



Systematic revision of the South American genus *Praocis* Eschscholtz, 1829 (Coleoptera: Tenebrionidae). Part 1: Introduction and subgenus *Praocis* s. str.

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Abstract

The first part of a revision of the species comprising the genus *Praocis* Eschscholtz, 1829 (Pimeliinae: Praociini) is presented. The history of taxonomic research on *Praocis* is reviewed. The subgeneric classification is outlined. The subgenus *Praocis* s. str., distributed in Central and Southern Chile, is revised. Species occur from 26° South to 42° South in the biogeographic provinces of Atacama, Coquimbo, Santiago, Maule and Valdivian Forest. Included is a redescription of the subgenus *Praocis* s. str., redescription of its species, an identification key, habitus photographs of the most representative species, illustrations of external morphology and genital features, scanning electron micrographs of pronotum, head and antenna, as well as distribution maps. *Praocis* s. str. comprises 18 species, two of which are new: *Praocis* (*Praocis*) *bicentenario* **sp.**

nov. and *P. (P.) medvedevi* **sp. nov.** Other species include: *Praocis (Praocis) aenea* Gay & Solier 1840, *P. (P.) costata* Gay & Solier 1840, *P. (P.) curta* Solier 1840, *P. (P.) elliptica* Philippi & Philippi 1864, *P. (P.) hirtella* Kulzer 1958, *P. (P.) marginata* Germain 1855, *P. (P.) parva* Gay & Solier 1840, *P. (P.) quadrisulcata* Germain 1855, *P. (P.) rufipes* Eschscholtz 1829 (type species), *P. (P.) sanguinolenta* Gay & Solier 1840, *P. (P.) spinolai* Gay & Solier 1840, *P. (P.) subaenea* Erichson 1834, *P. (P.) subsulcata* Gay & Solier 1840, *P. (P.) sulcata* Eschscholtz 1829 and *P. (P.) tibialis* Gay & Solier 1840. The status of *P. (P.) bicostata* Philippi & Philippi 1864, currently considered a valid name, is discussed. A lectotype is designated for *Praocis (P.) laevicosta* Curtis 1845 (synonym of *P. (P.) subaenea*). The subgenus *Praocis (Parapraocis)* Kulzer 1958 is excluded from *Praocis*.

Key words: Tenebrionidae, Pimeliinae, Praociini, *Praocis*, Chile, coastal desert, South America

Introduction

The genus *Praocis* Eschscholtz 1829 is placed in the Praociini, an endemic Neotropical tribe of Pimeliinae with 149 species arranged in 14 genera, which is distributed in arid and semiarid lands of southern South America (Kulzer 1958; Flores 2000, 2001, 2007, 2009; Flores & Chani-Posse 2005; Flores & Vidal 2009; Flores *et al.* 2011).

Praocis was established by Eschscholtz (1829) for *Praocis rufipes* and *P. sulcata* that he collected in Concepcion, Chile. Subsequent authors described additional new species (Lacordaire 1830; Laporte 1840; Germar 1855; Philippi & Philippi 1864; Burmeister 1875; Fairmaire 1883a, b) and revised the genus (Solier 1840, 1851; Lacordaire 1859) increasing the number of species to 93 (Gebien 1938). Kulzer (1958) in his revision of *Praocis* established 15 synonymies and described new species and subspecies, resulting in 77 species and 7 subspecies arranged in ten subgenera, distributed from central Peru to the southern part of Patagonia in Argentina and Chile. Other new species were later described (Kaszab 1969; Molinari 1969; Marcuzzi 1977, 2001), increasing the number of species to 100. Recent examination of types of *Praocis* (Flores 2007, 2009; Flores & Pizarro-Araya 2010; Flores *et al.* 2011) led to 13 synonymies resulting in 77 valid species plus 8 subspecies (Flores *et al.* 2011) and 7 species incertae sedis for which the types are lost (Kulzer 1958; Flores & Pizarro-Araya 2010).

Since *Praocis* was erected (Eschscholtz 1829), 119 names of species and subspecies have been proposed for the genus, 33 of which (27.73 %) are considered synonyms. The worst situation is that of the subgenus *Praocis* s. str. formerly composed of 29 names, of which 16 are valid and 13 (45 %) synonymous.

This paper is the first contribution to a revision of the genus *Praocis*. The history of taxonomic research on the genus and its subgeneric classification are reviewed and a revision is made of the species of the subgenus *Praocis* s. str., which are endemic to Central and Southern Chile.

Subgeneric classification of *Praocis*

After the description of *Praocis* by Eschscholtz (1829), Guérin-Méneville (1834) created the genus *Anthrasomus* to include his new species *A. chevrolati* from Chile. Solier (1840) revised *Praocis* and described 20 new species for the genus; due to the great variation among its species, he established three divisions within the genus: *Praocis* s. str., *Anthrasomus* (considered within *Praocis* by Solier) and *Orthogonoderes* Gay and Solier (created in the same study). Solier (1840) also created the new genus *Filotarsus*, today regarded as subgenus of *Praocis*. To separate *Praocis* from *Anthrasomus* and *Orthogonoderes*, Solier (1840) used features such as the shape of the body and pronotum and the posterior angles of pronotum; to separate *Anthrasomus* from *Orthogonoderes*, Solier (1840) used the shape of body and pronotum and length of the last antennomere, and to separate the genus *Praocis* from the genus *Filotarsus*, he used the shape of the anterior tibiae. Later, Solier (1851) considered three sections within *Praocis*: *Praocis* s. str., *Anthrasomus* and *Orthogonoderes*. *Filotarsus* was placed within *Anthrasomus*.

Lacordaire (1859) also recognized three sections within *Praocis*: *Praocis* s. str., *Anthrasomus* (including *Filotarsus*) and *Orthogonoderes*. For the limits among these sections, Lacordaire (1859) used the characters proposed by Solier (1840): shape of body, pronotum and anterior tibiae. At this time, most known species of *Praocis* were described from Chile (only two were from Peru). This concept of *Praocis* accommodated all known species of the genus among these three sections.

Burmeister (1875) and Fairmaire (1883a, b) described new species of *Praocis* from Argentina at the East of the Andes, which did not fit at that time into any of the pre-established sections of the genus. Subsequent catalogs (Gemminger & Harold 1870; Gebien 1910, 1938; Blackwelder 1945) listed the sections *Anthrasomus*, *Orthogonoderes* and *Filotarsus* as synonyms of *Praocis*.

Kulzer (1958) in his revision of *Praocis* reunited most of the types of known species from Chile together with abundant material from Argentina, Bolivia and Peru that constituted several new species. Because of the great variation among these, Kulzer (1958) classified the species of *Praocis* into 10 subgenera, six of which were new: *Mesopraocis*, *Postpraocis*, *Parapraocis*, *Hemipraocis*, *Praonoda*, and *Praocida*, plus the four sections of Solier (1840): *Praocis* s. str., *Anthrasomus*, *Orthogonoderes*, and *Filotarsus*. Kulzer (1958) did not characterize these subgenera but in his key he mentioned character states for identifying some of them (shape of prosternum, posterior angles of pronotum, lateral margin of pronotum, lateral margin of elytron, body shape and apical process of protibiae), except between *Anthrasomus* and *Filotarsus*, and between *Orthogonoderes* and *Praocida*, which can be keyed only by body size.

In this revision of the genus *Praocis* we add new characters to define each subgenus, such as the shape of clypeus, frons and clypeal suture, the arrangement of apical tomentose sensory patches on antennomeres 9, 10 and 11, length and proportion of antennomeres 9, 10 and 11, distance between meso–metacoxae, setae on ventral surface of profemora, shape of protibiae, and genital features.

The objectives of this study are to revise *Praocis* s. str. by incorporating new characters from external morphology and male genitalia and to detail their geographic distribution. As a result of this revision, we describe two new species that increase the number of species of the genus to 79. In the last contribution to this revision we will present a key for the subgenera of *Praocis* as we have many undescribed species of the remaining subgenera to describe in further contributions, which may modify the current subgeneric concepts of Kulzer (1958).

Material and methods

The present study is based on examination of specimens borrowed from the following collections and curators (we follow Arnett *et al.* 1993 where possible for collections codens): The Natural History Museum, London, England (BMNH, Maxwell V. L. Barclay), Field Museum of Natural History, Chicago, USA (FMNH, Alfred Newton, Margaret Thayer), Instituto Argentino de Investigaciones de las Zonas Áridas, Mendoza, Argentina (IADIZA, Sergio Roig-Juñent), Juan Enrique Barriga private collection, Curicó, Chile (JEBC, Juan Enrique Barriga), Laboratorio de Entomología Ecológica, Universidad de La Serena, Chile (LEULS, Jorge Cepeda-Pizarro), Museo Argentino de Ciencias Naturales Bernardino Rivadavia, Buenos Aires, Argentina (MACN, Arturo Roig-Alsina), Muséum National d'Histoire Naturelle, Paris, France (MNHN, Claude Girard, Antoine Mantilleri), Museum für Naturkunde der Humboldt Universität, Berlin, Germany (MNHUB, Manfred Uhlig, Bernd Jaeger), Museo Nacional de Historia Natural, Santiago, Chile (MNNC, Mario Elgueta D.), Natural History Museum, Basel, Switzerland (NHMB, Eva Sprecher), Pedro Vidal G. H. private collection, Santiago, Chile (PVGH, Pedro Vidal G. H.), Royal Belgian Institute of Natural Sciences, Brussels, Belgium (RBINS, Jerome Constant), Universidad de Concepción, Concepción, Chile (UCCC, Jorge Artigas).

All measurements were taken with a micrometer eyepiece. Body length was measured dorsally, along the midline, from anterior margin of labrum to elytral apex. For paraproct/coxite length, the ratio proposed by Doyen (1993) was used (P/C); for basal lamina of tegmen/lateral styles length (B/E), and median lobe/tegmen length (L/T) the ratios proposed by Flores (1996) were used. Dissection methods are those used by Tschinkel & Doyen (1980) for genital structures. Terminology of foreleg was taken from Doyen (1984: Fig. 41). Drawings were made with a camera lucida adapted to a stereoscopic microscope. Exact label data are cited only for the type material, where brackets delimit the text of individual labels. For distribution of the species we used the biogeographic classification of Morrone (2006).

Solier (1840) described 20 species of *Praocis*. Most of these new species were collected in Chile by C. Gay, who sent Solier the material for study. In the first of these descriptions, *Praocis costata* (Solier 1840: 222), Solier stated: "Je ne donne pas la description détaillée de cette espèce, pour ne pas anticiper sur le travail inédit que M. Gay et moi devons publier sur les Coléoptères du Chili, et j'observerai la même réserve pour les diverses espèces de ce voyage". In fact, for 17 of a total of 20 new species of *Praocis* described in that monograph of Praociini, the

descriptions were short and assigned to Gay and Solier. These authors never published the intended paper on Gay's trip, and subsequent authors (Gebien 1910, 1938; Kulzer 1958) attributed all these species to Solier alone. According to the interpretation of Article 50.1.1 of the International Code of Zoological Nomenclature (ICZN 1999), the authors of these species are Gay and Solier, as Solier indicated. This is valid for some species belonging to the subgenera *Praocis* s. str., *Anthrasomus*, *Filotarsus* and *Orthogonoderes*, with which we will deal in future contributions.

Results

Genus *Praocis* Eschscholtz, 1829

Praocis Eschscholtz, 1829: 6; Lacordaire, 1830: 284; Guérin-Méneville, 1834: 8; Dejean, 1834: 180 (cat.); Dejean, 1836: 200 (cat.); Guérin-Méneville, 1838: 92; Laporte, 1840: 186; Solier, 1840: 214 (rev.); Solier, 1851: 185 (rev.); Lacordaire, 1859: 212; Gemminger & Harold, 1870: 1904 (cat.); Burmeister, 1875: 495 (rev.); Philippi, 1887: 731 (cat.); Champion, 1895: 93 (cat.); Kolbe, 1907: 86 (cat.); Gebien, 1910: 260 (cat.); Bruch, 1915: 275 (cat.); Gebien, 1938: 398 (cat.); Blackwelder, 1945: 522 (cat.); Kulzer, 1958: 11 (rev.); Peña, 1966: 428 (cat.); Vidal & Guerrero, 2007: 73, 206; Flores, 2007: 411, 416; Flores, 2009: 23. Type species: *Praocis rufipes* Eschscholtz, 1829 (subsequent designation by Guérin-Méneville, 1834: 8–9).

Redescription. Length 5.0–18.0 mm. Head. Prognathous; labrum with anterior margin not broadened; clypeus and frons with round punctures; mentum subtrapezoidal, with setae; maxillary palps with last segment axe-shaped; eyes oval; antennomere 3 shorter than 4 + 5 combined.

Thorax. Prothorax semi-mobile; pronotum with round punctures; anterior angles rounded, anterior margin concave, width of posterior margin exceeding width of anterior margin, single lateral margin slender, expanded, remote from disc, posterior margin convex, not exceeding width of base of elytra, joined in central half to elytra, posterior angles not overlapping elytral humeri; disc of pronotum convex, higher than lateral margins; mesosternum inclined forward, separated from prosternum; scutellum visible.

Elytron with punctate surface, very variable among the subgenera and species in features such as with or without carinae, lateral margin well defined with a fine edge or carina shaped or rounded not defined, single or double; epipleuron with edge, anterior margin reaching elytral humeri and posterior angle of pronotum.

Legs. Procoxal separation equal to 1/3 procoxal width; mesocoxal and metacoxal separations not exceeding mesocoxal and metacoxal width; metacoxal cavity closed laterally by metasternum and sternum 3. Ventral femoral surface with setae arising from punctures.

Discussion. The genus *Praocis* was described by Eschscholtz (1829) and characterized by Solier (1840, 1851) and Lacordaire (1859), who defined it as having maxillary palps with last segment axe-shaped and pronotum with lateral margin slender, expanded, remote from disc. Kulzer (1958) did not redefine the genus but pointed out the great variation in many features among the species; in his key, he characterized *Praocis* only as having maxillary palps with last segment axe-shaped and pronotum with anterior angles rounded. Kulzer (1958) classified the species of *Praocis* into 10 subgenera, six of which were new.

Examination of species of all subgenera of *Praocis* (sensu Kulzer 1958) allows us to define the genus *Praocis* on the basis of five consistent character states, some of them used in previous revisions (Eschscholtz 1829; Solier 1840, 1851; Lacordaire 1859; Kulzer 1958): maxillary palps with last segment axe-shaped (defined here as apex twice as wide as base), antennomere 3 shorter than 4 + 5 combined, pronotum with single lateral margin slender, expanded, remote from disc, and anterior angles rounded.

Subgenus excluded from *Praocis*. The subgenus (*Parapraocis*) Kulzer 1958 is excluded here from *Praocis* because its species exhibit the following character states: maxillary palps with last segment subcylindric, apex wider than base (apex 1.5 times as wide as base), antennomere 3 longer than 4 + 5 combined, pronotum with lateral margin not expanded, contiguous with disc, lateral margin double, and anterior angles acute.

Examination of the external morphology of species from all the remaining genera of Praociini revealed that the character states antennomere 3 longer than 4 + 5 combined and pronotum with lateral margin double are unique to species assigned to *Parapraocis* and these deserve recognition as a separate genus within Praociini. *Parapraocis* includes three species inhabiting Peru: *Parapraocis vagecostata* (Fairmaire) **n. comb.** (type species, present designation), *P. rossi* (Kulzer) **n. comb.**, and *P. fumaria* (Kulzer) **n. comb.**

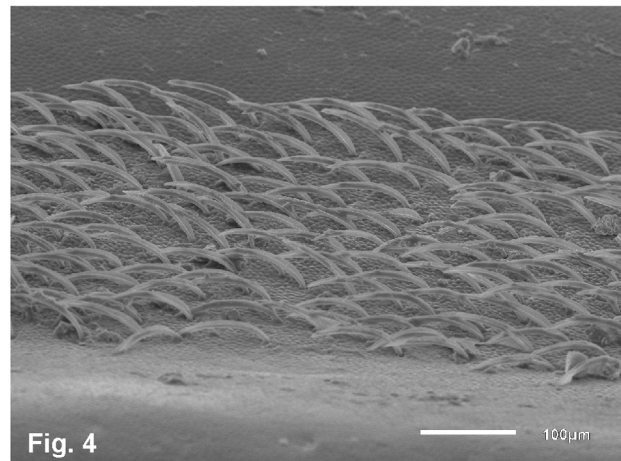
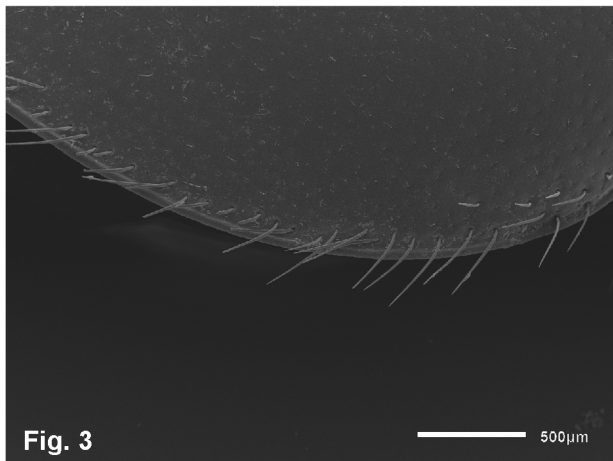
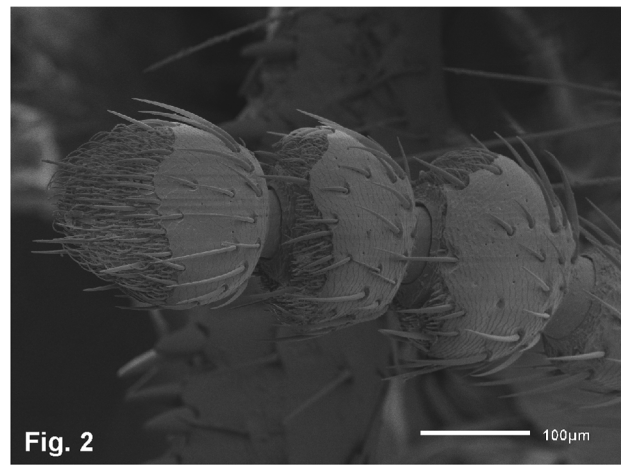
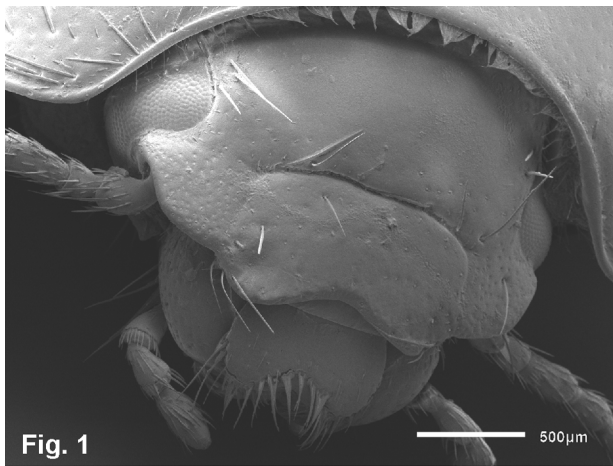
Subgenus *Praocis* (*Praocis*) Eschscholtz, 1829

Praocis Eschscholtz, 1829: 6.

Praocis (*Praocis*): Solier, 1840: 220; Solier, 1851: 186; Lacordaire, 1859: 213; Kulzer, 1958: 11 (rev.); Peña, 1966: 428 (cat.); Vidal & Guerrero, 2007: 73, 212; Flores, 2007: 411, 416.

Redescription. Length 5.0–14.0 mm; habitus elongate to oval, flattened or convex; body glabrous or with short setae. Colour of body and legs black to dark brown, antennae dark brown.

