

THREE NEW GENERA OF DERAEOCORINI (HETEROPTERA: MIRIDAE: DERAEOCORINAE) FROM SOUTH AMERICA

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Abstract.—The new genera *Acutifromiris*, *Cephalomiroides*, and *Scutellograndis* are described to accommodate four new species of Miridae from South America and the incertae sedis species, *Eurychilopterella acutifrons* Carvalho. The structures of the male genitalia are illustrated for all species and dorsal habitus views are given for selected species. Scanning electron micrographs of the head and pronotum, metathoracic scent efferent system, and the pretarsus are also provided. The relationships of *Acutifromiris*, *Cephalomiroides*, and *Scutellograndis* to other New World Deraeocorini genera are discussed.

Keywords. Heteroptera, Miridae, Deraeocorinae, Taxonomy, Chile.

During a study of the “*Eurychilopterella* complex” of genera (Stonedahl et al., 1997), three undescribed species of the tribe Deraeocorini were discovered in a collection of Chilean material borrowed from the Canadian National Collection. *Cephalomiroides* and *Scutellograndis* are here described to accommodate these species. *Acutifromiris* is described to include the new species *A. chilensis* and *Eurychilopterella acutifrons* Carvalho, a species placed as incertae sedis by Stonedahl et al. (1997). Terminology for structures of male genitalia follow Kelton (1959) and Stonedahl et al. (1997). All measurements are given in millimetres. Body length is measured from the tip of the tylus to the apex of the hemelytral membrane.

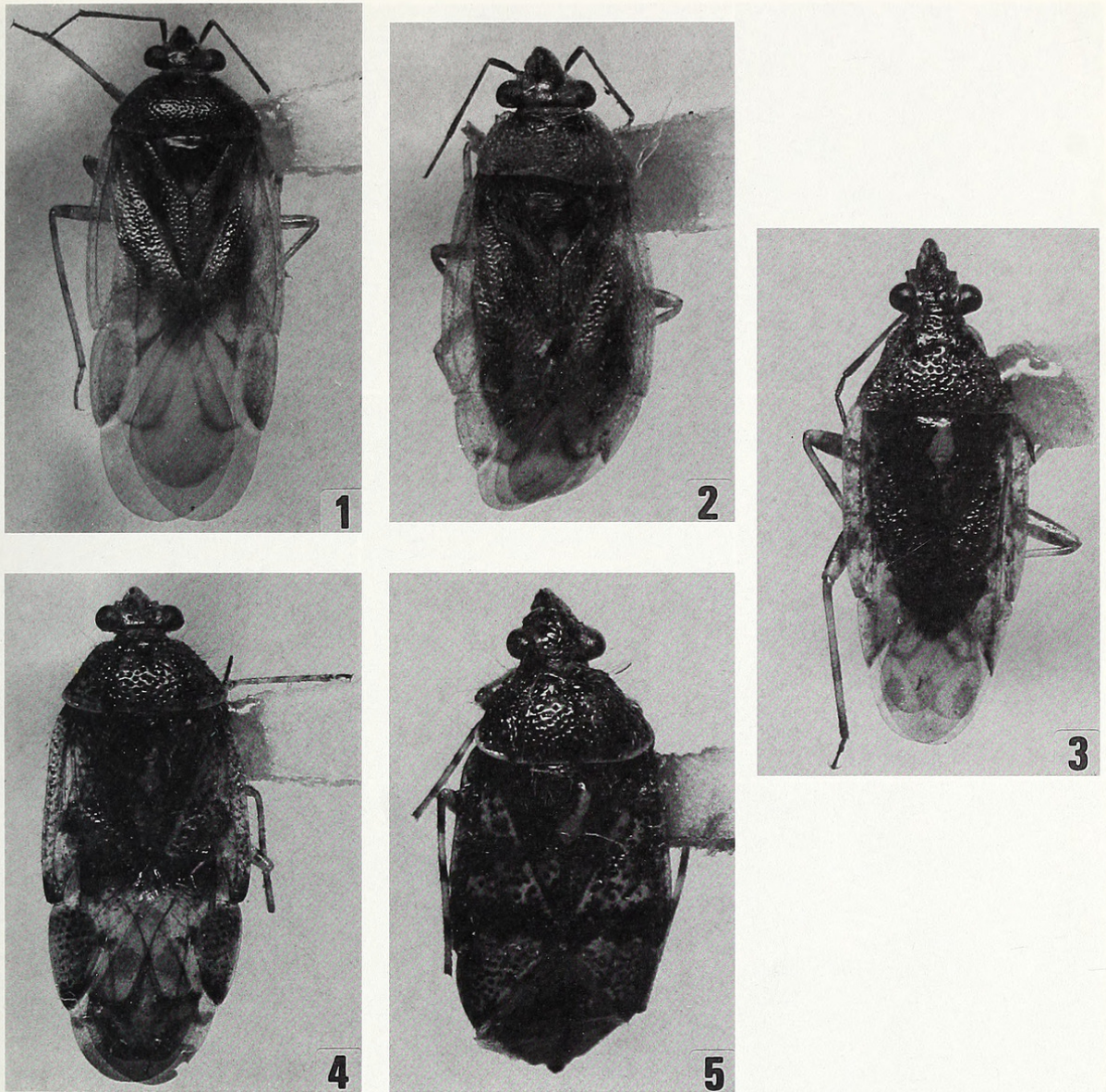
Acutifromiris, new genus

Figs. 1–2, 6–8, 15–20

Type species. *Eurychilopterella acutifrons* Carvalho, here designated.

