

A REVIEW OF THE CHILEAN ANTHICIDAE (COLEOPTERA)¹

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Abstract

The described Chilean species are keyed and discussed briefly, and their ranges indicated. Recognized precinctive species are: *Anthicus crux* Fairm. & Germ., *A. melanurus* Fairm. & Germ., *Chileanthicus lafertei* (Solier), *C. penai* Werner, *Ischyropalpus curtisi* (Solier), *I. maculosus* (Fairm. & Germ.), *I. parallelus* (Solier), *I. testaceoguttatus* (Fairm. & Germ.), and *Vacusus chilensis* (Solier). Additional recognized species recorded from Chile are *Ischyropalpus sericans* (Er.), which ranges into far northern Chile from coastal Peru, and the following probable adventives: *Acanthinus strangu-latus* (Pic), *Anthicus floralis* (L.), *A. torquatus* Werner, and *Vacusus holoxanthus* (Fairm. & Germ.). *Apotominus nigrozonatus* Fairm. & Germ., and *Heterolobus aeneus* Philippi and Philippi are treated as incertae sedis but probably not Anthicidae. The species of *Anthicoxenus* have previously been transferred to Meloidae by Selander. The following NEW SYNONYMY is proposed: *Ischyropalpus parallelus* (Solier) [= *Anthicus planicollis* Fairm. & Germ., = *Anthicus nigro-femoratus* Fairm. & Germ., = *Anthicus* (*Ischyropalpus*) *Curtisi* var. *latereductus* Pic].

The last general summary of the Anthicidae of Chile was published by Fairmaire and Germain in 1863. The present paper is an attempt to provide a modern summary of the family in this fauna. A large proportion of the known species was described in a period of barely more than 20 years in the 19th Century (Solier 1851, Fairmaire and Germain 1860, 1863, Philippi and Philippi 1864, and Philippi 1873). Since then there have been several additions and deletions, but no comprehensive key to species or updating of known distribution.

My interest in and familiarity with the Chilean fauna is largely the result of the activities of Mr. Luis Peña of Santiago. The collections made by E. S. Ross and A. E. Michelbacher for the California Academy of Sciences are also rather extensive. But most other collections have Chilean anthicids very poorly represented.

The species and groups of greatest interest are those that are precinctive in the Chilean fauna, of course. A major part of this paper is an attempt to identify these and distinguish them from species that appear to have been temporarily establis-

hed in parts of Chile at one time or another. In a few cases it is not really clear that the specimens allegedly originating in Chile actually did so, because the labels are very general.

The precinctive species known to me belong to the general *Anthicus*, *Chileanthicus*, *Ischyropalpus*, and *Vacusus*. All but the first of these genera are confined to the New World. *Chileanthicus* was described from the Atacama Desert, and may show relationship to some Australian species (Werner 1966b). *Ischyropalpus* and *Vacusus* are widespread in South and North America. The two Chilean species of *Anthicus* seem not to be closely related to each other or to any known species from other regions.

Three other genera, originally described as anthicids, are also found in Chile. *Anthicoxenus* has been transferred to the Meloidae (Selander 1966). *Apotominus* and *Heterolobus* are unknown to me, but by description do not seem to possess anthicid-like characters.

KEY TO SPECIES

1. Hind femur with a distinct tooth near middle. Elytra of known species with an interrupted white band near middle, inflated, and with obsolescent humeri. Prov. Atacama and Coquimbo, with seven

