateral posterior margins, female tergites piceous, castaneous in one paratype except tergite 8 that is castaneous anteriorly and dorsally with ground color posterolateral region connecting posteriorly across dorsum in some paratypes, auditory capsule piceous, castaneous in some paratypes, tergites covered with silvery pile which also radiates from posterior margin, very dense in some paratypes. Timbal cover piceous with ground color spot on ventral base continuous with ground color spot on lateral tergite, recurved exposing timbal dorsally, lateral tergite 2 expanding anteriorly to form small, triangular cover over posterolateral timbal cavity. Timbal with eleven long and ten intercalary ribs. Female abdominal segment 9 with thin castaneous fascia on dorsal midline, dark castaneous on either side of midline and anterolaterally, ground color longitudinal fascia on ventrolateral surface reaching to posterior margin, piceous posteriorly and ventrally to anterolateral castaneous region extending to posterior margin and including dorsal beak and stigma, piceous mark on anterior ground color region transverse to dark castaneous fascia extending to posterior margin lateral to base of dorsal beak, tip of dorsal beak piceous, and piceous on either side of ventral margin where they converge over gonapophyses, covered with short silvery pile on dorsal and dorsolateral surfaces, long golden pile on ventral and ventrolateral surfaces. Posterior margin of female abdominal segment 9 straight. Sternite I piceous, sternite II piceous medially, ground

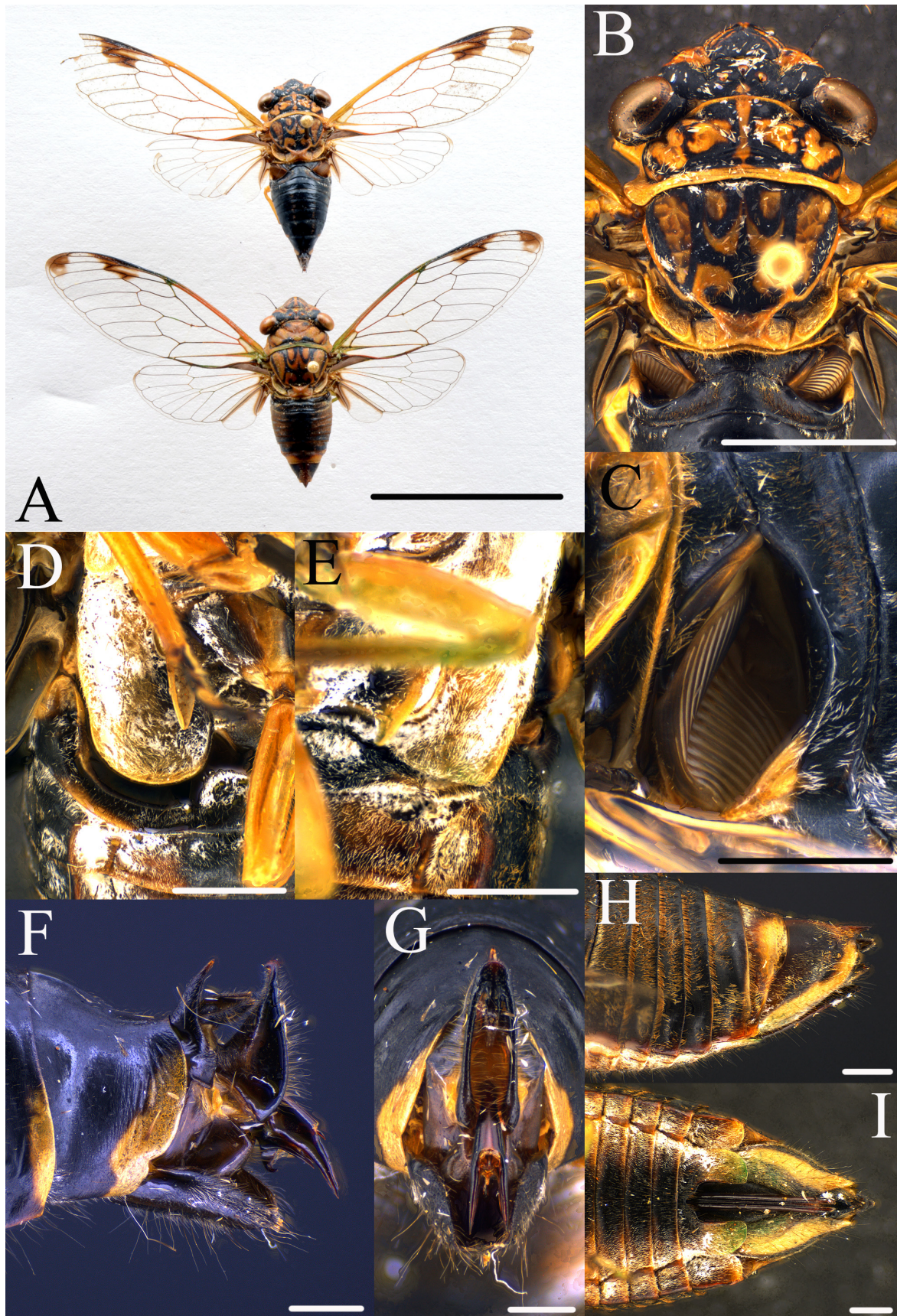


FIGURE 4. *Selymbria ecuadorensis* n. sp.: A, holotype male and paratype female habitus; B, holotype male dorsum; C, holotype male timbal cover; D, paratype male operculum; E, paratype female operculum; F, holotype male lateral view of genitalia; G, holotype male posterior view of genitalia; H, paratype female lateral view of genitalia; I, paratype female ventral view of genitalia. Scale bar: A, 2 cm; B, 5 mm; C–E, 2 mm; F–G, 1 mm; H–I, 2 mm.

color posterolateral margin and lateral margin of tympanal cavity, sternites III–VI piceous medially forming central fascia bordered by castaneous within ground color posterolateral margin, amount of castaneous and ground color reducing in posterior sternites, sternite VII piceous with ground color posterolateral margins margined with castaneous, sternites covered with long and short silvery pile and white pubescence, sternite VIII U-shaped with notched posterior margin, radiating long golden pile. Female sternites similarly marked except one paratype that is almost entirely tawny probably due to chemical modification. Epipleurites castaneous covered with white pubescence. Female sternite VII with a deep medial notch almost reaching anterior margin, V-shaped anteriorly, forming an almost transverse region extending laterally widening the anterior notch continuing with slightly sinuate margin posteriorly to right angled medioposterior margin, posterior extensions reducing the width of the notch slightly, posterior margin of sternite straight, smoothly curving to lateral surface, piceous on anteromidline, castaneous anterolaterally, most of posterior extension ground color, covered with white pubescence.

Genitalia. Male pygofer castaneous with piceous on distal shoulder, distal shoulder small, curved and evacuated laterally, curving smoothly to dorsal beak, dorsal beak piceous, castaneous in paratype, broadly triangular, apex slightly curved when viewed from the side. Pygofer basal lobe elongated, flattened, finger-like, lighter colored and curving medially, bending at obtuse angle away from base, basal half angled medially, extending laterally before reducing angle to become almost parallel at final bend, pygofer upper lobes small, flattened with angled terminus forming an almost perpendicular ridge near distal shoulder. Anal styles piceous with ground color deep lateral surfaces, radiating short silvery pile, extending beyond dorsal beak, anal tube dark ground color. Uncus lobe large, dark castaneous at base becoming piceous distally and ventrally, dorsally with medial carina not reaching apex, small recurved spine on either corner of terminus, terminus rounded when viewed from above, ventrally concave with medial carina in distal half, lateral portion folded ventrally from dorsal surface, base with ventral surface slightly angled toward dorsal surface, ventral margin smoothly curved at base before angling toward apex, sinuate ventral margin when viewed from the side, slightly widening from base, extending with parallel sides almost to terminus where they angle medially when viewed from the ventral side. Dorsal, lateral and ventral surfaces radiating long silvery pile. Aedeagus dark castaneous, with curving spinous lateral extensions with lanceolate lateral lobes near terminus.

Female gonocoxite IX piceous, gonapophyses castaneous, gonapophyses IX with piceous tip. Gonocoxite X piceous almost extending to length of dorsal beak, not as far as anal styles, with radiating golden pile. Anal styles piceous with ground color lateral depressions, anal tube ground color.

MEASUREMENTS (MM). N = two males or eight females, mean (range). Length of body: male 20.03 (19.65–20.4), female 18.56 (15.6–20.6); length of fore wing: male 23.80 (23.5–24.1), female 24.23 (21.9–26.05); width of fore wing: male 8.55 (8.4–8.7), female 8.08 (7.0–9.05); length of head: male 3.40 (3.2–3.6), female 3.44 (3.05–3.8); width of head including eyes: male 7.63 (7.4–7.85), female 7.43 (6.6–7.95); width of pronotum including suprahumeral plates: male 7.03 (6.95–7.1), female 6.88 (5.85–7.65); width of mesonotum: male 6.18 (6.05–6.3), female 6.00 (5.1–6.7).

DIAGNOSIS. *Selymbria ahyetios*, *S. pandora* and *S. subolivacea* can be distinguished from this species by the lack of infuscation on the apex of their fore wing. The infuscation of the fore wing is found only on the apex of the fore wing in *S. ahyetios*, *S. chevauxensis* **n. sp.**, *S. cinctifera* **n. sp.**, *S. guatemalensis* **n. sp.**, *S. guianensis* **n. sp.**, and *S. pluviialis*. The infuscation is restricted to the radiomedial crossvein in the fore wing of *S. danieleae* without extending onto the basal apical cells 1–3. The piceous region on dorsal head is reduced between the lateral ocelli and eye and the medial margin to notch in female sternite VII curves laterad toward the posterior in *S. puntarenasensis* **n. sp.** Tergite 3 in the male is wider than tergite 2, and the medial margin of the notch in female sternite VII curves posterolaterad and distinguishes *S. stigmata*. *Selymbria ecuadorensis* **n. sp.** can be distinguished from *S. boliviaensis* **n. sp.**, *S. iguazuensis* **n. sp.**, *S. loretoensis* **n. sp.**, and *S. madredeiosensis* **n. sp.** by the rounded terminus of the male uncus and the slightly constricting posterior notch in female sternite VII.

DISTRIBUTION. The species is known only from the type series collected in Ecuador.

***Selymbria guatemalensis* n. sp.**

(Fig. 5)

TYPE MATERIAL. Holotype. “GUATEMALA: Izabal Dept. / Finca Firmeza, Reserva de / Anfibios, SE of Morales,

540m / N15.40689° W88.69603° 3–4 / June 2016 R.S. Zack, light traps” one male (WSUC). Paratypes. “GUATEMALA: Dept. Izabal / Biotopo Chocon Machacas / 18–20–VI–2002, elev. 5 m / at M.V. Light, J.C. Schuster / & R.E. Woodruff” one female (FSCA), one male (AFSC); “GUATEMALA: Izabal Dept. / Finca Firmeza, Reserva de Anfibios, SE of Morales, 540m / N15.40689° W88.69603° 3–4 / June 2016 R.S. Zack, sweeping” one male (WSUC), one male (AFSC); “GUATEMALA: Izabal Dept. Finca / Firmeza, Reserva de Anfibios, / SE of Morales, 540m / N15.40689° W88.69603° 3–4 / June 2016 R.S. Zack, light traps” one male (WSUC); “GUATEMALA: Peten Dept. “el / Bosque” along Rio Machaquila / ca 9 km W of Machaquila, 419m / N16.39352° W89.51193° 5 June / 2016 R.S. Zack light traps” two males (WSUC), one female (AFSC); “GUATEMALA: Peten Dept. / Parque Arqueologico El Ceibal / E of Sayaxche, N16.51297° / W90.06256° 29–30 Jun 2014 / 233m. BL/MV lights. R.S. Zack” one male (WSUC).

ETYMOLOGY. The name is a combination of *guatemal*—for the country of origin of the type series and—*ensis* (L. suffix denoting place).

DESCRIPTION. Ground color of head and thorax greenish, faded to tawny in some specimens, marked with piceous, abdomen piceous marked with castaneous and greenish tawny.

Head. Head wider than pronotal collar lateral angles and mesonotum, dorsal head piceous except for small spot on posterior epicranial suture, small triangular mark on anterolateral vertex posterior to supra-antennal plate, and anterior and anterolateral margins of supra-antennal plates that are ground color, piceous posterior to eye. Long silvery pile posterior to eye, short golden pile on vertex, denser in sutures. Ocelli red, eyes testaceous. Ventral head piceous except triangular mark ventral to medial supra-antennal plate, enlarged to transverse fascia ventral to supra-antennal plate continuous with dorsal mark but not reaching eye in some paratypes, posterior margin of gena, anterior and lateral margin of lorum ground color, long silvery pile ventral to eye, on medial gena and on lorum, with white pubescence on ventral head. Postclypeus with seven transverse grooves, eight in one paratype, central sulcus narrow at apex expanding laterally on posteroventral surface, ground color with dorsal surface posterior to transverse grooves, within central sulcus, transverse grooves and ventroposterior piceous, paratype with midline spot on anterior central sulcus and medial portion of ventral transverse ridges ground color in some paratypes, first two dorsal transverse grooves, first three in some paratypes, connected medially by fascia lateral to central sulcus, white pubescence laterally and posteroventrally in paratypes. Anteclypeus piceous around margin, thicker anteriorly, with ground color spot on each side connected across posterior carina, covered with white pubescence. Mentum ground color, medial labium and tip ground color, lateral labium piceous, tip reaching to posterior of middle leg coxae, with sparse short silvery pile, denser near tip. Scape and most of pedicel ground color, distal pedicel and flagellar segments piceous.

Thorax. Dorsal thorax ground color. Pronotum ground color, with triangular piceous marks on anterior disks on either side of anterior midline, reduced to triangular mark in some paratypes, extending posteriorly as fascia to connect to posterior mark, extension missing in paratypes with reduced anterior mark, piceous anterior disks between sutures, transverse mark on posterior disk with angled medial margin extending laterally to posterior lateral fissure, connecting across ambient fissure midline in some paratypes, ambient fissure piceous from anterior lateral fissure to posterior mark, longitudinal piceous fascia on lateral scutes, longitudinal piceous mark on scute between paramedian and lateral fissures connecting to posterior transverse mark that also extends anteromedially to paramedian fissure anterior to middle. Pronotal collar lightened ground color, short golden pile radiating from lateral margin of lateral part of pronotal collar. Mesonotum ground color, piceous on disk surrounding sigillae including anterior margins of lateral sigillae and medial submedian sigillae, anterior mark in submedian sigillae absent in some paratypes, medioanterior and the middle of the lateral margin of the lateral sigillae, mark between lateral and submedian sigillae diverging and extending along medial margin of lateral sigilla almost to posterior margin and medially angling posteriorly median lanceolate mark on disk that narrows anteriorly between submedian sigillae, curving transverse fascia between anterior arms of cruciform elevation extending to, encircling and filling scutal depressions, lateral margin and posterior mesothorax piceous, marks incomplete in some paratypes. Cruciform elevation ground color with piceous mark posterior to anterior arm of cruciform elevation, wing groove ground color with piceous spot on piceous anteromedial margin and castaneous posterior. Metanotum piceous with ground color dorsum and posterior margin. Short golden pile on disk, denser in some paratypes, long silvery pile in posterior wing groove, silvery pile on posterior margin, silvery pile between anterior arms of cruciform elevation, on lateral cruciform elevation. Ventral thoracic segments ground color except piceous on all but lateral basisterna 2 and 3 and piceous spot on middle of episternum 3, covered with white pubescence.