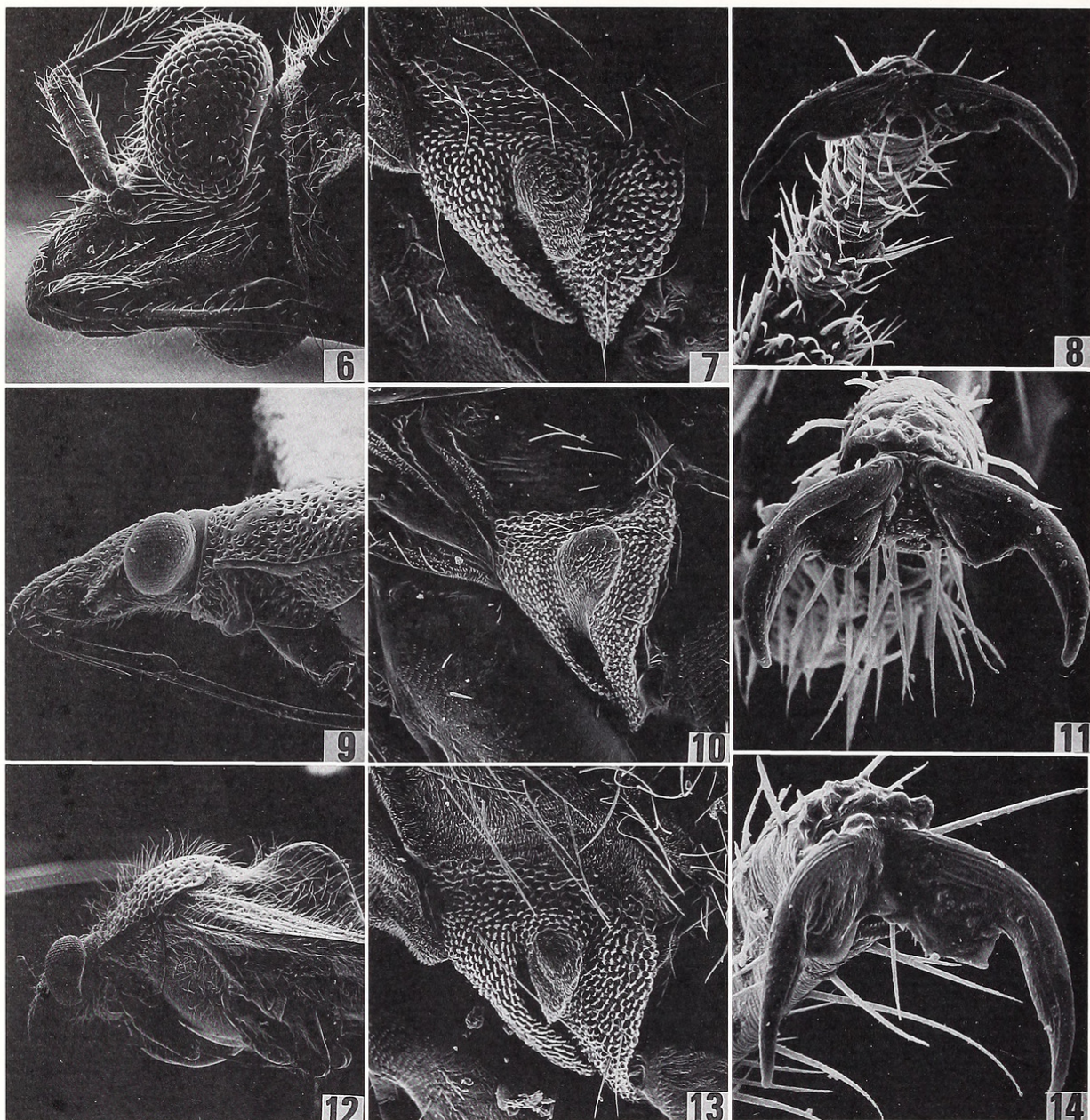
Diagnosis. *Acutifromiris* is distinguished from other New World genera of Deraeocorini by the following combination of characters: head strongly produced anterior to antennal fossae, cone-shaped; gular region flattened, with several weak transverse striations basally, lacking distinct carinae; peritreme of metathoracic scent efferent system strongly elevated, bulbous, coarsely sculptured (Fig. 7); shaft of male left paramere not noticeably expanded distally (Figs. 15–17); and vesica of male genitalia with weakly developed apical lobes and narrow sclerotized process attached to vesica base by fine membrane (Fig. 19). The species of this genus bear a strong superficial resemblance to *Eurychilopterella* species, but the two genera are readily distinguished by the characters given in the following discussion.

Description. Male. Macropterous, length 5.10–5.85; yellow brown with dark brown or black areas on pronotum, calli, and hemelytra; dorsum covered with short, semi-



Figs. 1–5. Dorsal habitus illustrations of Deraeocorinae species. 1–2. *Acutifromiris chilensis*, male and female, respectively. 3. *Cephalomiroides nigrifrons*, male. 4–5. *Scutellograndis nahuelbuta*, male and female, respectively.

erect, white setae. *Head* (Figs 1–2, 6): Broader than long in dorsal view; postero-dorsal margin straight; vertex flat, twice as broad as width of eye; frons produced anteriorly beyond antennal fossae; junction with tylus depressed; mandibular and maxillar plates weakly swollen; bucculae short, expanded; gula broad, concave, with small ridges basally and toward margin at base of antennal fossae, set with long erect white setae; eyes prominent, rounded, occupying entire height of head in lateral view, projected laterally to anterior margin of pronotum; buccal cavity subspherical. *Labium*: Extending to the second abdominal segment. *Antennae*: Cylindrical, linear, situated near ventral margin of eyes; fossae nearly touching margin of eye; segment I thicker than remaining segments; segment II longer than remaining segments; segment III and IV thin; all segments set with erect brown setae. *Thorax*: Pronotum.



Figs. 6-14. Scanning electron micrographs of Deraeocorinae species. 6-8. *Acutifromiris chilensis*. 6. Head, ventral view. 7. Metathoracic efferent system. 8. Pretarsus. 9-11. *Cephalomiroides nigrifrons*. 9. Head, lateral view. 10. Metathoracic efferent system. 11. Pretarsus. 12-14. *Scutellograndis nahuelbuta*. 12. Head, pronotum and scutellum, lateral view. 13. Metathoracic efferent system. 14. Pretarsus.