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- ral undescribed species in the latter.
Chileanthicus 2
 Hind femur without tooth and elytra without white midband 3
- 2.(1) Tergum 7 of female simple. 2.7-4 mm, shiny, forebody dark brown to rufous, elytra dark or obscurely rufescent at base. Long setae of dorsal surface almost erect and long. Elytra more swollen, with apices only slightly truncate. *Chileanthicus lafertei* (Solier)
 Tergum 7 of female with a small hump near apex, divided on midline. 2.5-3.8 mm, from all dark except for elytral band to rufous on forebody with base, suture and apex of elytra pale. Long setae of dorsal surface less erect and shorter. Elytra less swollen, with apices more truncate. *Chileanthicus penai* Werner
- 3.(1) Prothorax divided into an anterior and a posterior lobe by a broad lateral constriction and deep dorsal saddle. 2.5-3 mm, very shiny and glabrous except for erect tactile setae, brown, elytra obscurely paler at base. Doubtfully Chilean. *Acanthinus strangulatus* (Pic)
 Prothorax not divided into an anterior and a posterior lobe 4
- 4.(3) Mesosternum expanded so that it forms a plate with strongly curved anterolateral margins, fringed with fine setae appressed to mesepisterna. Last segment of maxillary palpi securiform 5
 Mesosternum with anterolateral margins straight or slightly curved, not fringed with setae. If mesosternal margins slightly curved, last segment of maxillary palpi usually very broadly triangular. .7
- 5.(4) Head and pronotum subopaque, deeply strigulose between punctures. 2.6-3.2 mm, dark brown, appearing glabrous, elytra rufous across base, head truncate, pronotum with a pair of small bumps on disc near front. Cosmopolitan and reported through synonymy, but not recorded from Chile in recent years. ... *Anthicus floralis* (L.)
 Head and pronotum smooth and shiny between punctures 6
- 6.(5) Head oval, almost evenly rounded behind eyes. 2.5 mm, shiny, rufescent with head darker and elytra dark beyond basal third except for an invasion from front along suture, the dark area enclosing a conspicuous pale spot in apical third of each elytron. Prov. Coquimbo — Santiago *Vacusus chilensis* (Pic)
 Head truncate at base. Ca. 2 mm, moderately slender, parallelsided, uniformly luteous. Described from Chile but not taken in recent years and probably an introduction
Vacusus holoxanthus (Fairm. & Germ.)
- 7.(4) Anterolateral margins of mesosternum straight. Last segment of maxillary palpi securiform. *Anthicus* 8
 Anterolateral margins of mesosternum slightly curved. Last segment of maxillary palpi broadly triangular in most species, at least in male of all Chilean species. *Ischyropalpus* 10
- 8.(7) Rufous with slightly less than apical half of elytra and abdomen beyond sternum 1 contrastingly black. 2.8-3.8 mm shiny, sparsely pubescent. Prothorax with patches of dense pubescence on sides near front and rear. Prov. Aconcagua — Concepción
Anthicus melanurus. ... Fairm. & Germ. Not so marked 9
- 9.(8) Luteous to rufescent, elytra with a dark midband and sometimes base and suture before midband also dark. 2.3-2.6 mm, pubescence moderately dense, underside mostly dark, legs pale, antennae simple. Prov. Valparaíso — Arauco
 *Anthicus crux* Fairm. & Germ. Luteous, elytra often with a dark clouding on suture in apical third. 3-3.9 mm., fairly slender, appearing glabrous. Head oval, prosternum with a pubescence-lined excavation across front. Male antennae with middle segments enlarged, flat. Collected at Santiago in 1953 but probably an introduction from Argentina. *Anthicus torquatus* Werner
- 10.(7) Some of pubescence in postbasal transverse impression of elytra oblique. ... 11
 Pubescence in transverse impression no more oblique than it is in the region of the impression 12
- 11.(10) Entirely dark brown except for a lateral yellowish-white spot in transverse impression. 2.8-3.4 mm, pubescence moderately dense, fine. Male parameres symmetrical, with a small subapical hook. Prov. Linares—Bío-Bío ... *Ischyropalpus testaceoguttatus* (Fairm. & Germ.)
 Rufescent, elytra slightly flattened, dark with impression and apex rufescent. 3.8 mm. One female from Paipote, Prov. Atacama. *Ischyropalpus* sp.
- 12.(10) Pale tan with weak brown markings on elytra that partially enclose a pale spot in middle of disc on apical third of each. 4-4.4 mm, moderately stout. Male parameres symmetrical, very long and slen-

der. Prov. Tarapacá, extending S from coastal Peru. *Ischyropalpus sericans* (Er)

3.(12) Head, all of thorax, and region of post-basal transverse impression of elytra bright rufous, elytra otherwise black. 3—4.4 mm, moderately densely and finely punctured and pubescent. Legs rufous, or hind legs or all legs dark. Male parameres symmetrical, slightly flared at apex. Prov. Coquimbo—O'Higgins.

