

A REVISION OF AMYRSIDEA, SUBGENUS *CRACIMENOPON*  
(MALLOPHAGA: MENOPONIDAE)

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*Abstract.*—Fourteen species are described in the subgenus *Cracimenopon* Carriker genus *Amyrsidea* Ewing from galliform hosts of the family Cracidae. One new species, *A. (C.) rogersi* from *Crax fasciolata*, is described, and 13 new synonymies are given. Illustrations and a key for identification of the species are given.

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The menoponid genus *Amyrsidea* Ewing, 1927, has recently been revised to recognize five subgenera (Scharf and Price, 1977, 1983; Scharf and Emerson, 1983). The genus is distributed world-wide on galliform hosts. Each of the subgenera has a discrete host group whose geographical distribution is distinctive. These subgeneric distributions are as follows: *Amyrsidea* from three genera of the Phasianidae from southeast Asia; *Desumenopon* Carriker from neotropical quail of the genus *Odontophorus*: Phasianidae; *Argimenopon* Eichler from four families of Phasianidae from Africa, India, southeast Asia, and the Holarctic Region; *Numidimenopon* Scharf from the family Numididae from Africa; and *Cracimenopon* Carriker from the neotropical family Cracidae.

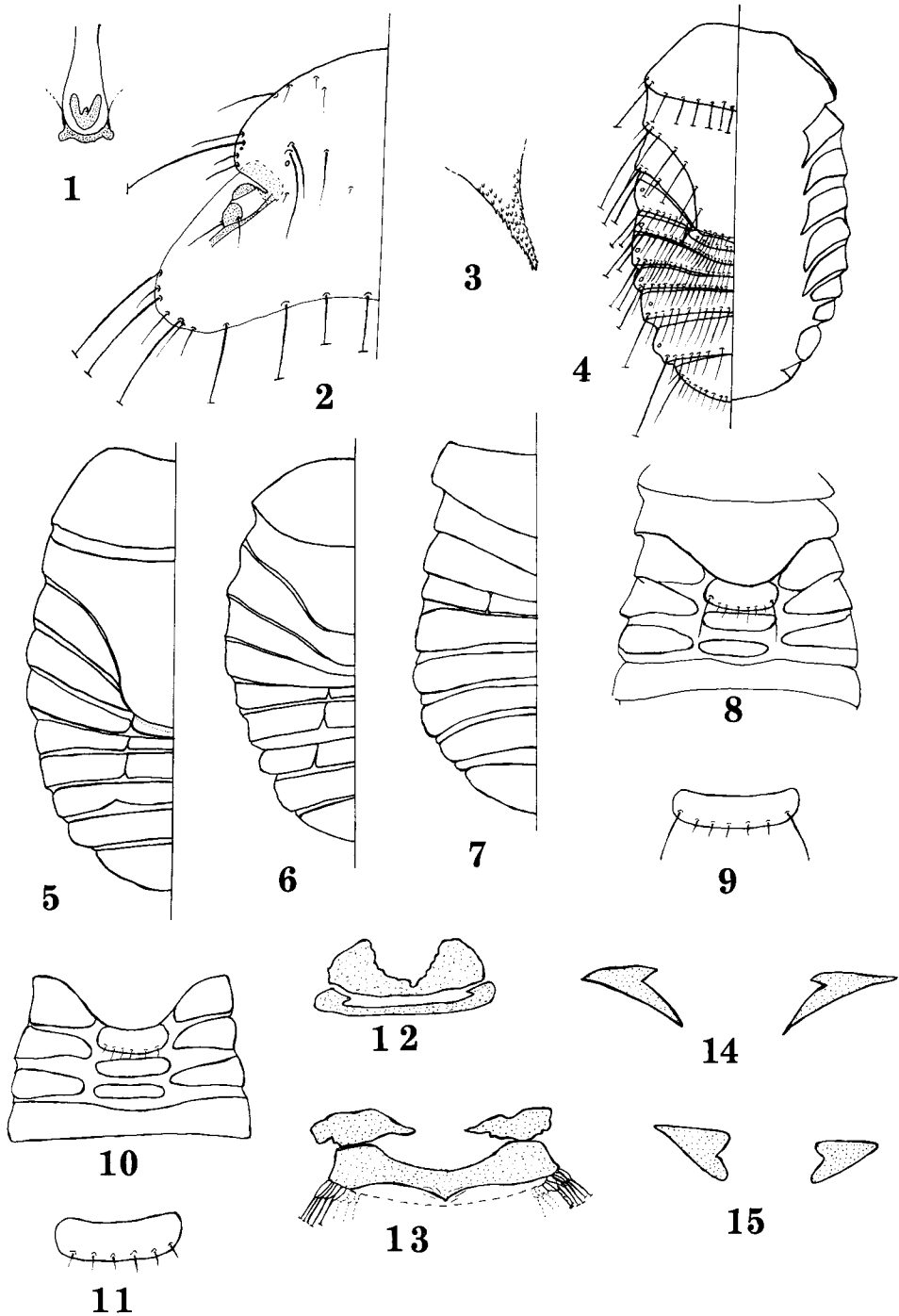
*Cracimenopon* species are distinctive not only in being restricted to one family of hosts, but also because of their large prominent eyes, preocular slit usually deeper than 0.025 mm, lack of setae on sternite I, sexually dimorphic ventral pleural extensions and frequent enlargement of anterior terga in females. This paper presents descriptions, illustrations, and a key to the 14 species of the subgenus *Cracimenopon*.

In the following descriptions, numbers of certain head setae are those given by Clay (1969). Measurements are in millimeters. Unless noted, all illustrations are of specimens from the type-host. The nomenclature of the hosts follows Peters (1934), but some pertinent recent changes are given based on Delacour and Amadon (1973) and Vaurie (1968).

**Subgenus *Cracimenopon* Carriker**

*Cracimenopon* Carriker, 1954: 21. Type-species: *Cracimenopon mituensis* Carriker.