Trapeziform, punctate; posterior angle rounded; anterior margin with distinct collar; posterior margin straight; anterolateral margin weakly concave; calli flat, depressed mesally; posterior lobe of disk moderately elevated. Scutellum. Flat, smooth. Metathoracic scent efferent system as in Fig. 7. Evaporative area well developed; peritreme textured, rounded distally. *Hemelytra*: Punctate; nearly parallel-sided; emboliar margin slightly concave apically; embolium developed, wider than diameter of antennal segment I; cuneus longer than wide; cuneal incisure distinct; membrane with

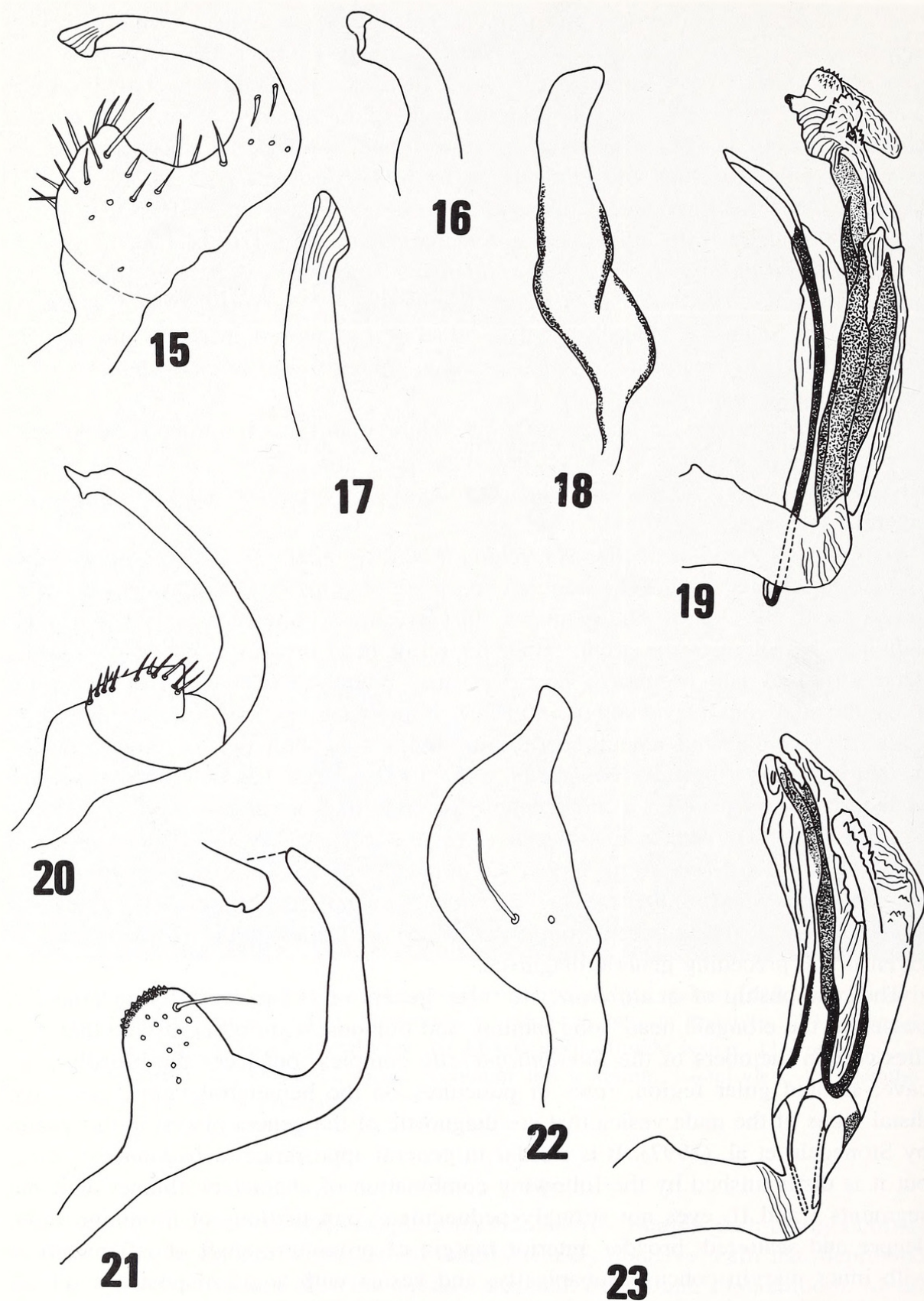
two cells, primary cell longer and rounded apically. *Legs*: Linear, cylindrical; pro- and mesotibia enlarged apically; tarsi linear, segment I longer than remaining segments; segment II short, rounded; segment III three times longer than II; protibiae covered with bristle like setae intermixed with spinules; claws (Fig. 8). *Genitalia*: *Genital capsule*. As broad as long; aperture broad, suboval; paramere sockets set relatively close together and elongate in form. *Left paramere* (Figs. 15–17, 20). Sensory lobe broad, expanded distally; angle strongly curved; shaft long, slightly expanded apically, with inner margin concave subapically; arm bearing long setae dorsally. *Right paramere* (Fig. 18, *A. chilensis* n. sp., only). Relatively small, elongate; apex acute. *Phallosome*. Moderately sclerotized. *Vesica* (Fig. 19, *A. chilensis* n. sp., only). Sclerotized basally, finely toothed near gonopore; membranous sac with teeth apically; angle of posterior ductus seminis giving rise to an elongate sclerotized spicule, slightly expanded apically.

Female. Macropterous, length 4.05–4.50; similar to male in structure, color and vestiture except as noted in species description.

Etymology. Named for the cone-shaped and strongly produced head anterior to the antennal fossae.

