

INSECTA MUNDI

A Journal of World Insect Systematics

0729

South American Coccinellidae (Coleoptera), Part XXI:
systematic revision of South American
Pentilia Mulsant (Cryptognathini)

Robert D. Gordon
Northern Plains Entomology
PO Box 65
Willow City, North Dakota, USA

Guillermo González F.
La Reina
Santiago, Chile

Guy A. Hanley
Northern Plains Entomology
Minot, North Dakota, USA

Date of issue: September 27, 2019

Robert D. Gordon, Guillermo González F. and Guy A. Hanley
South American Coccinellidae (Coleoptera), Part XXI: systematic revision of South
American *Pentilia* Mulsant (Cryptognathini)
Insecta Mundi 0729: 1–27

ZooBank Registered: urn:lsid:zoobank.org:pub:B3C0E818-8A1B-482C-9C21-001722E93768

Published in 2019 by

Center for Systematic Entomology, Inc.
P.O. Box 141874
Gainesville, FL 32614-1874 USA
<http://centerforsystematicentomology.org/>

Insecta Mundi is a journal primarily devoted to insect systematics, but articles can be published on any non-marine arthropod. Topics considered for publication include systematics, taxonomy, nomenclature, checklists, faunal works, and natural history. *Insecta Mundi* will not consider works in the applied sciences (i.e. medical entomology, pest control research, etc.), and no longer publishes book reviews or editorials. *Insecta Mundi* publishes original research or discoveries in an inexpensive and timely manner, distributing them free via open access on the internet on the date of publication.

Insecta Mundi is referenced or abstracted by several sources, including the Zoological Record and CAB Abstracts. *Insecta Mundi* is published irregularly throughout the year, with completed manuscripts assigned an individual number. Manuscripts must be peer reviewed prior to submission, after which they are reviewed by the editorial board to ensure quality. One author of each submitted manuscript must be a current member of the Center for Systematic Entomology.

Guidelines and requirements for the preparation of manuscripts are available on the *Insecta Mundi* website at <http://centerforsystematicentomology.org/insectamundi/>

Chief Editor: David Plotkin, insectamundi@gmail.com

Assistant Editor: Paul E. Skelley, insectamundi@gmail.com

Head Layout Editor: Robert G. Forsyth

Editorial Board: J. H. Frank, M. J. Paulsen, Michael C. Thomas

Review Editors: Listed on the *Insecta Mundi* webpage

Printed copies (ISSN 0749-6737) annually deposited in libraries

CSIRO, Canberra, ACT, Australia

Museu de Zoologia, São Paulo, Brazil

Agriculture and Agrifood Canada, Ottawa, ON, Canada

The Natural History Museum, London, UK

Muzeum i Instytut Zoologii PAN, Warsaw, Poland

National Taiwan University, Taipei, Taiwan

California Academy of Sciences, San Francisco, CA, USA

Florida Department of Agriculture and Consumer Services, Gainesville, FL, USA

Field Museum of Natural History, Chicago, IL, USA

National Museum of Natural History, Smithsonian Institution, Washington, DC, USA

Zoological Institute of Russian Academy of Sciences, Saint-Petersburg, Russia

Electronic copies (Online ISSN 1942-1354, CDROM ISSN 1942-1362) in PDF format

Printed CD or DVD mailed to all members at end of year. Archived digitally by Portico.

Florida Virtual Campus: <http://purl.fcla.edu/fcla/insectamundi>

University of Nebraska-Lincoln, Digital Commons: <http://digitalcommons.unl.edu/insectamundi/>

Goethe-Universität, Frankfurt am Main: <http://nbn-resolving.de/urn/resolver.pl?urn:nbn:de:hebis:30:3-135240>

Copyright held by the author(s). This is an open access article distributed under the terms of the Creative Commons, Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original author(s) and source are credited. <http://creativecommons.org/licenses/by-nc/3.0/>

Layout Editor for this article: Robert G. Forsyth

South American Coccinellidae (Coleoptera), Part XXI: systematic revision of South American *Pentilia* Mulsant (Cryptognathini)

Robert D. Gordon

Northern Plains Entomology
PO Box 65
Willow City, North Dakota, USA
rdgordonutma@gmail.com

Guillermo González F.