. *Ischyropalpus curtisi* (Solier) Forebody dark, or head darker than pronotum. If both head and pronotum pale, metasternum dark, or elytra pale with a postmedian band to all pale 14

4.(13) Pronotum densely and finely punctured. 2.6—3.6 mm, brown, each elytron with a lateral pale mark in postbasal transverse impression and another apical, the markings sometimes dull. Prothorax sometimes dull rufescent but head always brown. Male parameres very asymmetrical, left one with a long dorsal lobe directed mesad from near apex. Prov. Coquimbo—Talca. *Ischyropalpus maculosus* (Fairm. & Germ.)

Pronotum sparsely punctured, shiny. 2.8—3.8 mm, color pattern extremely variable, from all dark brown to all pale, with individuals generally similar to *curtisi* and *testaceoguttatus* in marking, others all pale or with only a narrow postmedian band on elytra brownish. No specimens seen have posterolateral pale markings on the elytra as in *maculosus*. Male parameres slightly asymmetrical, the left one with a slight dorsal expansion in apical third. Prov. Coquimbo — Concepción. *Ischyropalpus parallelus* (Solier)

DISCUSSION OF SPECIES

Acanthinus strangulatus (Pic)

Formicomus strangulatus Pic, 1895:19, footnote 1 (type-loc.: "Chili", ex coll. Achille Deyrolle).

Formicilla strangulata: Pic, 1911 :22. Blackwelder, 1945: 432.

Acanthinus strangulatus: Werner, 1970: 723, Fig. 17, 31.

Although this species was described from specimens ostensibly from Chile, all verifiable localities are in northern Argentina, where the species is taken frequently at light, and Uruguay. If the Pic specimens were actually taken in Chile,

they probably derived from an introduction that did not become permanently established. See the illustration of *Acanthinus argentinus* (Pic) in Werner 1970:720, for the habitus of this species. It is entirely unlike any other recorded for Chile.

Anthicus crux Fairmaire and Germain

Anthicus crux Fairmaire and Germain, 1860: 3 (type-loc.: Chile by title of publication); 1863:246 ("Quillota, sur les fleurs du *Quillaja saponaria*" only locality mentioned). Pic, 1911: 42. Blackwelder, 1945: 433.

Apparently not very abundant. Known from Prov. Valparaíso: Quillota (Fairmaire and Germain 1863). Prov. Concepción: Concepción? (E. C. Reed, Cal. Acad. Sci.). Prov. Bio-Bío: Angol (29 Jan. 1951, Ross & Michelbacher). Prov. Arauco: Rio Quidico (N.) Lebu (12 Feb. 1963, L. Peña).

Anthicus floralis (Linnaeus)

Meloë floralis Linnaeus, 1758: 420.

Anthicus semirufus Fairmaire and Germain, 1860:3 (type-loc.: Chile by title of publication); 1863: 246-7 (Quillota, sur les fleurs de *Quillaja saponaria*" only locality mentioned).

Formicomus breviculus Philippi and Philippi 1864:353-4 (type-loc.: Chile by title of paper. "Patria... provinciam ignoro").

Anthicus floralis: Bonadona 1953: 101 (extensive synonymy and bibliography). Werner, 1964-233, Fig. 18, 71.

A nearly cosmopolitan species recorded from Chile only by the synonymy of species described by Fairmaire and Germain, and by Philippi & Philippi. While there is little reason to doubt either the synonymy or the origin of the specimens, there is no available evidence that the species currently makes up part of the Chilean fauna. It should be looked for in cultivated areas, under grass clippings or at light. Two other nearly cosmopolitan species, *Anthicus formicarius* (Goeze) and *Anthicus tobias* Marseul, might be expected in the same locations.

Anthicus melanurus Fairmaire and Germain

Anthicus melanurus Fairmaire and Germain, 1863: 246 (type-loc.: "Forêts de

Chillan"). Pic 1911: 61. Blackwelder, 1945: 434.