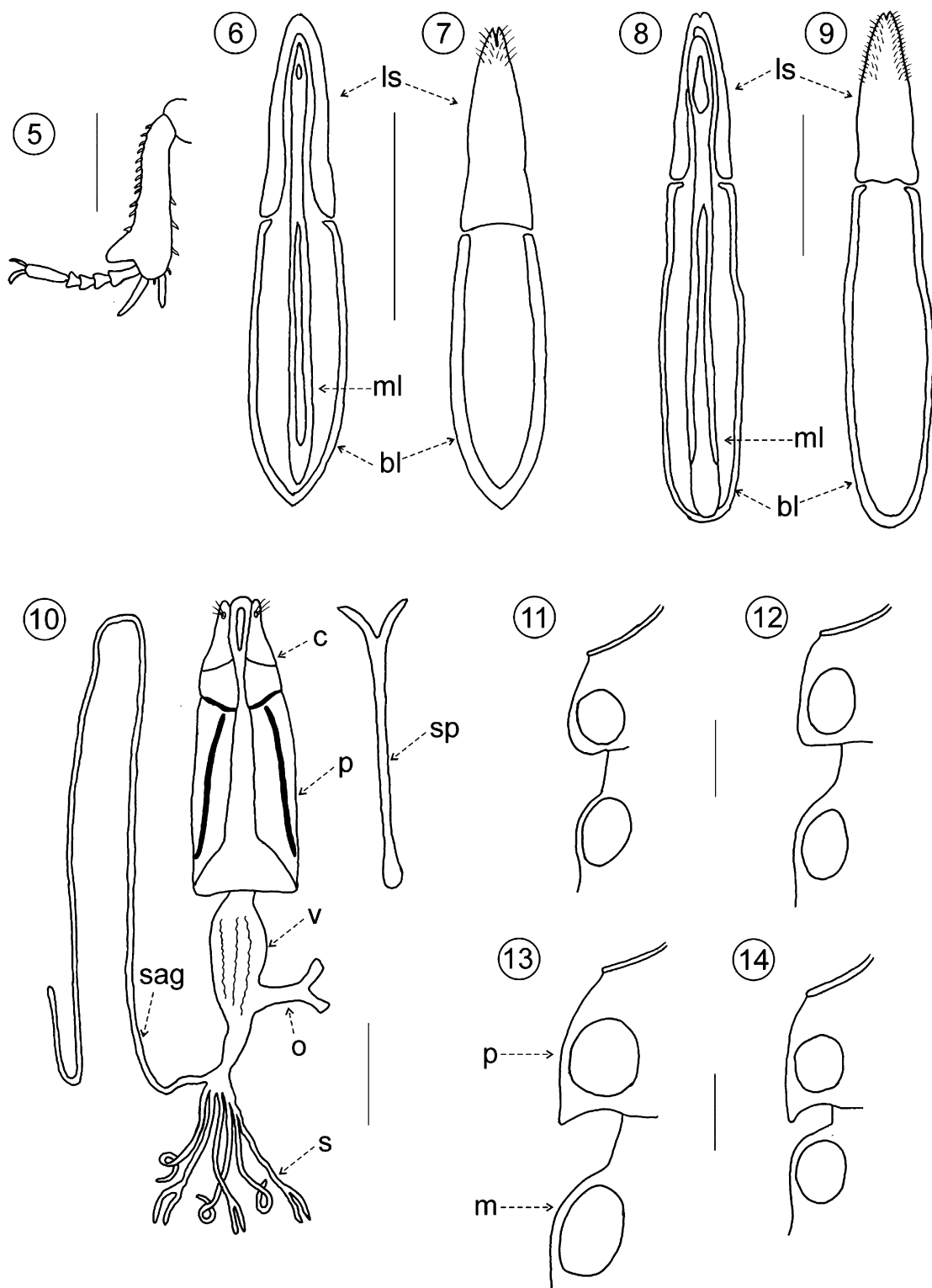
Head. Clypeus with anterior margin concave, extending anterior to lateral expansion of frons, width of anterior margin not exceeding half the width of interocular distance; clypeal suture not covered by frons, clypeus and frons at same level; frons with round punctures, lateral expansion rounded (Fig. 1); antennae equal in length in both sexes; antennomere 10 wider than long, antennomere 9 longer than antennomere 10, antennomere 11 longer than antennomere 10 (Fig. 2); apical tomentose sensory patches on antennomere 9 in two areas subequal in size, on antennomere 10 in a semicircle dorsally continuous, on antennomere 11 on distal half (Fig. 2).



FIGURES 1–4. Scanning electron micrographs of body details of *Praocis* (*Praocis*) species. 1. *Praocis* (*P.*) *subaenea*, head in dorsal view. 2. *P. (P.) bicentenario* **sp. nov.**, antennomeres 9–11 in dorsal view. 3. *P. (P.) spinolai*, lateral margin of pronotum in dorsal view. 4. *P. (P.) spinolai*, scaly setae of elytron into a groove.

Thorax. Pronotum with round punctures, lacking carinae or striae; prosternum with a narrow, well defined edge on anterior margin. Proepisternum, mesepisternum, and metepisternum with protuberances. Proepisternum with shallow grooves not reaching superior margin. Metasternum with punctures.

Elytron convex, surface punctate, lateral margin well defined with a fine edge, epipleuron conspicuous throughout, with edge, anterior margin reaching elytral humeri and posterior angle of pronotum, anterior quarter four times as wide as posterior half.



FIGURES 5–14. Male and female genitalia and body details of *Praocis* (*Praocis*) species. 5. Fore tibia and tarsus in anterior view of *Praocis* (*P.*) *sanquinolenta*. 6–9: Male: 6, 7. *P.* (*P.*) *rufipes*, dorsal and ventral views; 8, 9. *P.* (*P.*) *elliptica*, dorsal and ventral views. Abbreviations: bl, basal lamina of tegmen, ls, lateral styles of tegmen, ml, median lobe. 10. Ovipositor (ventral view), spiculum and internal female reproductive tract of *P.* (*P.*) *hirtella*. Abbreviations: c, coxite, o, oviduct, p, paraproct, s, spermatheca, sag, spermathecal accessory gland, sp, spiculum, v, vagina. 11–14. Prosternum and mesosternum, lateral aspect. 11. *P.* (*P.*) *costata*; 12. *P.* (*P.*) *quadrisulcata*; 13. *P.* (*P.*) *elliptica*; 14. *P.* (*P.*) *marginata*. Abbreviations: p, prosternum, m, mesosternum. Scale bars: 1 mm.

Legs. Distance between meso–metacoxae exceeding half mesocoxal length. Ventral surface of profemora with a row of setae on anterior edge. Protibiae explanate, apical process concave from behind, inner and outer margins armed with a row of contiguous spines, outer margin concave (Fig. 5), anterior face with long, fine setae; posterior face of protibiae and outer face of meso– and metatibiae with short, stout setae. Ventral surface of tarsi bearing sparse decumbent setae.

Male genitalia (Figs 6–9). Dorsal membrane of proctiger concave, with two sclerotized areas. Basal lamina of tegmen long ($B/E > 1.0$) (Figs 6, 8). Lateral styles of tegmen distally close, with apex narrow, with setae on ventral surface and lateral margins (Figs 7, 9), and not overlapping median lobe dorsally. Median lobe tubulous, one third width of lateral styles of tegmen (Figs 6, 8).

Female genitalia (Fig. 10). Spiculum with arms “V”-shaped. Paraprocts with setae; coxites with setae, basal lobe of coxite not extended over paraproct, midventral sclerite distally broadened. Vagina saccate. Spermathecal accessory gland longer than vagina, with duct not annulate. Spermatheca with six basal tubes or less, all similar in width and branching pattern.

Geographic distribution. The species of *Praocis* s. str. are endemic to central and southern Chile and occur from 26° South (Atacama Region, Quebrada el León) to 42° South (Los Lagos Region, Carelmapu) in the biogeographic provinces of Atacama, Coquimbo, Santiago, Maule and Valdivian Forest (Morrone 2006).

Habitat. The distribution range of the subgenus extends from the sea level to an altitude of ~1300 m. Most species are distributed between the Huasco coastal desert and the coastal steppe shrub (Gajardo 1994), with 4 and 10 species each one and are ecologically related to shrubby and herbaceous vegetation (perennial and annual) characteristic of the Chilean Coastal Desert (CCD) such as *Frankenia chilensis* K. Presl (Frankeniaceae), *Nolana brunonianus* Hook. et. Arn, *Nolana sedifolia* Poepp. (Nolanaceae), *Haplopappus foliosus* DC. (Asteraceae), *Cristaria glaucophylla* Cav. (Malvaceae), *Leucocoryne dimorphophetala* (Gay) (Alliaceae), *Adesmia littoralis* Burkart (Papilionaceae), and *Alstroemeria leporina* Ehr. (Alstroemeriaceae). One species (*Praocis* (*P.*) *costata*) inhabits deciduous woodlands of *Nothofagus obliqua*, *N. alpina*, and *Aextoxicon punctatum* (Gajardo 1994) in the Valdivian Forest biogeographic province (Morrone 2006).

Biology. Adults are epigeal and phytophagous, have diurnal habits and bury underground or hide under stones or shrubs in the hours of highest solar radiation. They are found mainly on coastal terraces, plains, and basins of the longitudinal valley of the CCD. One of us (JPA) collected *Praocis bicentenario* sp. nov. walking during the daytime on dunes and eating flowers and leaves of *Scirpus americanus* (Cyperaceae) and *Chorizanthe paniculada* (Polygonaceae) in the Choapa Province (Coquimbo Region, Chile).

Laboratory observations on oviposition: eggs are laid on the substrate surface –mainly sand– or at a depth ranging from 5 to 10 cm. Larval development is hypogeous and occurs mainly in protected places, e.g., under bark or rocks, and on sandy soils containing roots or rotting wood (J. Pizarro-Araya pers. obs.). The behavior of *Praocis* (*Praocis*) *spinolai* Gay & Solier and *Praocis* (*Praocis*) *tibialis* Gay & Solier 1840 shows that eggs are laid in groups of 5 to 7, with a maximum of 6 ovipositions. These data agree with reports by Pizarro-Araya *et al.* (2005, 2007) on *Gyriosomus* Guérin-Ménéville, a genus of Tenebrionidae Pimeliinae sympatric with *Praocis*.

Ecology. Some studies on coleopteran communities have documented the presence of species of the genus *Praocis* in central Chile and provided details about their distribution. Sáiz & Campalans (1984) and Cepeda-Pizarro (1989) studied the relationship between the assemblage of epigeal coleopterans and plant communities; Cepeda-Pizarro *et al.* (1996) examined the relationship between the body size of tenebrionids and biomass, and Vergara *et al.* (2006) related the distribution patterns of coleopteran species to protected areas.

Alfaro *et al.* (2009) documented the taxonomic diversity of epigeal tenebrionids on the Choros Archipelago (Coquimbo Region). They recorded fourteen species from eight genera, and *Praocis* (*Praocis*) *spinolai* Gay and Solier was the second most abundant, making up 17% of the total capture. *Praocis* was the most diverse genus of Tenebrionidae, with four sympatric species from three subgenera in all three islands associated mainly to dune systems, where they captured larvae of the genera *Praocis* and *Gyriosomus* at different stages of development. The preference for sandy places by species of these two genera agrees with observations by Pizarro-Araya *et al.* (2005, 2007) showing that such habitats allow for deeper ovipositions (Alfaro *et al.* 2009; Pizarro-Araya 2010).

Key to species of the subgenus *Praocis* s. str.

1. Pronotum widest at midpoint (Fig. 15), lateral margin with a horizontal, outer groove bearing a row of long, golden setae, dorsal surface of lateral margin lacking a row or tuft of setae; prosternum convex, with edge on anterior margin of equal width throughout, lacking prosternal process (Fig. 11) *P. (Praocis) costata* Gay & Solier
- Pronotum widest behind midpoint (Figs. 16–26), lateral margin lacking horizontal outer groove and without setae, dorsal surface of lateral margin bearing a row or tuft of short, golden setae (Fig. 3); prosternum horizontal, with edge on anterior margin broadened below gula, prosternal process subrectangular forming a straight angle or produced backwards (Figs. 12–14) 2
2. Apical tomentose sensory patches on antennomere 9 arranged in two areas contiguous dorsally (Fig. 2); antennomere 10 wider than antennomere 11 (Fig. 2); prosternum and mesosternum with protuberances; prosternal process subrectangular forming a straight angle, not produced backwards (Fig. 12); pseudopleuron with setae arising on protuberances 3
- Apical tomentose sensory patches on antennomere 9 arranged in two areas separated dorsally; antennomere 10 as wide as antennomere 11; prosternum and mesosternum with punctures; prosternal process produced backwards (Figs. 13–14); pseudopleuron glabrous or with setae arising on punctures 6
3. Antennomere 9 longer than wide; pronotum with lateral quarters flat, dorsal surface of lateral margin bearing a row of long, golden setae (Fig. 3); elytron with four longitudinal grooves bearing fine, golden setae (Fig. 16) *P. (Praocis) sanquinolenta* Gay & Solier
- Antennomere 9 wider than long (Fig. 2); pronotum with lateral quarters convex, dorsal surface of lateral margin bearing a tuft of long, golden setae; elytron with two to four longitudinal grooves bearing broad, golden, scaly setae (Fig. 4) 4
4. Pronotum with disc glabrous, width of anterior margin not exceeding half the width of posterior margin; elytron with four longitudinal grooves bearing setae, grooves wider than intervals, inner groove parallel with the inner groove of the other elytron; metatibiae straight *P. (Praocis) quadrisulcata* Germain
- Pronotum with disc bearing fine golden setae, width of anterior margin exceeding half the width of posterior margin; elytron with two or three longitudinal grooves bearing setae, intervals wider than grooves, inner groove converging at the apex with the inner groove of the other elytron (Fig. 17); metatibiae curved outward (Fig. 17) 5
5. Pronotum with posterior angles right; elytron with three longitudinal grooves bearing setae, inner groove from apex of elytron surpassing the midpoint of elytron towards anterior, medial and outer grooves from apex of elytron reaching the base towards anterior, intervals arched *P. (Praocis) rufipes* Eschscholtz
- Pronotum with posterior angles acute; elytron with two longitudinal grooves bearing setae, inner groove from apex of elytron reaching only the posterior third, not surpassing the midpoint of elytron towards anterior, outer groove wider than inner, from apex of elytron reaching the base towards anterior and broadened in central part, intervals flat (Fig. 17) *P. (Praocis) bicentenario* sp. nov.
6. Elytron with dorsal surface bearing two kinds of golden setae: some short, broad, scaly, dense, and others long, finer, twice or three times longer than scaly setae, sparse or forming tuft; setae disperse or arranged into three longitudinal grooves 7
- Elytron with dorsal surface glabrous or bearing only short, broad, golden, scaly setae disperse or arranged into three or four longitudinal grooves on dorsal surface or one groove over lateral margin (Fig. 4) 8
7. Elytron rugose with three longitudinal grooves well demarcated, grooves wider than intervals, with two kinds of setae abundant on dorsal surface or arranged into three grooves visible over entire surface (Fig. 18) *P. (Praocis) hirtella* Kulzer
- Elytron punctured with three longitudinal grooves weakly demarcated, intervals wider than grooves, with two kinds of setae disperse on dorsal surface or arranged into three grooves visible on posterior half (Fig. 19) *P. (Praocis) subsulcata* Gay & Solier
8. Elytron with three or four longitudinal grooves on dorsal surface or one groove over lateral margin; grooves bearing abundant or sparse short, broad, golden, scaly setae (Figs 20–22) 9
- Elytron lacking grooves on dorsal surface or over lateral margin; dorsal surface glabrous or with disperse short, broad, golden, scaly setae (Figs 23–26) 13
9. Elytron with one longitudinal groove over lateral margin bearing short, golden, scaly setae (Figs 20–21); inner surface of meso- and metatibiae with short, stout setae 10
- Elytron with three or four longitudinal grooves on dorsal surface bearing short, golden, scaly setae (Fig. 22) or lacking setae; inner surface of meso- and metatibiae with long, finer setae 12
10. Antennae reaching 3/4 along lateral margin of pronotum; prosternal process produced backwards, surpassing the midpoint of the space between pro- and mesocoxae (Fig. 14); pseudopleuron and epipleuron glabrous, lacking protuberances or punctures; (Fig. 20) *P. (Praocis) marginata* Germain
- Antennae reaching midpoint of lateral margin of pronotum; prosternal process produced backwards, not reaching the midpoint of the space between pro- and mesocoxae (Fig. 13); pseudopleuron with setae arising on punctures; epipleuron with setae arising on protuberances 11
11. Lateral quarters of pronotum and dorsal surface of elytron glabrous; elytron with one carina more approximate to lateral margin than suture, with a broad groove over lateral margin occupying outer third or quarter of elytra bearing short, golden, scaly setae (Fig. 21) *P. (Praocis) elliptica* Philippi & Philippi
- Lateral quarters of pronotum and dorsal surface of elytron with short, golden setae; elytron lacking carinae, with a narrow groove over lateral margin occupying only outer sixth of elytra bearing short, golden, scaly setae *P. (Praocis) subaenea* Erichson
12. Elytron with three longitudinal grooves weakly demarcated bearing sparse short, broad, golden, scaly setae, intervals arched (Flores & Pizarro-Araya 2010, Fig. 1); ventral surface of meso- and metafemora lacking a row of setae on posterior edge *P. (Praocis) sulcata* Eschscholtz
- Elytron with three or four longitudinal grooves well demarcated bearing abundant short, broad, golden, scaly setae, intervals carina-shape (Fig. 21); ventral surface of meso- and metafemora with a row of setae on posterior edge

- *P. (Praocis) spinolai* Gay & Solier
13. Elytral punctures twice the size of pronotal punctures; elytron with a carina more approximate to lateral margin than suture (Fig. 23); ventral surface of meso- and metafemora lacking a row of setae on posterior edge; inner surface of meso- and metatibiae with short, stout setae *P. (Praocis) medvedevi* sp. nov.
- Elytral punctures same size as pronotal punctures; elytron lacking carinae or with two or three weakly defined carinae equidistant between suture and lateral margin (Figs 24–26); ventral surface of meso- and metafemora with a row of setae on posterior edge; inner surface of meso- and metatibiae with long, finer setae 14
14. Antennae reaching midpoint of lateral margin of pronotum; width of anterior margin of pronotum not exceeding half the width of posterior margin; posterior angles of pronotum acute; elytron lacking carinae. *P. (Praocis) curta* Solier
- Antennae reaching 3/4 along lateral margin of pronotum; width of anterior margin of pronotum exceeding half the width of posterior margin; posterior angles of pronotum right; elytron with two or three weakly defined carinae equidistant between suture and lateral margin 15
15. Elytron rugose with a net of lateral ramifications from carinae (Fig. 24); metatibiae curved outward *P. (Praocis) aenea* Gay & Solier
- Elytron punctured and dorsal surface lacking a net of lateral ramifications from carinae (Figs 25–26); metatibiae straight . . . 16
16. Pronotum and elytra with small punctures; elytron with two or three carinae (Fig. 25); lateral styles of tegmen with proximal margin ventrally concave and with abundant setae on distal third of ventral surface; median lobe distally broadened *P. (Praocis) tibialis* Gay & Solier
- Pronotum and elytra with big punctures; elytron with two carinae (Fig. 26); lateral styles of tegmen with proximal margin “inverted V”-shaped ventrally, and with sparse setae on distal 1/5 of ventral surface; median lobe narrowed in pre-distal quarter and distally broadened *P. (Praocis) parva* Gay & Solier

Praocis (Praocis) costata Gay & Solier, 1840

(Figs. 11, 15, 27)

Praocis costata Gay & Solier in Solier, 1840: 222 (rev.); Solier, 1851: 188 (rev.); Lacordaire, 1859: 213; Gemminger & Harold, 1870: 1905 (cat.); Philippi, 1887: 731 (cat.); Gebien, 1910: 260 (cat.); Gebien, 1938: 398 (cat.); Blackwelder, 1945: 522 (cat.); Kulzer, 1958: 15 (rev.); Peña, 1966: 429 (cat.); Vidal & Guerrero, 2007: 73, 212; Flores, 2007: 416 (lectot.).

Praocis ciliata Germain, 1855: 400; Philippi, 1887: 731 (cat.); Gebien, 1910: 260 (cat.); Gebien, 1938: 398 (cat.); Blackwelder, 1945: 522 (cat.); Kulzer, 1958: 15 (syn.); Peña, 1966: 429 (cat.); Flores, 2007: 416 (type). Synonymy by Kulzer, 1958: 15.

Redescription. Length 7.0–9.0 mm. Body black, antennae and legs dark brown. Head. Clypeus and frons glabrous, with round punctures; antennae reaching midpoint of lateral margin of pronotum; antennomere 9 wider than long, with apical tomentose sensory patches arranged in two areas separated dorsally; antennomere 10 as wide as antennomere 11; Thorax. Pronotum widest at midpoint; disc and lateral quarters glabrous; punctures of disc same size as punctures of elytron; width of anterior margin exceeding half the width of posterior margin; lateral quarters convex, dorsal surface of lateral margin lacking a row or tuft of setae, lateral margin with a horizontal, outer groove bearing a row of long, golden setae; posterior angles acute (Fig. 15); prosternum convex, with edge on anterior margin of equal width throughout, lacking prosternal process (Fig. 11); prosternum and mesosternum with punctures. Elytron lacking grooves, with three weakly defined carinae, equidistant between suture and lateral margin; dorsal surface glabrous, with punctures; pseudopleuron with long setae arising on punctures; epipleuron with short setae arising on protuberances, with a row of setae on the edge of anterior quarter. Legs. Ventral surface of meso- and metafemora with a row of setae on posterior edge. Inner surface of meso- and metatibiae with long, fine setae. Metatibiae straight. Male genitalia. Rods of sterna IX close to each other at basal third. Basal lamina of tegmen equal width throughout, with base concave. Lateral styles of tegmen with proximal margin ventrally bisinuate, widest at base, with setae on distal 1/5 of ventral surface. Median lobe moderate ($0.75 < L/T \leq 1.00$), distally broadened, with apical aperture large and apex rounded. Female genitalia. Paraprocts long ($2.0 < P/C \leq 3.0$); baculi of coxite inclined 45° ; proctigeral baculus equal to length of paraproct baculus; apicodorsal lobe of proctiger extending about $\frac{1}{2}$ length of coxite.