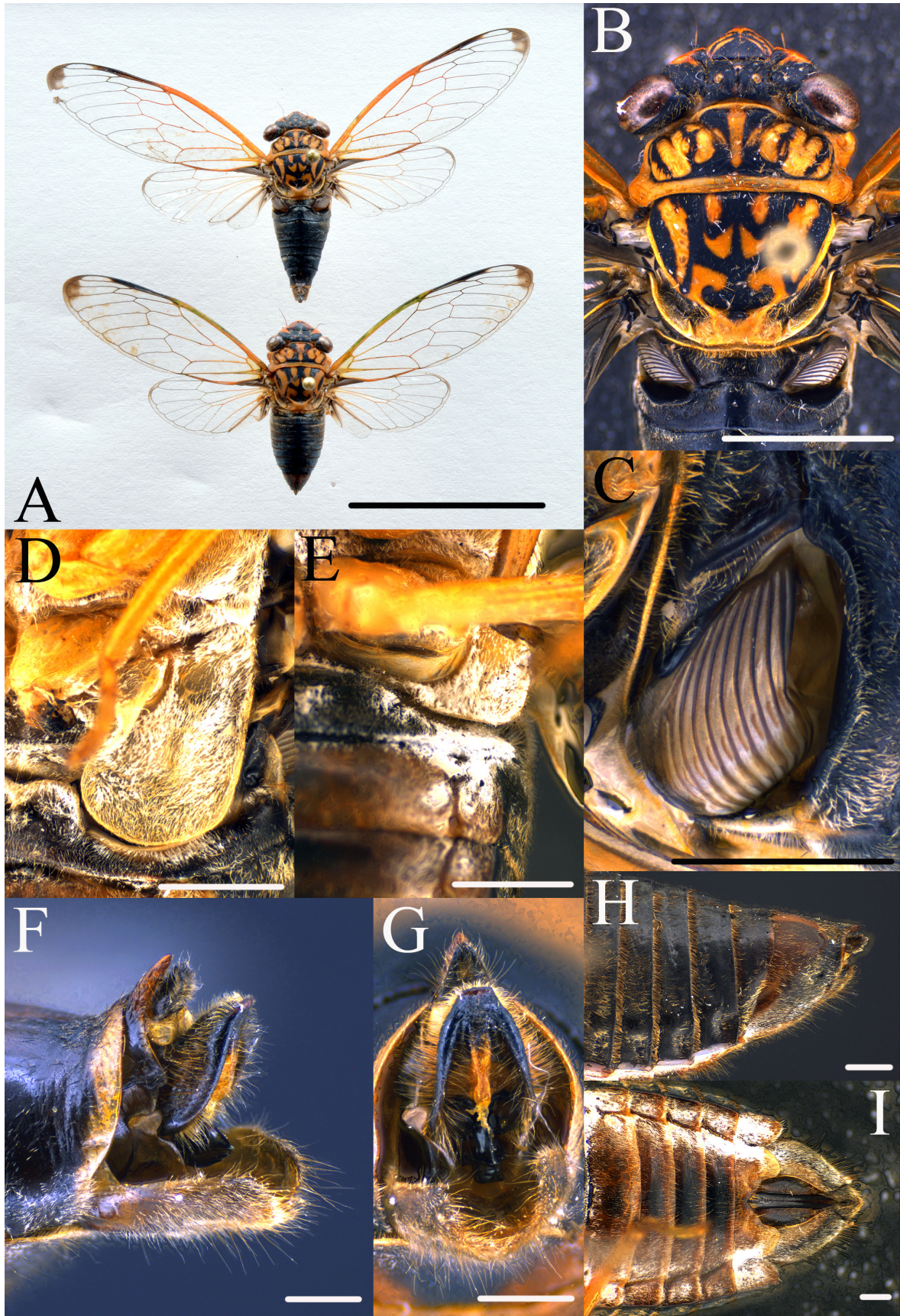


FIGURE 5. *Selymbria guatemalensis* n. sp.: A, holotype male and paratype female habitus; B, holotype male dorsum; C, holotype male timbal cover; D, paratype male operculum; E, paratype female operculum; F, paratype male lateral view of genitalia; G, paratype male posterior view of genitalia; H, paratype female lateral view of genitalia; I, paratype female ventral view of genitalia. Scale bar: A, 2 cm; B, 5 mm; C–E, 2 mm; F–G, 1 mm; H–I, 2 mm.

Wings. Fore wings hyaline with eight apical cells, hind wings hyaline with six apical cells. Cubitus anterior 1 of the fore wing straight between the split with cubitus anterior 2 and the mediocubital crossvein. Venation ground color at base becoming ferruginous in middle of fore wing and piceous in apical cells and ambient vein, anal vein 2 + 3 piceous. Basal cell longer than broad, hyaline with slight greenish tint. Pterostigma present. Infuscation on distal radius anterior 2 extending onto ambient vein on either side and to wing margin, spot extends across apical cells 1 and 2 with a small spot in anterior apical cell 3 and anterior ambient vein of apical cell 3. Basal membrane of fore wing gray with dark gray posterior margin. Venation of hind wing similar, anal vein 2 castaneous, anal vein 3 castaneous with central ground color region. Anal cell 3 and anal cell 2 along anal vein 3 gray, anal cell 2 along anal vein 2 gray. Infuscation in proximal anal cells 2 and 3, spot of infuscation on wing margin distal to apical cells 1 and 2.

Legs. Legs ground color. Fore femora proximal spine ground color, triangular forming acute angle to femur, secondary spine ground color with castaneous tip, narrowly triangular, angled slightly less than primary spine, and small ground color apical spine angled slightly more than secondary spine, long silvery pile radiating from ridge with spines. Tarsal claws ground color proximally with piceous tips separated from ground color by thin castaneous fascia, tibial spurs and comb castaneous with darker tips. Legs covered with long and short silvery pile.

Operculum. Male operculum ground color with piceous spot on medial and lateral base, medial spot missing in paratype, lateral margin parallel to body axis at base, slightly angled mediad from base joining to smoothly rounded posterior margin, posterior medial margin rounded, curving anteromedial margin to base, barely reaching sternite II but not covering tympanal cavity completely in medioposterior corner. Medial margin extending to middle of hind coxa. Meracanthus ground color, broadly triangular, curved margins and tip, reaching to posterior of sternite I. Female operculum ground color with piceous spot on lateral base, lateral margin straight, curved posterolateral and posterior margins, lateral and posterior margins at approximate right angle, terminating medially at middle of meracanthus, reaching to middle of sternite II. Female meracanthus ground color with castaneous posteromedial mark, curving mediad, pointed with straight tip, longer than operculum extending to posterior of sternite II. Opercula lightly covered with white pubescence, denser at base, radiating silvery pile in some paratypes.

Abdomen. Tergite 1 with ground color spot on anterolateral margin and castaneous posterolateral margin along timbal cavity margin, tergite 2 piceous with ground color ventral timbal cavity margin, tergites 3–7 piceous with castaneous lateral margins, castaneous region expanded in paratype male, tergite 8 piceous with ground color dorsolateral and lateral posterior margins, female tergites piceous with thin castaneous lateral margin, auditory capsule piceous, tergites covered with silvery pile which also radiates from posterior margin, very dense in some paratypes. Timbal cover piceous with ground color spot on ventral base continuous with ground color fascia on lateral tergite, recurved exposing timbal dorsally. Timbal with ten long and nine intercalary ribs. Female abdominal segment 9 with thin dark castaneous fascia on dorsal midline bordered by lighter castaneous region, dark castaneous on either side of lighter region anterolaterally, on posterior margin, and ventrally along midline to constriction over gonapophyses, piceous posteriorly and between anterolateral area, posterior margin and ventral castaneous region and tip of dorsal beak including stigma, covered with short silvery pile on dorsal and dorsolateral surfaces, long golden pile on ventral and ventrolateral surfaces. Posterior margin of female abdominal segment 9 straight. Sternite I piceous, sternite II piceous medially, ground color posterolateral margin of tympanal cavity, sternites III–VI castaneous with darker medial spot increasing in size in posterior sternites so that sternite VII dark castaneous with ground color anterolateral triangles and posterior margin, sternites covered with long and short silvery pile and white pubescence, sternite VIII U-shaped with notched posterior margin, radiating long golden pile. Female sternites similarly marked except greater proportion of sternites covered with dark castaneous on midline. Epipleurites castaneous, darker on lateral margin, covered with white pubescence. Female sternite VII with a deep medial notch almost reaching anterior margin, dense golden pile in middle of notch, V-shaped anteriorly for about half the length of the notch, posterior extension with straight margin widening the notch slightly to curved medioposterior and posterior margins, smoothly curving to lateral surface, castaneous, darker on anterior midline and on regions between notch and anterolateral margin, half posterior extension ground color, covered with white pubescence.

Genitalia. Male pygofer dark castaneous, distal shoulder small, forming an approximate right angle, curving smoothly to dorsal beak, dorsal beak lighter, narrowly triangular, dorsum curved to apex when viewed from the side. Pygofer basal lobe elongated, flattened, terminus expanding mediad and folding mediad around pygofer margin with transverse terminus margin, lighter colored and curving mediad, basal half angled laterad, increasing lateral angle and reducing thickness before changing angle to become anteroposterior at terminus, pygofer upper lobes small, triangular, flattened forming a ridge near distal shoulder. Anal styles piceous with ground color deep

lateral surfaces, radiating short silvery pile, extending beyond dorsal beak, anal tube dark ground color. Uncus lobe large, dark castaneous with piceous lateral margin, dorsally with medial carina not reaching apex, terminus slightly rounded when viewed from above, ventrally concave with medial carina in distal half, carina ground color except castaneous posterior, lateral portion folded ventrally from dorsal surface, base with ventral surface slightly angled toward dorsal surface, ventral margin smoothly sinuate toward apex when viewed from the side, slightly widening from base, converging almost to terminus where they become parallel when viewed from the ventral side. Dorsal, lateral and ventral surfaces radiating very dense, long golden pile. Aedeagus dark castaneous, with two short and two long spinous extensions near terminus.

Female gonocoxite IX dark castaneous laterally, lighter castaneous medial margin, gonapophyses castaneous. Gonocoxite X piceous extending to base of anal styles, with radiating golden pile. Anal styles piceous with ground color deep lateral regions, anal tube ground color.

MEASUREMENTS (MM). N = eight males or two females, mean (range). Length of body: male 19.48 (17.7–21.6), female 17.50 (17.1–17.9); length of fore wing: male 24.24 (22.5–26.4), female 23.90 (23.5–24.3); width of fore wing: male 7.59 (6.75–8.1), female 7.43 (7.2–7.65); length of head: male 3.26 (3.1–3.5), female 3.25 (3.2–3.3); width of head including eyes: male 7.10 (6.6–7.55), female 7.08 (7.05–7.1); width of pronotum including supra-humeral plates: male 6.68 (5.95–7.3), female 6.48 (6.4–6.55); width of mesonotum: male 5.83 (5.4–6.4), female 5.75 (5.6–5.9).

DIAGNOSIS. *Selymbria ahyetios*, *S. pandora* and *S. subolivacea* can be distinguished from this species by the lack of infuscation on the apex of their fore wing. The infuscation of the fore wing is found on the apex of the fore wing and on basal apical cells 1–3 and/or on the radiomedial cross vein in *S. boliviaensis* n. sp., *S. danieleae*, *S. ecuadorensis* n. sp., *S. iguazuensis* n. sp., *S. loretoensis* n. sp., *S. madredediosensis* n. sp., *S. puntarenasensis* n. sp., and *S. stigmatica* but restricted to the apex of the fore wing in *S. guatemalensis* n. sp. *Selymbria ahyetios* can be distinguished by the diamond shaped widening of the postclypeus central sulcus near the postclypeus ventral apex, female operculum extending to sternite II with a posteromedial notch, an uncus with a curved posterior margin that is wider than the anal styles with recurved spines on either side, the wide notch in the posterior of male sternite VIII, and aedeagus with two short spines medially with larger extensions forming lateral wings. *Selymbria chevauxensis* can be distinguished by the fore femur primary spine is addressed to the femur rather than being angled above it, the curved cubitus anterior 1 of the fore wing between the split with cubitus anterior 2 and the mediocubital crossvein. The fore wing length greater than 25 mm, uncus with curved lateral margins, and fore femur apical spine about half the length of the secondary spine distinguishes *S. cinctifera* n. sp. The uncus with a curved posterior margin, the upright secondary femoral spine, the male operculum not concealing the posteromedial tympanal cavity, and the sinuate lateral margin of female sternite VII constricting the posterior extension in the middle distinguishes *S. pluvialis*. The male uncus is about twice as long as the anal styles, the castaneous abdomen and the transverse posterior margin of female sternite VII distinguishes *S. guianensis* n. sp. from this new species.

DISTRIBUTION. The species is known only from the type series collected in Guatemala.

***Selymbria guianensis* n. sp.**

(Fig. 6)

TYPE MATERIAL. Holotype. “FRENCH GUIANA / Montagne des Chevaux / Automatic Light Trap / Polyvie 03–VIII–2013 / Soc. Ent. Antilles-Guyane coll.” male (FSCA). Paratypes. “FRENCH GUIANA / Montagne des Chevaux / Automatic Light Trap / Polyvie 17–VIII–2013 / Soc. Ent. Antilles-Guyane coll.” one female (AFSC); “FRENCH GUIANA / Orapu, RN 2 pk 65, Commune de / Régina, Abattis de 7 ha en pente, / 4°29’46.29”N 52°20’43.30”W / Manual Light Trap, 05–X–2016 / Soc. Ent. Antilles-Guyane coll.” one female (AFSC).

ETYMOLOGY. The name is a combination of *guiana*—for the country of origin and—*ensis* (L. suffix denoting place).

DESCRIPTION. Ground color of head and thorax tawny marked with piceous in male, paratypes are greenish marked with piceous and greenish tawny marked with fuscous, abdomen castaneous marked with piceous, one female abdomen greenish castaneous marked with fuscous. Color may be chemically altered from collection in traps. Pubescence absent in male probably due to chemicals in traps as well. Live or fresh specimens are probably green marked with piceous. Ground color will be used to describe structures below as it differs in the three specimens.

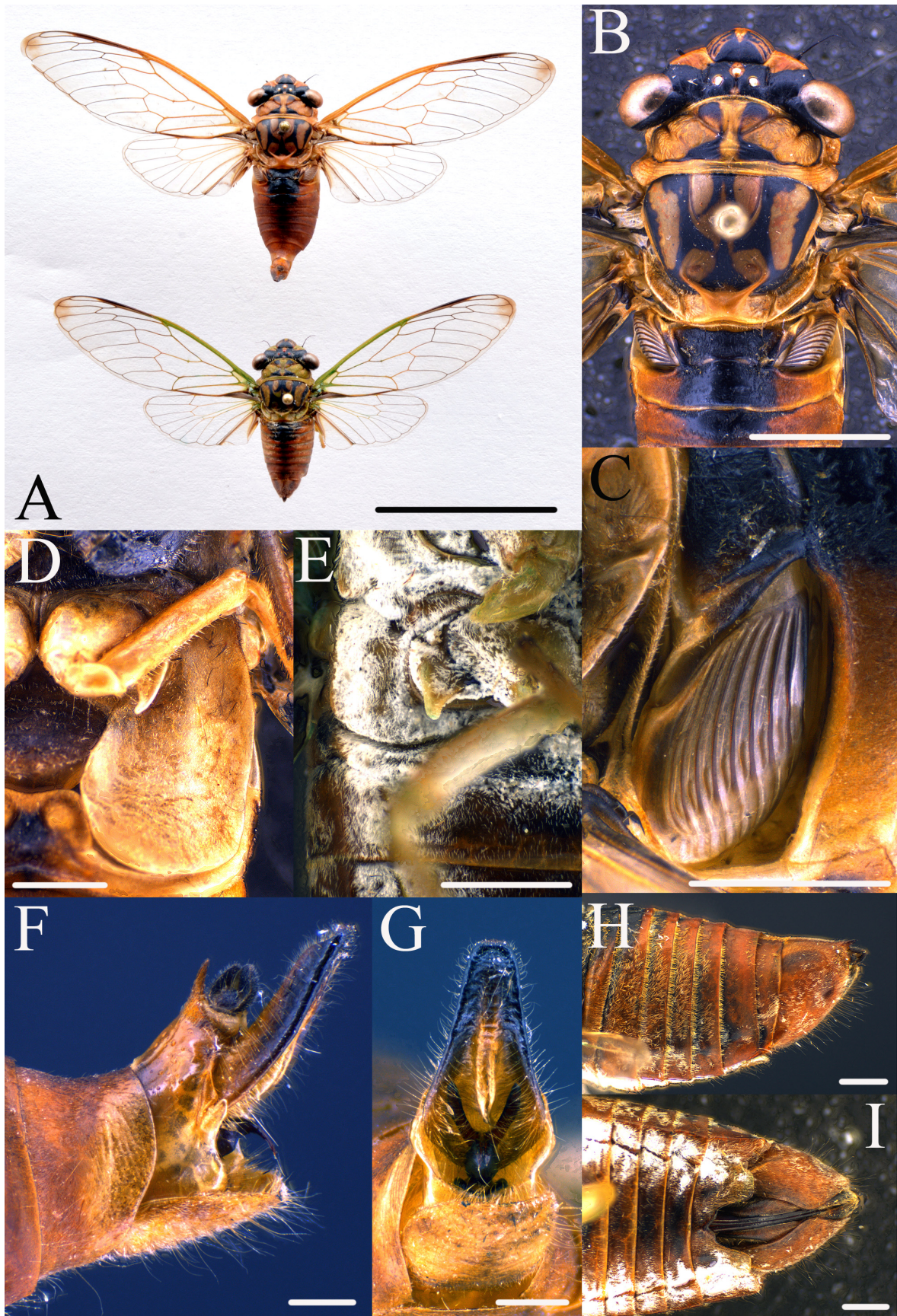


FIGURE 6. *Selymbria guianensis* n. sp.: A, holotype male and paratype female habitus; B, holotype male dorsum; C, holotype male timbal cover; D, paratype male operculum; E, paratype female operculum; F, holotype male lateral view of genitalia; G, holotype male posterior view of genitalia; H, paratype female lateral view of genitalia; I, paratype female ventral view of genitalia. Scale bar: A, 2 cm; B, 5 mm; C–E, 2 mm; F–G, 1 mm; H–I, 2 mm.

Head. Head wider than pronotal collar lateral angles and mesonotum, dorsal head piceous except spot surrounding median ocellus extending to frontoclypeal suture, small spot lateral to lateral ocelli, small spot on posterior epicranial suture, supra-antennal plates and small triangular mark on anterolateral vertex posterior to supra-antennal plate that are ground color, piceous posterior to eye. Long silvery pile posterior to eye, white pubescent spot posterior to eye near lateral margin in paratypes. Ocelli greenish, rosaceous in one paratype, eyes testaceous. Ventral head piceous except transverse fascia ventral to supra-antennal plate continuous with dorsal mark, posterior margin of gena, anterior and lateral margin of lorum ground color, long silvery pile ventral to eye, on medial gena and on lorum, paratypes covered with white pubescence on ventral head. Postclypeus with nine transverse grooves, central sulcus narrow at apex expanding laterally on posteroventral surface, ground color with dorsal surface posterior to transverse grooves, central sulcus except small triangular mark at anterior expansion and linear region crossing apex, posteroventral region posterior to transverse groove, first four dorsal transverse groove piceous, first three connected along medially by fascia lateral to central sulcus, middle of fifth and sixth transverse grooves, medial portion of seventh transverse groove, and all but the lateral end of the eighth and ninth transverse grooves piceous, white pubescence laterally and posteroventrally in paratypes. Anteclypeus piceous except ground color spot on anteromedial margin and short longitudinal fascia on either side of posterior carina, covered with white pubescence in paratypes. Mentum ground color, medial labium castaneous proximally, fuscous and extending almost to tip in one paratype, lateral and distal labium piceous, tip not reaching to posterior of middle leg coxae, with sparse short silvery pile, denser near tip. Scape and annular mark on proximal pedicel ground color, majority of pedicel and flagellar segments piceous, fuscous in one paratype.