La Reina
Santiago, Chile
willogonzales@yahoo.com

Guy A. Hanley

Northern Plains Entomology
Minot, North Dakota, USA
ghanley701@gmail.com

Abstract. Twenty **new species** are described in *Pentilia* Mulsant (Coleoptera: Coccinellidae: Scymninae: Cryptognathini) by Gordon and González: *Pentilia bernadette*, *P. chelsea*, *P. dianna*, *P. elena*, *P. ernestine*, *P. estelle*, *P. kari*, *P. jasmine*, *P. jody*, *P. kendra*, *P. krystal*, *P. lora*, *P. mable*, *P. muriel*, *P. nichole*, *P. nadine*, *P. paulette*, *P. rachael*, *P. sadie* and *P. traci*. A lectotype is **here designated** for *Pentilia egena* Mulsant.

Key words. Key, classification, list, illustrations.

Introduction

In a previous publication, González et al. (2019) reviewed Cryptognathini, provided a key to genera, and discussed nomenclatural history along with necessary illustrations. A revision of *Cryptognatha* Mulsant was also provided. Here, *Pentilia* Mulsant is similarly revised with modified synonymy presented. Users of this publication should refer to González et al. (2019) for more complete information on Cryptognathini as a whole.

Kirsch (1876) described four species as *Pentilia*, but examination of type specimens has shown that only one, *P. dispar* Kirsch, is a member of Cryptognathini, but belongs in the genus *Curticornis* Gordon; the remainder are either not Cryptognathini or not Coccinellidae at all.

Type(s) of *Pentilia castanea* Mulsant (1850) were stated by Mulsant to be in the “Muséum de Copenhague,” type locality was given as “l’Amérique méridionale.” The Copenhagen museum has two specimens identified as *P. castanea* and images of those specimens and associated labels were kindly provided by curators of that museum. Those specimens bear no type labels but do have labels that specifically give “Deyrolle” as the collection source and “Mexico” as the locality. Mulsant (1850) always correctly identified sources of his material and would have stated “Deyrolle” rather than “Amérique méridional.” Therefore, it is questionable as to whether these are actual types and are not accepted as such, leaving the identity of *P. castanea* in question. This species is probably not applicable to South American taxa in any event as it appears to be of Mexican origin.

Pentilia insidiosa Mulsant (1850) types were not available for examination and this species is not treated in this work.

Materials and Methods

Diagnostic characters. Coccinellidae morphological structures, both external and internal, were discussed and illustrated by Gordon (1985). Some of the same terminology is used here but changes have been made to conform to terminology used by Slipinski (2007) and Seago, et al. (2011). These publications should be consulted if clarification is needed.

Dissections. Both sexes should be dissected when examining specimens of Cryptognathini. A specific technique consists of softening a specimen in hot water, removing the abdomen, placing it in a dilute solution of potassium or sodium hydroxide until muscle and fat are removed, rinsing the abdomen and genitalic structures in clean water, and placing the cleaned structures in glycerin for examination. Genitalia may be stored in several ways, but here they were stored in glycerin in microvials.

Types. Lectotypes are designated to stabilize current classification for future researchers. Lectotype labels were affixed to specimens so designated throughout. Type specimens were examined for most specific taxa unless otherwise indicated. Detailed information is included under "Type locality," "Type depository," and "Remarks."

Names. Traditional methods of selecting names were not used. Instead, names were formed as nouns in apposition using female given names, except where otherwise noted.