Discussion. In a review of the “*Eurychlopterella* complex” of genera, Stonedahl et al. (1997) established that the nominal species *E. acutifrons* Carvalho was not congeneric with the type of the genus, *E. lurida* Reuter, because it lacked the major defining characters of the group: gular region of head broadly concave with transverse striations and prominent lateral carinae; hemelytra with rows of punctures along the anal vein, claval suture and R+M vein; metathoracic scent efferent system with strongly elevated smooth peritreme; and vesica with two or three elongate membranous lobes apically. Stonedahl et al. (1997) assigned *E. acutifrons* the status of incertae sedis pending a more detailed review of Central and South American Deraeocorini. Our further investigations of the tribe, while not exhaustive, have failed to reveal a described genus to accommodate this species, so we are describing the new genus *Acutifromiris* to receive *E. acutifrons* and the new species *A. chilensis*. *Acutifromiris* is distinguished from other genera of Deraeocorini by the characters given in the preceding generic diagnosis.

The relationship of *Acutifromiris* to other genera of Deraeocorini is uncertain. It possesses the elongate head, long labium, and bulbous, textured peritreme that typifies certain members of the *Eurychlopterella* complex, but lacks the broadly concave, striated gular region, rows of punctures on the hemelytral veins, and large distal lobes of the male vesica that are diagnostic of the genera placed in this group by Stonedahl et al. (1997). It is similar in general appearance to *Iridiomiris* China, but it is distinguished by the following combination of characters: thinner antennal segments I and II; eyes not strongly pedunculate; punctuations of pronotum more deeper and scattered; broader anterior margin of pronotum; shaft of left paramere with inner margin concave subapically; and vesica with angle of posterior ductus seminis with an elongate sclerotized spicule, slightly expanded apically. A detailed phylogenetic study of at least the Western Hemisphere genera of Deraeocorini is needed to further address the topic of generic relationships of this and other South American genera.



Figs. 15–23. Male genitalia of Deraeocorinae species. 15–19. *Acutifromiris chilensis*. 15, Left paramere, dorsal view. 16. Apex of the left paramere, dorsal view. 17. Apex of the shaft, ventral view. 18. Right paramere, dorsal view. 19. Vesica. 20. *A. acutifrons* (Carvalho), left

Acutifromiris acutifrons (Carvalho)

Fig. 20

Eurychlopterella acutifrons Carvalho, 1948:57. NEW COMBINATION.

Diagnosis. Similar to *A. chilensis* n. sp., but distinguished by the relatively smaller size; brown general coloration; and the structure of the male genitalia, especially the longer arm of the left paramere with the shaft distinctly produced apically (Fig. 20).

Redescription. Macropterous male; total length 4.65–5.10; yellowish brown general coloration; dorsal vestiture and punctation as in generic description. *Head*: Length 0.60; width across eyes 0.75–0.90; width of vertex 0.45; smooth, brown, two times wider than long; mandibular and maxillar plates dark brown, almost black; eyes black. *Labium*: Length 2.10–2.25, brown. *Antennae*: I, length 0.30, yellow; II (N = 1), 1.05, yellow, dark brown apically; III and IV missing. *Thorax*: Pronotum. Mesal length 0.75–0.90; posterior width 1.55–1.67; brown, punctate. Scutellum. Brown, creamy white apically. *Hemelytra*: Emboliar margins weakly parallel-sided, punctate, uniformly brown; clavus and cuneus sometimes darker; length of the cuneus 0.75–0.78. *Venter*: Brown, dark brown on mesepisternum and metapleura. *Legs*: Linear, evenly yellow. *Genitalia* (Fig. 20).

Female. Unknown.

Types. *Eurychlopterella acutifrons* Carvalho: CHILE, Valparaiso, 1 ♂ (Holotype, without right antenna and abdomen; left antenna with segments III and IV missing), 1945, Guszman (USNM). Paratypes: 1 ♂ (without antennae and abdomen), same data as for holotype, Carvalho (MNRJ).

Discussion. *Acutifromiris acutifrons* is only known from two males collected in Chile. The original description gave "Carvalho" as collector of the holotype, but the affixed label gives Guszman as the collector. Both specimens lack an abdomen, making it impossible to examine and compare the genitalic structures of this species with those of *A. chilensis*. Carvalho's (1948) drawing of the vesica of *A. acutifrons* is not sufficiently detailed to allow for direct comparison with *A. chilensis*.

Acutifromiris chilensis, new species

Figs. 1–2, 6–8, 15–19

Diagnosis. Similar to *A. acutifrons* Carvalho and *Idiomiris magellanesensis* China in general appearance, but distinguished by head with distinct black stripes basally; calli, scutellum, and two spots on the clavus dark brown to black; and the structure of the male genitalia (Figs. 15–19).

Description. Male (N = 5). Length 5.10–5.55; general color and vestiture as in generic description. *Head*: Length 0.45–0.60; width across eyes 0.88–0.90; width of vertex 0.45; brown; tylus sometimes yellow, darker at junction with bucculae; maxillary plate and bucculae dark brown; mandibular plate and gula yellowish brown. *Labium*: Length 1.80–2.10, brown, last segment dark brown. *Antennae*: I, length

←

paramere, dorsal view (after Carvalho, 1948). 21–23. *Cephalomiroides elongatus*. 21. Left paramere, dorsal view. 22. Right paramere, dorsal view. 23. Vesica.

0.30, dark brown; II, length 0.90–1.20, brown, darker and slightly enlarged apically; III and IV, dark brown, length 0.45–0.49 and 0.30–0.37, respectively. *Thorax*: Pronotum. Median length 0.75–0.84; posterior width 1.50–1.65, yellow, light brown between calli; calli black. Scutellum. Dark brown, marked with yellow at anterior angles and apex. Metathoracic efferent system as in Fig. 7. *Hemelytra*: Clavus, mesally and apically, and corium mesally, dark brown, remaining areas yellowish brown; cuneus usually marked with red; membrane opaque, veins brown. *Venter*: Dark brown. *Legs*: Yellow with dark brown annuli. *Genitalia* (Figs. 15–19).

Female (N = 5) (Fig. 2). Similar to male in general appearance, except slightly smaller with dark brown frons and scutellum, paler cuneus, and mesepisternum sometimes nearly black. Total length 4.05–4.35. *Head*: Length 0.60; width across eyes 0.90; width of vertex 0.52. *Labium*: Length 1.80–2.10. *Antennae*: I, length 0.30; II, 0.75; III, 0.45; IV, 0.30–0.36. *Thorax*: Pronotum. Mesal length 0.75; posterior width 1.50–1.65.