Thorax. Dorsal thorax ground color. Pronotum with triangular piceous marks on either side of anterior and posterior midline, posterior mark continues anteriorly as small fascia lateral to midline almost connecting to anterior spot, ambient fissure piceous from anterior lateral fissure to posterior triangular mark. Pronotal collar ground color, paratypes with white pubescence on lateral part of pronotal collar that radiates short pile from the margin. Mesonotum ground color, piceous on disk lateral to lateral sigillae, lateral margin in one paratype, medioanterior and the middle of the lateral margin of the lateral sigillae, between lateral and submedian sigillae, diverging curved marks along medial submedian sigillae margins, between posterior submedian sigillae and scutal depressions, between anterior arms of cruciform elevation extending anteriorly along midline as triangular mark terminating near posterior of submedian sigillae, and posterior mesothorax, posterior mark with central ground color spot in one paratype, marks castaneous in one paratype. Cruciform elevation ground color, wing groove ground color with piceous spot on anterolateral margin. Metanotum ground color with piceous spot at hind wing base. White pubescence and silvery pile on area lateral to lateral sigillae, on lateral cruciform elevation, anteriorly between the arms of the cruciform elevation, dorsally posterior to submedian sigillae, and in posterior wing groove in paratypes. Ventral thoracic segments light ground color except piceous basisterna 2 and 3, katepisternum 2 medial katepimeron 2, and medial episternum 3, covered with white pubescence in paratypes.

Wings. Fore wings hyaline with eight apical cells, hind wings hyaline with six apical cells. Cubitus anterior 1 of the fore wing straight between the split with cubitus anterior 2 and the mediocubital crossvein. Venation tawny becoming piceous between apical cells, except piceous proximal half of anal vein 2 + 3 and along distal ulnar cells 1 and 2, tawny replaced with green in one paratype, all veins tawny in the other paratype. Basal cell longer than broad, slightly clouded at base. Pterostigma present. Infuscation on distal wing veins and ambient veins of apical cells 1–2 and anterior of apical cell 3, infuscation expanding on wing margin from anterior to middle of apical cell 3. Basal membrane of fore wing gray with dark gray posterior margin. Venation of hind wing tawny proximally, becoming piceous in apical cells, all tawny in one paratype, cubitus posterior piceous in one paratype, proximal anal veins 2 and 3 piceous in holotype. Anal cell 3 and anal cell 2 along anal vein 3 gray, anal cell 2 along anal vein 2 gray. Light infuscation along outer edge of wing margins.

Legs. Legs ground color, distal tibiae and distal tarsi castaneous, proximal majority of tarsi dark castaneous, tarsal claws castaneous at base with piceous tips, tibial spurs and comb castaneous with piceous tips. Fore femora proximal spine ground color with castaneous tip, thin, elongate and acutely angled to long axis of femur, secondary spine castaneous with ground color base, elongated, upright, with slightly curved tip, and very small, upright, ground color apical spine. Legs covered with long and short silvery pile and white pubescence in paratypes.

Operculum. Male operculum ground color with piceous spot on lateral base, lateral margin parallel to body axis joining to smoothly rounded posterolateral and posterior margins, posterior medial margin straight, angled slightly towards midline, curved to connect to straight anteromedial margin to base, not reaching posterior sternite II but

covering tympanal cavity. Medial margin extending to middle of hind coxa. Meracanthus ground color, elongated with tip curving mediad, reaching to middle of sternite I. Female operculum ground color with piceous spot on lateral base, lateral margin straight, curved posterolateral and posterior margins, terminating medially at middle of meracanthus, reaching to middle of sternite II. Female meracanthus ground color, pointed with tip curving mediad, as long as or slightly longer than operculum. Opercula radiate silvery pile and covered with white pubescence in paratypes.

Abdomen. Abdominal tergites castaneous except piceous tergite 1, dorsum of tergite 2, dorsum of tergite 3 not reaching posterior margin and extending transversely on anterior margin, and spot on anterior midline of tergite 4, dorsolateral tergites 6 and 7 with piceous anterior and anterolateral tergite 8 with piceous spot with silvery pile medial to piceous spot on tergite 8 in one paratype, piceous spot in middle of auditory capsule in male holotype, auditory capsule completely piceous in one paratype, ground color in other paratype, tergites with short silvery pile extending from posterior of tergites, silvery pile on dorsal tergite 1, anterior and on either side of midline of tergite 2, and anterior of tergite 3, short piceous pile on tergites of male. Timbal cover only slightly recurved, timbal completely exposed, lighter than remaining tergite. Timbal with ten long and nine intercalary ribs. Female abdominal segment 9 castaneous with piceous dorsal beak, mediad angled dark castaneous fascia extending across anterior half of dorsolateral surface, dark castaneous stigma, and medioventral margin, covered with short silvery pile, long golden pile radiating from ventral surface. Posterior margin of female abdominal segment 9 slightly sinuate. Sternites light castaneous with ochraceous posterior margin, sternite I castaneous, sternite II with piceous midline except anterior margin, sternite VIII a flattened U-shape, radiating long golden pile. Female sternites with similar piceous marks on sternite I, mark on sternite II extends laterally, castaneous becoming darker in posterior sternites. Epipleurites castaneous. Female sternite VII with a deep medial notch, V-shaped anteriorly not as wide as gonapophysis VIII at terminus, forming an obtuse angle and becoming almost transverse to lateral anterior gonocoxite IX, then curving and widening for more than half the length to anteromedial abdominal segment 9 where it curves to transverse posterior margin, dark castaneous spot on either side of notch. Long silvery pile radiating from sternites, sternite I, anterior sternite II, and lateral sternites II–VII with white pubescence in one paratype.

Genitalia. Male pygofer castaneous, piceous on tip of dorsal beak, with long golden pile on base of basal lobes and short silvery pile on lateroposterior surface, distal shoulder with obtuse angle, dorsal beak elongated, pointed, straight when viewed from the side. Pygofer basal lobe extended to about half pygofer length, flattened laterally reducing to a triangular tip and adpressed to pygofer, pygofer upper lobes absent. Anal styles piceous, extending beyond dorsal beak, anal tube ground color. Uncus lobe castaneous at base and medially, lateral margin dark castaneous at base becoming piceous for most of its length, arched dorsally, ventral margin with medial carina, lateral margin angled laterad from base, curving to straight extension angled mediad to transverse terminus. Lateral dorsal and ventral surfaces radiating long golden pile, extremely dense from ventral base to lateral curve. Aedeagus dark castaneous, theca short with barb-like terminus, long, flattened extensions forming a V-shape above aedeagus.

Female gonocoxite IX castaneous with piceous lateral margin, gonapophyses castaneous, lighter at proximal base. Gonocoxite X piceous extending to length of dorsal beak but not as far as anal styles, with radiating golden pile. Anal styles piceous. Piceous fuscous in one paratype. Anal tube ground color.

MEASUREMENTS (MM). N = one male or two females, mean (range). Length of body: male 23.2, female 19.35 (18.0–20.7); length of fore wing: male 27.1, female 25.40 (24.5–26.3); width of fore wing: male 9.2, female 8.50 (8.1–8.9); length of head: male 3.7, female 3.53 (3.45–3.6); width of head including eyes: male 8.5, female 7.95 (7.6–8.3); width of pronotum including suprahumeral plates: male 7.75, female 7.10 (6.7–7.5); width of mesonotum: male 6.4, female 5.83 (5.6–6.05).

DIAGNOSIS. *Selymbria ahyetios*, *S. pandora* and *S. subolivacea* can be distinguished from this species by the lack of infuscation on the apex of their fore wing. The infuscation of the fore wing is found on the apex of the fore wing and on basal apical cells 1–3 and/or on the radiomedial cross vein in *S. boliviaensis* n. sp., *S. danieleae*, *S. ecuadorensis* n. sp., *S. iguazuensis* n. sp., *S. loretoensis* n. sp., *S. madredediosensis* n. sp., *S. puntarenasensis* n. sp., and *S. stigmatica* but is restricted to the apex of the fore wing in *S. guianensis* n. sp. This species can be distinguished from *S. chevauxensis* by the fore femur primary spine being adpressed to the femur rather than being angled above it, cubitus anterior 1 of the fore wing is curved rather than being straight between the split with cubitus anterior 2 and the mediocubital crossvein, and the male operculum does not cover the tympanal cavity in that species. *Selymbria ahyetios* can be distinguished by the diamond shaped widening of the postclypeus central sulcus near the postclypeus ventral apex, female operculum extending to sternite II with a posteromedial notch, an uncus with a curved

posterior margin that is wider than the anal styles with recurved spines on either side, the wide notch in the posterior of male sternite VIII, and aedeagus with two short spines medially with larger extensions forming lateral wings. The piceous rather than castaneous abdomen, the lateral uncus margins that reduce near the apex rather than being straight, and the curved rather than angled medioposterior of the female sternite VII distinguishes *S. cinctifera* **n. sp.** The male uncus is about as long as the anal styles, the piceous abdomen and the curved posterior margin of female sternite VII distinguish *S. guatemalensis* **n. sp.** from this new species. The piceous abdomen, uncus with narrowed and rectangular terminus, and the sinusoidal lateral margin of female sternite VII producing an indentation in the lateral margin distinguishes *S. pluvialis* from this new species.

The shape of the meracanthus can distinguish the three species found in French Guiana. The meracanthus is broadly triangular in *S. danieleae*, the extended tip is straight in *S. chevauxensis* **n. sp.** and the extended tip is curved mediad in *S. guianensis* **n. sp.**

DISTRIBUTION. The species is known only from the type series collected in French Guiana. *Selymbria danieleae* has also been collected on Montagne de Chevaux in May.

Selymbria iguazuensis **n. sp.**

(Fig. 7)

Selymbria pandora non Distant Sanborn & Heath 2014: 74.

TYPE MATERIAL. Holotype. "ARGENTINA, Prov. Misiones / Puerto Iguazú / 3 January 1991 / D. Rojas Lanus Coll." male (FSCA). Paratype. "Brasil: Iguassu (sic), / II 1987 / J. de Tonnancour" one female (MSMC).

ETYMOLOGY. The name is a combination of *iguazu*—for the type locality and—*ensis* (L. suffix denoting place).

DESCRIPTION. Ground color of head and thorax greenish tawny marked with piceous, abdomen piceous marked with castaneous and greenish tawny.

Head. Head wider than pronotal collar lateral angles and mesonotum, dorsal head piceous except for small spot on posterior epicranial suture, spot between median ocellus and frontoclypeal suture in paratype, supra-antennal plates and small triangular mark on anterolateral vertex posterior to supra-antennal plate that are ground color, piceous posterior to eye. Long silvery pile posterior to eye, short golden pile on vertex of paratype. Ocelli red, eyes testaceous. Ventral head piceous except transverse fascia ventral to supra-antennal plate continuous with dorsal mark but not reaching eye, posterior margin of gena, anterior and lateral margin of lorum ground color, long silvery pile ventral to eye, on medial gena and on lorum, paratype with white pubescence on ventral head. Postclypeus with eight transverse grooves, central sulcus narrow at apex expanding laterally on posteroventral surface, ground color with dorsal surface posterior to transverse grooves, within central sulcus, transverse ridges and ventroposterior piceous, paratype with midline fascia within central sulcus piceous and transverse ridges ground color, first four dorsal transverse groove piceous laterally, almost reaching end of transverse ridge in first groove and decreasing in size as move to fourth groove, first groove, all but lateral end of second groove, and complete third groove piceous in paratype, these three connected medially by fascia lateral to central sulcus in paratype, lateral three fourths of fourth groove piceous in paratype, white pubescence laterally and posteroventrally in paratypes. Anteclypeus piceous except ground color spot on anteromedial margin and short longitudinal fascia on either side of posterior carina, covered with white pubescence in paratypes. Mentum ground color, medial labium castaneous proximally, lateral and distal labium piceous, tip not reaching to middle leg trochanter, with sparse short silvery pile, denser near tip. Scape and proximal pedicel ground color, distal pedicel and flagellar segments piceous.

Thorax. Dorsal thorax ground color. Pronotum ground color, lightly castaneous on midline, with triangular piceous marks on either side of anterior and posterior midline, anterior mark continues posteriorly as small fascia lateral to midline almost connecting to posterior spot, ambient fissure piceous from anterior lateral fissure to posterior triangular mark, paratype with longitudinal castaneous fascia on lateral scutes. Pronotal collar ground color, paratype with white pubescence on lateral part of pronotal collar and in posterolateral ambient fissure, lateral part of pronotal collar radiates short piceous pile from the margin. Mesonotum ground color, piceous on disk lateral to lateral sigillae, lateral margin, medioanterior and the middle of the lateral margin of the lateral sigillae, between lateral and submedian sigillae diverging and extending along medial margin of lateral sigilla to posterior margin and medially to spot on disk, diverging curved marks along medial submedian sigillae margins connecting to parapsidal

suture, between posterior submedian sigillae and scutal depressions, between anterior arms of cruciform elevation extending anteriorly along midline as triangular mark terminating near posterior of submedian sigillae, base curved anteriorly to enclose scutal depressions, and posterior mesothorax. Cruciform elevation ground color with piceous mark posterior to anterior arm of cruciform elevation, wing groove ground color with piceous spot on anteromedial margin. Metanotum castaneous with ground color posterior margin. Golden pile in posterior wing groove, silvery pile on posterior margin, white pubescence and silvery pile on area lateral to lateral sigillae, on lateral cruciform elevation, anteriorly between the arms of the cruciform elevation, and dorsally posterior to submedian sigillae in paratype. Ventral thoracic segments light ground color except castaneous all but lateral basisterna 2 and 3, with white pubescence medially in paratype.

Wings. Fore wings hyaline with eight apical cells, hind wings hyaline with six apical cells. Cubitus anterior 1 of the fore wing straight between the split with cubitus anterior 2 and the mediocubital crossvein. Venation ochraceous except piceous anal vein 2 + 3, becoming piceous in apical cells, ambient vein lighter than veins between distal apical cells. Basal cell longer than broad, hyaline with slight greenish tint. Pterostigma present. Infuscation on distal radius anterior 2 extending onto ambient vein on either side and to wing margin, spot extends across apical cells 1 and 2 with a small spot in apical cell 3 in paratype. Basal membrane of fore wing gray with dark gray posterior margin. Venation of hind wing tawny ochraceous, distal anal vein 2 castaneous, anal vein 3 castaneous in paratype. Anal cell 3 and anal cell 2 along anal vein 3 gray, anal cell 2 along anal vein 2 gray. Infuscation in proximal anal cells 2 and 3, spot of infuscation on wing margin distal to apical cells 1 and 2 in paratype.

Legs. Legs ochraceous, castaneous marks on lateral coxae, distal trochanters and striped on femora, these marks absent in paratype, distal tibiae and tarsi castaneous, except proximal metatarsus of fore leg lighter, amount of castaneous decreasing in posterior tibiae. Fore femora proximal spine castaneous, elongate forming acute angle to femur, secondary spine ochraceous with castaneous tip, narrowly triangular, upright, and small, slightly angled apical spine, ochraceous with castaneous tip, long silvery pile radiating from ridge with spines. Tarsal claws dark castaneous, tibial spurs and comb castaneous with darker tips. Legs covered with long and short silvery pile.

Operculum. Male operculum ochraceous with piceous spot on lateral base, lateral margin angled mediad joining to smoothly rounded posterior margin, posterior medial margin rounded, curving anteromedial margin to base, almost reaching sternite II but not covering tympanal cavity completely. Medial margin extending to middle of hind coxa. Meracanthus ochraceous, broadly triangular with straight tip but curved medial margin, reaching to middle of sternite I. Female operculum ochraceous with piceous spot on lateral base, lateral margin straight slightly angled mediad, curved posterolateral and posterior margins, terminating medially at middle of meracanthus, reaching to middle of sternite II. Female meracanthus ochraceous with castaneous medial mark, curving mediad, pointed with straight tip, longer than operculum extending to posterior of sternite II. Opercula lightly covered with white pubescence, denser at base, radiating silvery pile in paratype.