Type material. Lectotype of *Praocis costata*: [*costata*] [*Praocis/ costata/ Sol./ Chili*] [*Pr. costata/ Sol./ Chili*] [Type] [*Praocis/ costata Sol./ Type de Solier/ Col. Marseul/ C. Girard det. 1975*] [Lectotypus/ *Praocis costata/ Gay et Solier, 1840/ Des. G. Flores 2005*] (MNHN). One paralectotype same data as lectotype, except the third label (MNHN).

Note: Flores (2007: 416) designated lectotype and paralectotype.

Syntype of *Praocis ciliata*: One specimen: [*costata*] [*Praocis/ costata/ Sol./ Chili*] [*Praocis/ ciliata/ P. G*] (handwritten by Germain) [Type] (MNHN).

Note: This specimen agrees with the description by Germain (1855), and we have no doubt that the label's handwriting belongs to Germain. Therefore we conclude that this specimen is a syntype of *Praocis ciliata*. Kulzer (1958) stated that the type of *P. ciliata* is in the MNNC, but currently is not there (Camousseight 1980 and pers. obs.).

Other material examined. CHILE. Bio Bío Region: Arauco Province: Tirua, 4.i.1977, L.E. Peña, 2 (FMNH), Isla Mocha, xi.1932, D.S. Bullock, 4 (FMNH), Lebu, 12.ii.1963, L.E. Peña, 1 (FMNH), Arauco, 37° 14' S, 73° 19' W, 1 (UCCC), Lebu, 37° 36' S, 73° 39' W, 1 (UCCC). Concepción Province: Coronel, 37° 01' S, 73° 08' W, 1 (UCCC), Escuadron, 36° 57' W, 73° 10' W, 1 (UCCC), Lenga, 36° 45' W, 73° 13' W, 1 (UCCC), Tomé, 36° 37' S, 72° 57' W, 1 (UCCC). Ñuble Province: Tregualemu, 36° 56' S, 71° 52' W, 1 (UCCC). Los Lagos Region: Osorno Province: Pucatrihue, 26.i.1966, L.E. Peña, 1 (UCCC), 1-15.xi.1966, O. Barros, 1 (FMNH), 4-21.ii.1967, L.E. Peña, 2 (FMNH), i.1971, 4 (IADIZA), 2 (LEULS), ii.1980, L.E. Peña, 2 (FMNH), Carelmapu (SW Llanquihue), 2.ii.1957, L.E. Peña, 2 (FMNH).

Geographic distribution. Chile (Bio Bío Region: Arauco Province to Los Lagos Region: Osorno Province), in the Maule and Valdivian Forest biogeographic provinces.

Praocis (Praocis) sanquinolenta Gay & Solier, 1840

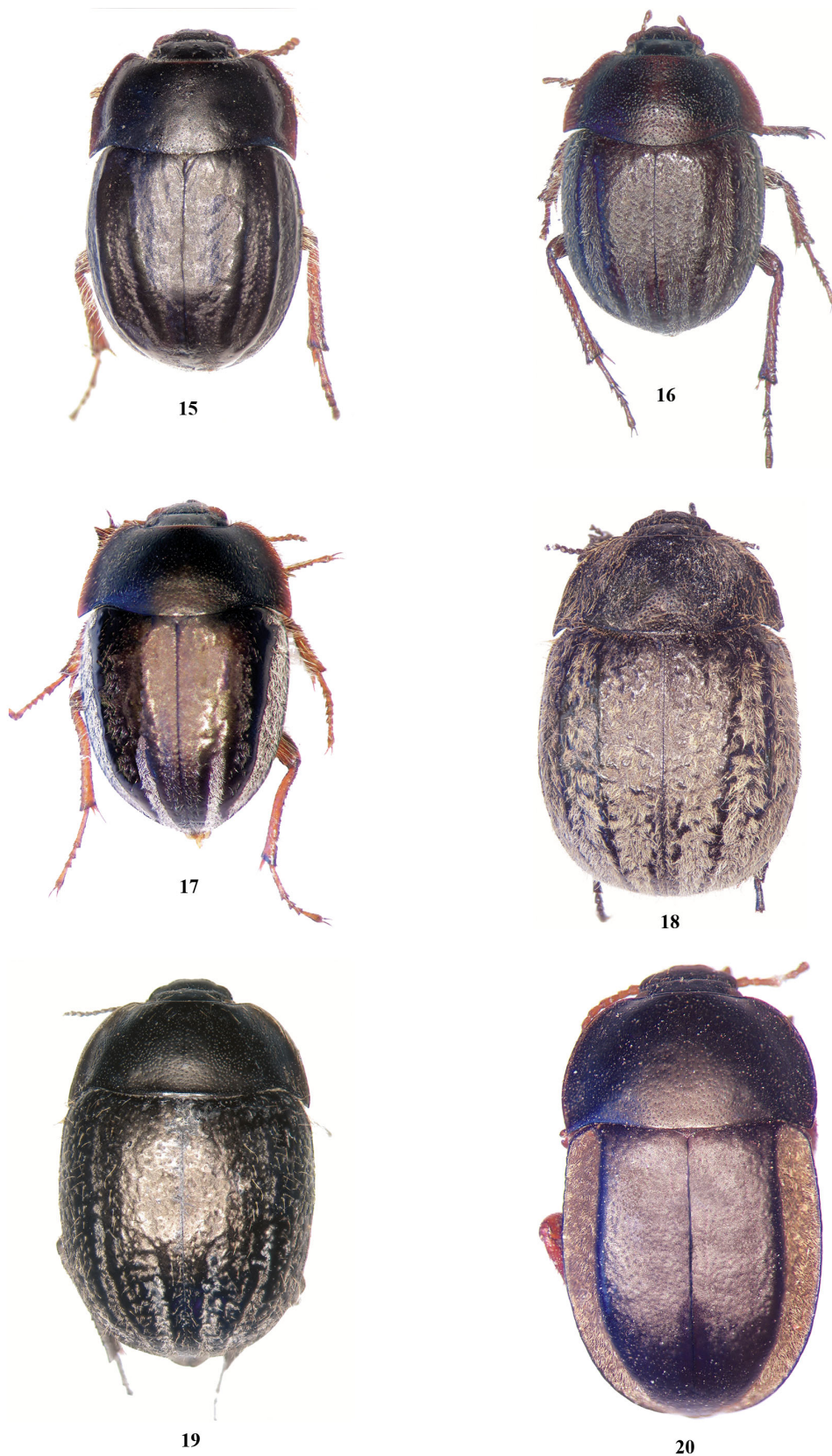
(Figs. 5, 16, 27)

Praocis sanquinolenta Gay & Solier in Solier, 1840: 223 (rev.); Solier, 1851: 192 (rev.); Lacordaire, 1859: 213; Gemminger & Harold, 1870: 1906 (cat.); Philippi, 1887: 733 (cat.); Gebien, 1910: 261 (cat.); Gebien, 1938: 398 (cat.); Blackwelder, 1945: 523 (cat.); Kulzer, 1958: 16 (rev.); Peña, 1966: 429 (cat.); Vidal & Guerrero, 2007: 73; Flores, 2007: 411 (lectot.); Pizarro-Araya *et al.*, 2008: 273 (list).

Praocis audouini Solier, 1840: 222 (rev.); Gemminger & Harold, 1870: 1905 (cat.); Philippi, 1887: 731 (cat.); Gebien, 1910: 260 (cat.); Gebien, 1938: 398 (cat.); Blackwelder, 1945: 522 (cat.); Kulzer, 1958: 15 (rev.); Peña, 1966: 429 (cat.); Vidal & Guerrero, 2007: 73; Flores, 2007: 411 (syn. & lectot.). Synonymy by Flores, 2007: 411.

Redescription. Length 5.0–9.0 mm. Body black to dark brown, antennae and legs dark brown. Head. Clypeus and frons with round punctures each with a central seta; antennae reaching midpoint of lateral margin of pronotum; antennomere 9 longer than wide, with apical tomentose sensory patches arranged in two areas close dorsally; antennomere 10 wider than antennomere 11. Thorax. Pronotum widest behind midpoint; disc and lateral quarters with fine golden setae; punctures of disc same size as punctures of elytron; width of anterior margin exceeding half the width of posterior margin; lateral quarters flat, dorsal surface of lateral margin bearing a row of long golden setae; posterior angles right, apex rounded (Fig. 16); prosternum horizontal, with edge on anterior margin broadened below gula; prosternal process subrectangular forming a right angle, not produced backwards (as in Fig. 12); prosternum and mesosternum with protuberances. Elytron lacking carinae, with four grooves bearing fine, golden setae, intervals flat, grooves wider than intervals; dorsal surface with short golden setae; the inner groove runs from apex of elytron reaching only the posterior third, not surpassing the midpoint of elytron towards anterior, parallel with the inner groove of the other elytron, the second groove runs from apex of elytron surpassing the midpoint of elytron, reaching the anterior third, the third and fourth (outer) grooves are very close together and run over lateral margin from apex of elytron reaching the base towards anterior (Fig. 16); pseudopleuron with long setae arising on protuberances; epipleuron with short setae arising on protuberances, bearing a row of setae on the edge of anterior quarter. Legs. Ventral surface of meso- and metafemora with a row of setae on posterior edge. Inner surface of meso- and metatibiae with long, fine setae. Metatibiae curved outward. Male genitalia. Rods of sterna IX close to each other at basal third. Basal lamina of tegmen equal width throughout, with base concave. Lateral styles of tegmen with proximal margin ventrally concave, widest at base, with setae on distal 1/5 of ventral surface. Median lobe long ($L/T > 1$), distally broadened, with apical aperture large and apex acute. Female genitalia. Paraprocts long ($2.0 < P/C \leq 3.0$); baculi of coxite horizontal; proctigeral baculus equal to length of paraproct baculus; apicodorsal lobe of proctiger extending about 1/4 length of coxite.

Type material. Lectotype of *Praocis sanquinolenta*: [sanqui-/nolenta] [*Praocis/ sanquinolentus/* Sol./ Coquimbo] [*P. sanquinolentus/* Gay et Sol./ Coquimbo] [Type] [*Praocis/ sanquinolenta* Sol./ Type de Solier/ Col. Marseul/ C. Girard det. 1975] [Lectotypus/ *Praocis sanquinolenta/* Gay et Solier, 1840/ Des. G. Flores 2005] (MNHN). One paralectotype same data as lectotype, plus a label: [*sanquinolenta* Sol. 223, 4 Chili] below the label [Type] (MNHN).



FIGURES 15–20. Habitus in dorsal view. 15. *Praocis (Praocis) costata*; 16. *P. (P.) sanguinolenta*; 17. *P. (P.) bicentenario* **sp. nov.**, holotype; 18. *P. (P.) hirtella*; 19. *P. (P.) subsulcata*; 20. *P. (P.) marginata*.



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FIGURES 21–26. Habitus in dorsal view. 21. *Praocis (Praocis) elliptica*; 22. *P. (P.) spinolai*; 23. *P. (P.) medvedevi* **sp. nov.**, holotype; 24. *P. (P.) aenea*; 25. *P. (P.) tibialis*; 26. *P. (P.) parva*.

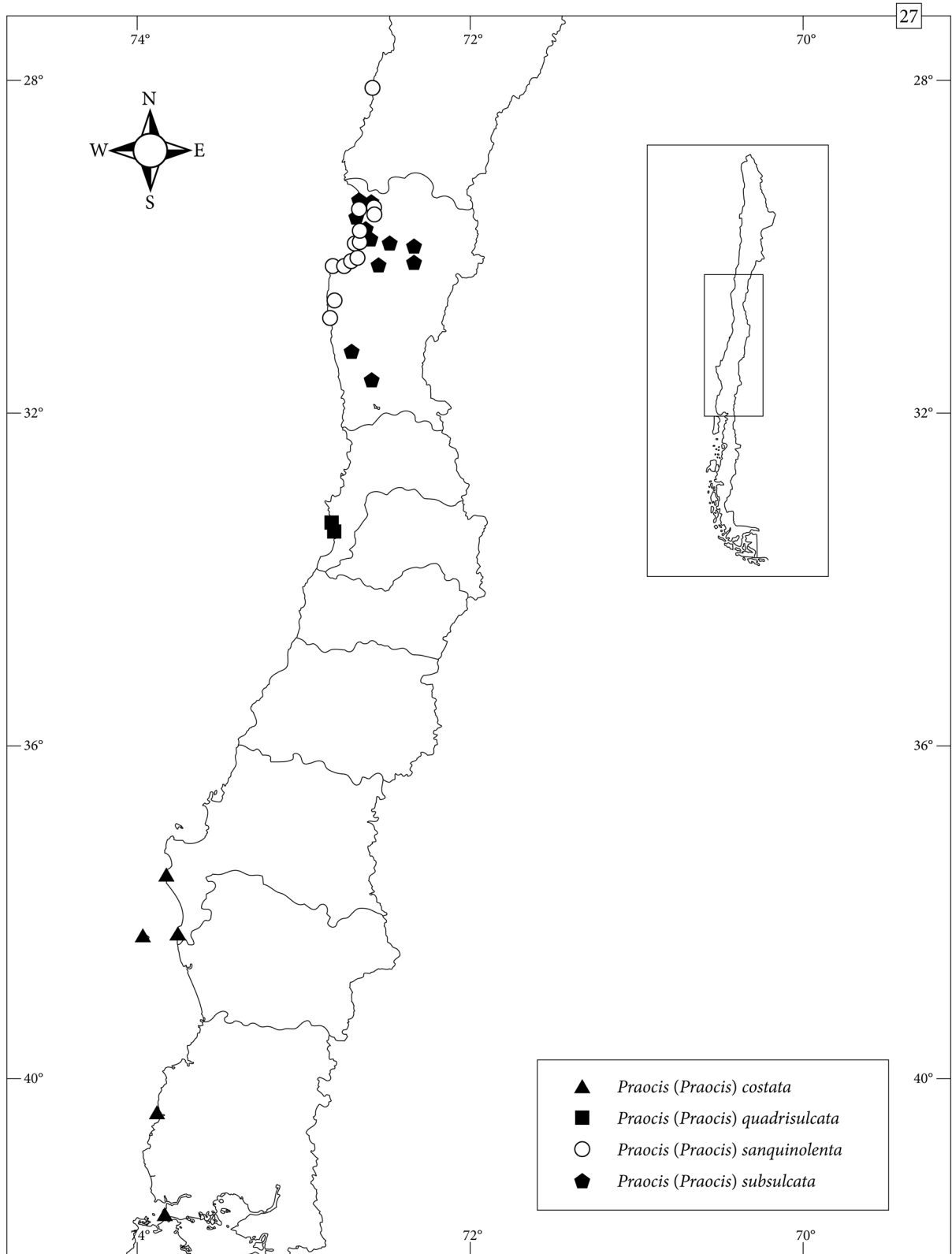


FIGURE 27. Geographical distribution of four species of *Praocis (Praocis)*: *P. (P.) costata*, *P. (P.) quadrisulcata*, *P. (P.) sanquinolenta*, and *P. (P.) subsulcata*.

Note: Flores (2007: 411) designated lectotype.

Lectotype of *Praocis audouini*: [Museum Paris/ Chili/ Gaudichaud 1833] [*Praocis audouini* / Sol.] [Type] [Lectotypus/ *Praocis audouini* / Solier, 1840/ Des. G. Flores 2005] (MNHN). Three paralectotypes same data as lectotype (MNHN).

Note: Flores (2007: 411) designated lectotype and paralectotypes.

Other material examined. CHILE. Atacama Region: Huasco Province: Carrizal Bajo, 09.x.1989, 1 (LEULS). Coquimbo Region: Elqui Province: Quebrada de Honda, 40 km N La Serena, 2.xi.1951, R. Wagenknecht, 1 (FMNH), x.1952, R. Wagenknecht, 1 (FMNH), Cuesta Buenos Aires, x.1992, S. Roig, 1 (IADIZA), Caleta de Hornos, 5.iii.2005, J. Pizarro-Araya 4 (LEULS), Punta de Teatinos, 3.xi.2002, J. Pizarro-Araya 1 (LEULS), Peñuelas, 22.iii.1943, R. Wagenknecht, 1 (FMNH), Coquimbo, 13.xi.1964, L.E. Peña, 1 (FMNH), La Herradura, 13.xi.1964, L.E. Peña, 3 (FMNH), La Pampilla, 15.viii.1969, L. Álvarez, 1 (FMNH), Guayacán, 2.ii.1967, L.E. Peña, 5 (FMNH), 8.ix.1968, Cekalovic, 2 (FMNH), Lagunillas, 4.ix.1947, L.E. Peña, 1 (FMNH), ix.1990, H. Vásquez, 15 (LEULS), 2.iv.1990, H. Vásquez, 1 (LEULS), 9.iii.1956, L.E. Peña, 1 (FMNH), Herradura a Guanaqueros, 3.ix.1947, L.E. Peña, 1 (FMNH), Guanaqueros, 6.xi.1980, L.E. Peña, 1 (FMNH), 9.i.1984, A. Roig, 6 (IADIZA), 10.i.1984, S. Roig, 2 (IADIZA), 25.x.1992, S. Roig, 1 (IADIZA), 23.i.1998, G. Castillo, 2 (IADIZA), 18 (LEULS), Terrazas de Guanaqueros, 14.viii.1999., J. Pizarro-Araya, 1 (LEULS), Tongoy, 25.xi.1954, 1 (FMNH), 16.ix.1964, H. Moyano, 1 (FMNH), 20.iv.1955, L.E. Peña, 1 (LEULS), E Lengua de Vaca, 25.vi.1955, L.E. Peña, 2 (FMNH). Limarí Province: P.N. Fray Jorge, 4.v.1991, H. Vásquez, 2 (LEULS), Talinay, vi.1968, L.E. Peña, 2 (FMNH), 29.x.1965, L.E. Peña, 5 (FMNH).

Geographic distribution. Chile (Atacama Region: Huasco Province to Coquimbo Region: Limarí Province), in the Coquimbo biogeographic province.

Praocis (Praocis) quadrisulcata Germain, 1855

(Figs. 12, 27)

Praocis quadrisulcata Germain, 1855: 399; Philippi, 1887: 732 (cat.); Gebien, 1910: 261 (cat.); Gebien, 1938: 398 (cat.); Blackwelder, 1945: 523 (cat.); Kulzer, 1958: 16 (rev.); Peña, 1966: 429 (cat.); Vidal & Guerrero, 2007: 73, 214; Flores, 2007: 417 (lectot.).

Redescription. Length 7.0–10.0 mm. Body, antennae and legs dark brown. Head. Clypeus and frons with round punctures each with a central seta; antennae reaching midpoint of lateral margin of pronotum; antennomere 9 wider than long, with apical tomentose sensory patches arranged in two areas close dorsally; antennomere 10 wider than antennomere 11. Thorax. Pronotum widest behind midpoint; disc glabrous, lateral quarters with fine, golden setae; punctures of disc same size as punctures of elytron; width of anterior margin not exceeding half the width of posterior margin; lateral quarters convex, dorsal surface of lateral margin bearing a tuft of long golden setae; posterior angles right, apex rounded; prosternum horizontal, with edge on anterior margin broadened below gula; prosternal process subrectangular forming a right angle, not produced backwards (Fig. 12); prosternum and mesosternum with protuberances. Elytron lacking carinae, with four grooves bearing short, broad, golden, scaly setae, intervals flat, grooves wider than intervals; dorsal surface with short golden setae; the inner groove runs from apex of elytron reaching only the posterior third, not surpassing the midpoint of elytron towards anterior, parallel with the inner groove of the other elytron, the second groove runs from apex of elytron surpassing the midpoint of elytron, reaching the anterior third, the third and fourth (outer) grooves are very close together and run over lateral margin from apex of elytron reaching the base towards anterior; pseudopleuron with long setae arising on protuberances; epipleuron with short setae arising on protuberances, bearing a row of setae on the edge of anterior quarter. Legs. Ventral surface of meso- and metafemora with a row of setae on posterior edge. Inner surface of meso- and metatibiae with long, fine setae. Metatibiae straight. Male genitalia. Rods of sterna IX close to each other at basal third. Basal lamina of tegmen equal width throughout, with base concave. Lateral styles of tegmen with proximal margin ventrally bisinuate, widest at base, with setae on distal 1/5 of ventral surface. Median lobe moderate ($0.75 < L/T \leq 1.00$), distally broadened, with apical aperture large and apex acute. Female genitalia. Paraprocts long ($2.0 < P/C \leq 3.0$); baculi of coxite horizontal; proctigeral baculus extending proximad much beyond paraproct baculus; apicodorsal lobe of proctiger extending about $\frac{1}{2}$ length of coxite.

Type material. Lectotype: [Chile] [*quadrisulcata*/ P. G. ined. (handwritten by Germain)] [Colección/ P. Germain] [Sintipo] [Chile M.N.H.N./ Tipo Nº 596] [Lectotypus/ *Praocis quadrisulcata*/ Germain, 1855/ Des. G. Flores 2006] (MNHC).

Note: Flores (2007: 417) designated lectotype.