Locality records. Locality records listed in the text were taken from specimens actually examined; published records were not accepted because genitalia were not examined by previous authors. All information listed for new taxa is given exactly as it appears on labels, with correction of any obviously incorrect spelling.

Collection codens. Specimens were borrowed from several institutions for this study. The following acronyms denote depositories for specimens used here.

BMNH Natural History Museum, London, UK

DCMC Dejean collection - Musée des Confluences, Lyon, France

CPGG Guillermo González, Personal Collection, Santiago, Chile.

CMNH Carnegie Museum of Natural History, Pittsburgh, PA, USA

CTNI Colección Taxonómica Nacional de Insectos Luis María Murillo, Corpoica, C.I. Tibaitatá, Mosquera, Cundinamarca, Bogotá, Colombia.

MEUT Museo de Entomología de la Universidad Nacional de Tumbes, Peru

MUSM Museo de Historia Natural de la Universidad Nacional Mayor de San Marcos, Lima, Peru

MZUG Museo de la Facultad de Ciencias Naturales de la Universidad de Guayaquil, Ecuador

USNM United States National Museum of Natural History, Smithsonian Institution, Washington, DC, USA

Systematics

Pentilia Mulsant

Pentilia Mulsant 1850: 502; Crotch 1874: 199; Korschefsky 1931: 223; Blackwelder 1945: 450; Gordon 1971: 185.

Type species. *Pentilia egena* Mulsant, by subsequent designation of Crotch (1874).

Description. Cryptognathini with frons narrow, anterior margin of clypeus emarginate medially, apical 1/4 curved upward (Fig. 116). Antenna with 9 articles, club apparently with 3 articles; maxillary palpus with last article widened apically. Epipleuron strongly descending externally (Fig. 117). Prosternum not widened anterior to coxae, not completely concealing mouthparts in repose (Fig. 118) Proleg with tibia expanded for reception of tarsus, 2/3 width of femur, femur notched for reception of tibia; meso- and metatibia less strongly expanded, grooved on outer margin for reception of tibia. Abdomen with postcoxal line on basal ventrite incomplete, reaching nearly to lateral margin of ventrite. Female genital with stylus and stiff setae, spermatheca curved.

Remarks. *Pentilia* is defined by key characters. It is most similar to *Curticornis* Gordon but differs from that genus by an upturned clypeal apex and strongly descending epipleuron. Gordon and González are authors of all taxa here described.

Key to species of *Pentilia*

1. Elytron entirely brownish yellow or yellow, completely devoid of maculation (Fig. 1) **1. *P. sadie* Gordon and González, n. sp.**
- Elytron entirely black or dark brown, or with distinct maculation **2**
- 2(1). Elytron with distinct maculation **3**
- Elytron entirely black or dark brown, without maculation **16**
- 3(2). Background color of elytron dark brown or black, maculation present **4**
- Background color of elytron yellow, or brownish yellow, maculation present **11**
- 4(3). Elytron black with yellow maculation **5**
- Elytron variable, background dark brown, maculation reddish yellow, or yellow **7**
- 5(4). Elytron with single yellow macula at humeral angle (Fig. 77) **15. *P. lora*, Gordon and González, n. sp.**
- Elytron with 2 or more maculae **6**
- 6(5). Elytron black with 2 yellow maculae (Fig. 35) **7. *P. jasmine*, Gordon and González, n. sp.**
- Elytron black with 4 unequal yellow maculae (Fig. 40) **8. *P. rachael*, Gordon and González, n. sp.**
- 7(4). Elytron narrowly bordered with yellow or reddish yellow, or with narrow apical macula .. **8**
- Elytron narrowly bordered with yellow or reddish yellow, with small apical macula (Fig. 73) **14. *P. krystal*, Gordon and González, n. sp.**
- 8(7). Elytron with large, round, yellow median macula, extreme apex narrowly yellow, without pale lateral border (Fig. 45) **9. *P. chelsea*, Gordon and González, n. sp.**
- Elytron with pale lateral border **9**
- 9(8). Elytron with yellow, elongate macula in basal 1/2, and narrow, lateral yellow border widened at apex (Fig. 18) **4. *P. nichole*, Gordon and González, n. sp.**
- Elytron without macula, only lateral yellow border **10**
- 10(9). Elytron with border very narrow, less than 1/8 width of elytron (Fig. 7) **2. *P. bernadette*, Gordon and González, n. sp.**
- Elytron with border wide, nearly 1/4 width of elytron (Fig. 13) **3. *P. traci*, Gordon and González, n. sp.**
- 11(3). Elytron with brown, black, or yellow lateral border on extreme margin **12**
- Elytron without lateral border or with very narrow trace of border, dark vitta removed from margin **15**
- 12(11). Lateral border on elytron yellow (Fig. 29) **6. *P. kendra*, Gordon and González, n. sp.**
- Lateral border on elytron brown or black **13**
- 13(12). Lateral border surrounding elytron, narrowly projected inward at humeral angle (Fig. 62) **12. *P. muriel*, Gordon and González, n. sp.**
- Lateral border surrounding elytron not projected inward at humeral angle **14**
- 14(13). Elytron with distinct sutural vitta (Fig. 50) .. **10. *P. mable*, Gordon and González, n. sp.**
- Elytron without sutural vitta, or if present, very narrow, Peru. (Fig. 24, imaged specimen is teneral and does not exhibit key characters) **5. *P. jody*, Gordon and González, n. sp.**