Abdomen. Male abdominal tergite 1 piceous with castaneous margin to timbal cavity, tergite 2 piceous with dark castaneous posterior to timbal cavity and greenish tawny posterior margin, tergites 3–7 with transverse castaneous region anterior to greenish tawny posterior margin, piceous region reduced in posterior tergites, tergite 8 castaneous anteriorly and greenish tawny posteriorly, tergites 1–7 piceous and tergite 8 piceous with thin transverse castaneous fascia anterior to ochraceous posterior margin in female, auditory capsule castaneous. Timbal cover recurved exposing timbal dorsally, piceous, lateral tergite 2 ochraceous expanding anteriorly to form cover over lateral timbal cavity. Timbal with eleven long and ten intercalary ribs. Female abdominal segment 9 castaneous lighter V-shaped region on dorsal surface enclosing an elongated triangular mark on anterior dorsal midline terminating on dorsal beak, lateral anterior margin and lateral to V-shaped regions darker castaneous, lateral regions piceous extending to base of dorsal beak, ochraceous fascia extending from anteroventral margin lateral to piceous region terminating on posterior margin and enclosing thick piceous fascia along ventral margin, covered with long golden pile on ventral and ventrolateral surfaces. Posterior margin of female abdominal segment 9 straight. Sternites I–II piceous, sternite II with tawny posterolateral margin and ochraceous lateral margin, sternites III–VI castaneous medially, tawny laterally, forming a medial castaneous fascia, sternite VII castaneous with tawny anterolateral margins, sternite VIII U-shaped, radiating long golden pile. Female sternites similarly marked but with central piceous fascia. Epi-pleurites tawny. Female sternite VII with a deep medial notch almost reaching anterior margin, V-shaped anteriorly, an oblique angle forms a short straight region before curving to slightly diverging straight extension to posterior margin, posterior margin of sternite smoothly arched to lateral surface, castaneous anteriorly to base of posterior

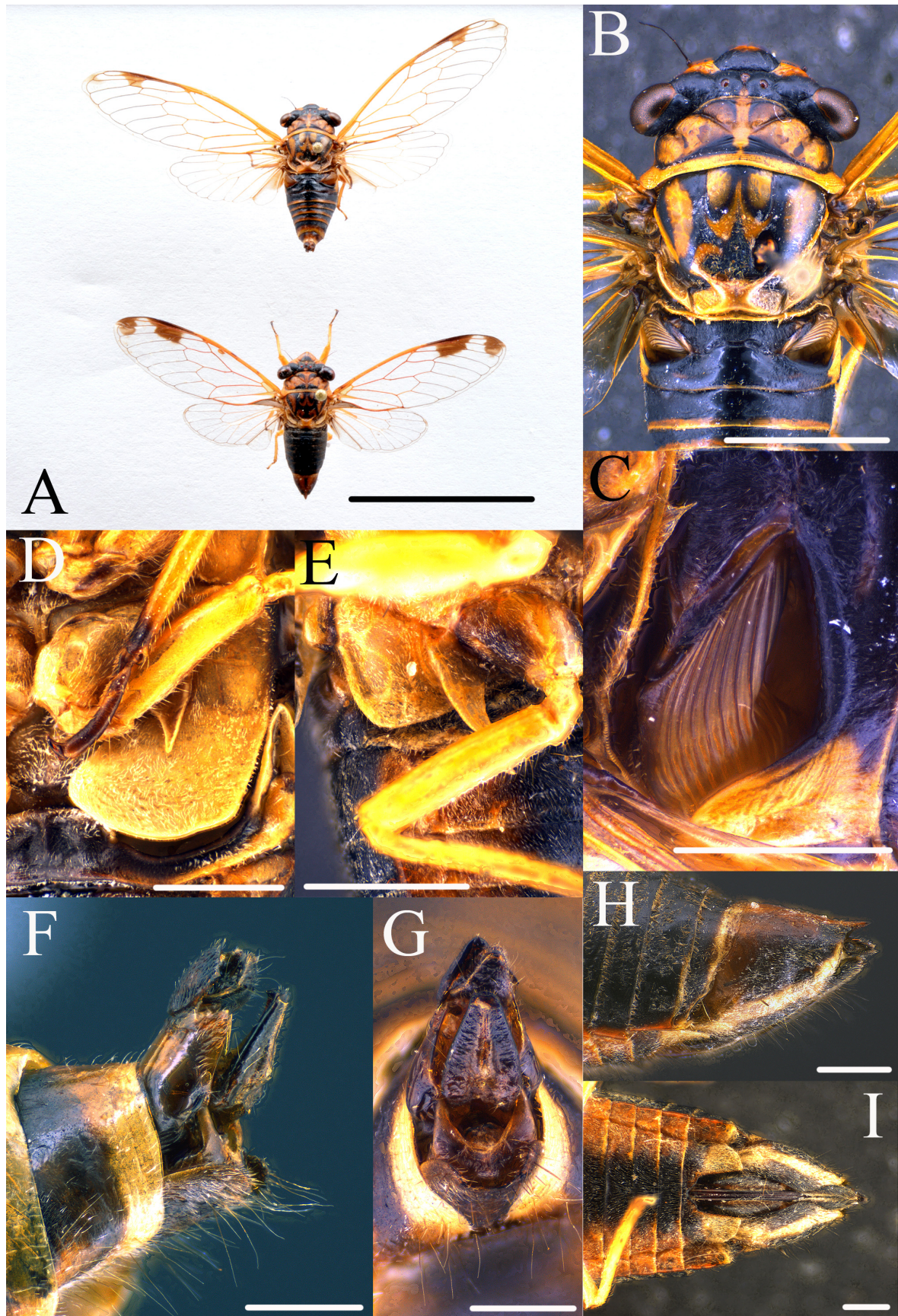


FIGURE 7. *Selymbria iguazuensis* n. sp.: A, holotype male and paratype female habitus; B, holotype male dorsum; C, holotype male timbal cover; D, paratype male operculum; E, paratype female operculum; F, holotype male lateral view of genitalia; G, holotype male posterior view of genitalia; H, paratype female lateral view of genitalia; I, paratype female ventral view of genitalia. Scale bar: A, 2 cm; B, 5 mm; C–E, 2 mm; F–G, 1 mm; H–I, 2 mm.

extension, ochraceous posteriorly. Long silvery pile radiating from sternites, white pubescence on male sternite I, anterior and posterior sternite II, and anterior sternite III.

Genitalia. Male pygofer castaneous, darker ventrally and dorsally anterior to dorsal beak, with piceous spot on lateral base and dorsal beak, with short silvery pile on ventral margin and posterior dorsal surface, distal shoulder pointed forming a notch lateral to dorsal beak, dorsal beak wide, hollow, broadly triangular, arching to terminus when viewed from the side. Pygofer basal lobe finger-like, extending to about half pygofer length, terminus curving mediad, pygofer upper lobes small, triangular, adpressed to pygofer with lateral central region excavated. Anal styles piceous radiating silvery pile, extending beyond dorsal beak, anal tube castaneous. Uncus lobe castaneous with piceous lateral margin, slightly arched dorsally and ventrally, medial carina on ventral side, lateral margin angled laterad from base, curving to straight extension angled mediad to transverse terminus, dorsal terminus with small, slightly recurved point. Lateral dorsal surface radiating long silvery pile. Aedeagus dark castaneous, with lateral extensions near terminus.

Female gonocoxite IX piceous with castaneous medial margin, gonapophyses castaneous, lighter at proximal base. Gonocoxite X piceous almost extending to length of dorsal beak but not as far as anal styles, with radiating golden pile. Anal styles piceous, anal tube ochraceous.

MEASUREMENTS (MM). N = one male or one female, mean (range). Length of body: male 17.4, female 16.7; length of fore wing: male 23.45, female 20.8; width of fore wing: male 7.7, female 7.15; length of head: male 3.1, female 3.2; width of head including eyes: male 7.2, female 6.6; width of pronotum including suprahumeral plates: male 6.9, female 6.0; width of mesonotum: male 5.2, female 5.0.

DIAGNOSIS. The basic coloration is similar to *S. guianensis* **n. sp.** but the species can be distinguished quickly by the two macular regions of the fore wing in *S. iguazuensis* **n. sp.** *Selymbria ahyetios*, *S. pandora* and *S. subolivacea* can be distinguished from this species by the lack of infuscation on the apex of their fore wing. The infuscation of the fore wing is found only on the apex of the fore wing in *S. ahyetios*, *S. chevauxensis* **n. sp.**, *S. cinctifera* **n. sp.**, *S. guatemalensis* **n. sp.**, *S. guianensis* **n. sp.**, and *S. pluvialis* but is also found on basal apical cells 1–3 and on the radiomedial cross vein in *S. iguazuensis* **n. sp.** The infuscation is restricted to the radiomedial crossvein in the fore wing of *S. danielleae* without extending onto the basal apical cells 1–3 but is found on basal apical cells 1–3 in *S. iguazuensis* **n. sp.** The piceous region on dorsal head is reduced between the lateral ocelli and eye and the medial margin to notch in female sternite VII curves laterad toward the posterior in *S. puntarenasensis* **n. sp.** Tergite 3 in the male is wider than tergite 2, and the medial margin of the notch in female sternite VII curves posterolaterad and distinguishes *S. stigmata*. *Selymbria ecuadorensis* **n. sp.** can be distinguished by the rounded terminus of the male uncus and the slightly constricting posterior notch in female sternite VII. The extension of male tergite 2 over the posterolateral tibial cavity, the concave ventral terminus of the uncus, and the straight medial margins in female sternite VII that widen slightly distinguishes *S. iguazuensis* **n. sp.** from *S. boliviaensis* **n. sp.**, *S. loretoensis* **n. sp.**, and *S. madredeiosensis* **n. sp.**

DISTRIBUTION. The species is known only from the type specimen collected in Misiones Province, Argentina and western São Paulo Province, Brazil in the area of Iguazú Falls.

***Selymbria loretoensis* n. sp.**

(Fig. 8)

TYPE MATERIAL. Holotype. “PERU: Dept. Loreto, 40 km / NE Iquitos on Amazon / River, Explorama Inn / 22–24–VIII–1992 / Castner, Skelley, *et al.*” one male (FSCA). Paratypes. Same data as holotype, one female (FSCA), one female (AFSC); “PERU: Dpto. Loreto / Quebrada Orán ca 5 km / N Rio Amazonas, 85 km / NE Iquitos, el. 110 m / VI–1984 L.J. Barkley // LSAM / 0297043” one female (LSAM).

ETYMOLOGY. The name is a combination of *loreto*—for the province of origin of the type series and—*ensis* (L. suffix denoting place).

DESCRIPTION. Ground color of head and thorax greenish marked with piceous, abdomen piceous marked with castaneous and greenish. Green has faded or was chemically altered to tawny in holotype and one paratype.

Head. Head wider than pronotal collar lateral angles and mesonotum, dorsal head piceous except for midline between median ocellus and frontoclypeal suture, ground color spot on posterior epicranial suture, and anterolateral vertex posterior to supra-antennal plate, castaneous spot on posterior cranial depression, supra-antennal plates ground color except for curved piceous mark extending anterolaterally from posteromedial margin, reduced to spot

near posteromedial corner or small medial spot in paratypes, piceous posterior to eye. Short silvery pile posterior to eye, white pubescence on posteromedial eye, short golden pile on vertex in one paratype, denser in sutures. Ocelli red, eyes testaceous. Ventral head piceous except transverse fascia ventral to supra-antennal plate continuous with dorsal mark but not reaching eye, posterior margin of gena, anterior and lateral margin of lorum ground color, long silvery pile ventral to eye, on gena and on lorum, white pubescence on ventral head in some paratypes. Postclypeus with eight transverse grooves, central sulcus narrow at apex expanding laterally on posteroventral surface, ground color with dorsal surface posterior to transverse grooves, within expanded region of central sulcus except for anterior region near apex and short fascia on midline in center of mark, within transverse grooves and ventro-posterior piceous, first four dorsal transverse groove piceous connected medially by fascia lateral to central sulcus, ventroposterior transverse grooves 5–8 ground color with fifth groove piceous in lateral half in one paratypes, white pubescence laterally and posteroventrally, long silvery pile on ventral surface. Anteclypeus piceous, covered with white pubescence. Mentum ground color, medial labium castaneous, lateral and distal labium piceous, tip reaching to anterior of middle leg trochanter, with sparse short silvery pile, denser near tip. Scape and proximal pedicel ground color, distal pedicel and flagellar segments piceous.

Thorax. Dorsal thorax ground color. Pronotum ground color, lightly castaneous on either side of midline on disk medial to posterior paramedian fissure, with triangular piceous marks on anterior disks on either side of anterior midline, reduced to curved mark in paratypes, extending posteriorly as fascia to connect to posterior mark, piceous anterior disks between sutures, transverse mark on posterior disk with angled medial margin extending laterally to posterior lateral fissure, ambient fissure piceous from anterior lateral fissure to posterior mark, longitudinal piceous fascia on lateral scutes, curved piceous and castaneous mark on scute between central paramedian fissure and posterior lateral fissure connecting to posterior transverse mark that also extends anteriorly to paramedian fissure near center, absent in paratypes. Pronotal collar lightened ground color, short golden pile radiating from lateral margin of lateral part of pronotal collar. Mesonotum ground color, piceous on disk lateral to lateral sigillae, medioanterior and the middle of the lateral margin of the lateral sigillae, between lateral and submedian sigillae diverging and extending along medial margin of lateral sigilla almost to posterior margin and medially to spot on disk, curved marks along medial submedian sigillae margins connecting to parapsidal suture expanded into triangular mark on anterior terminus, trident-shaped mark on disk with tines extending between sigillae, curving fascia between anterior arms of cruciform elevation extending to, encircling and filling scutal depressions, lateral margin and posterior mesothorax piceous. Cruciform elevation ground color with piceous mark posterior to anterior arm of cruciform elevation, wing groove ground color with piceous spot on anteromedial margin and posterolateral piceous fascia. Metanotum piceous with ground color dorsum and posterior margin. Short golden pile on disk of paratypes, long silvery pile in posterior wing groove, silvery pile on posterior margin, silvery pile between anterior arms of cruciform elevation, on lateral cruciform elevation in paratypes. Ventral thoracic segments ground color except dark castaneous or piceous on all but lateral basisterna 2 and 3, covered with white pubescence.

Wings. Fore wings hyaline with eight apical cells, hind wings hyaline with six apical cells. Cubitus anterior 1 of the fore wing straight between the split with cubitus anterior 2 and the mediocubital crossvein. Venation ground color at base along with costal margin and radius & subcostal vein to node and subcostal vein distal to node, remaining venation ferruginous except piceous anal vein 2 + 3, becoming piceous in distal veins between apical cells 4–8, ambient vein piceous between apical cells 2–8. Basal cell longer than broad, hyaline with slight greenish tint along radius & subcostal vein and at base. Pterostigma present. Infuscation on distal subcostal vein, radius anterior 1, radius anterior 2 and distal radius posterior, infuscation extending onto ambient vein anterior to radius posterior extending to wing apex, mark on radius posterior reduced in one paratype, second infuscation expanding from middle of subcostal vein across pterostigma, proximal apical cells 1–3 and anterior half of proximal apical cell 4, distal ulnar cells 1 and 2 not reaching bifurcation of median veins 1 and 2 but including entire radial and radiomedial crossveins, expanded anterodistally to connect to distal spot. Basal membrane of fore wing gray with dark gray posterior margin. Venation of hind wing similarly colored with anal veins 2 and 3 castaneous. Anal cell 3 and anal cell 2 along anal vein 3 gray, anal cell 2 along anal vein 2 gray, gray area margined with infuscation in anal cells 2 and 3, spot of infuscation on wing margin distal to apical cells 1 and 2.

Legs. Legs ground color, dark castaneous marks on lateral base of middle coxae and lateral hind coxae, distal tibiae edged in castaneous, dorsal metatarsus and mesotarsus, distal pretarsus piceous. Fore femora proximal spine forming acute angle to femur, secondary spine with wider base and sharper apex, upright to femoral axis with slightly curved tip, about as long as primary spine, and small, slightly angled apical spine, all spines ground color

with castaneous tips, long silvery pile radiating from ridge with spines. Tarsal claws dark castaneous with piceous tips, tibial spurs and comb castaneous with darker tips. Legs covered with long and short silvery pile.

Operculum. Male operculum ground color with piceous spots on lateral base and anteromedial corner, lateral margin curving slightly mediad from base, joining to smoothly rounded posterior margin, medial margin smoothly curved to base, medial margin covering medial tympanal cavity, posterior margin reaching to middle of sternite II covering tympanal cavity completely. Meracanthus ground color with castaneous spot on medial base, triangular with straight tip but curved lateral margin, reaching to middle of sternite II. Female operculum ground color with piceous spot on lateral base, straight lateral and posterior margins, posterolateral corner forming acute angle, terminating medially at medial meracanthus, reaching almost to posterior of sternite II. Female meracanthus ground color with castaneous medial spot, triangular, curving mediad, longer than operculum extending to posterior of sternite II. Opercula covered with white pubescence, denser at base, radiating silvery pile in paratypes.

Abdomen. Tergite 1 with castaneous posterior margin and ground color spot on dorsal timbal cavity margin, tergite 2 piceous with castaneous posterior and lateral margins with greenish spot on ventral timbal cavity margin, tergite 3 piceous dorsally and posteriorly, castaneous anterolaterally and laterally, tergites 4–7 piceous posteriorly, castaneous anteriorly and lateral margins, ground color fascia on lateral posterior margin of tergite 7, tergite 8 castaneous with ground color dorsolateral and lateral posterior margin, female tergites piceous except tergite 8 with castaneous anterolateral region and ground color posterior half, auditory capsule castaneous, tergites covered with silvery pile which also radiates from posterior margin. Timbal cover piceous, recurved exposing timbal dorsally, lateral tergite 2 expanding anteriorly to form small, triangular cover over posterolateral timbal cavity. Timbal with twelve long and eleven intercalary ribs. Female abdominal segment 9 with thin castaneous fascia on dorsal midline, castaneous tawny on either side of midline, castaneous anterolaterally, ground color longitudinal fascia on ventrolateral surface reaching to posterior margin, piceous posterior to anterolateral castaneous region extending to posterior margin and including dorsal beak and stigma, piceous mark on anterior ground color region transverse to dark castaneous fascia extending to posterior margin lateral to base of dorsal beak, and piceous on either side of ventral margin where they converge over gonapophyses, covered with short silvery pile on dorsal and dorsolateral surfaces, long golden pile on ventral and ventrolateral surfaces. Posterior margin of female abdominal segment 9 slightly sinuate. Sternite I piceous, sternite II piceous medially, castaneous posterolaterally with ground color ventrolateral region and piceous lateral margin, sternites III–VI piceous medially forming central fascia bordered by castaneous within ground color posterolateral margin and lateral regions, sternite VII piceous with ground color posterolateral margins margined with castaneous, sternites covered with silvery pile and white pubescence, sternite VIII U-shaped with transverse posterior margin, radiating long golden pile. Female sternites similarly marked. Epipleurites ground color with central castaneous spot. Female sternite VII with a deep medial notch almost reaching anterior margin, V-shaped anteriorly, forming an almost transverse region extending laterally widening the anterior notch continuing straight posteriorly to acutely angled medioposterior margin, posterior extensions are parallel, posterior margin of sternite straight, smoothly curving to lateral surface, piceous on anteromidline, castaneous anterolaterally with dark castaneous spots on either side of anterior midline, most of posterior extension ground color, covered with white pubescence.