Other material examined. CHILE. Valparaíso Region: San Antonio Province: Algarrobo, 27.xi.1950, L.E. Peña, 4 (FMNH), 27.vi.1953, L.E. Peña, 1 (FMNH), 26.xi.1950, L.E. Peña, 9 (IADIZA), El Tabo, 1.i.1968, O'Brien, 1 (FMNH), 15.iii.1968, L.E. Peña, 1 (FMNH). Libertador General Bernardo O'Higgins Region: Colchagua Province: Las Palmas de Cocalán, 28.xi.1967, L.E. Peña, 1 (FMNH).

Geographic distribution. Chile (Valparaíso Region: San Antonio Province to Libertador General Bernardo O'Higgins Region: Colchagua Province), in the Santiago biogeographic province.

Praocis (Praocis) rufipes Eschscholtz, 1829

(Figs. 6–7, 28)

Praocis rufipes Eschscholtz, 1829: 6; Guérin-Méneville, 1831: pl. 4 Fig. 1; Guérin-Méneville, 1834: pl. 105; Dejean, 1834: 180 (cat.); Dejean, 1836: 200 (cat.); Guérin-Méneville, 1838: 92; Laporte, 1840: 187; Solier, 1840: 221 (rev.); Curtis, 1845: 457; Solier, 1851: 186 (rev.); Lacordaire, 1859: 213; Gemminger & Harold, 1870: 1906 (cat.); Philippi, 1887: 732 (cat.); Gebien, 1910: 261 (cat.); Gebien, 1938: 398 (cat.); Blackwelder, 1945: 523 (cat.); Kulzer, 1958: 14 (rev.); Peña, 1966: 428 (cat.); Vidal & Guerrero, 2007: 73, 215; Flores, 2007: 416 (lectot.).

Sternodes mannerheimii Fischer, 1844: 125 (male); Motschulsky, 1845: 63 (syn.); Lacordaire, 1859: 214; Gemminger & Harold, 1870: 1906 (cat.); Philippi, 1887: 732 (cat.); Gebien, 1910: 261 (cat.); Gebien, 1938: 398 (cat.); Blackwelder, 1945: 523 (cat.); Kulzer, 1958: 14 (rev.); Peña, 1966: 429 (cat.). Synonymy by Motschulsky, 1845: 63.

Praocis interrupta Solier, 1851: 187; Lacordaire, 1859: 213; Gemminger & Harold, 1870: 1905 (cat.); Philippi, 1887: 732 (cat.); Gebien, 1910: 260 (cat.); Gebien, 1938: 398 (cat.); Blackwelder, 1945: 523 (cat.); Kulzer, 1958: 14 (syn.); Peña, 1966: 429 (cat.). Synonymy by Kulzer, 1958: 14.

Redescription. Length 5.0–9.0 mm. Body black to dark brown, antennae and legs dark brown. Head. Clypeus and frons with round punctures each with a central seta; antennae reaching midpoint of lateral margin of pronotum; antennomere 9 wider than long, with apical tomentose sensory patches arranged in two areas close dorsally; antennomere 10 wider than antennomere 11. Thorax. Pronotum widest behind midpoint; disc and lateral quarters with fine golden setae; punctures of disc same size as punctures of elytron; width of anterior margin exceeding half the width of posterior margin; lateral quarters convex, dorsal surface of lateral margin bearing a tuft of long golden setae; posterior angles right, apex rounded; prosternum horizontal, with edge on anterior margin broadened below gula; prosternal process subrectangular forming a right angle, not produced backwards (as in Fig. 12); prosternum and mesosternum with protuberances. Elytron lacking carinae, with three grooves bearing short, broad, golden, scaly setae, intervals arched, wider than grooves; dorsal surface with short golden setae; the inner groove runs from apex of elytron surpassing the midpoint of elytron towards anterior, converging at the apex with the inner groove of the other elytron, the medial groove runs from apex of elytron reaching the base towards anterior, sometimes interrupted, the outer groove runs over lateral margin from apex of elytron reaching the base towards anterior; pseudopleuron with long setae arising on protuberances; epipleuron with short setae arising on protuberances, bearing a row of setae on the edge of anterior quarter. Legs. Ventral surface of meso- and metafemora with a row of setae on posterior edge. Inner surface of meso- and metatibiae with long, fine setae. Metatibiae curved outward. Male genitalia. Rods of sterna IX close to each other at basal third. Basal lamina of tegmen equal width throughout, with base concave. Lateral styles of tegmen with proximal margin ventrally concave, widest at base, with setae on distal 1/5 of ventral surface (Fig. 7). Median lobe moderate ($0.75 < L/T \leq 1.00$), equal width throughout, with apical aperture small and apex acute (Fig. 6). Female genitalia. Paraprocts long ($2.0 < P/C \leq 3.0$); baculi of coxite horizontal; proctigeral baculus equal to length of paraproct baculus; apicodorsal lobe of proctiger extending about $\frac{1}{4}$ length of coxite.

Type material. Lectotype of *Praocis rufipes*: [Type] [14895] [Hist.-Coll. (Coleoptera)/ Nr. 14895/ *Praocis rufipes* Eschsch./ Chili, Eschsch. & V./ Chamisso/ Zool. Mus. Berlin] [Lectotypus/ *Praocis rufipes* Eschsch./ Des. G. Flores 2001] (MNHUB). Four paralectotypes same data as lectotype, except two first labels (MNHUB).

Note: Flores (2007: 416) designated lectotype and paralectotypes.

Other material examined. CHILE. Valparaíso Region: Valparaíso Province: Concón, 28.ix.1968, M. Pino, 1 (UCCC), Valparaíso, 14-VIII-1933, C. Reed, 1 (MACN), Puchuncaví, Cau Cau, 18 m, 32° 42' 36.10" S, 71° 29'

43.13'' W, 6–13.i.2012, S. & M. Roig & M. Criach 1 (IADIZA), Las Ventanas, xi.1967, L.E. Peña, 2 (FMNH), 1 (IADIZA), Quintero, 16.xi.1957, L.E. Peña, 1 (FMNH), 12.xii.1980, L.E. Peña, 2 (FMNH), Quinteros a Maitencillo, 29.iii.1945, L.E. Peña, 1 (FMNH), Algarrobo, 26.iii.1945, L.E. Peña, 1 (FMNH), 24.xi.1950, L.E. Peña, 1 (FMNH), viii–ix.1958, L.E. Peña, 2 (FMNH), Quintay, 11.viii.1968, L.E. Peña, 1 (FMNH), Tunquén, 6–15.vi.1960, L.E. Peña, 1 (FMNH), Horcones, 19.ii.1963, L.E. Peña, 2 (FMNH), El Peral, 21.x.1946, L.E. Peña, 2 (FMNH), El Convento, 1.xi.1946, L.E. Peña, 2 (FMNH). San Antonio Province: Santo Domingo, xi. 1965, 1 (LEULS), 7 (IADIZA). Libertador General Bernardo O'Higgins Region: Cardenal Caro Province: Pichilemú, 13.x.1967, L.E. Peña, 2 (FMNH). Maule Region: Cauquenes Province: Tregualemú, ii.1968, H. Moyano, 1 (UCCC), Chovelén, 5.xi.1953, L.E. Peña, 1 (FMNH). Talca Province: Constitución, 26.xi.1953, L.E. Peña, 7 (IADIZA), 1 (LEULS), i.1982, 2 (FMNH). Cardenal Caro Province, Bucalemú, 24-I-2001, T. Moore, 7 (JEBC). Bio Bío Region: Concepción Province: Coronel, 27.xi.1960, J. Artigas, 1 (UCCC), Escuadrón, 7.ix.1965, Méndez, 1 (UCCC), San Pedro de la Paz, boca sur (dunas), 14.x.2000, A. Palma, 1 (IADIZA), 2 (LEULS), 2.ix.2002, J. Pizarro-Araya, 1 (LEULS), Arauco, XII-1960, A. Baier, 2 (MACN), 16.xii.1985, S. Roig, 4 (IADIZA), SW Quirihue, 4.xii.2003, M. Snizek, 1 (IADIZA); without more precise data: 2 (RBINS).

Geographic distribution. Chile (Valparaíso Region, Valparaíso Province to Bio Bío Region: Concepción Province), in the Santiago and Maule biogeographic provinces.

***Praocis (Praocis) bicentenario* sp. nov.**

(Figs. 2, 17, 29)

Diagnosis. *Praocis (Praocis) bicentenario* sp. nov. may be identified by the pronotum with posterior angles acute and apex pointed; elytron with two longitudinal grooves and intervals flat (Fig. 17). It differs from *P. (Praocis) rufipes* which has pronotum with posterior angles right and apex rounded; elytron with three longitudinal grooves and intervals arched.

Description. Length 6.0–9.0 mm. Body black to dark brown, antennae and legs dark brown. Head. Clypeus and frons with round punctures, each with a central seta; antennae reaching midpoint of lateral margin of pronotum; antennomere 9 wider than long, with apical tomentose sensory patches arranged in two areas closed dorsally; antennomere 10 wider than antennomere 11 (Fig. 2). Thorax. Pronotum widest behind midpoint; disc and lateral quarters with fine, golden setae; punctures of disc same size as punctures of elytron; width of anterior margin exceeding half the width of posterior margin; lateral quarters convex, dorsal surface of lateral margin bearing a tuft of long, golden setae; posterior angles acute, apex pointed (Fig. 17); prosternum horizontal, with edge on anterior margin broadened below gula; prosternal process subrectangular forming a right angle, not produced backwards (as in Fig. 12); prosternum and mesosternum with protuberances. Elytron lacking carinae, with two grooves bearing short, broad, golden, scaly setae, intervals flat, wider than grooves; dorsal surface with short, golden setae; the narrow inner groove runs from apex of elytron reaching only the posterior third, not surpassing the midpoint of elytron towards anterior, converging at the apex with the inner groove of the other elytron, outer groove wider than inner, runs over lateral margin from apex of elytron reaching the base towards anterior and broadened in central part (Fig. 17), in females sometimes this broadening is longitudinally interrupted; pseudopleuron with long setae arising on protuberances; epipleuron with short setae arising on protuberances, bearing a row of setae on the edge of anterior quarter. Legs. Ventral surface of meso- and metafemora with a row of setae on posterior edge. Inner surface of meso- and metatibiae with long, fine setae. Metatibiae curved outward. Male genitalia. Rods of sterna IX close to each other at basal third. Basal lamina of tegmen equal width throughout, with base concave. Lateral styles of tegmen with proximal margin ventrally concave, widest at base, with setae on distal 1/5 of ventral surface. Median lobe moderate ($0.75 < L/T \leq 1.00$), equal width throughout, with apical aperture small and apex acute. Female genitalia. Paraprocts long ($2.0 < P/C \leq 3.0$); baculi of coxite horizontal; proctigeral baculus extending proximad much beyond paraproct baculus; apicodorsal lobe of proctiger extending about 1/2 length of coxite.

Etymology. Named “bicentenario” celebrating the bicentennial independence of Chile and Argentina.

Type material. Holotype, male: [CHILE: Region Coquimbo/ Prov. Choapa Quereo/ 31° 55' 35.2'' S, 71° 30' 44.2'' W/ 17 m 25-x-2009/ coll: J. Pizarro] [*Praocis (Praocis) bicentenario* sp. n./ HOLOTYPUS male/ Det. G. Flores and/ J. Pizarro-Araya 2011] (MNNC); allotype, female (MNNC) and 52 paratypes with the same data as holotype: 9 (MNNC), 8 (LEULS), 9 (IADIZA), 8 (UCCC), 4 (MNHN), 3 (NHMB), 3 (MNHUB), 2 (HNHM), 2 (BMNH), 2 (MACN), 2 (MLPA).

Paratypes: CHILE. Coquimbo Region: Elqui Province: Choros Bajos, xi.1989, J.E. Barriga, 7 (JEBC), Caleta de Hornos, 5.iii.2005, J. Pizarro-Araya 1 (LEULS). Choapa Province: Huentelauquén, 20.x.1988, 1 (PVGH), 6.x.1947, L.E. Peña, 1 (MNHC), 3 (FMNH), 6.xi.1957, L.E. Peña, 1 (FMNH), 4.x.1967, L.E. Peña, 1 (FMNH), Punta Chungo, Los Vilos, 25.vii.2007, A. González, 1 (LEULS), Puerto Manso, 24–31.vii.1960, L.E. Peña, 2 (IADIZA), Los Vilos, 7–9.x.1947, L.E. Peña, 3 (FMNH), 1 (NHMB), 12.x.1994, J.E. Barriga, 1 (JEBC), S Puerto Manso, 18–19.ix.1947, L.E. Peña, 1 (FMNH), N Los Vilos, 19.xi.1969, L.E. Peña, 3 (FMNH), Ñague, Los Vilos, Coquimbo, 5.xi.1981, L.E. Peña, 1 (IADIZA), 1 (FMNH), Los Vilos, 28.x.1970, M. Pino, 2 (UCCC), Quereo, ix.1983, G. Carrasco, 1 (FMNH), 1.xi.2008, F. Alfaro, 1 (LEULS), Huaquén, 24.xi.1961, L.E. Peña, 1 (FMNH), 26.x.1965, L.E. Peña, 1 (FMNH), Los Molles, 22.x.1961, L.E. Peña, 1 (FMNH).

Remarks. Most of the paratypes collected by L.E. Peña previously deposited in FMNH and NHMB were determined by Kulzer as *Praocis audouini* Solier 1840 and he used these specimens for his redescription of *P. audouini* (Kulzer, 1958). Probably Kulzer did not see the type of this species. Recently one of us (GEF) examined the types of *P. audouini* in the miscellaneous boxes of the old collection in MNHN and concluded it was a junior synonym of *P. sanguinolenta* Gay & Solier (Flores, 2007: 411). Because this misidentification of Kulzer we interpreted these specimens and the ones recently collected by JPA as a new species of *Praocis*, *P. bicentenario*.

Habitat. *Praocis (P.) bicentenario* sp. nov. inhabits the Gajardo's (1994) mesic vegetational formation named arborescent steppe shrub associated with *Piptochaetium montevidense* (Poaceae), *Hypochoeris radicata* (Asteraceae), *Nolana* sp. (Nolanaceae), *Stachys grandidentata* (Lamiaceae) and *Plantago* sp. (Plantaginaceae).

***Praocis (Praocis) hirtella* Kulzer, 1958**

(Figs. 10, 18, 30)

Praocis hirtella Kulzer, 1958: 18 (rev.); Peña, 1966: 429 (cat.); Vidal & Guerrero, 2007: 73, 213.

Redescription. Length 8.0–14.0 mm. Body, antennae and legs black to dark brown or pronotum and elytra black and head, antennae, legs, venter, and pseudopleuron dark brown. Head. Clypeus and frons with round punctures each with a central seta; antennae reaching midpoint of lateral margin of pronotum; antennomere 9 longer than wide, with apical tomentose sensory patches arranged in two areas separated dorsally; antennomere 10 as wide as antennomere 11. Thorax. Pronotum widest behind midpoint; disc glabrous or with setae, lateral quarters with fine golden setae; punctures of disc same size as punctures of elytron; width of anterior margin not exceeding half the width of posterior margin; lateral quarters convex, dorsal surface of lateral margin bearing a row of short, golden setae; posterior angles acute, apex pointed (Fig. 18); prosternum horizontal, with edge on anterior margin broadened below gula; prosternal process produced backwards, not reaching the midpoint of the space between pro- and mesocoxae (as in Fig. 13); prosternum and mesosternum with punctures. Elytron rugose with two carinae and three grooves equidistant between suture and lateral margin or lacking carinae; intervals flat, grooves wider than intervals (Fig. 18); dorsal surface and grooves bearing two kinds of golden setae: some short, broad, scaly, dense, and others long, finer, sparse or forming tuft; all grooves run from apex of elytron surpassing the midpoint of elytron towards anterior, the inner groove runs parallel with the inner groove of the other elytron reaching the anterior third, the medial and outer grooves reach the base (Fig. 18); pseudopleuron with long setae arising on punctures; epipleuron with short setae arising on protuberances, bearing a row of setae on the edge of anterior quarter. Legs. Ventral surface of meso- and metafemora with a row of setae on posterior edge. Inner surface of meso- and metatibiae with long, fine setae. Metatibiae straight. Female genitalia (Fig. 10). Paraprocts moderate ($1.2 \leq P/C \leq 2.0$); baculi of coxite inclined 45° ; proctigeral baculus extending proximad much beyond paraproct baculus; apicodorsal lobe of proctiger extending about $\frac{1}{2}$ length of coxite. Male: unknown.

Type material. Holotype: [Pta. Lengua/ de Vaca (E)/ Coquimbo/ 25 Junio 1955/ coll: L.E. Peña] [Holotypus/ *Praocis hirtella* nov./ det. H. Kulzer 1957] [sex: female/ Det. G. Flores & J. Pizarro-A. 2009] (NHMB); allotype: [Fray Jorge/ Coquimbo/ 13–15-Sept-1947/ coll: L.E. Peña] [Allotypus/ *Praocis hirtella* nov./ det. H. Kulzer 1957] [sex: female/ Det. G. Flores & J. Pizarro-A. 2009] (FMNH); five paratypes: [Talinay/ Coquimbo/ 20-22-Sept-1947/ coll: L.E. Peña] [Paratypus/ *Praocis hirtella* nov./ H. Kulzer 1957] [sex: female/ Det. G. Flores & J. Pizarro-A. 2009] (4 NHMB; 1 FMNH); one paratype: [Chile/ Ovalle/ XI-1941] [Paratypus/ *Praocis hirtella* nov./ H. Kulzer 1957] [sex: female/ Det. G. Flores & J. Pizarro-A. 2009] (NHMB); one paratype female same data as allotype (NHMB).

Other material examined. CHILE. Coquimbo Region: Elqui Province: El Tofo, x.1982, 1 (FMNH), La Herradura a Lagunillas, 1–3.ix.1947, L.E. Peña, 1 (FMNH). Limarí Province: El Peñón, 1.xi.1957, L.E. Peña, 1 (FMNH), Andacollo, 17.vii.2007, P. Augusto 1 (LEULS), Lengua de Vaca, 29.x.1965, L.E. Peña, 2 (FMNH), Fray Jorge, 13–18.ix.1947, L.E. Peña, 1 (FMNH), 16.ix.1964, T.C.K., 1 (UCCC), 6–9.ix.1980, L.E. Peña, 1 (FMNH), 400 m, 8.xi.1991, H. Vásquez, 2 (LEULS), 1 (IADIZA), 7–8.xi.2001, J. Pizarro-Araya, 3 (IADIZA), Talinay, 13.x.1976, C. Vivar, 1 (MNNC), xi.1978, J. Escobar, 4 (FMNH), Mineral de Talca, 28.ix.2003, J. Pizarro-Araya 2 (LEULS), 2 (IADIZA), Los Loros, desembocadura Río Limarí, 18.ix.1969, L.E. Peña, 4 (FMNH), Caleta El Limarí, 22.ix.2004, L.S. Espinoza, 2 (LEULS), Alcones, 12.xi.1974, M. Pino, 1 (UCCC); without more precise data, 2 (MNNC).

Geographic distribution. Chile (Coquimbo Region, El Tofo to Alcones), in the Coquimbo biogeographic province.

Praocis (Praocis) subsulcata Gay & Solier, 1840

(Figs. 19, 27)

Praocis subsulcata Gay & Solier in Solier, 1840: 224 (rev.); Solier, 1851: 189 (rev.); Lacordaire, 1859: 213; Gemminger & Harold, 1870: 1906 (cat.); Philippi, 1887: 733 (cat.); Gebien, 1910: 262 (cat.); Gebien, 1938: 398 (cat.); Blackwelder, 1945: 523 (cat.); Kulzer, 1958: 20 (rev.); Peña, 1966: 430 (cat.); Vidal & Guerrero, 2007: 73, 216; Flores, 2007: 417 (lectot.).

Redescription. Length 9.0–13.0 mm. Body black, antennae dark brown, legs black to dark brown. Head. Clypeus and frons with round punctures each with a central seta; antennae reaching midpoint of lateral margin of pronotum; antennomere 9 longer than wide, with apical tomentose sensory patches arranged in two areas separated dorsally; antennomere 10 as wide as antennomere 11. Thorax. Pronotum widest behind midpoint; disc glabrous, lateral quarters with fine golden setae; punctures of disc same size as punctures of elytron; width of anterior margin not exceeding half the width of posterior margin; lateral quarters convex, dorsal surface of lateral margin bearing a row of short golden setae; posterior angles acute, apex pointed (Fig. 19); prosternum horizontal, with edge on anterior margin broadened below gula; prosternal process produced backwards, not reaching the midpoint of the space between pro- and mesocoxae (as in Fig. 13); prosternum and mesosternum with punctures. Elytron lacking carinae, with three grooves weakly demarcated (Fig. 19), bearing two kinds of golden setae: some short, broad, scaly and others long, finer, sparse; intervals flat, wider than grooves; all grooves run from apex of elytron towards anterior, the inner groove runs parallel with the inner groove of the other elytron reaching the posterior third, not surpassing the midpoint of elytron, the medial and outer grooves reach the base (Fig. 19); dorsal surface with long golden setae; pseudopleuron with long setae arising on punctures; epipleuron with short setae arising on protuberances, bearing a row of setae on the edge of anterior quarter. Legs. Ventral surface of meso- and metafemora with a row of setae on posterior edge. Inner surface of meso- and metatibiae with long, fine setae. Metatibiae straight. Female genitalia. Paraprocts moderate ($1.2 \leq P/C \leq 2.0$); baculi of coxite inclined 45° ; proctigeral baculus extending proximad much beyond paraproct baculus; apicodorsal lobe of proctiger extending about $\frac{1}{2}$ length of coxite. Male: unknown.