Etymology. Named after the country in which it was collected.

Types. Holotype, ♂, CHILE, Las Cabras, Cord. Chillian, 6/3.iii.1959, L. E. Peña (CNC). Paratypes: CHILE, **Lautin**: 6 ♂♂ and 3 ♀♀, 30 Km NE Villarrico, 1/30.i.1965, L. E. Peña (USNM); 1 ♀, Pemehue, 11.i.1986, Gutierrez (USNM). **Mallica**: 1 ♀, Termas Rio Grande, Valdivian Rain Forest, 23.xi.1979, A. C. Asmolth & J. W. Haganson, on *Chusquea* sp. (CNC). **Ñuble**: 6 ♂♂ and 13 ♀♀, Las Cabras, Chilean Vulcain, 7/15.xi.1959, L. E. Peña (CNC; BMNH); 7 ♂♂ and 5 ♀♀, Las Cabras, Cord. Chillian, 6/31.i.1959, L. Peña (CNC; BMNH); 9 ♂♂, Las Cabras, 24.ii.1956, L. Peña, 1460 m (CNC; BMNH); 4 ♀♀, Las Trancas, 15.ii.1959, L. E. Peña (CNC); 1 ♂, Las Cabras, 1460 m, 24.ii.1956 (CNC). **Curico**: 1 ♂, Cubillo, 4.i.1960, L. Peña (CNC).

Material examined. *Iridiomiris magellanesensis* China: CHILE, **Magallanes**, 1 ♂ (holotype), Puerto Williams, 17.i.1959, Roy. Soc. Exped. S. Chile 1958–59, G. Kuschel; 1 ♀ (allotype), same data as holotype; 1 ♀ (paratype), same data as holotype, 18.i.1959 (all BMNH).

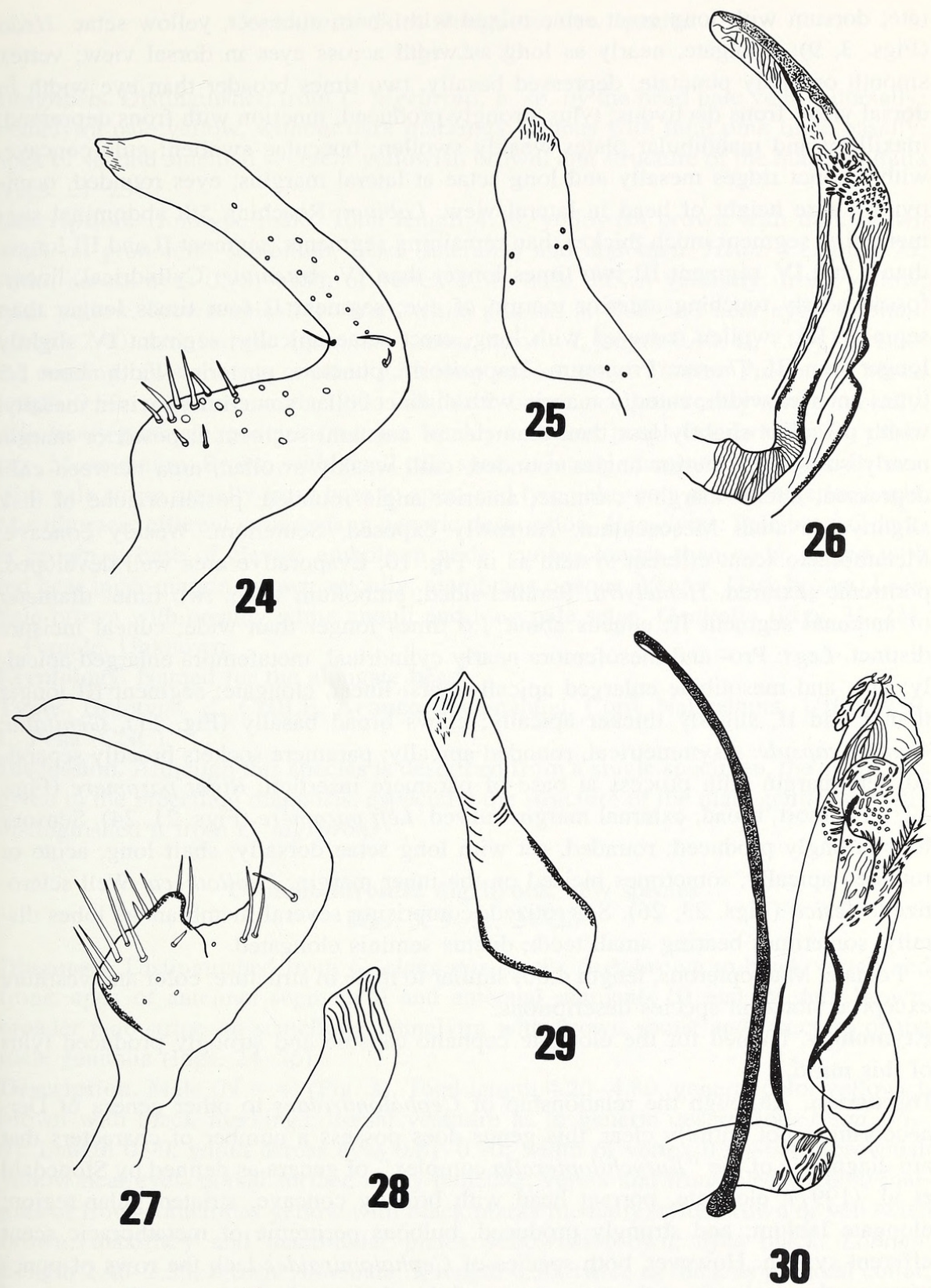
Cephalomiroides, new genus

Figs. 3, 9–11, 21–26

Type species. *Cephalomiroides nigrifrons*, new species, here designated.