Appears to be moderately abundant. Very similar to *Ischyropalpus curtisi* in color pattern and form, and often confused with that species in collections. Known from Prov. *Aconcagua*: Zapallar (30 Dec. 1963, L. Peña). Prov. *Curicó*: El Coigo (Cord. Curicó, Oct.-Nov. 1959, L. Peña). Prov. *Maule*: Tregualemu (300-500 m, 9 Dec. 1953, L. Peña), Prov. *Linares*: Parral (Fundo Malcho in Andes, Dec. 1957, L. Peña). Prov. *Ñuble*: San Carlos (40 km. E, 24 Dec. 1950; 50 km. E, 26 Dec. 1950, Ross & Michelbacher); Nogueche (15-17 Dec. 1953, L. Peña). Prov. *Concepción*: Fdo. Pinares (30 Dec. 1965, Flint & Cekalovic, U.S.N.M.). Prov. *Cautín*: Temuco (20 km. E, 7 Jan. 1951, Ross & Michelbacher). Prov. *Aconcagua*: Hda. Saladillo (Río Blanco, 16 Nov. 1958, L. Peña). Quebrada Seca (E. Pte. Ñilgue, 12 Oct. 1964, L. Peña).

Anthicus torquatus Werner

Anthicus torquatus Werner, 1966 d: 367-8, Fig. 2, 8 (type-loc.: Tigre, Prov. Buenos Aires, Argentina).

The presence of this species in Chile was somewhat unexpected. The record is based on a pair collected at Santiago, 1 October, 1953, by Luis Peña, in the Museum G. Frey, Tutzing, Germany. All other known specimens are from Argentina, mainly the province of Buenos Aires but also from the territories of Chubut and Río Negro in the Patagonia region. It seems most likely to have been introduced into the Santiago region from Argentina.

Chileanthicus lafertei (Solier)

Formicomus Lafertei Solier, 1851:277 (type-loc.: "Se halla en las provincias centrales"). Pic, 1911: 18.

Anthicus Lafertei: Fairmaire and Germain, 1863: 245.

Formicomus lafertei: Blackwelder, 1945: 432.

Chileanthicus lafertei: Werner, 1966 b: 223, 225, Fig. 1, 2, 5, 7. (designated as type species of *Chileanthicus* Werner, loc. cit.).

This and the following species are flightless, as are several other undescribed species from Prov. Coquimbo. Almost all specimens have been taken early in the season, in September and October. Redes-

cribed from a series from Prov. *Atacama*: Mineral El Morado in coast region (20 Sept. 1963, under stone, L. Peña, and 1 spm. from Prov. *Coquimbo*: Ovalle (5 mi N, 1 Dec. 1950, Ross & Michelbacher).

Chileanthicus penai Werner

Chileanthicus penai Werner, 1966 b: 225-6, Fig. 3, 4, 6 (type-loc.: N. of Valledar in desert, Atacama Prov., Chile).

Described from a long series collected under stones in desert, 24 Sept. 1963, by Luis Peña.

Ischyropalpus curtisi (Solier)

Formicomus Curtisii Solier, 1851: 276-7, Pl. 21, Fig. 10 a-d (type-loc.: "De Santa Rosa, Santiago, Coquimbo, Araucanía y Concepción, y probablemente esparcido por todo Chile").

Anthicus Curtisii: Fairmaire and Germain, 1863: 245.

Anthicus Curtisi: Pic, 1911: 42.

Anthicus Curtisi: Blackwelder, 1945: 433.

Ischyropalpus Curtisi: Bonadona, 1961: 173-5, Fig. 23, 44, 53.

Ischyropalpus Curtisi Wittmeri Bonadona, 1961: 175, Fig. 45, 47 (type-loc.: "Punta Teatinos, province de Coquimbo").

Ischyropalpus curtisi: Werner, 1966c: 195.

Ischyropalpus curtisi wittmeri: Werner, 1966c: 195.

This is the most striking species of the genus in Chile. It seems to be quite abundant in its range. Examined from Prov. *Coquimbo*: Cuesta Las Cardas (20 Nov. 1965, L. Peña), Illapel (5 mi N, 30 Nov. 1950, Ross & Michelbacher, La Junta (5 mi W, 7 Dec. 1950, Ross & Michelbacher), Ovalle (35 mi S, 1 Dec. 1950, Ross & Michelbacher), La Serena (20 mi E, 22 mi S, 9 Dec, 50 km S, 1 Dec. 1950, Ross & Michelbacher), Vicuña (12 mi E, 4 Dec. 1950, Ross & Michelbacher; 10 mi W, 3 Dec. 1950, Ross & Michelbacher; 900 m, 2 Nov. 1961, L. Peña), Los Vilos (3 mi N, 13 Dec. 1950, Ross & Michelbacher). Prov. *Aconcagua*: 90 km. S Illapel, at E entrance to tunnel (28 Dec. 1950, Ross & Michelbacher), Zapallar (27 Nov. 1950, Ross & Michelbacher). Prov. *Valparaíso*: Valparaíso (Feb. 1928, E. P. Reed, U.S.N.M.). Prov. *Santiago*: Los Andes (Dec. 1944, from Reitter, M. C. Z.), Apoquindo (Jan. 1964, L. Peña), Malvilla (Jan. 1948, L.