- 15(11). Pronotum with small, pale vitta at center of median dark macula (Fig. 56). 11. *P. ernestine*, Gordon and González, n. sp.
 — Pronotum without pale vittae on median dark macula (Fig. 67) 13. *P. elena*, Gordon and González, n. sp.
- 16(2). Penis guide of male genitalia with sides nearly parallel in basal 2/3, gradually narrowed to rounded apex in apical 2/3 (Fig. 94) 18. *P. kari*, Gordon and González, n. sp.
 — Penis guide of male genitalia entirely slender or with sides convergent just before apex . . . 17
- 17(16). Penis guide of male genitalia with sides convergent just before apex (Fig. 91) 18
 — Penis guide of male genitalia with sides slender, not strongly convergent before apex (Fig. 102) 20
- 18(17). Elytron dark brown; genitalia with penis guide long, basal lobe as long as paramere, sides parallel in basal 3/4, curved to rounded apex in apical 1/4 (Fig.94) 17. *P. nadine*, Gordon and González, n. sp.
 — Elytron black; genitalia with penis guide long, basal lobe as long as paramere, gradually narrowed at apical 1/3 to rounded apex, apex slightly emarginate 19
- 19(18). Elytron black; genitalia with penis guide as long as paramere, gradually narrowed at apical 1/3 to rounded apex, apex slightly emarginate (Fig. 107) 20. *P. dianna*, Gordon and González, n. sp.
 — Elytron black; genitalia with basal lobe as long as penis guide, basal 3/4 parallel sided, apical 1/4 narrowed to rounded apex, apex not emarginate (Fig. 85) 16. *P. egena* Mulsant
- 20(17). Basal lobe of male genitalia with distinctly emarginate apex (Fig. 102); lateral margin of elytron with trace of red in apical 1/3; Trinidad . . . 19. *P. estelle*, Gordon and González, n. sp.
 — Basal lobe of male genitalia not apically emarginate; lateral margin of elytron without trace of red in apical 1/3 (Fig. 112); Peru. 21. *P. paulette*, Gordon and González, n. sp.