Type material. Lectotype: [*subsul / cata*] [*Praocis/ subsulcata/ Coquimbo/ Sol.*] [*P. subsulcata/ Gay-Sol./ Coquimbo*] [Type] [*Praocis/ subsulcata Sol./ Type de Solier/ Col. Marseul/ C. Girard det. 1975*] [Lectotypus/ *Praocis subsulcata/ Gay et Solier, 1840/ Des. G. Flores 2005*] (MNHN). Two paralectotypes same data as lectotype, one plus a label: [*subsulcata Sol. 224, 6 Coquimbo*] below the label [Type] and the other plus a label: [Coquimbo/ Gay] between first and second label (MNHN).

Note: Flores (2007: 417) designated lectotype and paralectotypes.

Other material examined. CHILE. Coquimbo Region: Elqui Province: Llano de la Higuera, 14.x.1957, L.E. Peña, 2 (FMNH), Quebrada Honda, 30.x.1965, L.E. Peña, 2 (FMNH), El Temblador, 1.v.2004, L.S. Espinoza, 1 (LEULS), Caleta de Hornos, 8.x.1996, J. Pizarro-Araya, 1 (LEULS), Cuesta Buenos Aires, 29.x.1967, L.E. Peña, 1 (FMNH), 30.x.1965, L.E. Peña, 1 (FMNH), Quebrada Porotitos, 16.ix.2005, J. Pizarro-Araya, 1 (LEULS), Juan Soldado, 5.vi.2004, L.S. Espinoza, 2 (LEULS), Caleta de Hornos, 35 km N de La Serena, 3.x.1996, J. Pizarro-Araya, 1 (LEULS), El Durazno, Vicuña, 24.x.1971, L. Alvarez, 1 (FMNH), El Molle, La Serena, x.1958, L.E. Peña, 1 (FMNH), Diaguitas, Valle Elqui, 13.viii.2004, D. Valdivia, 2 (LEULS), 1 (IADIZA), P. Augusto, 1 (LEULS), 1 (IADIZA), 13.viii.1994, L.S. Espinoza, 2 (LEULS), 11.i.2006, P. Augusto, 1 (LEULS), 19.xi.2007, J.

Pizarro-Araya, 8 (LEULS), Quebrada Santa Gracia, 1.ix.2004, L.S. Espinoza, 1 (LEULS), 1.iv.1994, J. Pizarro-Araya, 1 (LEULS), Colina El Pino, La Serena, 23.i.1996, J. Pizarro-Araya, 1 (LEULS). Limarí Province: Andacollo, 17.viii.2007, P. Agosto, 1 (LEULS), P.N. Fray Jorge, xii.1991, H. Vasquez, 1 (LEULS). Choapa Province: W Canela Baja, 30.ix.1967, L.E. Peña, 1 (FMNH), Hacienda Illapel, El Calabozo, 29.x.1967, L.E. Peña, 2 (FMNH).

Geographic distribution. Chile (Coquimbo Region: Elqui Province to Choapa Province), in the Coquimbo biogeographic province.

Praocis (Praocis) marginata Germain, 1855

(Figs. 14, 20, 28)

Praocis marginata Germain, 1855: 401; Philippi, 1887: 732 (cat.); Gebien, 1910: 260 (cat.); Gebien, 1938: 400 (cat.); Blackwelder, 1945: 523 (cat.); Kulzer, 1958: 26 (rev.); Peña, 1966: 431 (cat.); Vidal & Guerrero, 2007: 73.

Redescription. Length 7.0–8.1 mm. Head, thorax and elytra black, sternites, femora and tibiae black to dark brown antennae and tarsi dark brown. Head. Clypeus and frons with round punctures each with a central seta; antennae reaching 3/4 along lateral margin of pronotum; antennomere 9 longer than wide, with apical tomentose sensory patches arranged in two areas separated dorsally; antennomere 10 as wide as antennomere 11. Thorax. Pronotum widest behind midpoint; disc and lateral quarters glabrous; punctures of disc same size as punctures of elytron; width of anterior margin not exceeding half the width of posterior margin; lateral quarters convex, dorsal surface of lateral margin bearing a row of short golden setae; posterior angles acute, apex pointed (Fig. 20); prosternum horizontal, with edge on anterior margin broadened below gula; prosternal process produced backwards, surpassing the midpoint of the space between pro- and mesocoxae (Fig. 14); prosternum and mesosternum with punctures. Elytron with one carina more approximate to lateral margin than suture, with a broad groove over lateral margin, occupying outer third of elytra, bearing short, broad, golden, scaly setae (Fig. 20); dorsal surface glabrous, with punctures; pseudopleuron and epipleuron glabrous, lacking protuberances or punctures, epipleuron lacking a row of setae on the edge of anterior quarter. Legs. Ventral surface of meso- and metafemora lacking a row of setae on posterior edge. Inner surface of meso- and metatibiae with short, stout setae. Metatibiae straight. Male genitalia. Rods of sterna IX close to each other at basal third. Basal lamina of tegmen equal width throughout, with base concave. Lateral styles of tegmen with proximal margin ventrally concave, widest at base, with setae on distal quarter of ventral surface. Median lobe long ($L/T > 1$), narrowed in pre-distal quarter and distally broadened, with apical aperture large and apex acute. Female: unknown.

Material examined. CHILE. Atacama Region: Chañaral Province, Ag. El León, N Caldera, 4–6.x.1980, L.E. Peña, 1 (FMNH); Quebrada el León, 1.ix.2007. J. Pizarro-Araya 1 (LEULS), without more precise data, *cum typus comparatum*, det. H. Kulzer 1957, 1 (NHMB).

Geographic distribution. Chile (Atacama Region: Chañaral Province, Quebrada el León), in the Atacama biogeographic province.

Praocis (Praocis) elliptica Philippi & Philippi, 1864

(Figs. 8–9, 13, 21, 29)

Praocis elliptica Philippi & Philippi, 1864: 342; Gemminger & Harold, 1870: 1905 (cat.); Philippi, 1887: 731 (cat.); Gebien, 1910: 260 (cat.); Gebien, 1938: 398 (cat.); Blackwelder, 1945: 522 (cat.); Kulzer, 1958: 25 [as synonym of *Praocis submetallica* Guérin-Méneville, 1834]; Peña, 1966: 430 (cat.) [as synonym of *Praocis submetallica*]; Flores, 2007: 412 (resurrection & lectot.).

Praocis angustata Philippi & Philippi, 1864: 341; Gemminger & Harold, 1870: 1905 (cat.); Philippi, 1887: 731 (cat.); Gebien, 1910: 260 (cat.); Gebien, 1938: 398 (cat.); Blackwelder, 1945: 522 (cat.); Kulzer, 1958: 25 [as synonym of *Praocis submetallica* Guérin-Méneville, 1834]; Peña, 1966: 430 (cat.) [as synonym of *Praocis submetallica*]; Flores, 2007: 412 (syn. & lectot.). Synonymy by Kulzer, 1958: 25.

Redescription. Length 9.0–11.0 mm. Body black or dorsal surface black and ventral surface dark brown, antennae dark brown, legs black to dark brown. Head. Clypeus and frons glabrous, with round punctures; antennae reaching midpoint of lateral margin of pronotum; antennomere 9 longer than wide, with apical tomentose sensory patches

arranged in two areas separated dorsally; antennomere 10 as wide as antennomere 11. Thorax. Pronotum widest behind midpoint; disc and lateral quarters glabrous; punctures of disc same size as punctures of elytron; width of anterior margin not exceeding half the width of posterior margin; lateral quarters convex, dorsal surface of lateral margin bearing a tuft of short golden setae; posterior angles acute, apex pointed (Fig. 21); prosternum horizontal, with edge on anterior margin broadened below gula; prosternal process produced backwards, not reaching the midpoint of the space between pro- and mesocoxae (Fig. 13); prosternum and mesosternum with punctures. Elytron with one carina more approximate to lateral margin than suture, with a broad groove over lateral margin occupying outer third or quarter of elytra, bearing short, broad, golden, scaly setae (Fig. 21); dorsal surface glabrous, with punctures; pseudopleuron with long setae arising on punctures, bearing a row of setae below lateral margin; epipleuron with short setae arising on protuberances, lacking a row of setae on the edge of anterior quarter. Legs. Ventral surface of meso- and metafemora lacking a row of setae on posterior edge. Inner surface of meso- and metatibiae with short, stout setae. Metatibiae straight. Male genitalia. Rods of sterna IX "V"-shaped. Basal lamina of tegmen distally narrowed, with base concave. Lateral styles of tegmen with proximal margin ventrally bisinuate, widest at base, with setae on distal half of ventral surface (Fig. 9). Median lobe moderate ($0.75 < L/T \leq 1.00$), distally broadened, with apical aperture large and apex rounded (Fig. 8). Female genitalia. Paraprocts moderate ($1.2 \leq P/C \leq 2.0$); baculi of coxite inclined 45° ; proctigeral baculus extending proximad much beyond paraproct baculus; apicodorsal lobe of proctiger extending about $\frac{1}{4}$ length of coxite.

Type material. Lectotype of *Praocis elliptica*: [*Praocis/ elliptica/* (Phil.). (handwritten by Philippi)] [Lectotypus/ *Praocis elliptica/* Philippi & Philippi, 1864/ Des. G. Flores 2006] (MNNC).

Note: Flores (2007: 412) designated lectotype.

Lectotype of *Praocis angustata*: [*Praocis/ angustata/* (Phil.). (handwritten by Philippi)] [Lectotypus/ *Praocis angustata/* Philippi & Philippi, 1864/ Des. G. Flores 2006] (MNNC).

Note: Flores (2007: 412) designated lectotype.

Other material examined. CHILE. Coquimbo Region: Elqui Province: Coquimbo, 1.ix.1947, L.E. Peña, 1 (FMNH). Limarí Province: Río Los Molles, Ovalle, 2400 m, 19.xi.1961, L.E. Peña, 2 (FMNH). Choapa Province: Hacienda Illapel, 600–1000 m, 1–6.xi.1954, L.E. Peña, 2 (FMNH), 16.xi.1963, L.E. Peña, 1 (FMNH), Illapel, 10.iii.1964, A. Mesa, 1 (IADIZA), Caimanes, 19.x.1969, L.E. Peña, 2 (FMNH), Canela Alta, 24.x.1961, L.E. Peña, 1 (FMNH), Puerto Oscuro, 18–28.ix.1947, L.E. Peña, 2 (FMNH), 1 (MNNC), 18.xi.1971, G. Santic, 1 (MNNC), 23.ix.2004, J. Pizarro-Araya 1 (LEULS), El Naranjo, Tilama, Quilimari, 2.xi.1969, L.E. Peña, 2 (FMNH), Ñague, 26.ix.1980, L.E. Peña, 1 (FMNH), Ñague, 30 km N Los Vilos, 13.x.1967, G. Zuffi, 1 (FMNH), 1 (PVGH), 40 km N Los Vilos, 1.x.1983, A. Roig, 1 (IADIZA), Los Vilos, 27.x.1965, L.E. Peña, 1 (FMNH), 15.x.1967, G. Zuffi, 1 (IADIZA), Quereo, $31^\circ 55' 35.2''$ S, $71^\circ 30' 44.2''$ W, 17 m, 25-x-2009, coll: J. Pizarro-Araya, 2 (IADIZA), M. Cortes, 1 (IADIZA), J.P. Castillo, 1 (IADIZA), 1.xi.2008, F. Alfaro, 5 (LEULS).

Geographic distribution. Chile (Coquimbo Region, Río Los Molles to Quereo), in the Coquimbo biogeographic province.

Praocis (Praocis) subaenea Erichson, 1834

(Figs. 1, 28)

Praocis subaenea Erichson, 1834: 248 (March 12); Curtis, 1845: 457; Lacordaire, 1859: 214; Gemminger & Harold, 1870: 1906 (cat.); Philippi, 1887: 733 (cat.); Gebien, 1910: 261 (cat.); Gebien, 1938: 398 (cat.); Blackwelder, 1945: 523 (cat.); Kulzer, 1958: 26 (rev.); Peña, 1966: 430 (cat.); Vidal & Guerrero, 2007: 73; Flores, 2007: 412 (lectot.).

Praocis submetallica Guérin-Méneville, 1834: 9 (June); Dejean, 1836: 200 (cat.); Guérin-Méneville, 1838: 92; Laporte, 1840: 187; Solier, 1840: 224 (rev.); Solier, 1851: 190 (rev.); Lacordaire, 1859: 213; Gemminger & Harold, 1870: 1906 (cat.); Philippi, 1887: 733 (cat.); Kolbe, 1907: 86 (cat.); Gebien, 1910: 261 (cat.); Gebien, 1938: 398 (cat.); Blackwelder, 1945: 523 (cat.); Kulzer, 1958: 24 (rev.); Peña, 1966: 430 (cat.); Vidal & Guerrero, 2007: 73; Flores, 2007: 412 (syn. & lectot.).
Synonymy by Flores, 2007: 412.

Praocis laevicosta Curtis, 1845: 457; Lacordaire, 1859: 214; Gemminger & Harold, 1870: 1905 (cat.); Philippi, 1887: 732 (cat.); Gebien, 1910: 260 (cat.); Gebien, 1938: 398 (cat.); Blackwelder, 1945: 523 (cat.); Kulzer, 1958: 26 (syn.); Peña, 1966: 431 (cat.). Synonymy by Kulzer, 1958: 26.

Redescription. Length 6.0–11.0 mm. Body black to dark brown, antennae and legs dark brown. Head (Fig. 1). Clypeus and frons with round punctures each with a central seta; antennae reaching midpoint of lateral margin of

pronotum; antennomere 9 longer than wide, with apical tomentose sensory patches arranged in two areas separated dorsally; antennomere 10 as wide as antennomere 11. Thorax. Pronotum widest behind midpoint; disc glabrous, lateral quarters with fine, golden setae; punctures of disc same size as punctures of elytron; width of anterior margin not exceeding half the width of posterior margin; lateral quarters convex, dorsal surface of lateral margin bearing a row of short golden setae; posterior angles acute, apex pointed; prosternum horizontal, with edge on anterior margin broadened below gula; prosternal process produced backwards, not reaching the midpoint of the space between pro- and mesocoxae (as in Fig. 13); prosternum and mesosternum with punctures. Elytron lacking carinae, with a narrow groove over lateral margin, occupying only outer sixth of elytra, bearing short, broad, golden, scaly setae; dorsal surface with short golden setae; pseudopleuron with long setae arising on punctures; epipleuron with short setae arising on protuberances, lacking a row of setae on the edge of anterior quarter. Legs. Ventral surface of meso- and metafemora lacking a row of setae on posterior edge. Internal surface of meso- and metatibiae with short, stout setae. Metatibiae straight. Male genitalia. Rods of sterna IX “V”-shaped. Basal lamina of tegmen equal width throughout, with base concave. Lateral styles of tegmen with proximal margin ventrally bisinuate, widest at base, with setae on distal half of ventral surface. Median lobe moderate ($0.75 < L/T \leq 1.00$), distally broadened, with apical aperture large and apex rounded. Female genitalia. Paraprocts moderate ($1.2 \leq P/C \leq 2.0$); baculi of coxite inclined 45° ; proctigeral baculus extending proximad much beyond paraproct baculus; apicodorsal lobe of proctiger extending about $\frac{1}{2}$ length of coxite.

Type material. Lectotype of *Praocis subaenea*: [Type] [14891] [Sex: male/ Det. G. Flores] [Hist.-Coll. (Coleoptera)/ Nr 14891/ *Praocis subaenea* Erichs./ Chili, Meyer/ Zool. Mus. Berlin] [Syntypus/ *Praocis subaenea*/ Erichson, 1834/ labelled by the MNHUB 2005] [Lectotypus/ *Praocis subaenea*/ Erichson, 1834/ Des. G. Flores 2005] (MNHUB). Two paralectotypes same data as lectotype, except three first labels (MNHUB).

Note: Flores (2007: 412) designated lectotype.

Lectotype of *Praocis submetallica*: [Type] [Type/ Guérin-Men.] [Ex-Museum/ Guérin-Meneville] [*Praocis submetallica*/ Chili Guer.] [Lectotypus/ *Praocis submetallica*/ Guérin-Meneville, 1834/ Des. G. Flores 2005] (MNHN).

Note: Flores (2007: 412) designated lectotype.

Lectotype of *Praocis laevicosta*: [Type] [*Praocis laevicosta* Curt.] [102 *P. laevicosta*/ Curt./ on reverse: Valp. (prov. Valparaiso, Chile)] [Lectotypus/ *Praocis laevicosta*/ Curtis, 1845/ Des. G. Flores & J. Pizarro-A. 2010] (BMNH) is the lectotype by present designation.

Note: Curtis (1845: 457) in describing this species stated: “several specimens from Valparaiso”. This is the only specimen of the type series of *P. laevicosta* available in BMNH. To fix the current interpretation of this name and to ensure stability, we are hereby designating this lectotype.

Other material examined. CHILE. Coquimbo Region: Elqui Province: Colina El Pino, La Serena, 10.xi.1992, K. Ayala, 1 (LEULS), Coquimbo, 20.ix.1969, P.R.F., 1 (FMNH), 22.x.1966, L.E. Peña, 1 (FMNH), 17.ix.1967, L.E. Peña, 3 (FMNH), Diaguitas, 13.viii.2004, P. Augusto, 1 (LEULS), Monte Grande, 20.ix.2009, J. Pizarro-Araya, 1 (LEULS), Pisco Elqui, 18.ix.1963, Gleisner, 1 (UCCC), 14.viii.2004, J. Pizarro-Araya, 7 (IADIZA), 14.viii.2004, P. Augusto, 1 (LEULS), L.S. Espinoza, 6 (LEULS), J. Pizarro-Araya, 11 (LEULS), C. Saavedra, 3 (LEULS), La Pampilla, 15.viii.1969, L. Álvarez, 1 (FMNH), Totalillo, 2.ix.1947, L.E. Peña, 2 (FMNH), 3.i.2004, J.P. Castillo, 1 (LEULS), Guanaqueros, S. Roig, x.1992, 1 (IADIZA), Terrazas de Guanaqueros, 14.viii.1999, J. Pizarro-Araya, 2 (LEULS), Tongoy, 7.ix.1947, L.E. Peña, 1 (FMNH), El Peñón, 1.xi.1957, L.E. Peña, 1 (FMNH). Limarí Province: Ovalle, 22.x.1944, 1 (FMNH), 30 km N. Ovalle, S. Roig, 1 (IADIZA), Socos, 28.x.1964, L.E. Peña, 3 (FMNH), 27.ix.1952, L.E. Peña, 1 (FMNH), 28.ix.1980, L.E. Peña, 2 (FMNH), 27.ix.2003, J. Pizarro-Araya, 4 (LEULS), 8.x.1974, L.E. Peña, 2 (FMNH), 8.x.1974, L.E. Peña, 1 (FMNH), Tangué, Cerro de Tamaya, 10.ix.1947, L.E. Peña, 2 (IADIZA), P.N. Fray Jorge, 29.xi.1992, L. Portilla, 1 (LEULS), 15.ix.1947, L.E. Peña, 2 (FMNH), 9.i.1984, S. Roig, 4 (IADIZA), 28.ix.1996, S. Vega, 1 (LEULS) 9.x.1999, G. Castillo, 10 (IADIZA), 4.xi.2003, C. Mattoni, L. Prendini, J. Ochoa, 1 (IADIZA), 15 km NW Pachingo, 100–200 m, 20.x.1966, E.I. Schlinger & M.E. Irwin, 1 (FMNH), Tarumay, 15.ix.1947, L.E. Peña, 1 (FMNH), Talinay, 17.ix.1967, L.E. Peña, 1 (FMNH), 23.xi.1967, L.E. Peña, 3 (FMNH), Alcones, 24.x.2009, coll: J. Pizarro-Araya, 2 (IADIZA), 2 (LEULS). Choapa Province: Huentelauquén, 3.xii.1965, L.E. Peña, 2 (FMNH), x.1967, L.E. Peña, 4 (FMNH), 4.x.1967, L.E. Peña, 5 (FMNH), Guampulla, 2.xi.1957, L.E. Peña, 1 (FMNH), 1 (FMNH), Puerto Oscuro, 18–28.ix.1947, L.E. Peña, 2 (FMNH), 26.x.1961, L.E. Peña, 1 (FMNH), Huilmo, Quilitapia, 13.xi.1961, L.E. Peña, 1 (FMNH), Los Vilos, 9.x.1947, L.E. Peña, 1 (FMNH), 22.x.1961, L.E. Peña, 1 (FMNH), 26.x.1965, L.E. Peña, 1

(FMNH), 5.i.1966, L.E. Peña, 4 (FMNH), 13.x.1974, L.E. Peña, 8 (FMNH), 27.x.1965, L.E. Peña, 1 (FMNH), 2 km N Los Vilos, 4.x.1967, L.E. Peña, 5 (FMNH), 8 km S Los Vilos, 1.x.1983, A. Roig, 3 (IADIZA), 27.x.1965, L.E. Peña, 2 (FMNH), Quereo, 31° 55' 35.2" S, 71° 30' 44.2" W, 17 m, 25-x-2009, coll: J. Pizarro-Araya, 4 (IADIZA), 4 (LEULS), A. Levicán, 3 (LEULS), M. Cortes, 2 (LEULS), J.P. Castillo, 1 (LEULS), 1.XI.2008, F. Alfaro 1 (LEULS), 11.x.1983, G. Carrasco, 5 (FMNH), Illapel a Los Vilos, R. Choapa, 27.x.1965, L.E. Peña, 2 (FMNH), Huintil, Hacienda Illapel, 18.x.1958, L.E. Peña, 1 (FMNH), Los Molles, 18.ix.1964, Moyano, 1 (UCCC). Valparaíso Region: Petorca Province: Cachagua, ii.1970, L.E. Peña, 1 (FMNH), Papudo, 11.xi.1967, O'Brien, 1 (FMNH). Valparaíso Province: Viña del Mar, 28.x.1967, L.E. Peña, 1 (FMNH), Quinteros, C. Passera, 5 (IADIZA), Marga Marga, Paso del Agua, 11.x.1980, P. Cerda B., 1 (PVGH), Puente Colmo, 21.ix.1966, J. Solervi-cens, 1 (FMNH). Quillota Province: Cerro Mollaca, Quillota, 18.xi.1962, L.E. Peña, 2 (FMNH). San Antonio Prov-ince: Algarrobo, 22.xi.1969, L.E. Peña, 2 (FMNH), xi.1970, Ramírez, 1 (FMNH), 27.xi.1950, L.E. Peña, 1 (IADIZA), El Quisco, Chile, 14.xi.1983, L.E. Peña, 7 (FMNH), Las Cruces, 3.i.2001, V.M. Diéguez, 6 (IADIZA), Quillaycillo, 26.ix.1947, L.E. Peña, 1 (FMNH). Metropolitana Region: Santiago Province, xi.1970, Ramírez, 1 (FMNH); without more precise data: 9 (RBINS).