Diagnosis. Distinguished from other New World genera of Deraeocorini by the following characters: elongate body; tylus strongly produced, conical; second antennal segment longer than head length; gula weakly concave, bearing distinct ridges mesally, lateral margins carinate, covered with long silvery setae; labium reaching at least to 5th abdominal segment; embolium wide, with row of fine punctures on basal half of R+M vein; peritreme of metathoracic scent efferent system strongly produced, bulbous, coarsely sculptured (Fig. 10); left paramere with strongly produced sensory lobe and shaft not noticeably expanded distally (Figs. 21, 24); and vesica without sclerotized process and recurved apical lobes, sometimes with teeth or spines near gonopore and sclerotized areas basally (Figs. 23, 26).

Description. Male. Macropterous; length 4.20–4.80; brownish yellow general coloration, sometimes with dark brown or black areas on head, pronotum, scutellum and base of clavus; cuneus with dark red tinge; pronotum, head and embolium punc-



Figs. 24–30. Male genitalia of Deraeocorinae species. 24–26. *Cephalomiroides nigrifrons*. 24. Left paramere, dorsal view. 25. Right paramere, dorsal view. 26. Vesica. 27–30. *Scutellograndis nahuelbuta*. 27. Left paramere, dorsal view. 28. Apex of the left paramere, dorsal view. 29. Right paramere, dorsal view. 30. Vesica.

tate; dorsum with long erect setae mixed with short, suberect, yellow setae. *Head* (Figs. 3, 9): Elongate, nearly as long as width across eyes in dorsal view; vertex smooth or finely punctate, depressed basally, two times broader than eye width in dorsal view; frons declivous; tylus strongly produced, junction with frons depressed; maxillary and mandibular plates weakly swollen; bucculae swollen; gula concave, with distinct ridges mesally and long setae at lateral margins; eyes rounded, occupying entire height of head in lateral view. *Labium*: Reaching 5th abdominal segment, first segment much thicker than remaining segments, segment II and III longer than I and IV, segment III two times longer than IV. *Antennae*: Cylindrical, linear; fossae nearly touching anterior margin of eye; segment II four times longer than segment III, swollen, covered with long, erect setae apically; segment IV slightly longer than III. *Thorax*: Pronotum. Trapeziform, punctate, posterior width about 1.5 times anterior width; anterior margin with distinct collar, sometimes incised mesally, width of collar slightly less than diameter of antennal segment I; posterior margin nearly straight; posterior angles rounded, calli weakly swollen, area between calli depressed; lateral margins carinate; anterior angle rounded; posterior lobe of disk slightly elevated. Mesoscutum. Narrowly exposed. Scutellum. Weakly concave. Metathoracic scent efferent system as in Fig. 10. Evaporative area well developed, peritreme textured. *Hemelytra*: Parallel-sided; embolium wide, two times diameter of antennal segment II; cuneus about 1.6 times longer than wide; cuneal incisure distinct. *Legs*: Pro- and mesofemora nearly cylindrical, metafemora enlarged apically; pro- and mesotibiae enlarged apically; tarsi linear, elongate; segment III longer than I and II, slightly thicker apically; claws broad basally (Fig. 11). *Genitalia*: *Genital capsule*. Asymmetrical, rounded apically; paramere sockets broadly separated; left margin with process at base of paramere insertion. *Right paramere* (Figs. 22, 25). Short, broad, external margin curved. *Left paramere* (Figs. 21, 24). Sensory lobe strongly produced, rounded, set with long setae dorsally; shaft long, acute or rounded apically, sometimes incised on the inner margin. *Phallosome*. Well sclerotized. *Vesica* (Figs. 23, 26). Sclerotized, comprising several membranous lobes distally, sometimes bearing small teeth; ductus seminis elongated.

Female. Macropterous, length 4.80; similar to male in structure, color and vestiture except as noted in species descriptions.

Etymology. Named for the elongate cephalic capsule and strongly produced tylus of this mirid.

Discussion. Although the relationship of *Cephalomiroides* to other genera of Deraeocorini is not entirely clear, this genus does possess a number of characters that are diagnostic of the "*Eurychlopterella* complex" of genera as defined by Stonedahl et al. (1997): elongate, porrect head with broadly concave, striated gular region; elongate labium; and strongly produced, bulbous peritreme of metathoracic scent efferent system. However, both species of *Cephalomiroides* lack the rows of punctures on the anal vein and outer margin of the clavus, which also are diagnostic of the "*Eurychlopterella* complex", as well as the strongly developed, elongate apical lobes of the male vesica. Considering these discrepancies, we prefer for the moment to place *Cephalomiroides* near but not within the "*Eurychlopterella* complex" pending a more thorough investigation of taxa and characters within the Deraeocorini.

Cephalomiroides elongatus, new species

Figs. 21–23

Diagnosis. Distinguished from *C. nigrifrons*, n. sp. by the head pale yellow dorsally; hemelytra pale yellow, without dark markings; cuneus with faint pink tinge basally; apex of second antennal segment yellowish brown; and structure of the male genitalia (Figs. 21–23).

Description. Holotype male. Total length 4.50; yellowish brown with dark brown areas on pronotum, scutellum, head (laterally) and abdomen. *Head*: Length 0.75; width across eyes 0.75; width of vertex 0.30; dark brown ventrally; frons yellow; tylus yellow, brown apically; vertex white pinkish at base and near eyes. *Labium*: Length 2.40, dark brown. *Antennae*: Linear, brown; I, length 0.30; II, 1.05; III, 1.00; IV, missing; all segments covered with long yellow setae. *Thorax*: Pronotum. Mesal length 0.60; posterior width 1.80; calli dark brown, collar creamy white mesally; disk finely punctate; posterior margin weakly concave; propleura dark brown, punctate. Mesoscutum. Brown with small pale spots at lateral margins. Scutellum. Brown, with pale stripe mesally from base to apex, and two pale spots at each anterior angle. Metathoracic efferent system as in generic description. *Hemelytra*: Pale brown, darker brown at base of clavus; embolium wide; cuneus longer than wide, tinged with red near inner margin, brown apically; membrane opaque. *Venter*. Dark brown. *Legs*: Pale brown with creamy white annuli and long pale setae. *Genitalia* (Figs. 21–23).