The members of this subgenus form a group of closely related lice which are known only from the Cracidae. They may be separated from other subgenera by the following combination of characteristics:



Figs. 1-15. 1, Strongly developed hypopharyngeal sclerite, from *Crax rubra*. 2, *Amyrsidea rubra* head. 3, *Amyrsidea* sp. pleural extension, from *Crax rubra*. 4-11, Female tergal features, subgenus *Cracimenopon*. 4, *A. pauxis*, from *Pauxi pauxis*. 5, *A. rubra*. 6, *A. rogersi*. 7, *A. mituensis* (thorax not shown). 8, *A. caquetae*. 9, *A. caquetae*, setal arrangement on mid-tergite II. 10, *A. jacquacu*. 11, *A. jacquacu*, setal arrangement on mid-tergite II. 12-15, Pre-anal plates. 12, *Amyrsidea garruli*, from *Ortalis g. garrula*. 13, *A. aburris*, from *Penelope jacquacu granti*. 14, *A. aburris*. 15, *A. semicracis*.

1. Head with wide temples; difference between temple and preocular width 0.14–0.27.
2. All species with strongly developed hypopharyngeal sclerite (Fig. 1).
3. Preocular slit deep (0.04–0.05).
4. Preocular seta 11 shorter than 0.10 and of similar thickness to seta 10 (Fig. 2).
5. No dorsal head sensilla between sensilla *c*.
6. Terminal antennal segment short and wide, ratio of width to length more than 0.5.
7. Large prominent eyes.
8. No setae on sternite I.
9. Outer medioanterior metanotal setae shifted far anterior, near meso-metanotal suture.
10. Frequent sexual dimorphism, with females having enlarged tergite I and some with tripartite tergites among II, III, or IV. Males without enlarged tergites.
11. Females with ventral extension on pleura I–IV or II–VI (Fig. 3). This is rarely seen in males.
12. Female segment IX with anal fringes and sternal setae similar to Fig. 36; no spiniform setae.

*Amyrsidea (Cracimenopon) mituensis* (Carriker)

Figs. 7, 30

*Cracimenopon mituensis*, Carriker, 1954: 22.

Type-host: *Mitu mitu* (Linnaeus).

Male.—Preocular slit 0.04 deep. Inner middorsal head seta 17 clearly anterior to outer 18. With 12 long and 4 short marginal pronotal setae. Mesothorax and metathorax not visible. Brush on femur III with 30–31 short setae. Tergite I normal length, with same proportions as other tergites; marginal tergal setae: I, 16; II, 14; III, 16; IV, 24; V, 25; VI, 24; VII, 22; VIII, 14. No anterior tergal setae on III–VIII. Sternal setae obliterated on I–VI; VII, 38; VIII, 21. Sternal brushes apparently small but obliterated on III; with short setae on each side of IV, 28; V, 30; VI, 25–26. Last tergite each side with 2 very long marginal setae, 3–4 medium setae lateroanterior to these, 10 total medium inner posterior setae, and no anterior setae. Subgenital plate with 16 marginal and anterior setae. Genitalia as in Fig. 30.

Female.—As for ♂, except as follows. Brush on femur III with 39 short setae. Tergite I enlarged, II slightly enlarged, III nearly normal with proportions as in V–VIII, IV tripartite (in Fig. 7, note thorax omitted), marginal tergal setae on I obliterated; II, 24; III, obliterated; IV, 41 (including all 3 parts); V, 49; VI, 44; VII, 31; VIII, 16. Last tergite with 4 very long marginal setae, 2 short setae lateroanterior to these, and 15 inner posterior setae. Subgenital plate with 31 marginal and 19 anterior setae. Anal fringe with 50 dorsal and 46 ventral setae.

Dimensions.—Preocular width, ♂ 0.39, ♀ 0.44; temple width, ♂ 0.58, ♀ 0.65; prothorax width, ♂ 0.41, ♀ 0.48; metathorax width, ♂ obliterated, ♀ 0.68; total length, ♂ 1.44, ♀ 1.97; ♂ genitalia width 0.15, length indistinguishable.

Remarks.—It is unfortunate that Carriker (1954) chose this species, represented by only two poor specimens, as the type-species for the genus *Cracimenopon*. It is best recognized by the ♂ genitalia and combination of enlarged tergite I, slightly enlarged II, normal III, and tripartite IV in ♀.

Material examined.—Holotype ♂, allotype ♀ of *C. mituensis*, USNM slide 68613, *Mitu mitu*, Bolivia.

*Amyrsidea (Cracimenopon) pauxis* Carriker

Figs. 4, 31–33

*Amyrsidea simplex pauxis* Carriker, 1950: 496. Type-host: *Pauxi pauxi gilliardi* Wetmore and Phelps.

*Amyrsidea parvispina* Carriker, 1950: 496. Type-host: *Pauxi pauxi unicornis* Bond and de Schauensee (= *Pauxi unicornis* Bond and de Schauensee). **NEW SYNONYMY.**

*Amyrsidea spinigaster spinigaster* Carriker, 1950: 497. Type-host: *Crax nigra* L. **NEW SYNONYMY.**

*Amyrsidea semicracis guttatus* Carriker, 1950: 505. Type-host: *Chamaepetes unicolor* Salvin. **NEW SYNONYMY.**

Male.—Features as for *A. mituensis*, except for the following. Middorsal head setae 17 and 18 in straight line across head. Mesosternal plate with 10–14 setae, metasternal plate with 9–12 setae, and metanotum with 14 long marginal setae. Brush on femur III with 40–42 short setae. All abdominal tergites normal length without enlargement. Marginal tergal setae: I, 15–17; II, 16–18; III, 17–22; IV, 24–27; V, 25–30; VI, 24–30; VII, 20–38; VIII, 12–16. No anterior tergal setae. Sternal setae: II, 18–20; III, 32–35; IV, 25–26; V, 25–30; VI, 16–26; VII, 14–39; VIII, 18–30. Sternal brushes: II, 12–23; III, 17–22; IV, 22–34; V, 20–35; VI, 20–28; VII, 12–15. Last tergite with 2 very long marginal setae on each side, 6–8 medium setae lateroanterior to these, and 10–12 medium inner posterior setae. Subgenital plate with 20–28 marginal and anterior setae. Genitalia somewhat variable for few specimens examined (Figs. 31–33), but all with some semblance of V-shaped sclerite.

Female.—As for ♂ except as follows. Abdominal tergite I greatly enlarged, covering half of abdomen; tergite II tripartite, with middle portion extremely short; tergites III and IV also tripartite (Fig. 4). Marginal tergal setae: I, 16–17; II, 12–15; III, 14; IV, 35–37; V, 39–45; VI, 37–42; VII, 30–33; VIII, 14. Sternal setae: II, 17–18; III, 43–44; IV, 30–32; V, 33–35; VI, 27–28; VII, 21–22. Last tergite with 2 very long marginal setae each side, 6 medium setae lateroanterior to these, and 14–15 medium inner posterior setae. Anal fringe with 48–54 setae dorsally and 60–61 setae ventrally.