Peña), Rinconada Maipú (16-29 Dec. 1965, trampa de luz, L. Peña). Prov. *O'Higgins*: La Leonera (nr. Rancagua, in Pre-Andes region, 24-25 Feb. 1962, L. Peña).

Ischyropalpus maculosus (Fairmaire and Germain)

Anthicus maculosus Fairmaire and Germain, 1860: 4 (type-loc.: Chile by title of publication); 1863: 248 ("Montagnes d'Aculeo; commun sur le *Fagus obliqua*." Aculeo, Prov. Santiago?). Blackwelder, 1945: 434.

Anthicus (Ischyropalpus) maculosus: Pic, 1911: 60.

Ischyropalpus maculosus: Bonadona, 1961: 172, Fig. 26, 42, 43, 56, 57. Werner, 1966c: 195.

Apparently frequent where it occurs, but known from relatively few localities. Examined from Prov. *Coquimbo*: La Serena (50 km. S, 1 Dec. 1950, Ross & Michelbacher). Prov. *Santiago*: El Alfalfal (1 March 1967, from L. Peña). Prov. *O'Higgins*: La Leonera (nr. Rancagua, in Pre-Andes region 24-25 Feb. 1962, L. Peña). Prov. *Talca*: (22 mi N, 22 Dec. 1950, Ross & Michelbacher). Prov. *Santiago-Valparaíso*: Cerro Las Vizcachas (1250 m, 8 Dec. 1951, P. C. Hutchison, in Cal. Acad. Sci.).

Ischyropalpus parallelus (Solier)

Formicomus parallelus Solier, 1851: 278 (type-loc.: "De Santa Rosa y de Coquimbo (Cordilleras Bajas)").

Anthicus planicollis Fairmaire and Germain, 1860: 3 (type-loc.: Chile by title of publication) — NEW SYNONYMY; 1863: 248-9 ("Au pied des montagnes d'Aculeo, sur les arbustes" only locality mentioned. Aculeo, Prov. Santiago?).

Anthicus nigro-femoratus Fairmaire and Germain, 1860: 3 (type-loc.: Chile by title of publication) — NEW SYNONYMY.

Anthicus nigrofemoratus: Fairmaire and Germain, 1863: 247-8 ("Au pied des montagnes d'Aculeo sur les arbustes" only locality mentioned). Pic, 1911: 63. Blackwelder, 1945: 434.

Anthicus parallelus: Fairmaire and Germain, 1863: 249. Blackwelder, 1945: 434.

Anthicus (Ischyropalpus) parallelus: Pic, 1911: 66.

Anthicus (Ischyropalpus) planicollis: Pic, 1911: 67.

Anthycus (Ischyropalpus) Curtisi var. *latereductus* Pic, 1914 (type-loc.: Juan Fernández). — NEW SYNONYMY.

Anthicus curtisi var. *latereductus*: Blackwelder, 1945: 433.

Ischyropalpus sericans: Bonadona, 1961: 166-7 (in part, by listing *planicollis* in synonymy), not *Anthicus sericans* Erichson, 1834: 250. Werner, 1966c: 196.

Ischyropalpus latereductus: Bonadona, 1961: 172-3, Fig. 52. Werner, 1966c: 195.

Ischyropalpus nigrofemoratus: Werner, 1966c: 195.

Ischyropalpus parallelus: Werner, 1966c: 196.

The extreme variability of the color pattern of this species has caused it to be named repeatedly and to be confused with other species in collections. The following code indicates color in the following list: A = all dark brown, B = brown with a lateral pale mark in postbasal transverse impression of elytra, C = like B but with prothorax rufous, and D = pale with at least impression and apex of elytra pale. Apparently not extremely abundant, but widespread.