Geographic distribution. Chile (Coquimbo Region: Elqui Province to Metropolitana Region: Santiago Province), in the Coquimbo and Santiago biogeographic provinces.

Praocis (Praocis) sulcata Eschscholtz, 1829

(Fig. 29; Flores & Pizarro-Araya 2010: Fig. 1)

Praocis sulcata Eschscholtz, 1829: 7; Dejean, 1834: 180 (cat.); Dejean, 1836: 200 (cat.); Guérin-Méneville, 1838: 92; Laporte, 1840: 187; Solier, 1840: 235 (rev.) (misidentif.); Lacordaire, 1859: 214; Gemminger & Harold, 1870: 1906 (cat.); Philippi, 1887: 733 (cat.); Gebien, 1910: 262 (cat.); Gebien, 1938: 400 (cat.); Blackwelder, 1945: 523 (cat.); Kulzer, 1958: 19 (rev.); Peña, 1966: 429 (cat.); Vidal & Guerrero, 2007: 73, 217; Flores, 2007: 416 (lectot.); Pizarro-Araya *et al.*, 2008: 273 (list); Flores & Pizarro-Araya, 2010: 66.

Sternodes mannerheimi Fischer, 1844: 125 (female); Motschulsky, 1845: 63 (syn.); Lacordaire, 1859: 214; Gemminger & Harold, 1870: 1906 (cat.); Philippi, 1887: 733 (cat.); Gebien, 1910: 262 (cat.); Gebien, 1938: 400 (cat.); Blackwelder, 1945: 523 (cat.). Synonymy by Motschulsky, 1845: 63.

Praocis rotundata Laporte, 1840: 187 (not Lacordaire, 1830: 284); Solier, 1851: 190 (rev.); Lacordaire, 1859: 213; Gemminger & Harold, 1870: 1905 (cat.); Philippi, 1887: 732 (cat.); Gebien, 1910: 261 (cat.); Gebien, 1938: 398 (cat.); Blackwelder, 1945: 523 (cat.); Flores & Pizarro-Araya, 2010: 66 (syn.). Synonymy by Flores & Pizarro-Araya, 2010: 66.

Redescription. Length 6.0–11.0 mm. Body black to dark brown, antennae and legs dark brown. Head. Clypeus and frons with round punctures each with a central seta; antennae reaching midpoint of lateral margin of pronotum; antennomere 9 longer than wide, with apical tomentose sensory patches arranged in two areas separated dorsally; antennomere 10 as wide as antennomere 11. Thorax. Pronotum widest behind midpoint; disc glabrous, lateral quarters with fine, golden setae; punctures of disc same size as punctures of elytron; width of anterior margin not exceeding half the width of posterior margin; lateral quarters convex, dorsal surface of lateral margin bearing a row of short golden setae; posterior angles acute, apex pointed; prosternum horizontal, with edge on anterior margin broadened below gula; prosternal process produced backwards, not reaching the midpoint of the space between pro- and meso-coxae; prosternum and mesosternum with punctures. Elytron with two carinae equidistant between suture and lateral margin and three grooves bearing short, broad, golden, scaly setae, intervals arched, wider than grooves; all grooves run from apex of elytron towards anterior, the inner groove runs parallel with the inner groove of the other elytron reaching the anterior third, the midpoint or the posterior third, the medial and outer grooves reach the base; dorsal surface with short golden setae or glabrous; pseudopleuron with long setae arising on punctures; epipleuron with short setae arising on protuberances, lacking a row of setae on the edge of anterior quarter. Legs. Ventral surface of meso- and metafemora lacking a row of setae on posterior edge. Inner surface of meso- and metatibiae with long, fine setae. Metatibiae curved outward. Male genitalia. Rods of sterna IX close to each other at basal third. Basal lamina of tegmen equal width throughout, with base concave. Lateral styles of tegmen with proximal margin ventrally bisinuate, widest at base, with setae on distal quarter of ventral surface. Median lobe moderate ($0.75 < L/T \leq 1.00$), distally broadened, with apical aperture large and apex rounded. Female genitalia. Paraprocts moderate ($1.2 \leq P/C \leq 2.0$); baculi of coxite horizontal; proctigeral baculus equal to length of paraproct baculus; apicodorsal lobe of proctiger extending about $\frac{1}{2}$ length of coxite.

Type material. Lectotype of *Praocis sulcata*: [Type] [14893] [Hist.-Coll. (Coleoptera)/ Nr. 14893/ *Praocis sulcata* Eschsch./ Chili, Eschsch./ Zool. Mus. Berlin] [Syntypus/ *Praocis sulcata*/ Eschscholtz, 1829/ labelled by the MNHUB 2005] [Lectotypus/ *Praocis sulcata* Eschscholtz, 1829/ Des. G. Flores 2005] (MNHUB). One paralectotype same data as lectotype, except two first labels (MNHUB).

Note: Flores (2007: 416) designated lectotype and paralectotype.

Other material examined. CHILE. Atacama Region: Huasco Province: Huasco, 18.xii.1963, T.C.K., 2 (UCCC). Coquimbo Region: Elqui Province: La Serena, x.1958, L.E. Peña, 2 (FMNH), Coquimbo, 16.ix.1964, Cekalovic, 1 (UCCC), Quebrada Santa Gracia, 1.ix.2004, L.S. Espinoza, 1 (IADIZA), Alfalfares, 14.viii.2004, P. Agosto, 1 (LEULS), Diaguítas, 13.viii.2004, 5 (LEULS), 25.viii.2008, J. Pizarro-Araya, 4 (LEULS), Lengua de Vaca, 29.x.1965, L.E. Peña, 1 (FMNH). Limarí Province: Caleta el Limarí, 22.ix.2004, L.S. Espinoza, 1 (LEULS), Mineral de Talca, 28.ix.2004, J. Pizarro-Araya, 4 (IADIZA), P.N. Fray Jorge, 7–8.xi.2001, J. Pizarro-Araya, 1 (IADIZA), Talinay, 22.ix.1947, L.E. Peña, 1 (FMNH), 29.x.1965, L.E. Peña, 7 (FMNH). Choapa Province: Puerto Oscuro, 23.ix.2004, J. Pizarro-Araya, 1 (IADIZA), Bahía El Teniente, 16.x.1968, J. Solervicens, 2 (FMNH), Quebrada el Teniente, 22.ix.1947, L.E. Peña, 1 (FMNH), 12.x.1957, L.E. Peña, 1 (FMNH). Metropolitana Region: Santiago Province, El Convento, 12.x.1963, L.E. Peña, 2 (FMNH), 19.xi.1967, L.E. Peña, 1 (FMNH). Maule Region: Cauquenes Province: Tregualemú, 24.iii.1967, Moyano, 1 (FMNH), 11.xii.1953, L.E. Peña, 1 (IADIZA). Pelluhue, costa Maule, 2.xii.1953, 600 m, L.E. Peña, 1 (FMNH). Talca Province: Constitución, 12.xi.1969, El Holsten, 2 (FMNH), 26.xi.1953, L.E. Peña, 1 (IADIZA). Cardenal Caro Province, Bucalemú, 24-I-2001, T. Moore, 3 (JEBC). Bio Bío Region: Concepción Province: Quillón, 20.ix.1966, Méndez, 1 (UCCC), Hualpén, 13.xi.1966, Quezada, 1 (UCCC), Concepción, 6.xi.1957, P.H. Lister, 1 (UCCC), 5.xi.1953, 1 (FMNH), 10.x.1955, 1 (FMNH). 5.xi.1953, 1 (FMNH), 10.x.1955, 1 (FMNH), Arauco, xii-1960, A. Baier, 2 (MACN), 16.xii.1985, S. Roig, 1 (IADIZA); without more precise data, 1 (RBINS).

Geographic distribution. Chile (Atacama Region: Huasco Province to Bio Bío Region: Concepción Province), in the Coquimbo and Maule biogeographic provinces.

***Praocis (Praocis) spinolai* Gay & Solier, 1840**

(Figs. 3–4, 22, 28)

Praocis spinolai Gay & Solier in Solier, 1840: 223 (rev.); Solier, 1851: 188 (rev.); Lacordaire, 1859: 213; Gemminger & Harold, 1870: 1906 (cat.); Philippi, 1887: 733 (cat.); Gebien, 1910: 261 (cat.); Gebien, 1938: 398 (cat.); Blackwelder, 1945: 523 (cat.); Kulzer, 1958: 20 (rev.); Peña, 1966: 430 (cat.); Vidal & Guerrero, 2007: 73, 217; Flores, 2007: 417 (lectot.); Pizarro-Araya *et al.*, 2008: 273 (list); Alfaro *et al.*, 2009: 126 (biog.).

Redescription. Length 8.0–14.0 mm. Body black, antennae dark brown, legs black to dark brown. Head. Clypeus and frons with round punctures each with a central seta; antennae reaching midpoint of lateral margin of pronotum; antennomere 9 longer than wide, with apical tomentose sensory patches arranged in two areas separated dorsally; antennomere 10 as wide as antennomere 11. Thorax. Pronotum widest behind midpoint; disc glabrous or with setae, lateral quarters with fine golden setae; punctures of disc same size as punctures of elytron; width of anterior margin not exceeding half the width of posterior margin; lateral quarters convex, dorsal surface of lateral margin bearing a row of short golden setae (Fig. 3); posterior angles acute, apex pointed (Fig. 22); prosternum horizontal, with edge on anterior margin broadened below gula; prosternal process produced backwards, not reaching the midpoint of the space between pro- and mesocoxae (as in Fig. 13); prosternum and mesosternum with punctures. Elytron with two or three carinae equidistant between suture and lateral margin and three or four grooves bearing short, broad, golden, scaly setae (Fig. 4), intervals carina-shaped, wider than grooves; the inner groove runs from apex of elytron reaching only the posterior third, not surpassing the midpoint of elytron towards anterior, parallel with the inner groove of the other elytron, the medial groove runs from apex of elytron reaching the base towards anterior, the third and fourth outer grooves are very close together (or only the third groove) and run over lateral margin from apex of elytron reaching the base towards anterior (Fig. 22); dorsal surface glabrous; pseudopleuron with long setae arising on punctures; epipleuron with short setae arising on protuberances, with a row of setae on the edge of anterior quarter. Legs. Ventral surface of meso- and metafemora with a row of setae on posterior edge. Inner surface of meso- and metatibiae with long, fine setae. Metatibiae straight. Male genitalia. Rods of sterna IX “V”-shaped. Basal lamina of tegmen equal width throughout, with base concave. Lateral styles of tegmen with proximal margin ventrally bisinuate, widest at base,

with setae on distal 1/5 of ventral surface. Median lobe moderate ($0.75 < L/T \leq 1.00$), distally broadened, with apical aperture large and apex rounded. Female genitalia. Paraprocts moderate ($1.2 \leq P/C \leq 2.0$); baculi of coxite inclined 45° ; proctigeral baculus extending proximad much beyond paraproct baculus; apicodorsal lobe of proctiger extending about $\frac{1}{2}$ length of coxite.

Type material. Lectotype: [*spino/ lae*] [Coquimbo/ Gay] [*Praocis/ spinolae* / Sol./ Coquimbo] [Type] [*Praocis/ spinolai* Sol./ Type de Solier/ Col. Marseul/ C. Girard det. 1975] [Lectotypus/ *Praocis spinolai*/ Gay et Solier, 1840/ Des. G. Flores 2005] (MNHN). Two paralectotypes same data as lectotype, except the second label (MNHN). Note: Flores (2007: 417) designated lectotype and paralectotypes.

Other material examined. CHILE. Atacama Region: Huasco Province: 10 km SE Carrizalillo, S Atacama, 25.x.1957, L.E. Peña, 2 (FMNH), Aguada Tongoy-Huasco, 19.xi.2005, F. Alfaro, 10 (LEULS), Chañaral de Aceituno, $29^\circ 03' 15.8''$ S, $71^\circ 25' 49.5''$ W, 94,5 msl, 7.ix.2002, J. Pizarro-Araya, 12 (LEULS), Agua de Luna, 15.ii.2007, F. Alfaro, 1 (LEULS), Bahía Sarco, 19–21.viii.2008, F. Alfaro, 1 (LEULS). Coquimbo Region: Elqui Province: Choros Bajos, La Higuera, xi.2002, G. Castillo, 2 (IADIZA), G. Castillo, 1 (LEULS), Los Choros, 19.x.2002, G. Arancio, 9 (LEULS), 1.xi.1961, L.E. Peña, 1 (FMNH), 10.xi.1981, L.E. Peña, 1 (FMNH), 29.ix.1980, L.E. Peña, 1 (FMNH), Punta de Choros, 6.xi.2002, J. Pizarro-Araya, 2 (LEULS), 18.xi.2005, J. Pizarro-Araya, 6 (LEULS), 1 (IADIZA), 6.xi.2002, J. Pizarro-Araya, 4 (LEULS), 14.ix.2002, S. Vega, 1 (IADIZA), 09.ix.2007, A. González, 5 (LEULS), Punta de Choros, sitio 4, 7.viii.2005, V. Rodríguez, 8 (LEULS), 8.viii.2005, J. Pizarro-Araya, 9 (LEULS), 2.vi.2005, V. Rodríguez, 1 (IADIZA), 4.vi.2005, D. Valdivia, 2 (LEULS), 27.viii.2005, S. Espinoza, 2 (LEULS), 6.x.2005, C. Saavedra, 1 (IADIZA), 7.x.2005, P. Gachón, 1 (LEULS), 7.x.2005, V. Rodríguez, 1 (LEULS), 8.x.2005, J. Pizarro-Araya, 2 (IADIZA), 28.viii.2005, J. Pizarro-Araya, 1 (LEULS), 15.i.2007, F. Alfaro & J. Pizarro-Araya, 3 (LEULS), 1 (IADIZA), Llano Los Choros, 15.xi.2007, J. Pizarro-Araya, 1 (LEULS), Isla Choros, 5.viii.2006, S. Espinoza, 5 (LEULS), 1 (IADIZA), 15.iv.2006, S. Espinoza & D. Valdivia, 17 (LEULS), 03–06.viii.2006, J. Pizarro-Araya & P. Gachón, 4 (LEULS), Isla Damas, 03.viii.2006, D. Valdivia & F. Alfaro, 2 (LEULS), 15.iv.2006, P. Agosto & F. Alfaro, 6 (LEULS), 1 (IADIZA), Isla Gaviota, 20.x.2006, J. Pizarro-Araya, 17 (LEULS), 3–6.viii.2006, C. Romero & C. Saavedra, 5 (LEULS), 7.xi.2002, J. Pizarro-Araya 1 (LEULS), 1 (IADIZA), Totalillo Norte, 1.v.2004, L.S. Espinoza, 1 (LEULS), N Cuesta Buenos Aires, 21.x.1975, L.E. Peña, 2 (FMNH), Totalillo Norte, 21.viii.2009, J. Pizarro-Araya, 1 (LEULS), Quebrada Santa Gracia, 19.i.2002, L.S. Espinoza, 1 (LEULS), 1.ix.2004, L.S. Espinoza, 1 (LEULS), Cuesta Porotitos, 16.viii.2009, J. Pizarro-Araya, 2 (LEULS), Las Compañías, 6.xii.1992, P. Plandiura, 1 (LEULS), 06.xii.1992, L. Jorquera, 1 (LEULS), La Serena, xi.1970, J. Peralta, 1 (UCCC), 5.ix.1968, Cekalovic, 1 (UCCC), Parque Cendyr, La Serena, 9.ii.2009, 127 m, $29^\circ 55' 20''$, $71^\circ 14' 17''$ W, G. y L. Flores, 2 (IADIZA), Colina El Pino, La Serena, 23.viii.2003, J. Pizarro-Araya, 4 (IADIZA), 9 (LEULS), Coquimbo, 27.xi.1992, C. Bravo, 2 (LEULS), 2.x.1983, A. Roig (LEULS), 10 km S Coquimbo, 2.x.1983, A. Roig, 1 (IADIZA), Peñuelas, 25.i.1929, L.E. Peña, 1 (FMNH), Sindempart, 30.iv.2010, C. Valdivia, 1 (LEULS), La Pampilla, 1.xi.1957, L.E. Peña, 1 (IADIZA), 16.xi.1946, L.E. Peña, 1 (FMNH), El Tanque, 29.x.1965, L.E. Peña, 1 (FMNH), 21.x.2005, J. Pizarro-Araya, 2 (LEULS), Lagunillas, 20.ix.2007, G. Flores & J. Pizarro-Araya, 1 (LEULS), 15.xi.2003, J. Pizarro-Araya, 6 (LEULS), Terrazas de Lagunillas, 22.iv.2004, P. Agosto, 2 (LEULS), Herradura a Guanaqueros, 3.ix.1947, L.E. Peña, 2 (FMNH), 1 (IADIZA), Guanaqueros, S. Roig, x.1992, 1 (IADIZA), 1 (LEULS), Tongoy, 7.ix.1947, L.E. Peña, 1 (FMNH), El Molle, 14.ix.2002, S. Vega, 15 (LEULS), 1 (IADIZA), x.1958, L.E. Peña, 1 (FMNH), Diaguitas, 13.viii.2004, P. Agosto, 7 (LEULS), 13.x.2004, P. Agosto, 1 (LEULS), Vicuña a Hurtado, 10 km E Vicuña, 8.x.1998, P. Vidal, 2 (PVGH), Dos Ríos, 20.iv.2002, L. Moreno, 1 (LEULS). Limarí Province: Cerro Cruz Verde, Andacollo, 21.viii.2003, P. Agosto, 2 (LEULS), Andacollo, 17.vii.2007, J. Pizarro-Araya, 1 (LEULS), Ovalle, 28.ii.2010, C. Valdivia, 1 (LEULS), Pichasca, 23.ii.2005, P. Agosto, 1 (LEULS), Cruce Oruro, 20.x.1996, $29^\circ 47' 02''$ S, $71^\circ 18' 18''$ W, P. Vidal, 2 (PVGH), Fray Jorge, 16.ix.1963, Gleisner, 1 (UCCC), P.N. Fray Jorge, 5.viii.1953, L.E. Peña, 1 (FMNH), 16.ix.1955, R.H. González, 1 (FMNH), 6.xi.1980, L.E. Peña, 2 (FMNH), 9.ix.1991, H.V.C., 1 (LEULS), 9.x.1999, G. Castillo, 2 (IADIZA), 7–8.xi.2001, J. Pizarro-Araya, 3 (IADIZA), 6 (LEULS), Talinay, vi.1968, L.E. Peña, 2 (FMNH), 5.x.1990, P. Vidal, 1 (PVGH), Socos, 18.ix.1947, L.E. Peña, 2 (FMNH), 28.x.1965, L.E. Peña, 1 (FMNH), 15.xi.2003, J. Pizarro-Araya, 6 (LEULS), Los Loros, desembocadura Río Limarí, 20.ix.1969, L.E. Peña, 1 (FMNH), Alcones, 10.x.2008, J. Pizarro-Araya, 1 (LEULS), El Peñón, 1.xi.1957, L.E. Peña, 1 (FMNH), Trapiche, 18.i.1969, H. Sielfeld, 1 (UCCC), Punta Talca, 21.xi.1967, L.E. Peña, 2 (FMNH), without more precise data, 2 (RBINS). Choapa Province: Puerto Oscuro, 23.ix.2004, J. Pizarro-Araya, 2 (LEULS), Los Vilos, 20.x.2008, J. Pizarro-Araya, 1 (LEULS), 20.iv.2010, E. Madariaga, 1 (LEULS).