Dimensions.—Preocular width, ♂ 0.38–0.52, ♀ 0.41–0.43; temple width, ♂ 0.58–0.67, ♀ 0.61–0.66; prothorax width, male 0.41–0.44, ♀ 0.42–0.50; metathorax width, ♂ 0.48–0.54, ♀ 0.67–0.68; total length, ♂ 1.66–1.78, ♀ 1.84–1.85; male genitalia width 0.14–0.16, length 0.31–0.43.

Remarks.—The combination of enlarged female tergum I with II–IV tripartite

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Figs. 16–26. 16–18, Pre-anal plates. 16, *A. aburris*, from *Chamaepetes goudoti*. 17, *A. aburris*, from *Chamaepetes rufiventris*. 18, *A. spicula*. 19–26, Male genitalia. 19, *A. garruli*. 20, *A. spicula*. 21, *A. aburris*. 22, *Amyrsidea aburris* from *Chamaepetes goudoti rufiventris*. 23, *A. aburris*, from *Penelope jacquacu grantii*. 24, *A. simplex*. 25, *A. semicracis*, from *Penelope argyrotis albicauda*. 26, *A. rubra*.



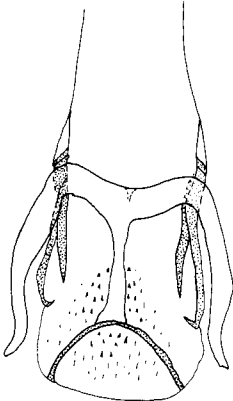
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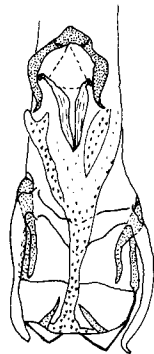
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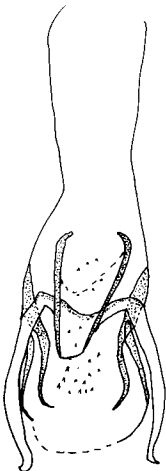
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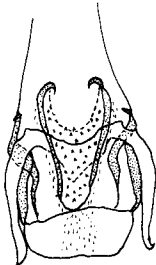
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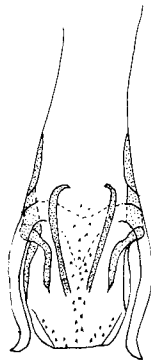
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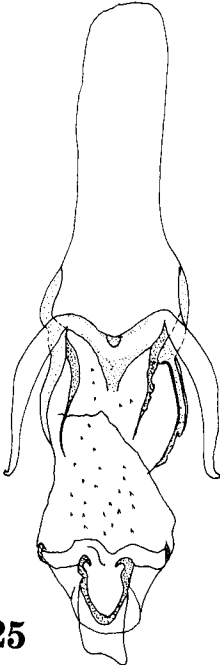
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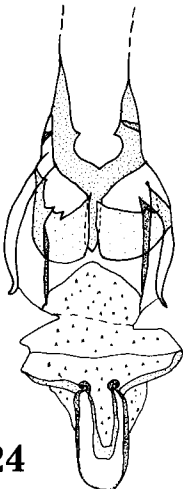
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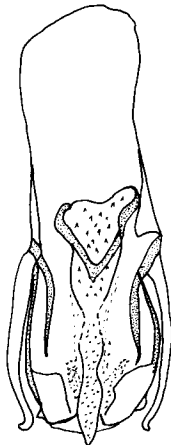
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and the V-shaped male genital sclerite are the best distinguishing features of this species.

Material examined.—3 ♂, 1 ♀ (holotype ♂, allotype ♀) on USNM slide 68591, and 2 ♂ paratypes of *A. parvispina*, *Pauxi pauxi unicornis*, Bolivia; 2 ♂, 3 ♀ (including holotype ♀ and allotype ♂ of *A. simplex pauxis*), *P. p. gilliardi*, Colombia; 6 ♂, 6 ♀ (including 5 ♂ paratypes of *Cracimenopon simplex pauxi* (sic), *Pauxi pauxi*, Colombia; paratype ♂ and female of *A. s. spinigaster*, (Oklahoma State University slides 967 and 968), *Crax nigra* L., Venezuela; 5 ♂, 2 ♀, *Crax alector* L. (= *Crax nigra*), Surinam; 1 ♂, 4 ♀, *Pipile cumanensis* Jaquin (= *Aburria pipile* (Jaquin), Surinam; ♂ holotype of *A. semicrasis guttatus*, *Chamaepetes unicolor*, Costa Rica; 3 ♀, *Ortalis guttatus columbianus* = *O. guttata*, Colombia.

***Amyrsidea (Cracimenopon) simplex* Carriker**

Fig. 24

*Amyrsidea simplex simplex* Carriker, 1950: 494. Type-host: *Crax annulata* Todd (= *Crax alberti* Fraser).

*Amyrsidea spinigaster alberti* Carriker, 1950: 498. Type-host: *Crax alberti alberti* Fraser. **NEW SYNONYMY.**

*Amyrsidea spinigaster daubentoni* Carriker, 1950: 498. Type-host: *Crax alberti daubentoni* G. R. Gray (= *Crax daubentoni* G. R. Gray). **NEW SYNONYMY.**

Male.—As in *A. pauxi*, but with genitalia (Fig. 24) with extensible area of sclerotization in sac and U-shaped sclerite.

Female.—As in *A. pauxi* except as follows. Tergite I greatly elongated covering nearly half of abdomen, with middle portion of II either absent or fused to I. Tergite IV–VI tripartite; anterior setae of middle portion IV indicates fusion with middle part of tergite III (similar to Fig. 5). Marginal tergal setae: I, 14–16; II, 14 on lateral portions only; III, 20–22 on lateral portions only; IV, 27–36; V, 40–46; VI, 34–45; VII, 30–35; VIII, 13–18. No anterior tergal setae except for 4–6 minute ones in middle of IV thought to represent fusion of III and IV. Anal fringes with 44–65 dorsal and 48–72 ventral setae.