Female. Unknown.

Etymology. Named for the elongate head.

Types. Holotype, ♂, CHILE, Arauco, Pichinahuel, Cord. Nahuelbuta, 1/10.i.1959, L. Peña (CNC).

Discussion. Although this species is described from a single specimen, the characters given in the preceding diagnosis, especially the structure of the male genitalia, easily distinguished it from *C. nigrifrons*.

Cephalomiroides nigrifrons, new species

Figs. 3, 9–11, 24–26

Diagnosis. Distinguished from *C. elongatus* by the dark-brown to black vertex and frons; apex of antennal segment II and antennal segments III and IV dark brown; broader pale stripe on scutellum; hemelytra with brown spots; and structure of the male genitalia (Figs. 24–26).

Description. Male (N = 4) (Fig. 3). Total length 4.20–4.80; general color yellowish brown with black markings; dorsal vestiture as in generic description. *Head* (Fig. 9): Length 0.90; width across eyes 0.81–0.90; width of vertex 0.30–0.45; brownish yellow near eyes, dorsal surface finely punctate; vertex and frons black, lateral margins of frons sometimes yellow with black marks medially; tylus brown or yellowish brown; maxillary and mandibular plates yellowish brown; eyes black. *Labium*: Length 2.40–2.55, brown. *Antennae*: I, length 0.30, twice as thick as pronotal collar; II, 1.20–1.35, four times longer than I, enlarged apically, dark brown subapically, set with short setae; III and IV subequal, 0.15–0.30 and 0.15–0.39, respectively. *Thorax*: Pronotum. Mesal length 0.75–0.90; posterior width 1.48–1.61; punctate, brownish yellow with black areas towards humeral angles and posterior margin; calli black. Scutellum. Anterior angle dark brown with broad, creamy white mesial stripe.

Metathoracic efferent system as in Fig. 10. *Hemelytra*: Emboliar margins nearly parallel-sided; clavus and cuneus with short, silvery, recumbent setae; clavus black basally; corium and cuneus with light brown spots; cuneus yellow, sometimes with pink tinge apically; membrane opaque, with dark brown areas; veins brown. *Venter*: Dark brown; mesepisternum sometimes black. *Legs*: Linear; femora brown with dark brown spots; tibiae yellowish brown with a pale annulus subapically. *Genitalia* (Figs. 24–26).

Female (N = 3). Similar to male in general structure and coloration, except head more yellow dorsally. Total length 4.80. *Head*: Length 0.45–0.60; width across eyes 0.81–0.90; width of vertex 0.45. *Labium*: Length 2.55–2.70. *Antennae*: I, 0.30; II, 1.05–1.20; III, 0.15–0.30; IV, 0.15–0.30. *Thorax*: Mesal length of pronotum 0.90–1.05; posterior width of pronotum 1.50–1.35.

Etymology. Named for the dark-brown to black frons.

Types. Holotype, ♂, CHILE, **Arauco**, Pichinahuel, Cord. Nahuelbuta, 20.i.1951, L. Peña (CNC). Paratypes: CHILE, **Ñuble**: 2 ♂♂ and 1 ♂, Las Cabras, Chilean Vulcain, 7/15.xi.1959, L. E. Peña (CNC; BMNH); 1 ♀, Las Trancas, 23/30.ii.54, 1260 m (CNC); 1 ♀, Las Trancas, 10.ii.1959, L. E. Peña; 1 ♀, Las Cabras, Cord. Chillian, 6/31.i.1959, L. Peña (CNC). **Arauco**: 1 ♀, Pichinahuel, Cord. Nahuelbuta, 23/31.xi.1958, L. Peña (CNC).

Scutellograndis, new genus

Figs. 4–5, 12–14, 27–30

Type species. *Scutellograndis nahuelbuta*, new species, here designated.

Diagnosis. Distinguished from other New World genera of Deraeocorini by the deeply punctate pronotum and cuneus (Figs. 4, 5); strongly swollen, cone-shaped scutellum; head, antennae, dorsal surface of body and legs with long, erect setae; small, bilobed, coarsely sculptured peritreme of metathoracic scent efferent system (Fig. 13); and structure of male genitalia, especially the left paramere with strongly produced sensory lobe and blunt shaft, apically (Figs. 27–28); and vesica strongly sclerotized, surrounding ductus seminis, with elongate sclerotized process arising from posterobasal margin of ductus seminis (Fig. 30).

Description. Male. Macropterous; length 5.40–5.85; dark brown, sometimes faintly tinged with red especially on cuneus; pronotum and cuneus strongly punctate; dorsum with long, simple, erect, brown setae intermixed with short, semidecumbent, white setae. *Head* (Figs. 4, 12): Declivous, two times wider than long; posterodorsal margin straight; junction of tylus and frons indistinct; maxillary and mandibular plates weakly swollen; gula short, clothed with long setae; eyes subovate, occupying entire height of head in lateral view, projecting laterally in dorsal view; bucculae large. *Labium*: Reaching the metacoxae, segment I shorter and thicker than remaining segments. *Antennae*: Linear; fossae inserted near base of eye and nearly contiguous with anterior margin of eye; segment II longer than remaining segments; all segments with long brown setae, intermixed with short white semierect setae; segment III longer than segment IV. *Thorax*: Pronotum. Trapeziform, punctate, moderately declivous; collar, medially, wider than diameter of antennal segment I; median length subequal to length of antennal segment II; calli weakly elevated; posterior and anterior angles rounded; posterior margin moderately concave. Scutellum. Smooth,