List of *Pentilia* species in order of text

1. *P. sadie*, n. sp.
2. *P. bernadette*, n.sp.
3. *P. traci*, n. sp.
4. *P. nichole*, n. sp.
5. *P. jody*, n. sp.
6. *P. kendra*, n. sp.
7. *P. jasmine*, n. sp.
8. *P. rachael*, n. sp.
9. *P. chelsea*, n. sp.
10. *P. mable*, n. sp.
11. *P. ernestine*, n. sp.
12. *P. muriel*, n. sp.
13. *P. elena*, n. sp.
14. *P. krystal*, n. sp.
15. *P. lora*, n. sp.
16. *P. egena* Mulsant
17. *P. nadine*, n. sp.
18. *P. kari*, n. sp.
19. *P. estelle*, n. sp.
20. *P. dianna*, n. sp.
21. *P. paulette*, n. sp.

1. *Pentilia sadie* Gordon and González, new species

Description. Male holotype. Length 2.6 mm, width 2.4 mm; dorsal surface with head densely alutaceous; pronotum distinctly alutaceous; elytron faintly alutaceous. Color brownish yellow (Fig. 1); head yellow; pronotum with lateral 1/4 yellow; abdomen yellow. Head punctures not visible, hidden in alutaceous sculpture; pronotal punctures small, separated by a diameter or less; elytral punctures slightly larger than on pronotum, separated by less than to 3 times a diameter; prosternum, mesosternum strongly alutaceous, no punctures visible; metasternum shiny, apparently lacking punctures; abdominal ventrites 1, 2 with fine punctures separated by less than to 3 times a diameter; ventrites 2–4 finely, densely punctured medially; ventrite 5 finely, densely punctured. Head with frons parallel sided, 1.2 times as wide as eye, clypeal apex widely emarginate, lateral angle abruptly curved (Fig. 2); eye canthus long, about 3/4 width of eye. Prosternum with lateral carina on each side short, straight, extended from apex of intercoxal process about 1/2 distance to apex of prosternum. Epipleuron strongly descending externally. Postcoxal line on basal abdominal ventrite curved, extended 3/4 distance to rear margin of ventrite. Genitalia with basal lobe as long as paramere, sides almost parallel in basal 4/5, slightly indented medially, apical 1/5 narrowed to broadly rounded apex; paramere slender, nearly straight, apex rounded (Fig. 3, 4); penis long, slender, apex attenuate, margins separated anterior to apex, lower margin curved (Fig. 5).

Female. Similar to male except head brown, pronotum faintly paler in lateral 1/4; ramus of spermathecal capsule wide, cornu weakly curved, apex acute (Fig. 6).

Variation. Length 2.3 to 2.6 mm, width 2.3 to 2.4 mm.

Type material. Holotype male; Carriacou (Brazil), June 1937, A. Pickles., *Exochomus* Det. G. Bryant, *Cryptognatha* spec. Det. R. Korschefsky 1938, Pres by Comm Inst Ent, B.M. 1981-1. (BMNH). Paratypes 6, 4, COLOMBIA, San Andrés, Aeropuerto, w.m., 24-X-2013, let. T. Kondo y E.M. Quintero. Pta. Hosp: *Cocos nuclifera*, presa: *Crypticerya multicicatrices*; 1, Colombia, Antioquia Medellín, 1600 m, 13-X-2012, leg. J.C. Gómez, En cítricos (*Citrus sinensis*); 1, Venezuela, B. E. Box Collector, Guatirt. Valley, “El Marquez” 18.vi.1926, Pres. by Imp. Bur. Ent. Brit. Mus. 1930-188. (BMNH) (CTNI).

Remarks. This species is recognized by a dorsally immaculate appearance not shared with other species of *Pentilia*.