Dimensions.—Preocular width, ♂ 0.33–0.42, ♀ 0.35–0.44; temple width, ♂ 0.48–0.60, ♀ 0.53–0.68; prothorax width, ♂ 0.33–0.44, ♀ 0.38–0.50; metathorax width, ♂ 0.43–0.54, ♀ 0.56–0.72; total length, ♂ 1.45–1.90, ♀ 1.40–2.10; ♂ genitalia width 0.13–0.16; length 0.39–0.41.

Remarks.—The male genitalia with U-shaped sclerites, and female tergal features with mid-portion of II either absent or fused are the best distinguishing characters of this species.

Material examined.—6 ♂, 11 ♀ (including holotype male, allotype female on USNM slide 68569, and 5 ♂, 6 ♀ paratypes of *A. simplex*) *Crax annulata*, Colombia; 3 ♂ (including holotype ♂ of *A. spinigaster alberti* on USNM slide 68572); 2 ♀, *C. a. alberti*, Colombia; 2 ♀ (including holotype ♀ of *A. spinigaster daubentoni* on USNM slide 68573), *Crax alberti daubentoni*, Venezuela.

***Amyrsidea (Cracimenopon) rubra* Carriker**

Figs. 1, 2, 3, 5, 26, 36

*Amyrsidea simplex rubra* Carriker, 1950: 495. Type-host: *Crax r. rubra* (Linnaeus).

Male.—As for *A. pauxi*, but without extensive sclerotization in region of genital sac and genital sclerite with less distinct U-shape (Fig. 26).

Female.—As for *A. pauxi*, but with slightly more marginal tergal setae: I, 18; II, 14 on lateral portions only; III, 18; IV, 40–42; V, 47–49; VI, 49–50; VII, 37–39; VIII, 15.

Dimensions.—Preocular width, ♂ 0.40–0.41, ♀ 0.45–0.47; temple width, ♂ 0.59–0.60, ♀ 0.68–0.70; prothorax width, ♂ 0.45–0.56, ♀ 0.50–0.52; metathorax width, ♂ 0.57–0.60, ♀ 0.79–0.80; total length, ♂ 1.88–1.90, ♀ 2.16–2.20; ♂ genitalia width, 0.13–0.14, length 0.39–0.41.

Remarks.—The lack of genital sac sclerotization and more marginal tergal setae in ♀ are the best distinguishing characters of this species.

Material examined.—2 ♂, 4 ♀, *Crax rubra*, Columbia, Republic of Panama.

***Amysrsidea (Cracimenopon) rogersi* Scharf and Emerson, NEW SPECIES**

Fig. 6, 34

Type-host: *Crax fasciolata fasciolata* Spix.

Male.—As for *A. pauxi* except as follows. Longer middorsal head setae with outer seta 18 farther lateral toward preocular slit. Only 9–13 setae on subgenital plate. Genitalia (Fig. 34) with enlarged epimeres, longer parameres, and bell-shaped sclerotization with sac.

Female.—As for *A. pauxi* except as follows. Tergite I enlarged, but covering less than half of abdomen; tergites II–IV entire, conforming to contour of tergite I and progressively less enlarged; and tergites V–VII, tripartite (Fig. 6). Marginal tergal setae: I, 10; II, 18–19; III, 18–20; IV, 32–33; V, 44–46; VI, 36–38; VII, 28–29; VIII, 14. Last tergite each side with 1 very long marginal seta, 3–4 short setae lateroanterior to this, and 10 total inner posterior setae. Sternal setae as for *A. pauxi*, except 46–48 total marginal and anterior subgenital plate setae.

Dimensions.—Preocular width, ♂ 0.35–0.37, ♀ 0.39–0.41; temple width, ♂ 0.53–0.55, ♀ 0.59–0.61; prothorax width, ♂ 0.37–0.39, ♀ 0.39–0.42; metathorax width, ♂ 0.43–0.45, ♀ 0.59–0.60; total length, ♂ 1.63–1.70, ♀ 1.81–1.94; ♂ genitalia width 0.14, length 0.42–0.46.

Remarks.—The ♂ genitalia with enlarged epimeres, longer parameres, bell-shaped sclerotization, and configuration of the female abdominal tergites serve to distinguish this species. This species is named for Joseph H. Rogers, who as friend and colleague of the first author, encouraged this work.

Material examined.—Holotype ♂, *C. f. fasciolata*, Matto Grosso, Brazil, no date, T-821, in collection of U.S. National Museum. Paratypes: 2 ♂, 3 ♀, same data as holotype.

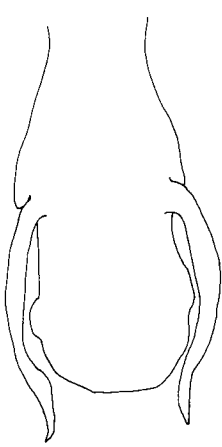
***Amysrsidea (Cracimenopon) caquetae* Carriker**

Figs. 8, 9, 35

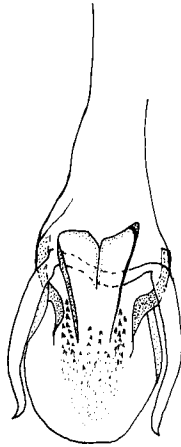
*Cracimenopon caquetae* Carriker, 1967: 41. Type-host: *Ortalis guttata caquetae* Chapman (= *O. guttata* Spix).

*Cracimenopon huilensis* Carriker, 1967: 44. Type-host: *Ortalis guttata columbianus* Hellmayr. **NEW SYNONYMY.**

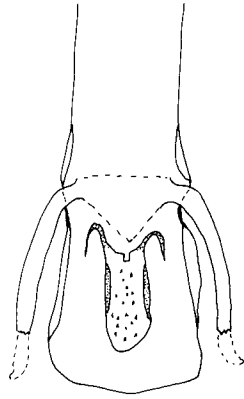
Male.—As for *A. pauxi* except as follows. Brush on femur III with only 16 small setae. Subgenital plate with 16 marginal and 22 anterior setae; otherwise, specimen