strongly swollen, cone-shaped, higher than pronotum in lateral view. Metathoracic scent efferent system as in Fig. 13. Evaporative area well developed; peritreme bilobed, bulbous distally. *Hemelytra*: Emboliar margins parallel-sided; embolium weakly punctate, two times wider than diameter of antennal segment I; cuneal fracture distinct; cuneus two times longer than wide, deeply punctate; membrane with two cells, secondary cell elongate. *Legs*: Linear; metafemora longer than pro- and mesofemora; protibiae swollen apically; metatibiae linear, with dark spinules, and dark, erect setae longer than tibial width; tarsi elongate, linear, segment I enlarged, segment II short, segment III longer than I and II; claws deeply cleft, broad basally (Fig. 14). *Genitalia*: *Genital capsule*. Longer than broad, narrowed apically; paramere sockets widely separated; right margin of capsule between paramere sockets, expanded. *Right paramere* (Fig. 29). Short, arm expanded basally, apex truncate. *Left paramere* (Figs. 27–28). C-shaped with long setae dorsally; sensorial lobe strongly produced, notched apically; shaft long. *Phallosome*. Fully sclerotized. *Vesica* (Fig. 30). Membranous, with sclerotized areas basally overlaying ductus seminis, spinous near gonopore, with elongate sclerotized process.

Female. Macropterous; length 4.50–5.40; similar to male in color, structure and vestiture, except abdomen sometimes paler ventrally.

Etymology. Named for the distinct strongly swollen, cone-shaped scutellum.

Discussion. The relationships of *Scutellograndis* to other genera of Deraeocorini are uncertain. In general aspect this genus is similar to *Deraeocoris*, but differs by the greatly enlarged scutellum and the long erect setae on head, antennae, dorsal surface of body, and legs. It is also close to *Eurychlopterella* and *Acutifromiris* by having an elongate sclerotized process in the vesica of the male genitalia, but the length and shape of this process and the unique structure of scutellum easily separate *Scutellograndis* from these two genera. Since our preliminary examination of Old and New World Deraeocorini has failed to reveal other genera with close affinities to *Scutellograndis*, we are unable at present to speculate further on the relationships of this genus to other groups of Deraeocorini.

***Scutellograndis nahuelbuta*, new species**

Figs. 4–5, 12–14, 27–30

Diagnosis. Recognized by the characters given in the generic diagnosis.

Description. Male (N = 4) (Fig. 4). Total length 5.40–5.80; general coloration, surface texture and dorsal vestiture as in generic description. *Head*: Length 0.60–0.75; width across eyes 1.05; width of vertex 0.45; dark brown with two yellow spots near inner dorsal margin of eye; tylus brown; maxillary and mandibular plates yellowish brown; bucculae nearly black; gula yellow basally. *Labium*: Length 1.35–1.65, brown. *Antennae*: I, length (N = 2) 0.45, yellow ventrally, dark brown dorsally; II (N = 1), 1.05, brown; III and IV, dark brown, length (N = 1) 0.45 and 0.28, respectively. *Thorax*: Pronotum. Mesal length 0.75–1.03; posterior width 1.50–1.95; brown, with three dark marks along subposterior margin; posterior margin narrowly pale; collar dark brown, yellow mesally. Mesoscutum. Short, brown. Scutellum. Brown with creamy white stripe along posterior margin of elevation (dorsal view); sometimes black basally. Metathoracic scent efferent system as in generic description. *Hemelytra*: Dark brown, with darker areas at apex of embolium and mesally on

clavus and corium; corium brown, marked with white near base and sometimes spotted with brown along inner apical margin; membrane opaque with white marks. *Venter*. Mesosternum black; metathoracic efferent system yellow with black areas bordering peritreme; abdominal segments dark brown. *Legs*: Pro- and mesofemora yellow, dark brown basally, with brown spots on external surface; metafemora with two dark brown annuli apically; tibiae yellow with dark brown annuli; tarsi yellowish brown. *Genitalia* (Figs. 27–30).

Female (N = 7) (Fig. 5). Similar to male except abdominal segments usually yellow; 9th abdominal segment yellow basally, and dark brown apically. Total length 4.50–5.40. *Head*: Length 0.60–0.75; width across eyes 0.90–1.05; width of vertex 0.45–0.55. *Labium*: Length 1.65–1.80. *Antennae*: I, length (N = 5) 0.45; II (N = 5), 0.90–1.05; III (N = 3), 0.30–0.57; IV (N = 2), 0.30–0.36. *Thorax*: Mesal length of pronotum 1.03–1.05; posterior width of pronotum 1.65–1.80.

Etymology. Named for the type locality, Cordillera Nahuelbuta, Chile.

Types. Holotype, ♂, CHILE, **Arauco**, Pichinahuel, Cord. Nahuelbuta, 20/28.i.1959, L. Peña (CNC). Paratypes: CHILE, **Ñuble**: 1 ♂, Las Cabras, Chilean Vulcain, 7/15.ii.1959, L. E. Peña (CNC); 1 ♂, Coquecura, 13.xi.1959, L. E. Peña (CNC.); 3 ♀♀, same data as holotype, 1/10.i.1959 (CNC; BMNH); 1 ♀, Las Cabras, Chilean Vulcain, 7/15.xi.1959, L. E. Peña (CNC); **Aconcagua**: 7 ♀♀, Guardia Vieja, 22.xi.1958, L. E. Peña (CNC; BMNH); 1 ♀, Rio Blanco, 29.xi.1958, L. Peña (CNC); **Coquimbo**: 1 ♀, Had Illapel, 21/25.xi.1958 (CNC); **Curico**: 1 ♂, El Coigo, 1/20.x.60, L. Peña (CNC); 5 ♀♀, Las Cabras, Cord. Chilean, 6/31.i.1959, L. Peña (CNC; BMNH).

Additional material examined. CHILE, **Arauco**: 1 ♂ and 1 ♀, Butamal, Cord. Nahuelbuta, 12.i.1959, L. Peña; 3 ♀♀ and 1 ♂, Las Cabras, Cord. Chilean, 6/31.iii.1959, L. Peña; 1 ♂, Pichinahuel, Cord. Nahuelbuta, 28/31.i.1959, L. Peña; **Aconcagua**: 1 ♀, Rio Blanco, 27.xi.1958, L. Peña; 1 specimen without abdomen, Piscicultura, 21/25.xi.1958 (all CNC).

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