Geographic distribution. Chile (Atacama Region: Huasco Province to Coquimbo Region: Choapa Province), in the Coquimbo biogeographic province.

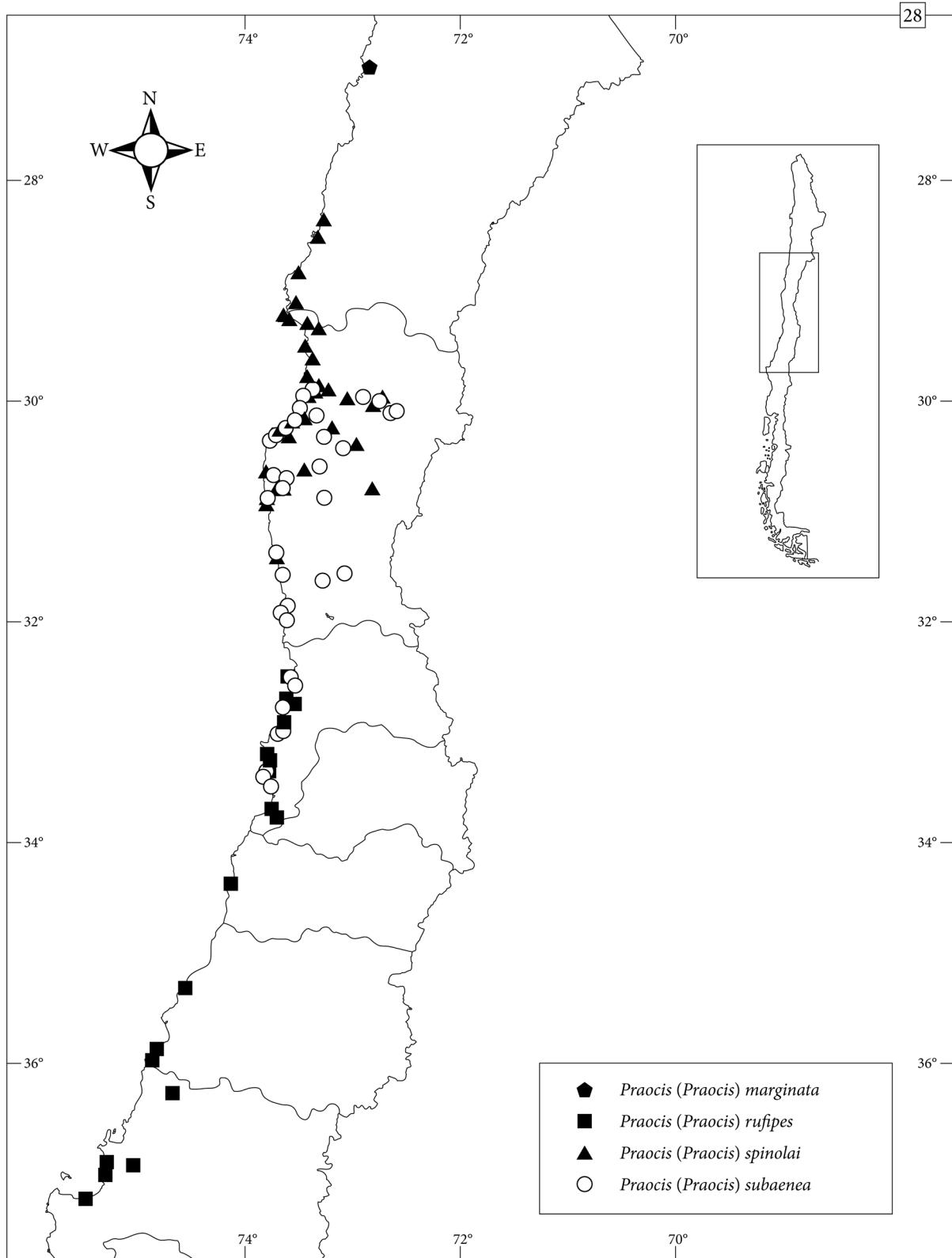


FIGURE 28. Geographical distribution of four species of *Praocis (Praocis)*: *P. (P.) marginata*, *P. (P.) rufipes*, *P. (P.) spinolai*, and *P. (P.) subaenea*.

***Praocis (Praocis) medvedevi* sp. nov.**

(Figs. 23, 29)

Diagnosis. *Praocis (Praocis) medvedevi* sp. nov. is the only species of the subgenus with elytral punctures twice the size of pronotal punctures (Fig. 23); the remaining species of the subgenus have elytral punctures the same size as pronotal punctures. In addition, *Praocis medvedevi* may be identified by the elytron with a carina more approximate to lateral margin than suture (Fig. 23), ventral surface of meso- and metafemora lacking a row of setae on posterior edge and inner surface of meso- and metatibiae with short, stout setae. It differs from *P. curta* Solier which has elytron without carinae, ventral surface of meso- and metafemora with a row of setae on posterior edge and inner surface of meso- and metatibiae with long, fine setae.

Description. Length 7.0–9.0 mm. Body black, antennae and legs dark brown. Head. Clypeus and frons with round punctures each with a central seta; antennae reaching 3/4 along lateral margin of pronotum; antennomere 9 longer than wide, with apical tomentose sensory patches arranged in two areas separated dorsally; antennomere 10 as wide as antennomere 11. Thorax. Pronotum widest behind midpoint; disc glabrous, lateral quarters with fine golden setae; punctures of disc half the size of punctures of elytron; width of anterior margin exceeding half the width of posterior margin; lateral quarters convex, dorsal surface of lateral margin bearing a row of short golden setae; posterior angles acute, apex pointed (Fig. 23); prosternum horizontal, with edge on anterior margin broadened below gula; prosternal process produced backwards, not reaching the midpoint of the space between pro- and mesocoxae (as in Fig. 13); prosternum and mesosternum with punctures. Elytron with a carina weakly defined, more approximate to lateral margin than suture, lacking grooves; dorsal surface glabrous; pseudopleuron with long setae arising on punctures; epipleuron glabrous, lacking a row of setae on the edge of anterior quarter. Legs. Ventral surface of meso- and metafemora lacking a row of setae on posterior edge. Inner surface of meso- and metatibiae with short, stout setae. Metatibiae straight. Female genitalia. Paraprocts moderate ($1.2 \leq P/C \leq 2.0$); baculi of coxite inclined 45° ; proctigeral baculus extending proximad much beyond paraproct baculus; apicodorsal lobe of proctiger extending about 1/4 length of coxite. Male: unknown.

Etymology. Named in honour of the late colleague Prof. Gleb S. Medvedev, outstanding specialist in Tenebrionidae from Russia.

Type material. Holotype, female, length 9 mm (dissected): [Ag. El Leon/ Caldera (N)/ Atac. 4-6-x-1980/ Coll: L.E. Peña] [*Praocis (Praocis) medvedevi* sp. nov./ HOLOTYPUS female/ Det. G. Flores-J. Pizarro-A. 2011] (FMNH). One paratype female, lacking the right median leg, length 7 mm: [Prov. Atacama/ Qda. El Leon/ N. Caldera] [22-xi-1972/ Coll: L.E. Peña] (MNNC).

Other material examined. CHILE. Atacama Region: Chañaral Province: Quebrada El León, Caldera, 1.ix.2007, J. Pizarro-Araya 3 (LEULS), 1 (IADIZA). These specimens were found in poor conditions. Further attempts (collecting trips) by the junior author to find male specimens of this new species in the area brought no results up to this date.

***Praocis (Praocis) curta* Solier, 1840**

(Fig. 30)

Praocis curta Solier, 1840: 226 (rev.); Gemminger & Harold, 1870: 1905 (cat.); Philippi, 1887: 731 (cat.); Gebien, 1910: 260 (cat.); Gebien, 1938: 398 (cat.); Blackwelder, 1945: 522 (cat.); Kulzer, 1958: 17 (rev.); Peña, 1966: 429 (cat.); Vidal & Guerrero, 2007: 73, 212; Flores, 2007: 417 (lectot.).

Praocis nigroaenea Solier, 1840: 226 (rev.); Solier, 1851: 191 (rev.); Lacordaire, 1859: 213; Gemminger & Harold, 1870: 1905 (cat.); Philippi, 1887: 732 (cat.); Gebien, 1910: 261 (cat.); Gebien, 1938: 398 (cat.); Blackwelder, 1945: 523 (cat.); Kulzer, 1958: 17 (syn.); Peña, 1966: 429 (cat.). Synonymy by Kulzer, 1958: 17.

Praocis rugipennis Germain, 1855: 400; Philippi, 1887: 733 (cat.); Gebien, 1910: 261 (cat.); Gebien, 1938: 398 (cat.); Blackwelder, 1945: 523 (cat.); Kulzer, 1958: 17 (syn.); Peña, 1966: 429 (cat.). Synonymy by Kulzer, 1958: 17.

Redescription. Length 7.0–12.0 mm. Body black to dark brown, antennae and legs dark brown. Head. Clypeus and frons with round punctures each with a central seta; antennae reaching midpoint of lateral margin of pronotum; antennomere 9 longer than wide, with apical tomentose sensory patches arranged in two areas separated dorsally; antennomere 10 as wide as antennomere 11. Thorax. Pronotum widest behind midpoint; disc glabrous or with setae, lateral quarters with fine, golden setae; punctures of disc same size as punctures of elytron; width of anterior margin

not exceeding half the width of posterior margin; lateral quarters convex, dorsal surface of lateral margin bearing a row of short golden setae; posterior angles acute, apex pointed; prosternum horizontal, with edge on anterior margin broadened below gula; prosternal process produced backwards, not reaching the midpoint of the space between pro- and mesocoxae (as in Fig. 13); prosternum and mesosternum with punctures. Elytron lacking carinae and grooves; dorsal surface with short, golden setae; pseudopleuron with long setae arising on punctures; epipleuron with short setae arising on protuberances, with a row of setae on the edge of anterior quarter. Legs. Ventral surface of meso- and metafemora with a row of setae on posterior edge. Inner surface of meso- and metatibiae with long, fine setae. Metatibiae straight. Female genitalia. Paraprocts moderate ($1.2 \leq P/C \leq 2.0$); baculi of coxite inclined 45° ; proctigeral baculus extending proximad much beyond paraproct baculus; apicodorsal lobe of proctiger extending about $\frac{1}{4}$ length of coxite. Male: unknown.

Type material. Lectotype of *Praocis curta*: [*curta*] [*Praocis/ curta/ Sol./ Chili*] [*P. curta/ Sol.*] [Chili M.B. Tournade] [Type] [*Praocis/ curta Sol./ Type de Solier/ Col. Marseul/ C. Girard det. 1975*] [Lectotypus/ *Praocis curta/ Solier, 1840/ Des. G. Flores 2005*] (MNHN).

Note: Flores (2007: 417) designated lectotype.

Other material examined. CHILE. Coquimbo Region: Elqui Province: Vicuña, F. Ruiz, 12.xi.1969, 12 (UCCC), El Molle, La Serena, x.1958, L.E. Peña, 1 (FMNH), Huanta, 27.ii.2004, J. Pizarro-Araya, 1 (LEULS), Colina El Pino, 23.i.1996, J. Pizarro-Araya, 1 (LEULS), La Serena, 25.ix.1992, N. Tobar, 1 (LEULS), Coquimbo, La Pampilla, 16.vi.1968, L.E. Peña, 1 (FMNH), La Caldera, Andacollo, 27.ix.2001, P. Augusto, 3 (IADIZA), Guanaqueros, 9.i.1984, A. Roig, 2 (IADIZA), Terrazas de Guanaqueros, 22.ix.2004, L.S. Espinoza 1 (LEULS). Limarí Province: Socos, 16.ix.1963, L.E. Peña, 2 (FMNH), 8.x.1974, L.E. Peña, 2 (FMNH), 27.ix.2003, J. Pizarro-Araya, 4 (IADIZA), 15.xi.2003, J. Pizarro-Araya, 5 (IADIZA), 28.x.1965, L.E. Peña, 2 (FMNH), 27.ix.2003, J. Pizarro-Araya, 1 (LEULS), Guatulame, Ovalle, 13.xi.1961, L.E. Peña, 1 (FMNH), Ovalle, Barraza, 6.viii.1972, (1 FMNH), Guayanay, 20.ix.1965, L.E. Peña, 2 (FMNH), Valle del Encanto, 26.ix.2005, L.S. Espinoza 1 (LEULS), Talinay, 24.ix.2004, L.S. Espinoza 1 (LEULS), Quebrada Amolanas, 28.xi.1944, 1 (FMNH). Barraza, Dualle, 6.viii.1972, 1 (FMNH). Choapa Province: Samo Alto, Hurtado, 2.xii.1980, L.E. Peña, 1 (IADIZA), Punitaqui, 20.ix.2004, L.S. Espinoza 1 (LEULS), 9.x.2005, L.S. Espinoza 2 (LEULS), Mincha Norte, 20.viii.2009, J. Pizarro-Araya 1 (LEULS), Huilmo, 22.ix.1982, L.E. Peña, 1 (FMNH), Puerto Oscuro, 18–28.ix.1947, L.E. Peña, 1 (FMNH), 23.ix.2004, J. Pizarro-Araya 1 (LEULS), Illapel a Los Vilos, Río Choapa, 27.x.1965, L.E. Peña, 1 (FMNH), 1.xi.2008, F. Alfaro 2 (LEULS), Los Vilos, 18.ix.1964, H. Moyano, 1 (UCCC), 7.x.1947, L.E. Peña, 1 (FMNH), 27.x.1965, L.E. Peña, 1 (FMNH), 5.i.1966, L.E. Peña, 1 (FMNH), 13.x.1974, L.E. Peña, 2 (FMNH), 40 km N Los Vilos, 1.ix.1983, A. Roig, 2 (IADIZA), Los Molles, 22.x.1961, L.E. Peña, 1 (FMNH). Valparaíso Region: Quillota Province: Quillota, 4.xii.1965, L.E. Peña, 1 (FMNH), Cuesta El Melon, 20.xi.2004, M. Guerrero, 1 (IADIZA). Valparaíso Province: El Salto, 9.xii.1968, M. Pino, 1 (UCCC), Valparaíso, on beach 14 hs, 9.xi.1994, G. Flores, 1 (IADIZA), Laguna Verde, 11.viii.1968, L.E. Peña, 1 (FMNH), El Reloj, 16.x.1944, 1 (FMNH), Quintero, 5.ii.1960, J. Valencia, 1 (UCCC), i.1982, C. Passera, 1 (IADIZA), 7.xii.1963, L.E. Peña, 1 (FMNH), 12.xii.1980, L.E. Peña, 1 (FMNH), Viña del Mar, 28.x.1967, L.E. Peña, 1 (FMNH), Marga Marga, Paso del Agua, 11.x.1980, P. Cerda B., 1 (PVGH). San Antonio Province: Algarrobo, 27.xi.1950, L.E. Peña, 3 (IADIZA), xi.1970, Ramírez, 1 (FMNH), 22.xi.1969, L.E. Peña, 3 (FMNH), El Quisco, 14.xi.1983, L.E. Peña, 8 (FMNH), Sto. Domingo, 24.xi.1967, Ramírez, 2 (FMNH). Petorca Province: Cachagua, ii.1970, L.E. Peña, 4 (FMNH). Metropolitana Region: Santiago Province, Santiago, xii.1963, L.E. Peña, 1 (FMNH). El Volcán, 9.xi.1969, 2 (FMNH), El Manzano, 43 km Stgo, 4.xi.1970, M. Díaz, 1 (MNNC), without more precise data, 2 (RBINS).

Geographic distribution. Chile (Coquimbo Region: Elqui Province to Metropolitana Region: Santiago Province), in the Coquimbo and Santiago biogeographic provinces.

***Praocis (Praocis) aenea* Gay & Solier, 1840**

(Figs. 24, 30)

Praocis aenea Gay & Solier in Solier, 1840: 227 (rev.); Solier, 1851: 193 (rev.); Lacordaire, 1859: 213; Gemminger & Harold, 1870: 1904 (cat.); Philippi, 1887: 731 (cat.); Gebien, 1910: 260 (cat.); Gebien, 1938: 398 (cat.); Blackwelder, 1945: 522 (cat.); Kulzer, 1958: 22 (rev.); Peña, 1966: 430 (cat.); Vidal & Guerrero, 2007: 73; Flores, 2007: 417 (lectot.).

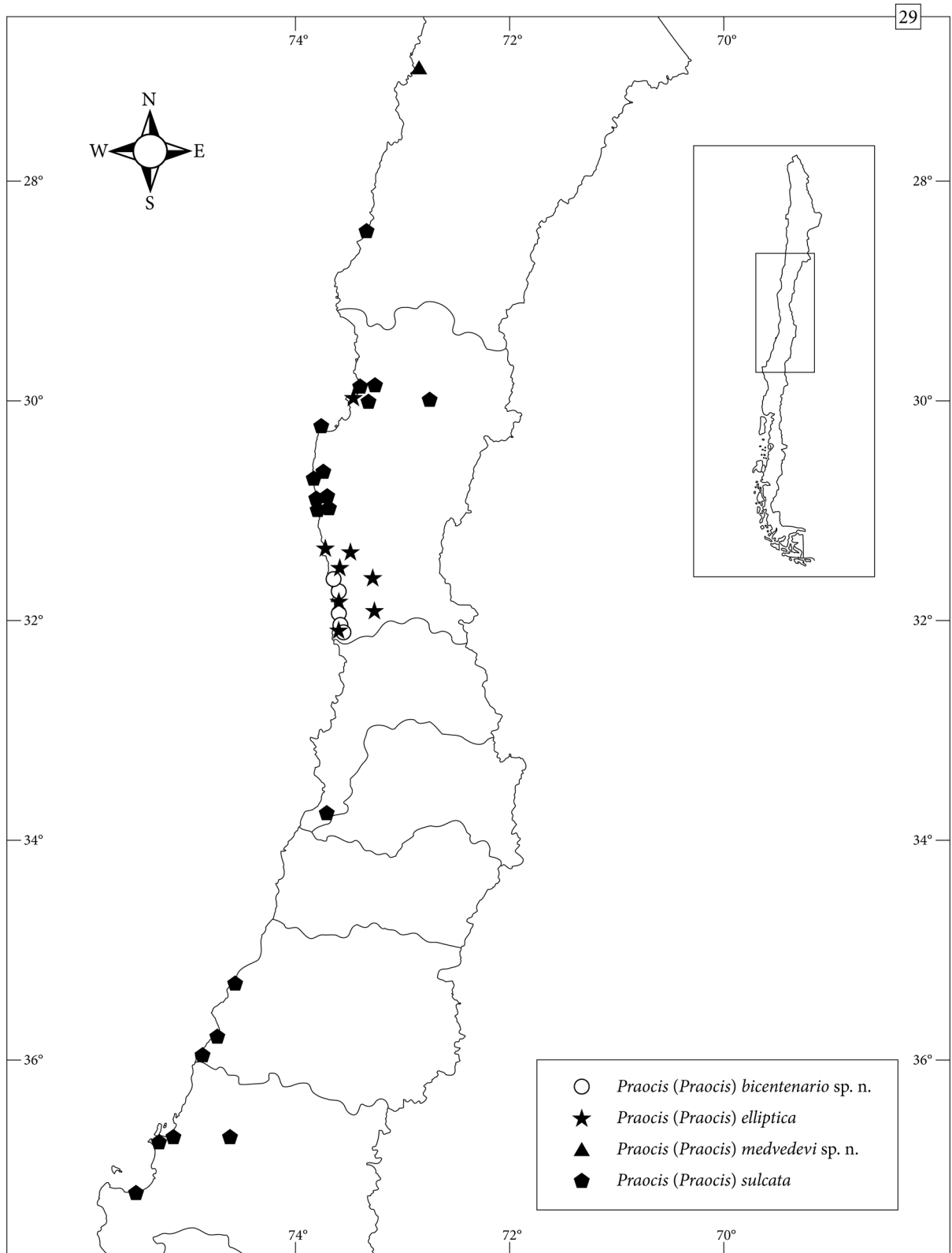


FIGURE 29. Geographical distribution of four species of *Praocis (Praocis)*: *P. (P.) bicentenario*, *P. (P.) elliptica*, *P. (P.) medvedevi*, and *P. (P.) sulcata*.