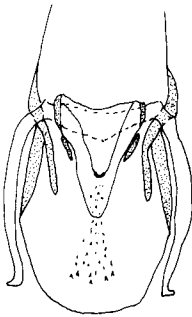
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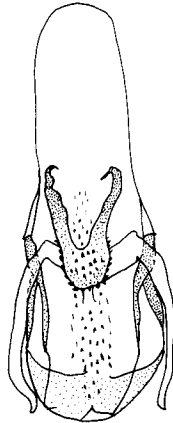
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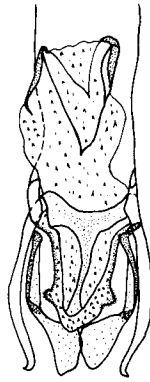
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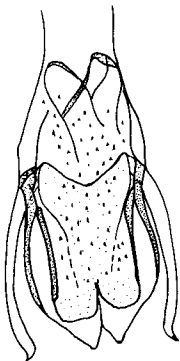
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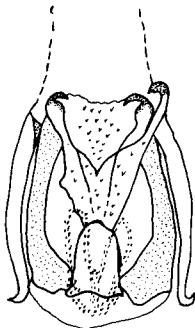
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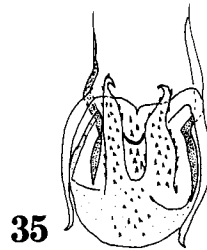
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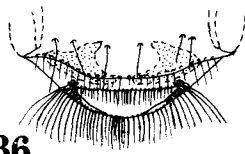
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rolled and obliterated ventrally. Genitalia (Fig. 35) with narrow epimeres, lacking prominent sclerotization in genital sac area, and with characteristic shape of sac.

Female.—As for *A. pauxi* except as follows. Abdominal tergite I enlarged; tergites II–IV tripartite, other tergites undivided (Fig. 8). Mid-portion of II with 1 long seta at each corner and 5–7 marginal minute setae between them (Fig. 9). Marginal tergal setae: I, 18; II, 21; III, 16; IV, 26; V, 30; VI, 28; VII, 30; VIII, 24. Tergites IV–VI with 40–58 marginal setae on specimen from *O. arcuan squamata* Lesson. Specimen rolled and obliterated ventrally.

Dimensions.—Preocular width, ♂ 0.48, ♀ 0.58–0.71; prothorax width, ♂ 0.37–0.46, ♀ 0.31–0.42; metathorax width, ♂ 0.48–0.68, ♀ 0.43–0.58; total length, ♂ 1.55, ♀ 1.81–2.15; ♂ genitalia width 0.14, length indistinguishable.

Remarks.—The narrow epimeres lacking prominent sclerotization in ♂ and the setal pattern on the mid-portion of tergite II of ♀ are the distinguishing characters.

Material examined.—1 ♂, 1 ♀ (including holotype ♀ of *C. caquetae* on USNM slide 68887), *Ortalis guttata caquetae*, Colombia; 1 ♀, *O. arcuan squamata* (= *O. guttata squamata* Lesson), Brazil; 2 ♂, 5 ♀ (including holotype ♀ and allotype ♂ *C. huilensis* on USNM slide 68888), *Ortalis guttatus columbianus*, Colombia.

#### *Amysrsidea (Cracimenopon) jacquacu* Carriker

Figs. 10, 11

*Amysrsidea semicracis jacquacu* Carriker, 1950: 502. Type-host: *Penelope obscura jacquacu* Spix (= *P. j. jacquacu* Spix).

Male.—As for *A. pauxi*, except as follows. Ventral femur III with 27 short setae. Sternal setae: II, 35; III, 48; IV, 30; V, 31; VI, 33; VII, 41; VIII, 32. Sternal brushes each side: III, 20–21; IV, 24–25; V, 18–22; VI without brushes. Genitalia as for *A. aburris* (Fig. 23) with small lateral sclerotized strips along genital sac.

Female.—As for *A. caquetae* except as follows. Lacking long corner seta on mid-portion of tripartite tergite II (Figs. 10 and 11). Marginal tergal setae: I, 10; II, 20–22; III, 21–22; IV, 32–36; V, 43–44; VI, 41–42; VII, 31–35; VIII, 18–19. Sternal setae: II, 30; III, 48–50; IV, 24–25; V, 26–27; VI, 42–43; VII, 20–21. Sternal brushes: III, 17–20; IV, 20–24; V, 17–20. Terminal segment with 4 very long marginal and 18–19 anterior setae. Anal fringing setae with 86–88 dorsally and 78–80 ventrally.

Dimensions.—Preocular width, ♂ 0.36, ♀ 0.39–0.40; temple width, ♂ 0.50, ♀ 0.58; prothorax width, ♂ 0.40, ♀ 0.44–0.45; metathorax width, ♂ 0.59, ♀ 0.62; total length, ♂ 1.68, ♀ 1.86–1.88; ♂ genitalia width 0.14, length indistinguishable.

Remarks.—The combination of ♀ tergal features and male genitalic features serve to distinguish this species. There are minor differences in tergal setae and arrangement of long and very long marginal setae on the last tergite as those on *A. aburris*. However, we have also examined a specimen from the same host and

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Figs. 27–36. 27–35, Male genitalia. 27, *A. sixiola*. 28, *A. purpurascens*. 29, *Amysrsidea wagleri*. 30, *A. mituensis*. 31, *A. pauxis*. 32, *A. pauxis*, from *Pauxi unicornis*. 33, *A. pauxis*, from *Pauxi p. pauxis*. 34, *A. rogersi*. 35, *A. caquetae*. 36, Female terminal segments showing typical anal fringe and sternal setae, from *Crax rubra*.

locality dated 3 days later which is close to *A. aburris* Carriker, which does not have enlarged tergite I; and we should point out that a series of 6 ♂ and 6 ♀ specimens for *Penelope granti* Berlepsch (= *Penelope jacquacu granti* Vaurie) is also included in *A. aburris*.

Material examined.—1 ♂, 3 ♀ (including holotype ♀ and allotype ♂ of *A. semicracis jacquacu* on USNM slide 68578, and paratype ♀), *Penelope obscura jacquacu*, Peru.

***Amyrsidea (Cracimenopon) garruli* Carriker**

Figs. 12, 19

*Amyrsidea spicula garruli* Carriker, 1950: 506. Type-host: *Ortalis garrula garrula* (Humbolt).