2. *Pentilia bernadette* Gordon and González, new species

Description. Male holotype. Length 2.1 mm, width 2.0 mm; dorsal surface with faint microsculpture. Color brownish black; head yellow; pronotum with lateral 1/3 yellow; elytron with narrow yellow lateral margin (Fig. 7); venter yellow; abdomen yellow. Head punctures coarse, separated by a diameter or less; pronotal punctures small, separated by a diameter or less; elytral punctures larger than on pronotum, separated by less than to twice a diameter; prosternum with small punctures separated by less than a diameter; mesosternum with coarse punctures separated by less than to twice a diameter; metasternum impunctate or nearly so; abdominal ventrites 1, 2 with distinct punctures separated by less than to twice a diameter; ventrites 3–4 finely, densely punctured medially; ventrite 5 finely, densely punctured. Head with frons parallel sided, 1.5 times as wide as eye, clypeal apex widely emarginate, lateral angle abruptly curved (Fig. 8); eye canthus long, about 3/4 width of eye. Prosternum with lateral carina on each side short, straight, extended from apex of intercoxal process about 1/2 distance to apex of prosternum. Epipleuron strongly descending externally. Postcoxal line on basal abdominal ventrite curved, extended 3/4 distance to rear margin of ventrite. Genitalia with basal lobe longer than paramere, sides parallel in basal 4/5, apical 1/5 narrowed to broadly rounded apex; paramere slender, nearly straight, apex rounded (Fig. 9, 10); penis short, robust, basal capsule slender, inner arm long, apically widened, outer arm short, apex truncate (Fig. 11).

Female. Similar to male except genitalia with ramus of spermathecal capsule wide, cornu weakly curved, apex acute (Fig. 12).

Variation. Length 2.0 to 2.6 mm, width 1.9 to 2.4 mm.

Type material. Holotype male; B.C.-Tumbes-PERU, 01-VII-06, Leg. J. Miró. (MEUT) Paratypes 8, 1, Ch.-H.,-ECUADOR, 15.VII-06, Leg. J. Miró, En cocotero sobre queresa redonda; 1, P,E,T,-Tumbes-PERU, 05-VII-06, Leg. J. Miró; 1, Q, Seca-Matapalo Tumbes, 19-IV-06, Col: J. Miró; 4, S,J.V. Tumbes, 26-III-06, 20-IV-06, J. Miró Col.; 1. Tumbis-Zarumilla-Tumbes, 04-IX-06, Leg. J. Miró, Pta H.: Cocotero Pga. H; *A. destructor* (MEUT) (MUSM) (MZUG).

Remarks. The black elytra with a narrow, lateral, yellow border distinguish this species from all other species of *Pentilia* except *P. traci*. The latter species is Brazilian with a wider lateral border on each elytron and has different male genitalia; see description under *P. traci*.

3. *Pentilia traci* Gordon and González, new species

Description. Male holotype. Length 2.5 mm, width 2.4 mm; dorsal surface shiny except head densely alutaceous. Color black; head yellow; pronotum with lateral 1/4 yellow; elytron with wide, yellow lateral margin (Fig. 13); venter yellow except meso-, metasternum brown; abdomen yellow except basal abdominal ventrite with median 1/3 apically brown. Head punctures not visible, hidden in alutaceous sculpture, frons (Fig. 14); pronotal punctures small, separated by less than to 3 times a diameter; elytral punctures larger than on pronotum, separated by less than to twice a diameter, becoming larger, denser toward lateral margin; prosternum with punctures separated by less than a diameter; mesosternum with coarse punctures separated by a diameter or less; metasternum with large punctures separated by less than to twice a diameter in median 3/4, punctures becoming sparse or absent in lateral 1/4; abdominal ventrites 1, 2 with coarse punctures separated by less than to twice a diameter; ventrites 3–4 finely, densely punctured medially; ventrite 5 finely, densely punctured. Head with frons parallel sided, 1.5 times as wide as eye, clypeal apex widely emarginate, lateral angle abruptly curved (Fig.); eye canthus long, about 3/4 width of eye. Prosternum with lateral carina on each side long, straight, extended from apex of intercoxal process to apex of prosternum. Epipleuron strongly descending externally. Postcoxal line on basal abdominal ventrite curved, extended 7/8 distance to rear margin of ventrite. Genitalia with basal lobe as long as paramere, sides gradually narrowed from base to abruptly rounded apex; paramere slender, nearly straight, apex rounded (Fig. 15, 16); penis short, robust, apex shortly attenuate, margins separated anterior to apex, lower margin straight; basal capsule slender, inner arm long, slightly curved, apically rounded, outer arm shorter than inner arm, apex rounded (Fig. 17).