Genitalia. Male pygofer dark castaneous, distal shoulder small, forming a right angle, curving smoothly to dorsal beak, dorsal beak piceous, broadly triangular, apex slightly bent when viewed from the side. Pygofer basal lobe elongated, finger-like, lighter colored and curving mediad, bending at approximate right angle away from base, pygofer upper lobes small, flattened with rounded terminus adpressed to distal shoulder. Anal styles piceous with ground color deep lateral surfaces, radiating short silvery pile, extending well beyond dorsal beak, anal tube dark ochraceous. Uncus lobe large, dark castaneous at base becoming piceous distally, dorsally with medial convex region widening towards apex, small recurved spine on either corner of terminus, terminus transverse when viewed from above, ventrally concave with medial carina in center, lateral portion folded ventrally from dorsal surface, base with ventral surface angled toward dorsal surface, ventral margin angling toward apex with sinuate ventral margin when viewed from the side, slightly widening from base, extending with parallel sides almost to terminus where they angle medially. Dorsal, lateral and ventral surfaces radiating long silvery pile. Aedeagus dark castaneous, with curving lateral extensions with lanceolate lateral lobes near terminus.

Female gonocoxite IX castaneous with lighter medial margin, gonapophyses light castaneous. Gonocoxite X piceous almost extending to length of anal styles but not as far as dorsal beak, with radiating golden pile. Anal styles castaneous with ground color lateral depressions, anal tube ochraceous.

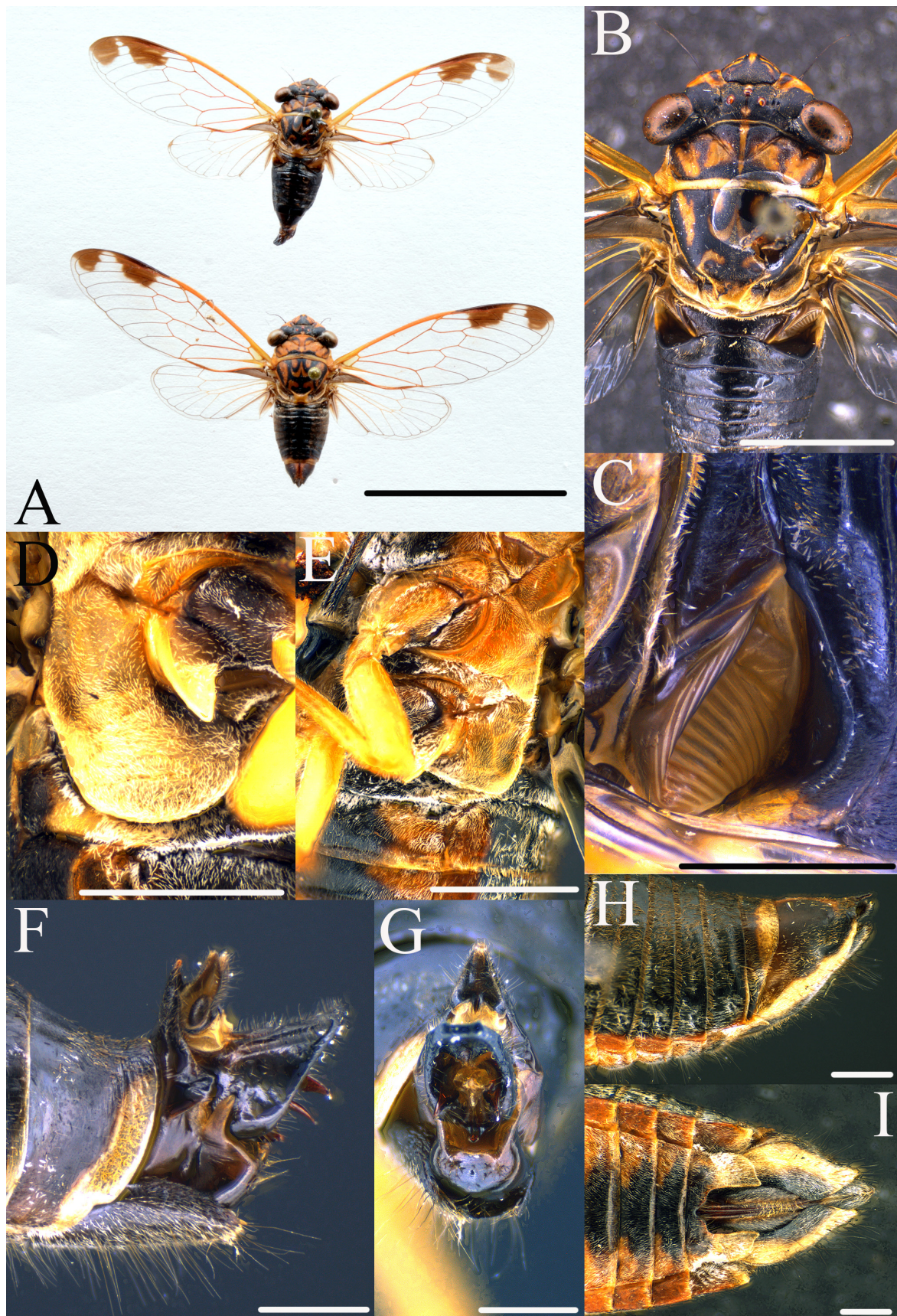


FIGURE 8. *Selymbria loretoensis* n. sp. A, holotype male and paratype female habitus; B, holotype male dorsum; C, holotype male timbal cover; D, paratype male operculum; E, paratype female operculum; F, holotype male lateral view of genitalia; G, holotype male posterior view of genitalia; H, paratype female lateral view of genitalia; I, paratype female ventral view of genitalia. Scale bar: A, 2 cm; B, 5 mm; C–E, 2 mm; F–G, 1 mm; H–I, 2 mm.

MEASUREMENTS (MM). N = one male or three females, mean (range). Length of body: male 17.3, female 17.60 (17.3–18.2); length of fore wing: male 19.95, female 23.13 (22.6–23.6); width of fore wing: male 7.0, female 7.53 (7.3–7.7); length of head: male 3.1, female 3.23 (3.1–3.3); width of head including eyes: male 6.75, female 7.18 (7.0–7.45); width of pronotum including suprahumeral plates: male 5.8, female 6.42 (6.2–6.75); width of mesonotum: male 4.8, female 5.50 (5.2–5.65).

DIAGNOSIS. *Selymbria ahyetios*, *S. pandora* and *S. subolivacea* can be distinguished from this species by the lack of infuscation on the apex of their fore wing. The infuscation of the fore wing is found only on the apex of the fore wing in *S. ahyetios*, *S. chevauxensis* n. sp., *S. cinctifera* n. sp., *S. guatemalensis* n. sp., *S. guianensis* n. sp., and *S. pluvialis* without extending on basal apical cells 1–3 and on the radiomedial cross vein as in *S. madredediosensis* n. sp. The piceous region on dorsal head is reduced between the lateral ocelli and eye and the medial margin to notch in female sternite VII curves laterad toward the posterior in *S. puntarenasensis* n. sp. The infuscation is restricted to the radiomedial crossvein in the fore wing of *S. danieleae* without extending onto the basal apical cells 1–3. Tergite 3 in the male is wider than tergite 2, and the medial margin of the notch in female sternite VII curves posterolaterad and distinguishes *S. stigmata*. *Selymbria ecuadorensis* n. sp. can be distinguished by the rounded terminus of the male uncus and the slightly constricting posterior notch in female sternite VII. The extension of male tergite 2 over the posterolateral timbal cavity, the concave ventral terminus of the uncus, and the straight medial margins in female sternite VII that widen slightly distinguishes *S. iguazuensis* n. sp. from this new species. The male uncus has a lateral expansion near the terminus and the medial margins of the posterior notch female sternite VII with are angled mediad in *S. boliviaensis* n. sp. The male uncus is as wide as the pygofer and the medial margins of the posterior extension of female sternite VII smoothly curve mediad forming a sharp acute angle at the apex that almost meet over the gonapophyses at the posterior sternite in *S. madredediosensis* n. sp. The species is very similar to *S. madredediosensis* in general appearance. This new species is smaller and there are differences in the genitalia of both males and females in the two species.

DISTRIBUTION. The species is known only from the type series collected in Loreto Province of northern Peru.

***Selymbria madredediosensis* n. sp.**

(Fig. 9)

Selymbria (sic) sp. 1 Pogue 1996: 317, Table 2.

Selymbria stigmatica (non Germar) Marshall *et al.* 2018: 12, Table 1, 19, Fig. 4, 21, Fig. 6, 51, Fig. 12.

TYPE MATERIAL. Holotype. “PERU: Madre de Dios / Rio Tambopata Res.; 30 air / km. SW Pto. Maldonado, 290m. / 6–10 XI 1979 J.B. Heppner / subtropical moist forest // PERU TAMBOPATA SURVEY / PROJECT PHOTO / J. B. Heppner // (blank blue label) // *Selymbria*? ♂ / not *stigmatica* / Det. TEMoore 1985” one male (FSCA). Paratypes. “PERU: Madre de Dios / Rio Tambopata Res. / 30 km (air) SW Puerto / Maldonado, 290m 20–31 /–X–1982 R. Wilkerson” one male (AFSC) (this is the specimen illustrated as *S. stigmatica* in Marshall *et al.* 2018); “PERU Madre de Dios / Tambopata Res. Zone / Tambopata Research / Cntr on Rio Tambopata // S13 08.305 W69 38.502 / 622 ft (3–7)–X–2004 / CRBartlett” one female (AFSC); “PERU Madre de Dios / Tambopata Res. Zone / Tambopata Research / Cntr on Rio Tambopata // S13 08.305 W69 38.502 / 622 ft (3–7)–X–2004 / CRBartlett” one female (AFSC); “PERU Madre de Dios / nr Puerto Maldonado / Posada Amazonas / lodge@Rio Tambopata // S12 48.115 W69 18.019 / 609 ft (7–10)–X–2004 / CRBartlett” one male (AFSC); “PERU: Dept. Loreto, 40 km / NE Iquitos on Amazon / River, Explorama Inn / 22–24–VIII–1992 / Castner, Skelley, *et al.*” one female (FSCA), one male and one female (AFSC); “PERU Madre de Dios / Tambopata Res. Zone / Tambopata Research / Cntr on Rio Tambopata // S13 08.305 W69 38.502 / 622 ft (3–7)–X–2004 / CRBartlett” two females (UDCC); “PERU Madre de Dios / nr Puerto Maldonado / Posadas Amazonas / lodge@Rio Tambopata // S12 48.115 W69 18.019 / 609 ft (30–IX)–(3–X)–2004 / C R Bartlett” one female (UDCC).

ETYMOLOGY. The name is a combination of *madrededios*—for the province of origin of the type series and—*ensis* (L. suffix denoting place).

DESCRIPTION. Ground color of head and thorax greenish marked with piceous, abdomen piceous marked with castaneous and greenish. Green has faded or was chemically altered to tawny in several specimens including holotype.

Head. Head wider than pronotal collar lateral angles and mesonotum, dorsal head piceous except for midline

between median ocellus and frontoclypeal suture, triangular spot on posterior epicranial suture and triangular spot on posterior cranial depression, posterior margin of head, and anterolateral vertex posterior to supra-antennal plate that are ground color, supra-antennal plates ground color except for curved piceous mark extending anterolaterally from posteromedial margin, reduced to posteromedial corner, or edged in castaneous in some paratypes, piceous posterior to eye. Short silvery pile posterior to eye, short golden pile on vertex in some paratypes, denser in sutures. Ocelli red, eyes testaceous. Ventral head piceous except transverse fascia ventral to supra-antennal plate continuous with dorsal mark but not reaching eye, posterior margin of gena, anterior and lateral margin of lorum ground color, long silvery pile ventral to eye, on gena and on lorum, white pubescence on ventral head in some paratypes. Postclypeus with eight transverse grooves, central sulcus narrow at apex expanding laterally on posteroventral surface, ground color with dorsal surface posterior to transverse grooves, within expanded region of central sulcus except for anterior region near apex and short fascia on midline in center of mark, within transverse grooves and ventro-posterior piceous, first four dorsal transverse groove piceous connected medially by fascia lateral to central sulcus, ventroposterior transverse grooves 5–8 ground color with fifth groove piceous in medial half in some paratypes, white pubescence laterally and posteroventrally in some paratypes, long silvery pile on ventral surface. Anteclypeus piceous, covered with white pubescence in paratypes. Mentum ground color, medial labium castaneous, lateral and distal labium piceous, tip reaching to posterior of middle leg coxae, with sparse short silvery pile, denser near tip. Scape and proximal pedicel ground color, distal pedicel and flagellar segments piceous.

Thorax. Dorsal thorax ground color. Pronotum ground color, lightly castaneous on either side of midline on disk medial to posterior paramedian fissure, with triangular piceous marks on anterior disks on either side of anterior midline extending posteriorly as fascia to connect to posterior mark, piceous anterior disks between sutures, transverse mark on posterior disk with angled medial margin extending laterally to posterior lateral fissure, ambient fissure piceous from anterior lateral fissure to posterior mark, longitudinal piceous fascia on lateral scutes, curved piceous and castaneous mark on scute between central paramedian fissure and posterior lateral fissure connecting to posterior transverse mark, reduced or absent in some paratypes. Pronotal collar lightened ground color. Mesonotum ground color, piceous on disk lateral to lateral sigillae, reduced in some paratypes, medioanterior and the middle of the lateral margin of the lateral sigillae, between lateral and submedian sigillae diverging and extending along medial margin of lateral sigilla almost to posterior margin and medially to spot on disk, curved marks along medial submedian sigillae margins connecting to parapsidal suture expanded into triangular mark on anterior terminus, trident-shaped mark on disk with tines extending between sigillae, curving fascia between anterior arms of cruciform elevation extending to and encircling scutal depressions, lateral margin piceous, posterior mesothorax piceous, reduced to medial piceous spot in some paratypes. Cruciform elevation ground color with piceous mark posterior to anterior arm of cruciform elevation, wing groove ground color with piceous spot on anteromedial margin. Metanotum piceous with ground color dorsum and posterior margin. Long silvery pile in posterior wing groove, silvery pile on posterior margin, silvery pile between anterior arms of cruciform elevation, on lateral cruciform elevation in some paratypes. Ventral thoracic segments ground color except dark castaneous or piceous on all but lateral basis-terna 2 and 3, covered with white pubescence in paratypes.

Wings. Fore wings hyaline with eight apical cells, hind wings hyaline with six apical cells. Cubitus anterior 1 of the fore wing straight between the split with cubitus anterior 2 and the mediocubital crossvein. Venation ground color at base along with costal margin and radius & subcostal vein to node and subcostal vein distal to node, remaining venation ferruginous except piceous anal vein 2 + 3, becoming piceous in distal veins between apical cells 4–8, ambient vein piceous between apical cells 2–8. Basal cell longer than broad, hyaline with slight greenish tint along radius & subcostal vein and at base. Pterostigma present. Infuscation on distal subcostal vein, radius anterior 1, radius anterior 2 and distal radius posterior, infuscation extending onto ambient vein anterior to radius posterior extending to wing apex, mark on radius posterior reduced in one paratype, second infuscation expanding from middle of subcostal vein across pterostigma, proximal apical cells 1–3 and anterior half of proximal apical cell 4, distal ulnar cells 1 and 2 not reaching bifurcation of median veins 1 and 2 but including entire radial and radiomedial crossveins, mark reduced to along veins in one paratype, expanded anterodistally to connect to distal spot in some paratypes. Basal membrane of fore wing gray with dark gray posterior margin. Venation of hind wing similarly colored with anal veins 2 and 3 castaneous. Anal cell 3 and anal cell 2 along anal vein 3 gray, anal cell 2 along anal vein 2 gray, gray area margined with infuscation in anal cells 2 and 3, spot of infuscation on wing margin distal to apical cells 1 and 2.