*Amyrsidea spicula microspina* Carriker, 1950: 507. Type-host: *Ortalis r. ruficrissa* Sclater and Salvin (= *O. ruficauda ruficrissa* Sclater and Salvin). **NEW SYNONYMY.**

*Cracimenopon mirae* Carriker, 1967: 41. Type-host: *Ortalis garrula mira* Griscom. **NEW SYNONYMY.**

*Cracimenopon ruficaudatus* Carriker, 1967: 44. Type-host: *Ortalis ruficauda* (Jardine). **NEW SYNONYMY.**

Male.—As for *A. pauxi*, except as follows. Inner middorsal head seta 17 nearly twice as long as minute outer 18. With 22–24 small setae on ventral femur III. Marginal abdominal tergal setae: I, 18–19; II, 20; III, 29–31; IV, 34–35; V, 38–40; VI, 42–43; VII, 31–32; VIII, 20–21. Sternal setae: II, 32–34; III, 58–62; IV, 28–30; V, 29–32; VI, 29–31; VII, 56–58; VIII, 41–45. Sternal brushes: IV, 20–22; V, 24–25; VI, 19–20. Last tergite each side with 1 very long marginal seta, 2–3 medium; lateroanterior to this, and 15–16 total inner posterior setae. With 23 total marginal and anterior setae on subgenital plate. Male genitalia (Fig. 19) with narrow U-shaped sclerotization at base of genital sac.

Female.—As for ♂, except as follows. Ventral terminal segment having 27–28 marginal, 20–22 anterior setae on subgenital plate and 59–60 dorsal and 56–59 ventral anal fringe setae. With pre-anal plate circular on anterior with notch as in Fig. 12.

Dimensions.—Preocular width, ♂ 0.42–0.43, ♀ 0.45–0.47; temple width, ♂ 0.63–0.64, ♀ 0.65–0.67; prothorax width, ♂ 0.45–0.48, ♀ 0.46–0.48; metathorax width, ♂ 0.55–0.57, ♀ 0.60–0.62; total length, ♂ 1.96–2.02, ♀ 2.09–2.14; ♂ genitalia width 0.15, length indistinguishable.

Remarks.—This is the first species described without sexually dimorphic tergal features. Males are best identified by the genital sclerite, and females have a characteristic pre-anal plate.

Material examined.—4 ♂, 8 ♀, (including ♀ holotype of *A. spicula garrula* on USNM slide 68583, and 2 ♀ paratypes), *O. g. garrula*, Colombia; holotype ♀ of *Cracimenopon mirae* (on USNM slide 68886, and 2 ♀ paratypes), *O. g. mira*, Colombia; 1 ♀ paratype of *A. spicula microspina*, *O. ruficrissa*, Colombia; 2 ♂, 4 ♀, *O. ruficauda* (Jardine), Venezuela.

***Amyrsidea (Cracimenopon) aburris* Carriker**

Figs. 13, 14, 16, 17, 21, 22, 23

*Amyrsidea semicracis aburris* Carriker, 1950: 502. Type-host: *Aburria aburri* (Lesson).

*Amyrsidea semicracis chamaepeta* Carriker, 1950: 504. Type-host: *Chamaepetes goudoti rufiventris* (Tschudi). **NEW SYNONYMY.**

*Amyrsidea semicracis sanctaemartae* Carriker, 1950: 504. Type-host: *Chamaepetes goudoti sanctaemartae* Chapman. **NEW SYNONYMY.**

Male.—As for *A. pauxis*, except as follows. With 26–41 small setae in brush of femur III. Marginal tergal setae: I, 15–16; II, 18–20; III, 18–23; IV, 18–23; V, 20–29; VI, 18–28; VII, 16–22; VIII, 12–16. Last tergite each side with 1–2 very long marginal setae, 2–3 short setae lateroanterior to these, and 10–18 total inner posterior setae. Sternal setae: II, 19–44; III, 22–41; IV–VI, 19–33; VII, 42–45; VIII, 22–38. Sternal brushes: III, 15–22; IV–VI, 19–43. Total marginal and anterior setae on subgenital plate 15–21. Genitalia (Figs. 21, 22 and 23) with U-shaped genital sclerite elongated on lateral margins of genital sac.

Female.—As for ♂, except as follows. Marginal tergal setae as for male, except specimens from *P. obscura obscura* with greater number of marginal tergal setae than from other hosts on IV–VI, 34–37. Sternite III with 41–46, and VII with 54–62 setae. Subgenital plate with 22–31 marginal and 21–33 anterior setae. Anal fringe of 56–64 setae dorsally and 54–63 ventrally. Pre-anal plates various but always separate (Figs. 13, 14, 16, and 17).

Dimensions.—Preocular width, ♂ 0.37–0.40, ♀ 0.41–0.45; temple width, ♂ 0.53–0.59, ♀ 0.61–0.67; prothorax width, ♂ 0.37–0.43, ♀ 0.44–0.49; metathorax width, ♂ 0.49–0.54, ♀ 0.55–0.64; total length, ♂ 1.62–1.81, ♀ 1.98–2.28; ♂ genitalia width, 0.13–0.16, length indistinguishable.

Remarks.—The ♂ genitalia are the best identifying feature of this species and, although they show some variation among the 5 hosts, they are distinctive enough to consider this as a single species. The smaller number of marginal tergal setae is also indicative of the integrity of the species, but the higher count in specimens from *P. obscura obscura* overlaps with counts for *Amyrsidea garruli*.

Material examined.—2 ♂, 2 ♀ (including holotype ♀ and allotype ♂ of *A. semicracis aburris* on USNM slide 68579), *Aburria aburri*, Colombia: 6 ♂, 2 ♀ (including holotype ♀, allotype ♂ of *A. s. chamaepeta* (on USNM slide 68587, and 5 ♂ and 1 ♀ paratypes), *Chamaepetes goudoti rufiventris*, Peru; 13 ♂, 11 ♀, *Chamaepetes a. goudoti*, Colombia; 1 ♀ (holotype of *A. s. sanctaemartae* on USNM slide 68580), *Chamaepetes goudoti sanctaemartae*, Colombia; 6 ♂, 6 ♀, *Penelope granti* Berlepsch (= *P. jacquacu granti* Vaurie), Guyana; 4 ♂ 6 ♀, *P. o. obscura* Temminck, Paraguay.

### *Amyrsidea (Cracimenopon) semicracis* Carriker

Figs. 15, 25

*Amyrsidea semicracis semicracis* Carriker, 1950: 500. Type-host: *Penelope argyrotis colombiana* Todd.

*Amyrsidea semicracis perijana* Carriker, 1950: 500. Type-host: *Penelope argyrotis albicauda* Phelps and Gilliard. **NEW SYNONYMY.**

Male.—As for *A. pauxis*, except as follows. Fewer marginal tergal setae on V–VII, 18–27; fewer setae in brush on venter of femur III, 31–34; and more sternal setae on VII, 44–54, and VIII, 31–34. Genitalia with retrorse terminal barbs on genital sclerite and obvious connection between parameres (Fig. 25).