Examined from Prov. *Coquimbo*: Huanta (2B, 1C, 5 mi S, 7 Dec. 1950, Ross & Michelbacher), Illapel (2A, 4D, 5 mi N, 30 Nov. 1950, Ross & Michelbacher), La Junta (1B, 1C, 5 mi W, 7 Dec. 1950, Ross & Michelbacher), R. Los Molles (1C, 1300 m, 7-10 Nov. 1962, L. Peña), Paihuano (1C, 10 km S, 10 Nov. 1964, L. Peña), Vicuña (1C, 10 mi W, 3 Dec. 1950, Ross & Michelbacher), Los Vilos (2D, 3 mi N, 13 Dec. 1950, Ross & Michelbacher), Prov.

Aconcagua: Concón (1D, under kelp, 16 Dec. 1950, Ross & Michelbacher), 90 km S. Illapel, at E entrance to tunnel (2A, 28 Nov. 1950, Ross & Michelbacher), Papudo (2C, 10 km. E, 27 Nov. 1950, Ross & Michelbacher); Zapallar (3A, 27 Nov.; 6A, 3C, 15 Dec. 1950, Ross & Michelbacher; 4A, 5C, 30 Dec. L. Peña), Papudo (4A, 2C, 10 km E, 28 Dec. 1950, Ross & Michelbacher). Prov. *Valparaíso*: Llay-Llay (2C with tips of elytra pale, 4 Feb. 1951, Ross & Michelbacher), Valparaíso (3A, 1D, Feb. 1928, E. P. Reed, U. S. N. M.). Prov. *Santiago*: Los Andes (2C, Dec. 1944, from Reitter, M.C.Z.), Apoquindo (1A, 9C, Jan. 1964, L. Peña), San Bernardo (1C, 1948, from Reitter, M. C. Z.), Las Condes (5A, 26C — some with apex pale, 3D, 7 Dec. 1965, from Peña). Prov. *Talca*: Talca (1A, 22 mi N, 22 Dec. 1950, Ross & Michelbacher). Prov. *Concepción*: Contulmo (4A, Schönemann, 1904-5, Mus. G.

Frey). Prov. *Valparaíso*: Bell Mtn. (C^o La Campana) (2A, 5C, S. slope, 3000 ft, 17 Dec. 1950, Ross & Michelbacher). Cerro Las Vizcachas (1C, 1250 m, 8 Dec. 1951, P. C. Hutchison, Cal. Acad. Sci).

Ischyropalpus sericans (Erichson)

Anthicus sericans Erichson, 1834: 250 (type-loc Perú?). Blackwelder, 1945: 434.

Anthicus (Ischyropalpus) sericans: Laferté, 1848: 143-4. Pic, 1911: 73.

Ischyropalpus sericans: Bonadonna, 1961: 166-7, Fig. 21, 35, 39, 50 Werner, 1966c: 196.

Known from Chile only from two collections, Prov. *Tarapacá*: Arica (29 Nov. 1966, L. Peña), and *Pachica* (Cord. Iquique, 21 Apr., 1969, L. Peña).

Ischyropalpus testaceoguttatus (Fairmaire and Germain)

Anthicus testaceoguttatus Fairmaire and Germain, 1863: 247 (type-loc.: "Forêts subandines de Chillán"). Blackwelder, 1945: 435.

Anthicus (Ischyropalpus) testaceoguttatus: Pic, 1911: 76.

Ischyropalpus testaceoguttatus: Bonadonna, 1961: 162-3 (in part, not description or figures of male). Werner, 1966c: 196.

Almost uniform in the series examined, and apparently fairly abundant where it occurs in cooler region. Examined from Prov. *Linares*: Parral (Fundo Malcho in Andes, Dec. 1957, L. Peña). Prov. *Nuble*: Las Cabras (foothill SW of Chillán Volcano in Andes region, 1500 m, 6-31 Jan. 1963, L. Peña), San Carlos (40 km E, 24 Dec. 1950, Ross & Michelbacher). Prov. *Bío-Bío*: El Abanico (30 Dec. 1950, Ross & Michelbacher), Tucapel (5 km W, 28 Dec. 1950, Ross & Michelbacher).

Vacusus chilensis (Solier)

Formicomus chilensis Solier, 1851: 277 (type-loc.: "De Santiago, etc.").