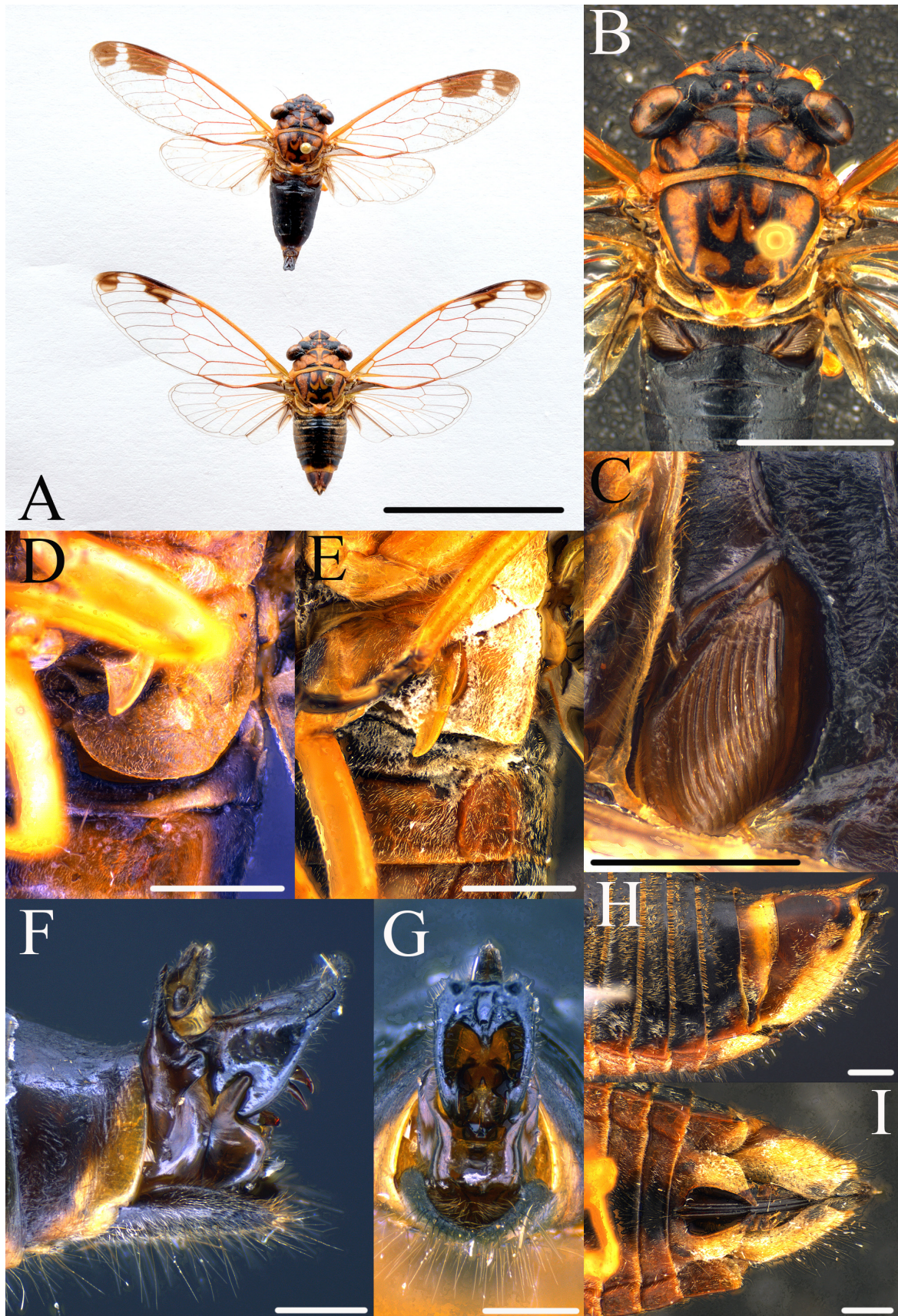


FIGURE 9. *Selymbria madredediosensis* n. sp. A, holotype male and paratype female habitus; B, holotype male dorsum; C, holotype male timbal cover; D, paratype male operculum; E, paratype female operculum; F, holotype male lateral view of genitalia; G, holotype male posterior view of genitalia; H, paratype female lateral view of genitalia; I, paratype female ventral view of genitalia. Scale bar: A, 2 cm; B, 5 mm; C–E, 2 mm; F–G, 1 mm; H–I, 2 mm.

Legs. Legs ground color, dark castaneous marks on lateral base of middle coxae and lateral hind coxae, distal tibiae edged in castaneous, dorsal metatarsus and mesotarsus, distal pretarsus piceous. Fore femora proximal spine, longest spine, forming acute angle to femur, secondary spine triangular, slightly angled to femoral axis with curved tip, and small, slightly angled, triangular apical spine, more than half as long as secondary spine which is large for the genus, all spines ground color with castaneous tips, long silvery pile radiating from ridge with spines. Tarsal claws dark castaneous with piceous tips, tibial spurs and comb castaneous with darker tips. Legs covered with long and short silvery pile.

Operculum. Male operculum ground color with piceous spots on lateral base and anteromedial corner, lateral margin parallel to body axis at base, angled mediad at about half its length, joining to smoothly rounded posterior margin, posterior medial margin curved, transverse anteromedial margin curving to base, medial margin covering medial tympanal cavity, posterior margin reaching to anterior margin of sternite II covering tympanal cavity completely. Meracanthus ground color with castaneous spot on medial base, triangular with straight tip but curved lateral margin, reaching to anterior of sternite II. Female operculum ground color with piceous spot on lateral base, straight lateral and posterior margins, posterolateral corner approximate right angle, terminating medially at medial meracanthus, reaching to anterior of sternite II. Female meracanthus ground color with castaneous medial mark, curving mediad, tip slightly angled mediad, longer than operculum extending to middle of sternite II. Opercula covered with white pubescence, denser at base and radiating silvery pile in some paratypes.

Abdomen. Tergite 1 with castaneous posterior margin and ground color spot on dorsal timbal cavity margin, tergites 2–7 piceous with castaneous lateral margins, tergite 2 with greenish spot on ventral timbal cavity margin, thin ground color fascia on dorsolateral posterior margin of tergite 7, tergite 8 castaneous with ground color posterior margin, female tergites similarly colored, tergite 8 castaneous anteriorly with piceous spots on either side of anterior midline and on lateral margins with ground color posterior half, auditory capsule piceous, castaneous and covered with white pubescence in some paratypes. Timbal cover piceous, recurved exposing timbal dorsally, lateral tergite 2 expanding anteriorly to form small, triangular cover over posterolateral timbal cavity. Timbal with twelve long and eleven intercalary ribs. Female abdominal segment 9 castaneous anteriorly, ground color posteriorly with darker dorsolateral castaneous fascia and stigma, piceous mark on anterior ground color region transverse to dark castaneous fascia extending to posterior margin lateral to base of dorsal beak, and piceous spots on either side of ventral margin where they converge over gonapophyses, dorsal beak ground color with castaneous tip, covered with short silvery pile on dorsal and dorsolateral surfaces, long golden pile on ventral and ventrolateral surfaces. Posterior margin of female abdominal segment 9 slightly sinuate. Sternite I dark castaneous, piceous in some paratypes, sternite II piceous medially, castaneous posterolaterally with ground color ventrolateral region and piceous lateral margin, sternites III–VI piceous medially forming central fascia bordered by castaneous within ground color lateral regions, sternite VII mainly piceous with dark castaneous lateral regions and ground color posterolateral margins, sternite VIII U-shaped with transverse posterior margin, radiating long golden pile. Female sternites similarly marked. Epipleurites castaneous, with ground color posterior margin in some paratypes. Female sternite VII with a deep medial notch almost reaching anterior margin, V-shaped anteriorly, forming an almost transverse region extending laterally widening the anterior notch before curving to pointed posterior margin, apices converging and almost meeting medially, posterior margin of sternite straight, smoothly curving to lateral surface, piceous on anteromidline, castaneous anterolaterally with dark castaneous spots on either side of anterior midline, most of posterior extension ground color except castaneous medial point with piceous tip. Long silvery pile radiating from sternites, white pubescence on male sternites I and II, lateral sternites and epipleurites III–VI in paratypes.

Genitalia. Male pygofer dark castaneous, distal shoulder small, forming a right angle, curving smoothly to dorsal beak, dorsal beak piceous, broadly triangular, apex slightly bent when viewed from the side. Pygofer basal lobe elongated, finger-like, bending at approximate right angle away from base, pygofer upper lobes small, adpressed to pygofer, flattened with rounded terminus extending to distal shoulder. Anal styles piceous with ground color deep lateral surfaces, radiating short silvery pile, extending well beyond dorsal beak, anal tube dark ochraceous. Uncus lobe large, piceous, dorsally with medial convex region widening towards apex, small recurved spine on either corner of terminus, terminus transverse when viewed from above, ventrally concave with medial carina in distal half, lateral portion folded ventrally from dorsal surface, base with approximately parallel dorsal and ventral surfaces, ventral margin angling toward apex with sinuate ventral margin when viewed from the side, slightly widening from base, reducing width only slightly towards terminus. Dorsal, lateral and ventral surfaces radiating long silvery pile. Aedeagus dark castaneous, with curving lateral extensions with leaf-like lateral lobes near terminus.

Female gonocoxite IX and gonapophyses castaneous. Gonocoxite X piceous extending to length of dorsal beak but not as far as anal styles, with radiating dense golden pile. Anal styles piceous with ground color lateral interior, anal tube ochraceous.

MEASUREMENTS (MM). N = three males or four females, mean (range). Length of body: male 19.46 (18.9–20.1), female 18.59 (18.3–19.0); length of fore wing: male 23.55 (22.65–24.3), female 24.46 (23.95–25.3); width of fore wing: male 7.95 (7.9–8.0), female 7.98 (7.65–8.4); length of head: male 3.33 (3.2–3.4), female 3.49 (3.4–3.6); width of head including eyes: male 7.31 (7.2–7.45), female 7.38 (7.25–7.55); width of pronotum including supra-humeral plates: male 6.67 (6.5–6.9), female 6.80 (6.6–7.1); width of mesonotum: male 5.68 (5.2–6.3), female 5.75 (5.5–5.9).

DIAGNOSIS. *Selymbria ahyetios*, *S. pandora* and *S. subolivacea* can be distinguished from this species by the lack of infuscation on the apex of their fore wing. The infuscation of the fore wing is found only on the apex of the fore wing in *S. ahyetios*, *S. chevauxensis* n. sp., *S. cinctifera* n. sp., *S. guatemalensis* n. sp., *S. guianensis* n. sp., and *S. pluviialis* without extending on basal apical cells 1–3 and on the radiomedial cross vein as in *S. madredeiosensis* n. sp. The piceous region on dorsal head is reduced between the lateral ocelli and eye and the medial margin to notch in female sternite VII curves laterad toward the posterior in *S. puntarenasensis* n. sp. The infuscation is restricted to the radiomedial crossvein in the fore wing of *S. danieleae* without extending onto the basal apical cells 1–3. Tergite 3 in the male is wider than tergite 2, and the medial margin of the notch in female sternite VII curves posterolaterad and distinguishes *S. stigmata*. *Selymbria ecuadorensis* n. sp. can be distinguished by the rounded terminus of the male uncus and the slightly constricting posterior notch in female sternite VII. The extension of male tergite 2 over the posterolateral timbal cavity, the concave ventral terminus of the uncus, and the straight medial margins in female sternite VII that widen slightly distinguishes *S. iguazuensis* n. sp. from this new species. The male uncus is not as wide as the pygofer and the medial margins of the posterior extension of female sternite VII do not smoothly curve mediad forming a sharp acute angle at the apex that almost meet over the gonapophyses at the posterior sternite *S. boliviaensis* n. sp. or *S. loretoensis* n. sp. The species is very similar to *S. loretoensis* in general appearance. This new species is smaller and there are differences in the genitalia of both males and females in the two species.

DISTRIBUTION. The species is known only from the type series collected in Madre de Dios Province in southern Peru. The undetermined species listed in Pogue (1996) was collected at the Tambopata Reserved Zone on the Río Tambopata, 12° 50'S, 069° 17'W at an elevation of 290 m, very close to some specimens of the type series.

Selymbria pandora Distant, 1911

Selymbria pandora Distant 1911: 135.

TYPE LOCALITY. Espirito Santo, Brazil.

REMARKS. Syntypes are in the BMNH. The species can be distinguished from all but *S. ahyetios* and *S. subolivacea* by the lack of infuscation on the apex of the fore wing. This species is slightly larger (body length about 21–22 mm, wing span about 55–67 mm vs. 18.5–19.5 mm and 52.5–53.5 mm in *S. ahyetios*) with the dorsal head mostly piceous rather than marked with piceous, general body coloration tawny rather than ochraceous, abdominal tergites testaceous rather than fuscous, and basal area of the wings red rather than grayish and piceous. The Brazilian *S. subolivacea* can be distinguished by its greenish tawny body marked with light fuscous-piceous markings, the greenish rather than the orange basal areas of the wings, the piceous markings around the ocelli do not fuse to a single spot, the lateral part of the pronotal collar is visible from the dorsal side, and the larger body size of this species (body length 27 mm, wing span 78 mm). Although the body length of the female is only slightly longer than the male, the female wing span (67 mm) is noticeably greater than that of the male (57 mm).

DISTRIBUTION. The species has been reported only from the type locality in Brazil (Metcalf 1963). The previous report from Argentina (Sanborn & Heath 2104) is a misidentification as of the *S. iguazuensis* n. sp. that has infuscation in the fore wings.

MATERIAL EXAMINED. “Leopoldina Esp. S^o / Michaelis // Arc.-Arth. SPeyer / 1898 // *Selymbria* / *pandora* ♀, / type Dist. // Type (circular label with red border) // NHMUK / 010220887” female syntype (BMNH); “Espirito Santo / Brasil / ex coll. Frushtorfer. // *Selymbria*, ♂, / *pandora* / type Dist. // Type (circular label with red border) // NHMUK / 010220888” male syntype (BMNH).

Selymbria pluvialis Ramos & Wolda, 1985

Selymbria sp. 1 Wolda 1977: 244, Table 1.

Selymbria stigmatica (non Germar) Wolda 1984: 451.

Selymbria pluvialis Ramos & Wolda 1985: 177.

TYPE LOCALITY. Barro Colorado Island, Panama.

REMARKS. Type material is in the USNM, STRI, and the Ramos collection (NCSU) (Ramos & Wolda 1985). *Selymbria ahyetios*, *S. pandora* and *S. subolivacea* can be distinguished from this species by the lack of infuscation on the apex of the fore wing. The infuscation of the fore wing is found on the apex of the fore wing and on basal apical cells 1–3 and/or on the radiomedial cross vein in *S. boliviaensis* n. sp., *S. danieleae*, *S. ecuadorensis* n. sp., *S. iguazuensis* n. sp., *S. madredeiosensis* n. sp., *S. puntarenasensis* n. sp., and *S. stigmatica*. *Selymbria ahyetios* can be distinguished by the diamond shaped widening of the postclypeus central sulcus near the postclypeus ventral apex, female operculum extending to sternite II with a posteromedial notch, an uncus with a curved posterior margin that is wider than the anal styles with recurved spines on either side, the wide notch in the posterior of male sternite VIII, and aedeagus with two short spines medially with larger extensions forming lateral wings. *Selymbria chevauxensis* can be distinguished by the fore femur primary spine is addressed to the femur rather than being angled above it, the curved cubitus anterior 1 of the fore wing between the split with cubitus anterior 2 and the mediocubital crossvein. The fore wing length greater than 25 mm, uncus with curved lateral margins, and fore femur apical spine about half the length of the secondary spine distinguishes *S. cinctifera* n. sp. The uncus with a transverse posterior margin, the angled secondary femoral spine, the male operculum concealing the posteromedial tympanal cavity, and the straight lateral margin of female sternite VII not constricting the posterior extension in the middle distinguishes *S. guatemalensis* n. sp. The castaneous abdomen, uncus without a narrowed and rectangular terminus, and the straight lateral margin of female sternite VII distinguishes *S. guianensis* n. sp. from this new species.

The Panamanian species can be distinguished by the fore wing length being greater than 25 mm, an uncus with curved lateral margins, and a fore femoral apical spine about half the length of the secondary spine in *S. cinctifera* n. sp., the diamond shaped widening of the postclypeus central sulcus near the postclypeus ventral apex, an uncus with a curved posterior margin that is wider than the anal styles with recurved spines on either side, the wide notch in the posterior of male sternite VIII, and the parallel medial margins of the notch in female sternite VII in *S. ahyetios*, and the fore wing length being less than 25 mm, an uncus with straight lateral margins, and a small fore femoral apical spine, the expanding central sulcus to the posteroventral postclypeus, the constricted and rectangular uncus terminus, male sternite VIII without a terminal notch, and the posteriorly widening notch in female sternite VII in *S. pluvialis*.

The species is named for the emergence pattern (Ramos & Wolda 1985). It emerges when the rains begin and remains active during the early and mid-rainy season between late April and mid-September. The majority of specimens for the type series was collected in canopy traps suggesting that it tends to fly at higher altitudes in the forest (Ramos & Wolda 1985; Wolda 1977; 1988; 1989).

DISTRIBUTION. The species has been reported previously from Costa Rica, Guatemala and Panama (Sanborn 2013; 2014; 2018). Previous records to Guatemala are in actuality *S. guatemalensis* n. sp. reducing the range of the species here. Panamanian specimens are from Barro Colorado Island, Panama Canal Zone, 120 m altitude in lowland forest (Ramos & Wolda 1985; Wolda 1977; 1988; 1989; Wolda & Ramos 1992).