Female.—As for *A. pauxis*, except with 22 marginal and 32 anterior setae on subgenital plate, and pre-anal plates usually as in Fig. 15.

Dimensions.—Preocular width, ♂ 0.41–0.42, ♀ 0.42–0.44; temple width, ♂ 0.56–0.57, ♀ 0.60–0.62; prothorax width, ♂ 0.42, ♀ 0.42–0.44; metathorax width, ♂ 0.52–0.60, ♀ 0.57–0.63; total length, ♂ 1.58–1.78, ♀ 1.76–1.83; ♂ genitalia width 0.14–0.15, length indistinguishable.

Remarks.—The ♂ genitalia appear to be the singular identifying feature of this species.

Material examined.—4 ♂, 2 ♀ (including ♀ holotype and ♂ allotype of *A. s. semicracis* on USNM slide 68574), *Penelope argyrotis colombiana*, Colombia; ♂ holotype of *A. s. perijana* (on USNM slide 68575, and 1 ♀ paratype), *P. a. albicauda*, Colombia.

***Amyrsidea (Cracimenopon) purpurascens* Carriker**

Fig. 28

*Amyrsidea semicracis purpurascens* Carriker, 1950: 501. Type-host: *Penelope purpurascens purpurascens* Wagler.

*Amyrsidea semicracis brunnescens* Carriker, 1950: 502. Type-host: *Penelope purpurascens brunnescens* Hellmayr and Conover. **NEW SYNONYMY.**

Male.—As for *A. pauxis*, except as follows. Slightly more marginal tergal setae on IV–VI, 27–28. Subgenital plate with 4 very long and 3–4 short setae. Genitalia with spiculate sac and paired sclerites above base of parameres meeting at cleft on sac (Fig. 28).

Female.—Also as for *A. parvispina*, except for 30–34 marginal tergal setae IV–VI, 28–34 marginal and 12–16 anterior setae on subgenital plate. Pre-anal plate reduced or absent in specimens studied.

Dimensions.—Preocular width, ♂ 0.34–0.35, ♀ 0.40–0.42; temple width, ♂ 0.57–0.59, ♀ 0.62; prothorax width, ♂ 0.37–0.38, ♀ 0.42–0.46; metathorax width, ♂ 0.50–0.51, ♀ 0.57–0.60; total length, ♂ 1.72–1.76, ♀ 1.72–1.93, ♂ genitalia width 0.15–0.16, length 0.42.

Remarks.—The ♂ genitalia with parallel genitalic sclerites connected anteriorly are the best distinguishing feature of this species.

Material examined.—1 ♂, 1 ♀ (holotype ♂ and paratype ♀ of *Amyrsidea semicracis purpurascens* on USNM slide 68577) *Penelope purpurascens*, Mexico; 1 ♀, 1 ♂ (holotype ♀ and allotype ♂ of *Amyrsidea semicracis brunnescens* on USNM slide 68576) *Penelope purpurascens brunnescens*, Colombia.

***Amyrsidea (Cracimenopon) spicula* Carriker**

Figs. 18, 20

*Amyrsidea spicula spicula* Carriker, 1950, Rev. Acad. Colomb. Cienc., 7: 506.

Type-host: *Ortalis vetula vetula* (Wagler).

Male.—Head and thorax as for male of *A. parvispina*, except only 18–20 short setae on ventral femur III. Slightly more marginal tergal setae on tergites III–V, 26–38. Marginal tergal setae on VI–VIII substantially more; VI, 32–36; VII, 29–33; VIII, 16–20. Ventrally with sternal setae much as for *A. parvispina*, but 45 setae on sternite VII, and sternal brushes with fewer setae; IV, 19–22; V, 19–24; VI, 15–18. Subgenital plate with 10 marginal and 21 anterior setae. Genitalia with characteristic inverted U-shaped sclerite with knob-shaped enlargement anteriorly; with a spiculate genital sac and obvious cross connection of parameres (Fig. 20).

Female.—As for  $\delta$ , but with slightly more marginal tergal setae on II–VIII, 34–45, and slightly larger in all dimensions. Pre-anal plate as in Fig. 18.

Dimensions.—Preocular width,  $\delta$  0.37–0.38,  $\varnothing$  0.38–0.40, temple width,  $\delta$  0.53–0.56,  $\varnothing$  0.55–0.57; prothorax width,  $\delta$  0.40–0.41,  $\varnothing$  0.42–0.44; metathorax width,  $\delta$  0.49–0.52,  $\varnothing$  0.60–0.62; total length,  $\delta$  1.78–1.81,  $\varnothing$  1.84–1.87;  $\delta$  genitalia width 0.15, length 0.55.

Remarks.—The unusual genital sclerite of the  $\delta$  is the most salient feature of this species.

Material examined.—4  $\delta$ , 2  $\varnothing$  (including holotype  $\varnothing$  of *Cracimenopon spicula* on USNM slide 68582, allotype and 2 paratype  $\delta$ ), *Ortalis v. vetula*, Mexico.

### *Amyrsidea (Cracimenopon) sixiola* Carriker

Fig. 27

*Cracimenopon sixiola* Carriker, 1967: 41. Type-host: *Ortalis garrula frantzi* (Cabanis).

Male.—Head and thoracic setae as for *A. pauxis*. Marginal tergal setae: I, 18; II, 20; III–VII, 30; VIII, 18. Last tergite each side with 1 very long marginal seta, 4 medium setae lateroanterior to these, and 10 total inner posterior setae. Ventral abdomen badly rolled, setae obliterated. Genitalia (Fig. 27) very large, with long parameres, but unfortunately specimen overcleared, with no internal features visible.

Female.—Unknown.

Dimensions of  $\delta$ .—Preocular width, 0.40; temple width, 0.67; prothorax width, 0.41; metathorax width, 0.48; total length, 2.03; genitalia width 0.22, length indistinguishable.

Remarks.—This species is described from a single specimen which represents by far the largest in all dimensions of the known species of this subgenus.

Material examined.—Holotype  $\delta$  of *Cracimenopon sixiola* (on USNM slide 68885), *Ortalis garrula frantzi*, Costa Rica. Other  $\delta$  mentioned by Carriker (1967) was not found.

### *Amyrsidea (Cracimenopon) wagleri* Carriker

Fig. 29

*Cracimenopon wagleri* Carriker, 1967: 44. Type-host: *Ortalis wagleri* (G. R. Gray) (= *Ortalis poliocephala* Wagler).