Anthicus chilensis: Fairmaire and Germain, 1863: 245. Pic, 1911: 40. Blackwelder, 1945: 433.

Formicomus quadriguttatus Philippi and Philippi 1864: 353 (type-loc.: "Prov. Santiago"). Pic, 1911: 20. Blackwelder, 1945: 432.

Vacusus chilensis: Werner, 1961: 805-6, Fig. 8; 1966a: 219.

This species is apparently closely rela-

ted to *Vacusus vulgaris* Werner and some others in northern Argentina and southwestern Brazil. It has been only rarely collected. Examined from Prov. *Coquimbo*: Huaquén (30°S, 27°W, July 1960, L. Peña). Prov. *Aconcagua*: Concón (10 mi N, 16 Dec. 1950, Ross & Michelbacher). Prov. *Santiago*: Apoquindo (Aug. 1953, L. Peña).

Vacusus holoxanthus (Fairmaire and Germain)

Anthicus holoxanthus Fairmaire and Germain, 1860:3 (type-loc.: Chile, by title of publication); 1863: 249 (mentioned only from "Santiago, dans une court, sous des pierres"). Pic, 1911: 53. Blackwelder, 1945: 434.

Vacusus holoxanthus: Werner, 1961: 808-9; 1966a: 219.

Vacusus jamaicanus Werner, 1961: 809, Fig. 12 (type-loc.: Spanish Town, Jamaica).

Although this species has been ascribed to the Chilean fauna for more than a century, no verifiable records of its occurrence in the country have accumulated since its description. It has now been collected in northern Argentina and southern Brazil, and on the island of Jamaica in the Greater Antilles. Its presence at several coastal localities on Jamaica indicates that it can establish itself in ecologically disturbed areas. It might be found in association with *Anthicus floralis* and the other cosmopolitan species mentioned with it.

TRANSFERRED TO FAMILY MELOIDAE (Selander, 1966)

Anthicoxenus nigroplagiatus Fairmaire and Germain

Anthicoxenus nigroplagiatus Fairmaire and Germain, 1860: 2 (type-loc.: Chile by title of publication).

Anthicoxenus nigroplagiatus: Fairmaire and Germain, 1863: 244 ("Santiago, au premier printemps, sous les pierres" only locality mentioned). Pic, 1911: 81. Blackwelder, 1945: 435. Selander, 1966: 470-1, Figs. 49-54.

Anthicoxenus lagenicollis (Fairmaire and Germain)

Anthicus lagenicollis Fairmaire and Germain, 1860: 2 (type-loc.: Chile by title of publication).

Anthicoxenus lagenicollis: Fairmaire and Germain, 1863: 244-5 ("Concepción, sur les feuillages" only locality mentioned). Pic, 1911: 81. Blackwelder, 1945: 435. Selander, 1966: 470.

Anthicoxenus ovallei Philippi

Anthicoxenus Ovallei Philippi, 1873: 10-11, Pl. 2, Fig. 4a-b (type-loc.: "In praedio Catapilco orn. dom. Franc. Xav. Ovalle, jam defuncti, in prov. Aconcagua nense Septembri in lapide sedens cepi"). Fairmaire, 1876: 385. Pic, 1911: 81.

Anthicoxenus ovallei: Blackwelder, 1945: 435. Selander, 1966: 470.

Anthicoxenus paulseni Fairmaire

Anthicoxenus Paulsenii Fairmaire, 1875: 200 (type-loc.: Chile); 1876, 385.

Anthicoxenus Paulseni: Pic, 1911: 82.

Anthicoxenus paulseni: Blackwelder, 1945: 435. Selander, 1966: 470.

INCERTAE SEDIS, PROBABLY NOT ANTHICIDAE

Apotominus nigrozonatus Fairmaire and Germain

Apotominus nigrozonatus Fairmaire and Germain, 1863: 284 (type-loc.: "Concepción, sous les pierres"). Pic, 1911: 81. Blackwelder, 1945: 435.

Heterolobus aeneus Philippi and Philippi

Heterolobus aeneus Philippi and Philippi, 1864: 354-5 (type-loc.: "Valdivia durch das Abklopfen blühender Bäume, . . . *Eugenia temu*"). Blackwelder, 1945: 435.

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