MATERIAL EXAMINED. “PANAMA—BCI / Lights III / 23 V 1979 / Henk Wolda // paratype (blue label) / *Selymbria / pluvialis* Ramos / & Wolda” paratype male (NCSU); “PANAMA—BCI / Lights III / 15 VII 1978 / Henk Wolda // paratype (blue label) / *Selymbria / pluvialis* Ramos / & Wolda” paratype male (NCSU); “PANAMA—BCI / Lights I / 1 IX 1978 / Henk Wolda // paratype (blue label) / *Selymbria / pluvialis* Ramos / & Wolda” paratype male (NCSU); “BARRO COLORADO—C.Z. / Lights / SMIII / 31 X 1974 / Coll. H. Wolda // paratype (blue label) / *Selymbria / pluvialis* Ramos / & Wolda” paratype female (NCSU); “PANAMA—BCI / Lights III / 26 V 1981 / Henk Wolda” paratype male (missing ID and paratype label but listed in type series in Ramos & Wolda 1985 so considered paratype) (NCSU); “COSTA RICA, Heredia / nr Puerto Viejo, LaSelvaBiol. / Sta. 10°25' N, 84°00' W, 179ft // at station 16—VIII—03 / CRBartlett, J.Cryan, J.Urban” one female (UDCC); “COSTA RICA, Heredia / nr Puerto Viejo, LaSelvaBiol. / Sta. 10°25' N, 84°00' W, 179ft // at station (18—19)—VIII—03 / CRBartlett, J.Cryan, J.Urban” one female (AFSC); “COSTA RICA: Heredia / La Selva Biological Station / 2 km S. Pt. Viejo, 3—5—VI—1984” one male (LSAM); “COSTA RICA: Heredia / 1 Km S. Pt. Viejo, VI—4—5—84 ; E.Riley / D.Rider&D.LeDoux // LSAM /

0297044" one male (LSAM); "COSTA RICA, Catie / 27–VI–5–VII–1984 / H.L. Dozier coll." one female (FSCA); "PANAMA: Chiriquí Prov. / Ojo de Agua, Fca. Hartmann / 8.86159°N, 82.74339°W / 4–5,000 ft, VIII–1–4–2011 / E.G. & M.L. Riley, UV" one female (TAMU); "PANAMA: Panamá Prov. / Llano-Carti Rd., Burbayar / Lodge, VIII–7–9–2011 / 9.31753°N, 78.99212°W / E.G. & M.L. Riley, UV" two females (TAMU); "PANAMA: Colón / Sierra Llorona Lodge 225m / Cerro Sta. Rita 2–3 Aug 2008 / J.B. Heppner" two males and two females (FSCA); "PANAMA: Colón Prov. Sta. / Rita Arriba, Sierra Llorona / Lodge 21 to 24–VIII–2012 / 225m J. Heppner" one female (FSCA); "PANAMA: Colón, Sierra / Llorona Lodge, Santa Rita / Arriba, 21–24–VIII–2013 225m / collector: J.B. Heppner" one female (FSCA); "PANAMA: Canal Zone / Barro Colorado Island / 23–V–1977 / L.R. Davis, Jr." one male (AFSC); "PANAMÁ: Canal Zone / Base of Cerro / Galera VI–19–1985 / E.Riley & D.Rider" one female (AFSC); "PANAMÁ: Canal Zone / Base of Cerro / Galera VI–9–1985 / E.Riley & D.Rider" one female (AFSC); "PANAMA Pnm Prv. / Pipeline Rd K 1–12 / 26–30–VI–1997 / Wappes & Morris" one male (AFSC); "PANAMA: Panama / Cerro Jefe / 27 June–29 July 1997 / J. Huether" one female (AFSC); "PANAMA Pnma Prv / K 8–13 El Llano-Carti / Rd 10–13 May 1996 / Wappes Huether & Morris" one male (AFSC); "Republic of Panama // Coco Solo Tank Farm CZ / EX: UV Lamp L.T / Coll: EHA / 16 Jul 1975" one female (AFSC); "Panama / Barro Colorado Island / 28–IV–1979 / Clive D. Jorgensen" one female (BYUC); "Coco Solo Tank Farm C.Z. / Ex: UV Lamp L.T. / Coll: EHA / 16 Jul 1975 // Republic of Panama // ♂ // UDCC_TCN 00049031" one male (UDCC); "Gatun Tank Farm C.Z. / Ex: UV Lamp L.T. / 2 MAY 1975 / Coll: EHA // Republic of Panama // ♀ // UDCC_TCN 00049032" one female (UDCC).

Selymbria puntarenasensis n. sp.

(Fig. 10)

TYPE MATERIAL. Holotype. "COSTA RICA, Puntarenas / Prov.: Puntarenas Co. / Puntarenas Dist.; "Tiskita / Jungle Lodge". At Light 16 / January 2012 Anthony / Martin Deczynski" one female (FSCA).

ETYMOLOGY. The name is a combination of *puntarenas*—for the province of origin of the holotype and—*ensis* (L. suffix denoting place).

DESCRIPTION. Ground color of head castaneous marked with piceous, and thorax tawny and castaneous marked with piceous, abdomen castaneous marked with piceous marked with castaneous and tawny. Tawny appears to have faded or was chemically altered from green.

Head. Head wider than pronotal collar lateral angles and mesonotum, dorsal head piceous except for castaneous anterolateral vertex not reaching anterior eye, mark extends posteriorly towards posterior cranial depression reducing piceous region, posterior cranial depression, mark continues laterally along posterior head towards but not reaching eye, supra-antennal plates castaneous, piceous posterior to eye. Long silvery pile posterior to eye, short golden pile on vertex, denser in sutures. Ocelli red, eyes testaceous. Ventral head castaneous with piceous transverse fascia between eye and postclypeal margin, anterior lorum piceous, posterior lorum castaneous, long silvery pile ventral to eye, on gena and on lorum, white pubescence on ventral head. Postclypeus with eight transverse grooves, central sulcus narrow at apex expanding laterally on posteroventral surface, tawny with castaneous fascia along midline over apex, with dorsal surface posterior to transverse grooves, within expanded region of central sulcus except for anterior region near apex, within transverse grooves, except for lateral portion of first transverse groove on dorsal surface, and ventroposterior piceous, white pubescence laterally, long silvery pile on ventral surface, short silvery pile in central sulcus. Anteclypeus piceous with tawny lateral regions connecting across posterior carina anterior to posterior margin, covered with white pubescence and long silvery pile. Mentum greenish tawny, medial and distal labium castaneous, lateral labium piceous, tip reaching to posterior of middle leg coxae, with sparse short silvery pile, denser near tip. Scape and dorsoproximal pedicel ground color, distal and ventroproximal pedicel and flagellar segments piceous.

Thorax. Dorsal thorax ground color. Pronotum ground color with median longitudinal castaneous fascia extending onto anteromedial scutes, with triangular piceous marks on anterior disks on either side of anterior midline, transverse mark on posterior disk with angled medial margin extending laterally to posterior lateral fissure, ambient fissure piceous from anterior lateral fissure to posterior mark. Pronotal collar tawny mottled with green, short golden pile radiating from lateral margin of lateral part of pronotal collar, white pubescence in posterolateral ambient fissure extending onto pronotal collar. Mesonotum ground color, piceous on disk surrounding sigillae except anterior

margins of sigillae, posterolateral margin of the lateral sigillae, mark along medial submedian sigilla incomplete on right sigilla, mark between sigillae extending medially angling posteriorly connecting to median central fascia on disk that narrows anteriorly between submedian sigillae and expands laterally between anterior arms of cruciform elevation, scutal depressions piceous, anterolateral margin and posterior mesothorax piceous. Cruciform elevation ground color with piceous mark posterior to anterior arm of cruciform elevation, wing groove green with piceous spot on anteromedial and anterolateral margins. Metanotum castaneous with ground color dorsum and posterior margin, dense pile radiating from posterior margin. Short golden pile on disk between anterior arms of cruciform elevation and on lateral cruciform elevation, long silvery pile in posterior wing groove and on posterior margin. Ventral thoracic segments ground color, covered with white pubescence.

Wings. Fore wings hyaline with eight apical cells, hind wings hyaline with six apical cells. Cubitus anterior 1 of the fore wing straight between the split with cubitus anterior 2 and the mediocubital crossvein. Venation ground color at base becoming piceous in distal veins of apical cells, subcostal vein distal to node and spot on proximal base of anal vein 2 + 3 piceous. Basal cell longer than broad, hyaline with slight greenish tint. Pterostigma present, mottled with red. Infuscation on distal subcostal vein, radius anterior 1, radius anterior 2 and distal radius posterior, infuscation extending onto ambient vein from subcostal vein to posterior of radius posterior vein extending to wing apex, second infuscation expanding from middle of subcostal vein across pterostigma, proximal apical cells 1–2, distal half of ulnar cell 1, and anterodistal ulnar cell 2 including entire radial and most of radiomedial crossveins. Basal membrane of fore wing gray with dark gray posterior margin. Venation of hind wing similarly colored with anal veins 2 and 3 castaneous, anal vein 3 piceous around base. Anal cell 3 and anal cell 2 along anal vein 3 gray, anal cell 2 along anal vein 2 gray, gray area margined with infuscation in anal cells 2 and 3, spot of infuscation on wing margin distal to apical cells 1 and 2.

Legs. Coxae, trochanters, femora and proximal tibiae ground color, distal tibiae and tarsi castaneous, medial mesotarsus lighter. Fore femora proximal spine forming acute angle to femur with narrower base than secondary spine, secondary spine broadly triangular, upright to femoral axis, about as long as primary spine, and small, angled apical spine, primary spine ground color at base, piceous in middle with castaneous tip, secondary spine with piceous base except distal ground color spot and castaneous tip, apical spine ground color, long silvery pile radiating from ridge between spines. Tarsal claws dark castaneous with piceous tips, tibial spurs and comb castaneous with darker tips. Legs covered with long and short silvery pile.

Operculum. Female operculum ground color, straight lateral angled slightly mediad, sinuate when viewed from the side, posterolateral angle obtuse, posterior margins curving anteriorly in medial half, terminating medially at medial meracanthus, reaching to middle of sternite II. Female meracanthus ground color with castaneous medial spot, triangular, curving mediad, longer than operculum. Opercula radiating silvery pile.

Abdomen. Tergites castaneous with piceous anterolateral region, percentage reducing in posterior tergites, piceous mark on lateral tergite 2 margin, tergites 4–7 with lighter posterior margins, tergite 8 with lighter dorsolateral regions, may be ground color in fresh specimens, auditory capsule castaneous with piceous anterior spot on margin, tergites covered with silvery pile, denser on lateral tergites. Female abdominal segment 9 light castaneous, dark castaneous dorsolaterally, piceous on stigma and ventrally lateral to margin covering of gonocoxites and continuing to posteroventral margin, covered with short silvery pile on dorsolateral surfaces, long golden pile on ventral and ventrolateral surfaces. Posterior margin of female abdominal segment 9 straight. Sternites castaneous with dark castaneous transverse fascia on posterior midline, covered with long and short silvery pile. Epipleurites castaneous covered with silvery pile. Female sternite VII with a deep medial notch, V-shaped anteriorly, angled laterally to about half sternite length where angle reduces and arches to posterior margin to semicircular posterior margin, lateral margin sinuate constricting posterior extension in middle of lateral margin, castaneous, lighter on distal posterior extension, covered with silvery pile, dense golden pile radiating from either side of notch center.

Genitalia. Female gonocoxite IX dark castaneous medially with piceous lateral margin, gonapophyses castaneous, gonapophyses X with piceous tip. Gonocoxite X piceous not extending to length of anal styles which do not reach to terminus of dorsal beak, with radiating golden pile. Anal styles piceous with lighter ventral side, anal tube piceous.

Male is unknown.

MEASUREMENTS (MM). N = one female, mean. Length of body: 18.55; length of fore wing: 24.0; width of fore wing: 7.8; length of head: 3.15; width of head including eyes: 6.95; width of pronotum including suprahumeral plates: 6.3; width of mesonotum: 5.6.

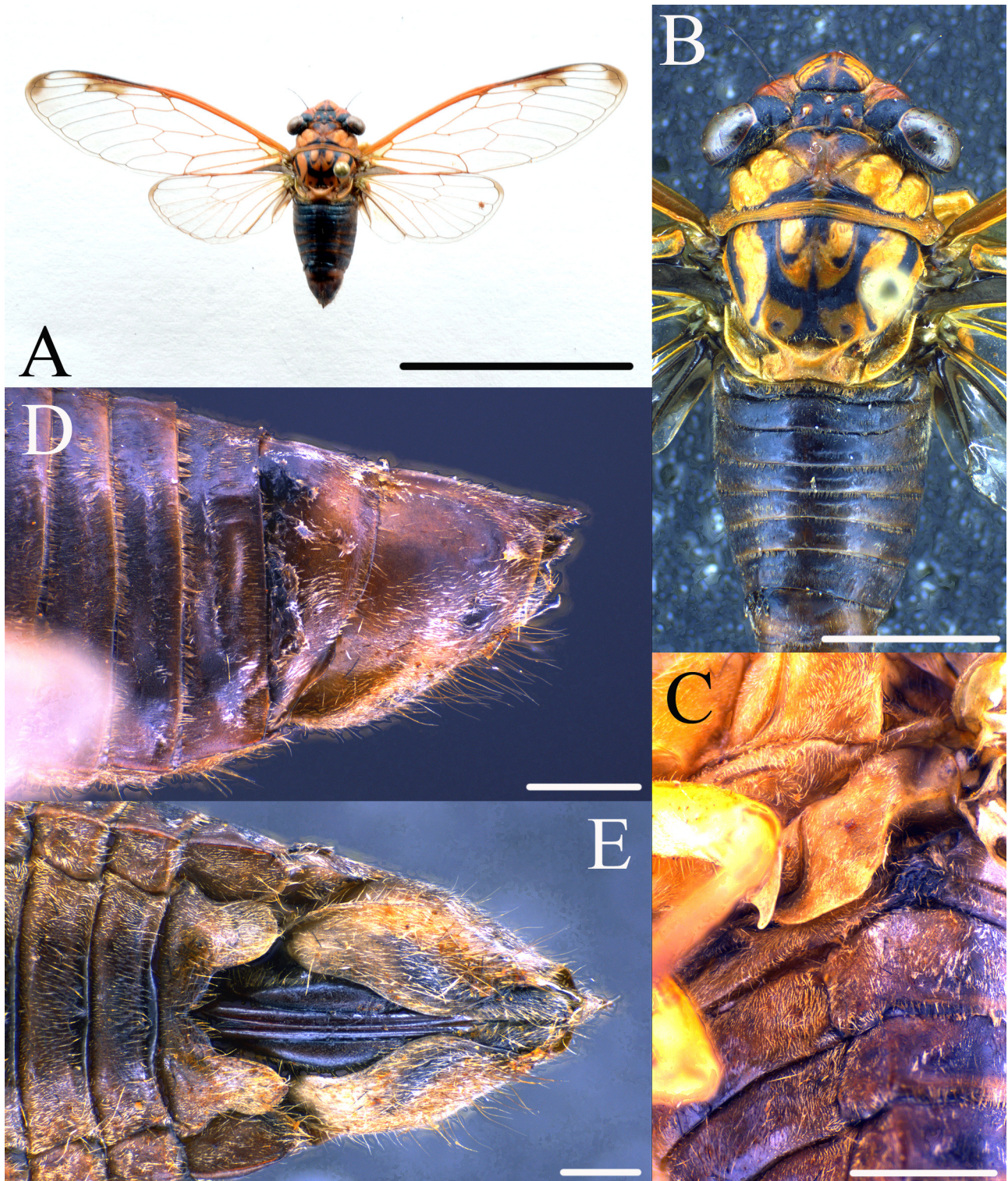


FIGURE 10. *Selymbria puntarenasensis* n. sp. A, holotype female habitus; B, holotype female dorsum; C, holotype female operculum; D, holotype female lateral view of genitalia; E, holotype female ventral view of genitalia. Scale bar: A, 2 cm; B, 5 mm; C–E, 2 mm.

DIAGNOSIS. Although it is not preferable to describe a species from a single female, the characteristics of this specimen preclude it from being classified as one of the other known species. *Selymbria ahyetios*, *S. pandora* and *S. subolivacea* can be distinguished from this species by the lack of infuscation on the apex of their fore wing. The infuscation of the fore wing is found only on the apex of the fore wing in *S. ahyetios*, *S. chevauxensis* n. sp., *S. cinctifera* n. sp., *S. guatemalensis* n. sp., *S. guianensis* n. sp., and *S. pluvialis*. The fore wing infuscation is found on the radiomedial crossvein and not on basal apical cells 1–3 in *S. danieleae*. This new species can be distinguished

from the females of *S. boliviaensis* n. sp., *S. ecuadorensis* n. sp., *S. iguazuensis* n. sp., *S. loretoensis* n. sp., *S. madredediosensis* n. sp., and *S. stigmatica* by the medial margin of the notch in the posterior extension of sternite VII curving laterad while it is straight or curving mediad in these species. The piceous region on the dorsal head is not reduced between lateral ocelli and eye in *S. boliviaensis* n. sp., *S. ecuadorensis* n. sp., *S. iguazuensis* n. sp., *S. loretoensis* n. sp., *S. madredediosensis* n. sp., and *S. stigmatica* but is reduced in *S. puntarenasensis* n. sp. It is also the only species with two apical spots of infuscation in each fore wing known from Central America.

DISTRIBUTION. The species is known only from the holotype collected in Puntarenas Province, Costa Rica.

***Selymbria stigmatica* (Germar, 1834)**

C[icada] signifera Germar 1830: 44.

C[icada] stigmatica nom. nov. pro *Cicada signifera* Germar 1830: 44 nec *Cicada signifera* Germar 1830: 43 Germar 1834: 63. (Brazil)

C[icada] macrophalama Stål 1854: 242. (Brazil)

TYPE LOCALITY. Brazil.