Male.—Like *A. spicula* except as follows. Genitalia as in Fig. 29, with membranous connection of anterior portions of sac sclerite, anterior portion of sclerite well below base of parameres, and small retrorse sclerotizations.

Female.—As for *A. spicula*.

Dimensions.—Preocular width,  $\delta$  0.38,  $\varnothing$  0.41; temple width,  $\delta$  0.52,  $\varnothing$  0.60; prothorax width,  $\delta$  0.40,  $\varnothing$  0.48; metathorax width,  $\delta$  0.50,  $\varnothing$  0.65; total length,  $\delta$  1.81,  $\varnothing$  2.09; male genitalia width 0.15, length indistinguishable.

Remarks.—The  $\delta$  genitalia are the most discernable feature distinguishing this from *A. spicula*.

Material examined.—Allotype  $\delta$  and holotype  $\varnothing$  of *Cracimenopon wagleri* (on USNM slide 68241), *Ortalis wagleri* (G. R. Gray), Mexico.

## NOMINA DUBIA

*Menopon cracis* Giebel, 1866: 391.

Type-host: (*Crax rubirostris*. Misdetermined; see Thompson, 1948) = *Crax globulosa* Spix. Synonym indicated is from Hopkins and Clay (1952). No specimens from this host were available for this study. Specimens reportedly in collection of British Museum (Natural History) could not be located (personal communication, Mr. Christopher Moreby).

*Menopon macropus* Giebel, 1874: 294.

Type-host: *Crax rubirostris*. Misdetermined; see Thompson, 1948: 740. = *Crax globulosa* Spix. The type cannot be located; believed to be lost.

KEY TO SPECIES IN THE SUBGENUS *Cracimenopon*

## MALES

- |  |  |
|--|--|
| 1. Genital sac with U-shaped sclerite (inverted or upright) . . . . .  | 2  |
| – Genital sac with separated sclerites, no sclerite, or partially sclerotized anterior portion of sac . . . . .  | 7  |
| 2. U-shaped genital sac sclerite inverted . . . . .  | 3  |
| – U-shaped genital sac sclerite in upright position . . . . .  | 4  |
| 3. Genital sclerite on posterior portion of spinous sac (Fig. 19) . . . . .  | <i>garruli</i>                               |
| – Genital sclerite on anterior portion of spinous sac (Fig. 20) . . . . .  | <i>spicula</i>                               |
| 4. U-shaped genital sclerite elongated on margins of spinous sac (Figs. 21–22) . . . . .   | <i>aburris</i> (in part)                     |
| – U-shaped genital sclerite shorter . . . . .  | 5  |
| 5. Genitalia with extensive area of sclerotization under spinous sac and sclerite (Fig. 24) . . . . .  | <i>simplex</i>                               |
| – Genitalia without sclerotization under spinous sac . . . . .   | 6  |
| 6. Genital sclerite with retrorse terminal barbs; connection between parameres obvious (Fig. 25) . . . . .   | <i>semicracis</i>                            |
| – Genital sclerite without retrorse barbs, no obvious connection between parameres; small pair of projections on distal portion of the phallus (Fig. 26) . . . . . | <i>rubra</i>                                 |
| 7. Genitalia with sclerotization limited to anterior portion of spinous sac, or without sclerotization . . . . .   | 8  |
| – Genitalia with sclerite along lateral margins of spinous sac . . . . .   | 11   |
| 8. Genitalia with long parameres as in Fig. 27 . . . . .   | <i>sixiola</i>                               |
| – Genitalia with shorter parameres . . . . .   | 9  |
| 9. Genitalia with no connection of anterior portions of sclerites (Fig. 23) . . . . .  | <i>aburris</i> (in part) and <i>jacquacu</i> |
| – Genitalia with membranous connection of anterior portions of sclerites . . . . .   | 10   |
| 10. Anterior portion of genital sclerite at or well above base of paramere (Fig. 28) . . . . .   | <i>purpurascens</i>                          |
| – Anterior portion of genital sclerite well below base of parameres (Fig. 28) . . . . .  | <i>wagleri</i>                               |
| 11. Genital sac with 2 small strips of sclerotization on each side (Fig. 30) . . . . .   | <i>mituensis</i>                             |
| – Genital sac with 1 strip of sclerotization on each side . . . . .  | 11   |

12. Genital sac not deeply cleft below base of parameres (Figs. 31–33)  
 ..... *pauxis*  
 – Genital sac deeply cleft below base of parameres ..... 12
13. Epimeres enlarged and sclerotized with bell-shaped sac connecting them  
 distally (Fig. 34) ..... *rogersi*  
 – Epimeres narrow and not connected (Fig. 35) ..... *caquetae*

## FEMALES

(excluding *sixiola*)

1. Tergite 1 enlarged posteriorly (Figs. 4–8; note thorax omitted in Fig. 7)  
 ..... 2  
 – Tergite I not enlarged posteriorly ..... 7
2. Tergite I extending to middle of abdomen (Figs. 4 and 5) ..... 3  
 – Tergite I shorter, covering less than half of abdomen ..... 4
3. Tergites II–IV tripartite (Fig. 4) ..... *pauxis*  
 – Tergites IV–VI tripartite; anterior setae of middle section indicate fusion  
 of tergites III and IV (Fig. 5) ..... *simplex* and *rubra*
4. Tergites V–VII tripartite; tergites III and IV neither divided nor fused  
 (Fig. 6) ..... *rogersi*  
 – One to all of tergites II–IV tripartite (Fig. 7) ..... 5
5. Only tergite IV tripartite (Fig. 7) ..... *mituensis*  
 – Tergites II–IV tripartite ..... 6
6. Median plate of tergite II with long seta at each posterior corner (Fig. 8)  
 ..... *caquetae*  
 – All setae on median plate of tergite II minute (Fig. 10) ..... *jacquacu*
7. Pre-anal plate entire with roughly circular anterior margin and small  
 rounded notch (Fig. 12) ..... *garruli*  
 – Pre-anal plate divided or apparently absent ..... 8
8. Pre-anal plates arranged in relation to anal sclerite as in Fig. 13 .....  
 ..... *aburris* (in part)  
 – Pre-anal plates arranged variously (Figs. 14–18) .....  
 ..... *aburris* (in part) *semicracis*, *purpurascens*, *spicula*, and *wagleri*.

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