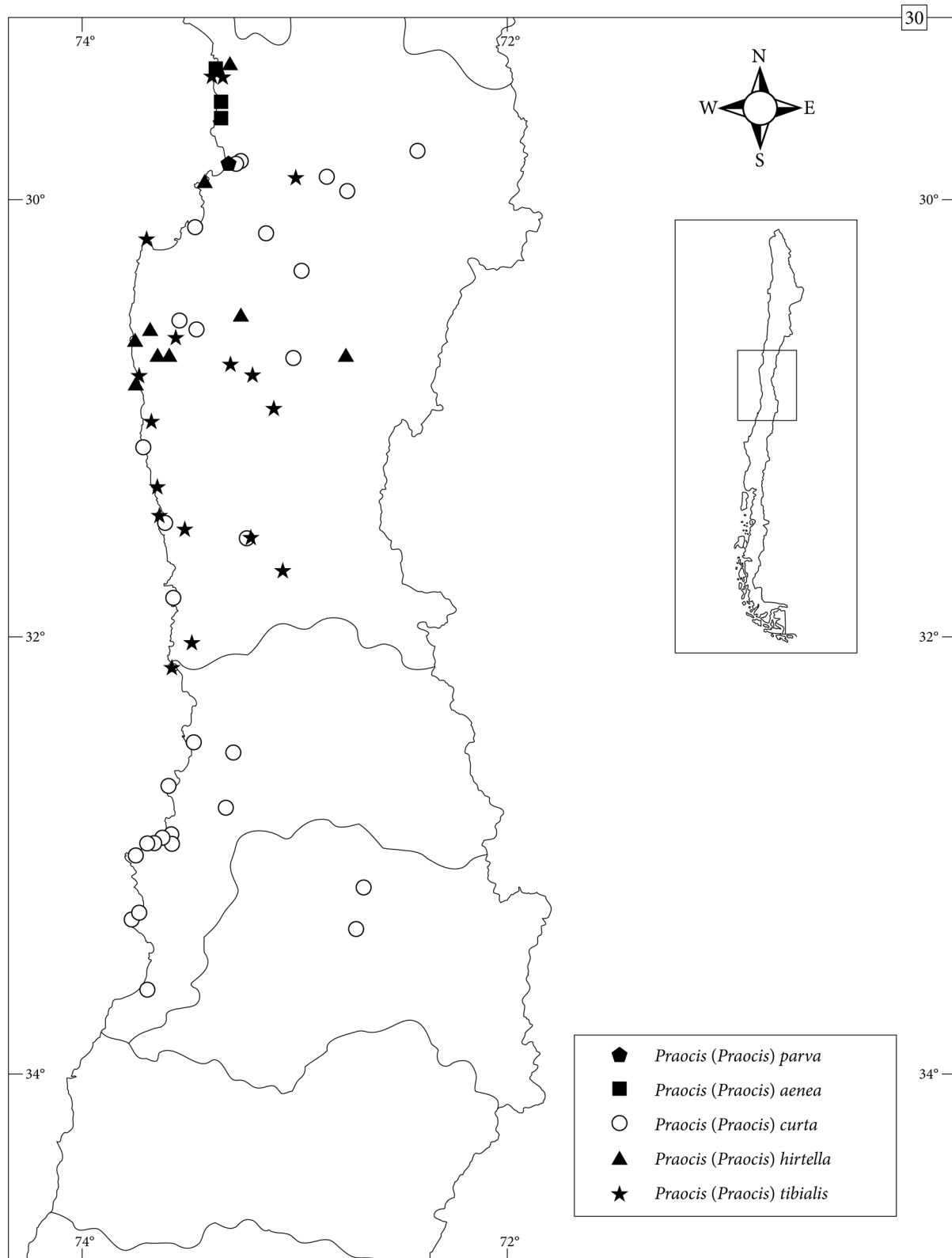


FIGURE 30. Geographical distribution of five species of *Praocis (Praocis)*: *P. (P.) parva*, *P. (P.) aenea*, *P. (P.) curta*, *P. (P.) hirtella*, and *P. (P.) tibialis*.

Redescription. Length 8.0–10.0 mm. Body black to dark brown, antennae and legs dark brown. Head. Clypeus and frons with round punctures each with a central seta; antennae reaching 3/4 along lateral margin of pronotum; anten-

nomere 9 longer than wide, with apical tomentose sensory patches arranged in two areas separated dorsally; antennomere 10 as wide as antennomere 11. Thorax. Pronotum widest behind midpoint; disc and lateral quarters with fine golden setae; punctures of disc same size as punctures of elytron; width of anterior margin exceeding half the width of posterior margin; lateral quarters convex, dorsal surface of lateral margin bearing a row of short golden setae; posterior angles right, apex rounded (Fig. 24); prosternum horizontal, with edge on anterior margin broadened below gula; prosternal process produced backwards, not reaching the midpoint of the space between pro- and mesocoxae (as in Fig. 13); prosternum and mesosternum with punctures. Elytron lacking grooves, with two carinae weakly defined, equidistant between suture and lateral margin, with a net of lateral ramifications from carinae (Fig. 24); dorsal surface rugose with short golden setae; pseudopleuron with long setae arising on punctures; epipleuron with short setae arising on protuberances, lacking a row of setae on the edge of anterior quarter. Legs. Ventral surface of meso- and metafemora with a row of setae on posterior edge. Inner surface of meso- and metatibiae with long, fine setae. Metatibiae curved outward. Male genitalia. Rods of sterna IX close to each other at basal third. Basal lamina of tegmen equal width throughout, with base straight. Lateral styles of tegmen with proximal margin ventrally bisinuate, widest at middle, with setae on distal third of ventral surface. Median lobe moderate ($0.75 < L/T \leq 1.00$), narrowed in pre-distal quarter and distally broadened, with apical aperture large and apex rounded. Female genitalia. Paraprocts moderate ($1.2 \leq P/C \leq 2.0$); baculi of coxite inclined 45° ; proctigeral baculus extending proximad much beyond paraproct baculus; apicodorsal lobe of proctiger extending about $\frac{1}{4}$ length of coxite.

Type material. Lectotype: [aenea/ Type/ Solier] [*Praocis/ aenea/ Sol./ Coquimbo*] [Coquimbo/ Gay] [Type] [*Praocis/ aenea Sol./ Type de Solier/ Col. Marseul/ C. Girard det. 1975*] [Lectotypus/ *Praocis aenea/ Gay et Solier, 1840/ Des. G. Flores 2005*] (MNHN). Two paralectotypes same data as lectotype, one plus a label: [*aenea Sol. Gay 227: 11 Coquimbo*] below the label [Type] (MNHN).

Note: Flores (2007: 417) designated lectotype and paralectotypes.

Other material examined. CHILE. Coquimbo Region: Elqui Province: El Temblador, 1.v.2004, J. Pizarro-Araya, 1 (LEULS), La Darsena, 14.ii.2004, J. Pizarro-Araya, 1 (LEULS), Caleta de Hornos, 5.v.2005, J. Pizarro-Araya, 1 (LEULS), 25 km N Serena, 29.ix.1980, L.E. Peña, 5 (FMNH), 30.x.1965, L.E. Peña, 1 (FMNH).

Geographic distribution. Chile (Coquimbo Region, El Temblador to La Serena), in the Coquimbo biogeographic province.

***Praocis (Praocis) tibialis* Gay & Solier, 1840**

(Figs. 25, 30)

Praocis tibialis Gay & Solier in Solier, 1840: 225 (rev.); Solier, 1851: 193 (rev.); Lacordaire, 1859: 213; Gemminger & Harold, 1870: 1906 (cat.); Philippi, 1887: 733 (cat.); Gebien, 1910: 262 (cat.); Gebien, 1938: 398 (cat.); Blackwelder, 1945: 523 (cat.); Kulzer, 1958: 24 (rev.); Peña, 1966: 430 (cat.); Vidal & Guerrero, 2007: 73; Flores, 2007: 411 (lectot.).

Praocis rufitarsis Gay & Solier in Solier, 1840: 227 (rev.); Solier, 1851: 194 (rev.); Lacordaire, 1859: 213; Gemminger & Harold, 1870: 1906 (cat.); Philippi, 1887: 732 (cat.); Gebien, 1910: 262 (cat.); Gebien, 1938: 398 (cat.); Blackwelder, 1945: 523 (cat.); Kulzer, 1958: 22 (rev.); Peña, 1966: 430 (cat.); Vidal & Guerrero, 2007: 73; Flores, 2007: 411 (syn. & lectot.). Synonymy by Flores, 2007: 411.

Praocis aenipennis Germain, 1855: 400; Philippi, 1887: 731 (cat.); Gebien, 1938: 398 (cat.); Kulzer, 1958: 24 (syn.); Peña, 1966: 430 (cat.); Flores, 2007: 411 (type). Synonymy by Kulzer, 1958: 24.

Redescription. Length 6.0–11.0 mm. Body black to dark brown, antennae and legs dark brown. Head. Clypeus and frons with round punctures each with a central seta; antennae reaching $\frac{3}{4}$ along lateral margin of pronotum; antennomere 9 longer than wide, with apical tomentose sensory patches arranged in two areas separated dorsally; antennomere 10 as wide as antennomere 11. Thorax. Pronotum widest behind midpoint; disc and lateral quarters with finer golden setae; punctures of disc same size as punctures of elytron; width of anterior margin exceeding half the width of posterior margin; lateral quarters convex, dorsal surface of lateral margin bearing a row of short golden setae; posterior angles right, apex rounded (Fig. 25); prosternum horizontal, with edge on anterior margin broadened below gula; prosternal process produced backwards, not reaching the midpoint of the space between pro- and mesocoxae (as in Fig. 13); prosternum and mesosternum with punctures. Elytron lacking grooves, with two or three carinae weakly defined, equidistant between suture and lateral margin (Fig. 25); dorsal surface with short golden setae; pseudopleuron with long setae arising on punctures; epipleuron with short setae arising on protuberances, lacking a row of setae on the edge of anterior quarter. Legs. Ventral surface of meso- and metafemora with a row of setae on posterior

edge. Inner surface of meso- and metatibiae with long, fine setae. Metatibiae straight. Male genitalia. Rods of sterna IX "V"-shaped. Basal lamina of tegmen equal width throughout, with base concave. Lateral styles of tegmen with proximal margin ventrally concave, widest at base, with abundant setae on distal third of ventral surface. Median lobe moderate ($0.75 < L/T \leq 1.00$), distally broadened, with apical aperture large and apex rounded. Female genitalia. Paraprocts moderate ($1.2 P/C \leq 2.0$); baculi of coxite inclined 45° ; proctigeral baculus extending proximad much beyond paraproct baculus; apicodorsal lobe of proctiger extending about $\frac{1}{2}$ length of coxite.

Type material. Lectotype of *Praocis tibialis*: [*tibialis*] [*Praocis/ tibialis/ Sol./ Illapel*] [*P. tibialis* G. S./ Sta. Rosa Illapel] [Type] [*Praocis/ tibialis* Solier/ Type de Solier/ Col. Marseul/ C. Girard det. 1975] [Lectotypus/ *Praocis tibialis/ Gay et Solier, 1840/ Des. G. Flores 2005*] (MNHN). One paralectotype same data as lectotype, plus a label: [*tibialis* Sol. 225, 8 Coquimbo] below the label [Type] (MNHN).

Note: Flores (2007: 411) designated lectotype.

Lectotype of *Praocis rufitarsis*: [*rufitarsis*] [*Praocis/ rufitarsis/ Sol./ Illapel*] [Illapel/ Gay] [Type] [*Praocis/ rufitarsis* Sol./ Type de Solier/ Col. Marseul/ C. Girard det. 1975] [Lectotypus/ *Praocis rufitarsis/ Gay et Solier, 1840/ Des. G. Flores 2005*] (MNHN). Three paralectotypes same data as lectotype, one plus a label: [*P. rufitarsis* Gay/ et Sol. Illapel] and one of the others plus two labels: [Sa Rosa/ Gay] and [*P. rufitarsis* Sol./ Illapel] (MNHN).

Note: Flores (2007: 411) designated lectotype.

Syntype of *Praocis aenipennis*: [*aenipennis/ Germain/ Chili*] [Chili/ Germain] [*Praocis/ aenipennis/ P. G* (handwritten by Germain)] [*Praocis/ tibialis* Sol./ (= *aenipennis* Germ.)/ det. H. Kulzer 1957] (MNHN).

Note: This specimen agrees with the description by Germain (1855), and we have no doubt that the label's handwriting belongs to Germain. Therefore we conclude that this specimen is a syntype of *Praocis aenipennis*. Kulzer (1958) stated that the type of *P. aenipennis* is in the MNHC, but currently is not there (Camousseight 1980 and pers. obs.).

Other material examined. CHILE. Coquimbo Region: Elqui Province: Totoralillo Norte, 21.viii.2009, J. Pizarro-Araya, 1 (LEULS), Llano La Higuera, 29.ix.1980, L.E. Peña, 1 (FMNH), El Molle, x.1958, L.E. Peña, 1 (FMNH), Lengua de Vaca, xi.1978, J. Escobar, 3 (FMNH). Limarí Province: Talinay, 20.ix.1947, L.E. Peña, 2 (FMNH), 19.x.2003, J. Pizarro-Araya, 1 (IADIZA), J. Pizarro-Araya, 1 (LEULS), 13.x.1976, C. Vivar, 5 (MNHC), 19.x.2003, J. Pizarro-Araya, 1 (IADIZA), xi.1978, J. Escobar, 1 (FMNH), Quebrada Los Maitenes, N Amolanas, 28.ix.1980, L.E. Peña, 1 (FMNH), Socos, 8.x.1974, L.E. Peña, 2 (FMNH), 15. xi.2003, $30^\circ 44'S$, $71^\circ 31'W$, 200 msl, J. Pizarro-Araya 10 (LEULS), 22. xi.2003, J. Pizarro-Araya 1 (LEULS), 27.xi.2003, J. Pizarro-Araya 2 (LEULS). Choapa Province: Hda. Illapel, J. Irrarázabal, 1 (FMNH), La Higuera, Salamanca, 18.ix.2007. A. Gonzalez 3 (LEULS), 1 (IADIZA), Huaquilón, San Lorenzo, 24.ix.1982, L.E. Peña, 1 (FMNH), Puerto Manso, 18.ix.1967, L.E. Peña, 1 (FMNH), Majada Blanca, Punitaqui, 9.X.2005, J. Pizarro-Araya 3 (LEULS), S Punitaqui, 7.x.1961, L.E. Peña, 1 (FMNH), 6 km E Quilimari, 25.xi.1967, L.E. Peña, 2 (FMNH), 2 (IADIZA), Choapa, km 272 Panam. Norte, 24.ix.1985, M. Elgueta, 3 (MNHC), Camino a Mincha, 27.x.1965, L.E. Peña, 1 (FMNH), Puerto Oscuro, 18–28.ix.1947, L.E. Peña, 1 (FMNH), 2.ix.1983, A. Roig, 1 (IADIZA), 23.ix.2004, J. Pizarro-Araya, 2 (IADIZA), 23.ix.2004, J. Pizarro-Araya, 1 (LEULS), Huilmo, 22.ix.1982, L.E. Peña, 1 (FMNH), Huaquén a Los Molles, 17.xi.1972, L.E. Peña, 1 (FMNH), Los Molles, 22.x.1961, L.E. Peña, 1 (FMNH), 2.x.1963, Col. Escuela de Biología, 1 (FMNH), without more precise data: 15 (MNHC).

Geographic distribution. Chile (Coquimbo Region, Coquimbo to Los Molles), in the Coquimbo biogeographic province.

***Praocis (Praocis) parva* Gay & Solier, 1840**

(Figs. 26, 30)

Praocis parva Gay & Solier in Solier, 1840: 232 (rev.); Solier, 1851: 194 (rev.); Lacordaire, 1859: 213; Gemminger & Harold, 1870: 1905 (cat.); Philippi, 1887: 732 (cat.); Gebien, 1910: 261 (cat.); Gebien, 1938: 399 (cat.); Blackwelder, 1945: 523 (cat.); Kulzer, 1958: 23 (rev.); Peña, 1966: 430 (cat.); Vidal & Guerrero, 2007: 73; Flores, 2007: 417 (lectot.).

Redescription. Length 7.0 mm. Body, antennae and legs dark brown. Head. Clypeus and frons with round punctures each with a central seta; antennae reaching $\frac{3}{4}$ along lateral margin of pronotum; antennomere 9 longer than wide, with apical tomentose sensory patches arranged in two areas separated dorsally; antennomere 10 as wide as antennomere 11. Thorax. Pronotum widest behind midpoint; disc and lateral quarters with fine golden setae; punc-

tures of disc same size as punctures of elytron; width of anterior margin exceeding half the width of posterior margin; lateral quarters convex, dorsal surface of lateral margin bearing a row of short golden setae; posterior angles right, apex rounded (Fig. 26); prosternum horizontal, with edge on anterior margin broadened below gula; prosternal process produced backwards, not reaching the midpoint of the space between pro- and mesocoxae (as in Fig. 13); prosternum and mesosternum with punctures. Elytron lacking grooves, with two carinae weakly defined, equidistant between suture and lateral margin (Fig. 26); dorsal surface with short golden setae; pseudopleuron with long setae arising on punctures; epipleuron with short setae arising on protuberances, lacking a row of setae on the edge of anterior quarter. Legs. Ventral surface of meso- and metafemora with a row of setae on posterior edge. Inner surface of meso- and metatibiae with long, fine setae. Metatibiae straight. Male genitalia. Rods of sterna IX close to each other at basal third. Basal lamina of tegmen equal width throughout, with base concave. Lateral styles of tegmen with proximal margin “inverted V”-shaped ventrally, widest at base, with sparse setae on distal 1/5 of ventral surface. Median lobe moderate ($0.75 < L/T \leq 1.00$), narrowed in pre-distal quarter and distally broadened, with apical aperture large and apex rounded. Female: unknown.

Type material. Lectotype: [*parva*] [*Praocis/ parva* Sol./ Coquimbo] [*P. parva* Gay et/ Sol. Coquimbo] [Type] [*Praocis/ parva* Sol./ Type de Solier/ Col. Marseul/ C. Girard det. 1975] [Lectotypus/ *Praocis parva*/ Gay et Solier, 1840/ Des. G. Flores 2005] (MNHN). Three paralectotypes same data as lectotype except the third label, one plus two labels: [Coquimbo/ Gay] and [*parva* Sol. Gay 232, 17 Chili] below the label [Type] and one of the others plus two labels: [Museum Paris/ Coll. Solier/ Coll. Marseul 1890] and [*Praocis/ parva* Sol./ det. H. Kulzer 1957] below the label [Type] (MNHN).

Note: Flores (2007: 417) designated lectotype and paralectotypes.

Other material examined. CHILE. Region IV: La Serena, 22.ix.1999, M. Guerrero, 1 (MNNC).

Geographic distribution. Chile (Coquimbo Region, La Serena), in the Coquimbo biogeographic province.

Species assigned to *Praocis* s. str. but not examined

Praocis bicostata Philippi & Philippi, 1864

Praocis bicostata Philippi & Philippi, 1864: 341; Gemminger & Harold, 1870: 1905 (cat.); Philippi, 1887: 731 (cat.); Gebien, 1910: 260 (cat.); Gebien, 1938: 398 (cat.); Blackwelder, 1945: 522 (cat.); Kulzer, 1958: 21 (rev.); Peña, 1966: 430 (cat.); Vidal & Guerrero, 2007: 73.

Note. Kulzer (1958) examined the unique type (female) of *P. bicostata* and stated that this type was in the MNNC, but is not there currently (Camousseight 1980 and pers. obs.), nor was it in the other museums from which we borrowed material. Kulzer (1958) considered this species very closely related to *P. spinolai* and established few differences between both (see below), possibly an atypical individual of *P. spinolai*, which he could not ascertain from a single individual (the type). According to the key by Kulzer (1958), it seems that the major difference between *P. spinolai* and *P. bicostata* is given by the number of grooves bearing scaly setae on each elytron: *P. bicostata* has only one (the outer one) whereas *P. spinolai* has three or four (Fig. 22). In this revision we examined few specimens of *P. spinolai* glabrous, with grooves but lacking scaly setae (LEULS, IADIZA). *P. spinolai* exhibits a great variation in the number of carinae and grooves with or without scaly setae but without examining the type we cannot judge *P. bicostata* as synonymous with *P. spinolai*. We present the redescription of *P. bicostata* by Kulzer (translated from German by Christian Maus):

“Of this species, I only know the type, a female. Very closely related to *P. spinolai*. Black with a slight metallic shine, oval, quite strongly convex. Legs dark brown, antennae a bit lighter. Length: 12 mm, width: 7 mm. Head and pronotum as in *P. spinolai*, punctuation of the pronotum a bit finer. Elytra apically more rounded, largest width behind the middle, lateral edge fine and well visible in dorsal view, evenly convex, with two very shallow and indistinct carinae which end in front of the apex and which are merged in the first quarter of the elytron and thus do not reach its base. The inner carina is more distant from the suture than in *P. spinolai*. The lateral furrow is narrow and covered with small, light grey scales, and is basally split until two thirds of its length. Prosternum and underside as in *P. spinolai*, but slightly lighter colored. Described from Illapel. *P. bicostata* is very closely related to *spinolai*, possibly even an atypical individual of that species, which I cannot assert from the single individual available to me”.

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