REMARKS. The holotype male of *Cicada signifera* is in the Germar collection housed at the ZMD (specimen number 1259) (http://zoomus.lviv.ua/en/germar_collection/; Shydlovskyy & Holovachov 2005) and the holotype of *Cicada macrophalama* is in the Stål collection at the NHRS. The holotype of *Cicada macrophalama* is reported to have a body length of 20 mm (Stål, 1854). The virtual image is useful in distinguishing the species from the remaining species of the genus.

Selymbria ahyetios, *S. pandora* and *S. subolivacea* can be distinguished from this species by the lack of infuscation on the apex of the fore wing. The infuscation of the fore wing is found only on the fore wing apex in *S. chevauxensis* n. sp., *S. cinctifera* n. sp., *S. guatemalensis* n. sp., *S. guianensis* n. sp., and *S. pluvialis*. The piceous region on dorsal head is reduced between the lateral ocelli and eye and the medial margin to notch in female sternite VII curves laterad toward the posterior in *S. puntarenasensis* n. sp. The infuscation is restricted to the radiomedial crossvein in the fore wing of *S. danieleae* without extending onto the basal apical cells 1–3. Tergite 3 in the male is wider than tergite 2, and the medial margin of the notch in female sternite VII curves posterolaterad and distinguishes *S. stigmata* from *S. boliviaensis* n. sp., *S. ecuadorensis* n. sp., *S. iguazuensis* n. sp., *S. loretoensis* n. sp., and *S. madredediosensis* n. sp.

DISTRIBUTION. The species is currently known only from Brazil (Metcalf 1963; Sanborn 2013). References to Panama were shown to be erroneous (Sanborn 2018).

MATERIAL EXAMINED. “Brasil // macro- / pthalama / Stål. Typ. // stigmatica Germ. // sec. ex. Typ. a. / Schaum misform. // Typus // NHRS-GULI / 000046992” holotype female (NHRS); “Brazil:” one male (AFSC); “Brazil:” one female (MSMC).

***Selymbria subolivacea* (Stål, 1862)**

C[icada (Cicada)] subolivacea Stål, 1862: 20.

TYPE LOCALITY. Rio de Janeiro, Brazil.

REMARKS. The holotype of this species is in the Stål collection at the NHRS. The species can be distinguished from all but *S. ahyetios* and *S. pandora* by the lack of infuscation on the apex of the fore wing. The Brazilian, *S. subolivacea* can be distinguished by its primarily greenish tawny coloration, green basal areas of the wings and larger body size (body length 27 mm, wing span 78 mm). Both *S. ahyetios* and *S. pandora* are smaller (body length less than 22 mm, wing span less than 57 mm), general body coloration ochraceous or than tawny, abdominal tergites fuscous or testaceous, and the basal area of the wings grayish and piceous or red.

DISTRIBUTION. The species is currently known only from Brazil (Metcalf 1963; Sanborn 2013).

MATERIAL EXAMINED. “Rio Jan // F. Sahib. // subolivacea Stål // Typus // NHRS-GULI / 000046991” holotype female (NHRS).

Key to species of *Selymbria*

- 1 Fore wings without infuscation 2
 - Fore wings with spots of infuscation 4
- 2 Body mainly greenish tawny with light fuscous-piceous markings, greenish basal area of the wings, body length 27 mm, wing span about 78 mm, known only from Brazil *S. subolivacea* (Stål, 1862)
 - Body tawny, dorsal head mostly piceous, testaceous abdominal tergites, red or grayish piceous basal area of the wings, body length 18.5–22 mm, wing span less than 70 mm, known from Panama and Brazil. 3
- 3 Body ochraceous, dorsal head marked with piceous, fuscous abdominal tergites, grayish piceous basal area of the wings, body length 18.5–19.5 mm, known only from Panama *S. ahyetios* Ramos & Wolda, 1985
 - Body tawny, dorsal head mostly piceous, testaceous abdominal tergites, reddish orange basal area of the wings, body length 21–22 mm, known only from Brazil *S. pandora* Distant, 1911
- 4 Infuscation of fore wing restricted to apex, not on proximal apical cell veins or crossveins 5
 - Infuscation on fore wing apex, proximal apical cell veins and/or crossveins 10
- 5 Infuscation may restricted to apex of fore wing distal to the ambient vein, diamond shaped widening of central sulcus near postclypeus ventral apex, secondary spine of fore femur with sinuate apex, female sternite VII posterior extension with parallel margins, ovipositor sheath extending to the level of the dorsal beak, curved posterior uncus margin wider than anal styles with recurved spines on either side, the aedeagus with two short spines medially with larger extensions forming lateral wings, known only from Panama. *S. ahyetios* Ramos & Wolda, 1985
 - Central sulcus expanded over majority of ventral postclypeus, secondary spine not sinuate at apex, female sternite VII extension without parallel margins, posterior uncus not as wide as anal styles, aedeagus not as above 6
- 6 Infuscation not dense, known from French Guiana 7
 - Infuscation dense, known from Central America 8
- 7 Primary spine of fore femur adpressed, cubitus anterior 1 of the fore wing is curved between the split with cubitus anterior 2 and the mediocubital crossvein, male operculum does not cover the tympanal cavity, meracanthus tip straight, male uncus thin, extending just past level of anal styles, notch in female sternite VII angled laterally along entire length *S. chevauxensis* n. sp.
 - Primary spine of fore femur angled above femur, cubitus anterior 1 of the fore wing is straight between the split with cubitus anterior 2 and the mediocubital crossvein, male operculum covers the tympanal cavity, meracanthus tip curved mediad, male uncus stout, about half of uncus extending beyond level of anal styles, notch in female sternite VII with anterior V-shape and parallel margins on posterior half of sternite *S. guianensis* n. sp.
- 8 Fore wing length greater than 25 mm, uncus with lateral margins curved, widest in middle, fore femur apical spine about half as long as secondary spine *S. cinctifera* n. sp.
 - Fore wing length less than 24 mm, uncus widest near base tapering to apex with straight lateral margins, fore femur apical spine very small 9
- 9 Uncus with curved posterior margin, fore femur secondary spine upright, male operculum not concealing posteromedial tympanal cavity, female sternite VII with sinuate lateral margin constricting the posterior extension in the middle *S. pluvialis* Ramos & Wolda, 1985
 - Uncus with transverse posterior margin, fore femur secondary spine angled, male operculum concealing posteromedial tympanal cavity, female sternite VII with straight lateral margin along posterior extension parallel to posterior notch margin *S. guatemalensis* n. sp.
- 10 Infuscation restricted to apex, primarily distal apical cell 1, distal radius anterior 2, and distal apical cell 2, and on radial crossvein not extending onto radius anterior 2 or radius posterior veins or proximal apical cell 1 *S. danieleae* Sanborn, 2011
 - Infuscation in proximal and distal apical cells 1, 2 and/or 3, on proximal and distal radius anterior 2 and radius posterior, across radial crossvein extending to subcostal vein 11
- 11 Piceous region on dorsal head reduced between lateral ocelli and eye, medial margin to notch in female sternite VII curving laterad toward posterior, known from Costa Rica *S. puntarenasensis* n. sp.
 - Piceous region on dorsal head not reduced between lateral ocelli and eye, medial margin to notch in female sternite VII straight, curving mediad, or curving laterad toward posterior, known from South America. 12
- 12 Male tergite 3 wider than tergite 2, male uncus with rounded terminus, medial margin to notch in female sternite VII curving laterad toward posterior, known from Brazil *S. stigmatica* (Germar, 1834)
 - Male tergite 3 as wide as tergite 2, male uncus with transverse or rounded terminus, medial margin to notch in female sternite VII not curving laterad toward posterior, known from Argentina, Bolivia, Brazil, Ecuador or Peru 13
- 13 Male uncus with rounded terminus, female sternite VII slightly constricting towards posterior margin, known from Ecuador *S. ecuadorensis* n. sp.
 - Male uncus with transverse terminus, female sternite VII with parallel, slightly widening, or strongly curved medial margins towards posterior margin, strongly curved margins almost meet medially, known from Argentina, Bolivia, Brazil, or Peru 14
- 14 Male tergite 2 with extension over posterolateral timbal cavity, uncus with concave ventral terminus, female sternite VII with straight medial margins slightly widening towards posterior sternite margin, known from NW Argentina and SE Brazil *S. iguazuensis* n. sp.
 - Male tergite 2 without extension over posterolateral timbal cavity, uncus without concave ventral terminus, female sternite VII with straight medial margins smoothly curving mediad towards posterior sternite margin, known from Bolivia or Peru 15
- 15 Male uncus as wide as pygofer, female sternite VII with mediad margins of posterior extension smoothly curving mediad forming a sharp acute angle at apex that almost meet over gonapophyses at posterior sternite margin, known from southern Peru .

- *S. madredeiosensis* **n. sp.**
- Male uncus not as wide as pygofer, female sternite VII with mediad margins of posterior extension not smoothly curving mediad forming a sharp acute angle at apex that almost meet over gonapophyses at posterior sternite margin, known from Bolivia or northern Peru 16
 - 16 Male uncus with lateral expansion near terminus, female sternite VII with mediad margins of posterior extension angled mediad reducing notch forming an almost right angle at apex over lateral gonocoxite IX at posterior sternite margin, known from Bolivia *S. boliviaensis* **n. sp.**
 - Male uncus without lateral expansion near terminus, female sternite VII with mediad margins of posterior extension parallel to posterior sternite margin, known from northern Peru *S. loretoensis* **n. sp.**

Acknowledgements

C. Bartlett (UDCC), B. Blinn (NCSU), S. Brule (SEAG), C. Carlton and V. Bayless (LSAM), S. Clark (BYUC), M. Epstein, R. Froeschner and S. McKamey (USNM), B. Gustafsson and G. Lindberg (NHRS), S. Halbert (FSCA), M. Moulds (MSMC), E. Riley (TAMU), C. Smith (UGCA), M. Webb (BMNH), and R. Zack (WSUC) provided specimens, helped in gaining access to type material or collections, or provided further information from their respective institutions.

References

- Buckton, G.B. (1890) *Mongraph of the British Cicadae, or Tettigiidae, illustrated by more than four hundred coloured drawings. Vol. I. Part III.* Macmillan and Co., London, 15 + 32 pp., pls. xxi–xxx. [pp. xxxiv–xlvi + 65–96]
- Distant, W.L. (1905a) Rhynchotal notes XXX. *Annals and Magazine of Natural History*, Series 7, 15, 304–319.
<https://doi.org/10.1080/03745480509443047>
- Distant, W.L. (1905b) Rhynchotal notes XXXI. *Annals and Magazine of Natural History*, Series 7, 15, 379–387.
<https://doi.org/10.1080/03745480509443064>
- Distant, W.L. (1905c) Rhynchotal notes XXXV. *Annals and Magazine of Natural History*, Series 7, 16, 265–281.
<https://doi.org/10.1080/03745480509442862>
- Distant, W.L. (1905d) Rhynchotal notes XXXV. *Annals and Magazine of Natural History*, Series 7, 16, 265–281.
<https://doi.org/10.1080/03745480509442862>
- Distant, W.L. (1911) New genera and species of Cicadidae. *Annals and Magazine of Natural History*, Series 8, 8, 132–137.
<https://doi.org/10.1080/00222931108693006>
- Kato, M. (1932) *Monograph of Cicadidae*. Sanseido, Tokyo, 450 pp.
- Latreille, P.A. (1802) *Histoire naturelle, générale et particulière des crustacés et des insectes. Ouvrage faisant suite à l'histoire naturelle générale et particulière, composée par Leclerc de Buffon, et rédigée par C.S. Sonnini, membre de plusieurs sociétés savantes. Familles naturelles des genres. Tome Troisième.* F. Dufast, Paris, 467 pp. [pp. i–xii, 13–467]
- Marshall, D.C., Moulds, M.S., Hill, K.B.R., Price, B.W., Wade, E.J., Owen, C.J., Goemans, G., Marathe, K., Sarkar, V., Cooley, J.R., Sanborn, A.F., Kunte, K., Villet, M.H. & Simon, C. (2018) A molecular phylogeny of the cicadas (Hemiptera: Cicadidae) with a review of tribe and subfamily level classification. *Zootaxa*, 4424 (1), 1–64.
<https://doi.org/10.11646/zootaxa.4424.1.1>
- Matsumura, S. (1917) A list of the Japanese and Formosan Cicadidae, with description of new species and genera. *Transactions of the Sapporo Natural History Society*, 6, 186–212.
- Metcalf, Z.P. (1963) General catalogue of the Homoptera, Fascicle VIII. Cicadoidea. Part 2. Tibicinidae. *North Carolina State College Contribution*, 1564, i–vi, 1–492.
- Moulds, M.S. (2005) An appraisal of the higher classification of cicadas (Hemiptera: Cicadoidea) with special reference to the Australian fauna. *Records of the Australian Museum*, 57, 375–446.
<https://doi.org/10.3853/j.0067-1975.57.2005.1447>
- Moulds, M.S. (2012) A review of the genera of Australian cicada (Hemiptera: Cicadoidea). *Zootaxa*, 3287 (1), 1–262.
<https://doi.org/10.11646/zootaxa.3287.1.1>
- Pogue, M.G. (1996) Biodiversity of Cicadoidea (Homoptera) of Pakitza, Manu Reserved Zone and Tambopata Reserved Zone, Peru: A faunal comparison. In: Wilson, D.E. & Sandoval, A. (Eds.), *Manu, the biodiversity of southeastern Peru*. Smithsonian Institution, Editorial Horizonte, Lima, pp. 313–325.

- Ramos, J.A. & Wolda, H. (1985) Description and distribution of two new species of *Selymbria* from Panama (Homoptera, Cicadoidea, Tibicinidae). *Caribbean Journal of Science*, 21, 177–185.
- Sanborn, A.F. (2010) Two new species and new records of cicadas from Central America (Hemiptera: Cicadoidea: Cicadidae). *Studies on Neotropical Fauna and Environment*, 45, 67–76.
<https://doi.org/10.1080/01650521003778814>
- Sanborn, A.F. (2011) Checklist of the cicadas of French Guiana including new records and the description of nine new species (Insecta, Hemiptera, Cicadoidea, Cicadidae). *Zoosystema*, 33, 377–418.
<https://doi.org/10.5252/z2011n3a6>
- Sanborn, A.F. (2013) *Catalogue of the Cicadoidea (Hemiptera: Cicadoidea). With contributions to the bibliography by Martin H. Villet*. Elsevier/Academic Press, San Diego, 1001 pp.
- Sanborn, A.F. (2014) Checklist of the cicadas (Insecta: Hemiptera: Cicadidae) of Costa Rica including new records for fourteen species. *Check List*, 10, 246–252.
<https://doi.org/10.15560/10.2.246>
- Sanborn, A.F. (2018) The cicadas (Hemiptera: Cicadidae) of Panama including the description of six new species, three new combinations, one new synonymy, and nine new records. *Zootaxa*, 4493 (1), 1–69.
<https://doi.org/10.11646/zootaxa.4493.1.1>
- Sanborn, A.F. & Heath, M.S. (2014) The cicadas of Argentina with new records, a new genus and fifteen new species (Hemiptera: Cicadoidea: Cicadidae). *Zootaxa*, 3883 (1), 1–94.
<https://doi.org/10.11646/zootaxa.3883.1.1>
- Shydlovskyy, I.V. & Holovachov, O.V. (2005) [*Homopteran insects from the collection of E.-F. Germar in the Zoological Museum of LNU (Catalogue).*] Ivan Franko National University of Lviv, Zoological Museum, Lviv, 92 pp, 8 pls. [in Russian, English forward]
- Stål, C. (1854) Nya Hemiptera. *Öfversigt af Svenska Vetenskaps Akademien Förhandlingar*, 11, 231–255.
- Stål, C. (1861) Genera nonnulla nova Cicadinorum. *Annales de la Société Entomologique de France*, Series 4, 1, 613–622.
- Stål, C. (1862) Bidrag till Rio Janeiro - traktens Hemipter-fauna. II. Handlingar. *Kongliga Svenska Vetenskaps Akademien. Stockholm*, 3, 1–75.
- White, A. (1845) Appendix (D.) Description and figures of four new species of Australian insects. In: Eyre, E.J. (Ed.), *Journals of expeditions of discovery into Central Australia and overland from Adelaide to King George Sound, in the years 1840–1; sent by the colonists of South Australia, with the sanction and support of the government: including an account of the manners and customs of the Aborigines and the state of their relations with Europeans*. T. and W. Boone, London, pp. 432–434, pls. 4.
- Wolda, H. (1977) Fluctuations in abundance of some Homoptera in a neotropical forest. *Geo-Eco-Trop*, 3, 229–257.
- Wolda, H. (1984) Diversity and seasonality of Panamanian cicadas. *Mitterlungen du Schweizerischen Entomologischen Gesellschaft*, 57, 451.
- Wolda, H. (1988) Insect seasonality: Why? *Annual Review of Ecology and Systematics*, 19, 1–18.
<https://doi.org/10.1146/annurev.es.19.110188.000245>
- Wolda, H. (1989) Seasonal cues in tropical organisms: rainfall? Not necessarily. *Oecologia, Berlin*, 80, 437–442.
<https://doi.org/10.1007/BF00380064>
- Wolda, H. (1993) Diel and seasonal patterns of mating calls in some neotropical cicadas. Acoustic interference? *Proceedings of the Koninklijke Nederlandse Akademie van Wetenschappen. Biological, Chemical, Geological, Physical and Medical Sciences*, 96, 369–381.
- Wolda, H. & Ramos, J.A. (1992) Cicadas in Panama, their distribution, seasonality and diversity. In: Quintero, D. & Aiello, A. (Eds.), *The insects of Panama and Mesoamerica. Selected studies*. Oxford University Press, New York, pp. 271–279.