Female. Similar to male except head yellowish brown; genitalia with spermathecal capsule not examined.

Variation. Length 2.3 to 2.6 mm, width 2.2 to 2.5 mm.

Type material. Holotype male; Brasilien, Nova Teutonia, 27° 11' B. 52° 23', Fritz Plaumann, Jan. 1939, Brit. Mus. 1946-191. (BMNH). Paratype 1, same data as for holotype. (BMNH)

Remarks. This species closely resembles *P. bernadette*; see remarks under that species.

4. *Pentilia nichole* Gordon and González, new species

Description. Male holotype. Length 2.3 mm, width 2.1 mm; dorsal surface shiny except head densely alutaceous. Color black; pronotum with lateral 1/4, apical 1/4 yellow; elytron with wide, yellow lateral margin enlarged into incipient macula on apical declivity, in addition an irregularly oval macula present medially in basal 1/2 (Fig. 18); venter yellow; abdomen yellow except apex of basal abdominal ventrite. Head punctures not visible, hidden in alutaceous sculpture; pronotal punctures small, separated by less than to 3 times a diameter; elytral punctures larger than on pronotum, separated by less than to 4 times a diameter, becoming larger, denser toward lateral margin; prosternum with small punctures separated by less than a diameter; mesosternum with coarse punctures separated by a diameter or less; metasternum with punctures smaller than on mesosternum, separated by 1 to 3 times a diameter in median 3/4, punctures becoming absent in lateral 1/4; abdominal ventrites 1, 2 with coarse punctures separated by less than to twice a diameter; ventrites 3–4 finely, densely punctured medially; ventrite 5 finely, densely punctured. Head with frons parallel sided, 1.2 times as wide as eye, clypeal apex widely emarginate, lateral angle abruptly curved (Fig. 19); eye canthus long, about 3/4 width of eye. Prosternum

with lateral carina on each side short, straight, extended from apex of intercoxal process 1/4 distance to apex of prosternum. Epipleuron strongly descending externally. Postcoxal line on basal abdominal ventrite slightly flattened along posterior ventrite margin, extended 7/8 distance to rear margin of ventrite. Genitalia with basal lobe as long as paramere, sides gradually narrowed from base to abruptly rounded apex; paramere slender, nearly straight, apex rounded (Fig. 20, 21); penis with apical portion divided; basal capsule slender, inner arm long slightly curved, apex truncate, outer arm long, straight, apex abruptly curved (Fig. 22).

Female. Similar to male except spermathecal capsule slender, ramus not enlarged, cornu evenly curved to rounded apex (Fig. 23).

Variation. Length 2.0 to 2.4 mm, width 1.8 to 2.3 mm. Pronotal color varies from entirely yellow to lateral 1/3 yellow with all intergrades between, size and shape of elytral maculae vary slightly.

Type material. Holotype male; BRAZIL, Recife, Pernambuco, Krauss X-1961 (USNM). Paratypes 68, 39, Pernam., Fry Coll. 1905-100, 23, same data as holotype; 1, Exochomus Pernamb, Pascoe Coll. 98-60; 1, Pernambuco, Brazil, 2/183; 2, Brazil, Macuió(sp?), (Ipioca), 26-6-1994, Lima, I-M. N JM- leg. (BMNH) (USNM).

Remarks. This species is possibly conspecific with *P. traci* in spite of the quite different dorsal color patterns. The male genitalia are virtually identical and both are from Brazil. They are maintained as separate species because of the different color patterns.

5. *Pentilia jody* Gordon and González, new species

Description. Male holotype. Length 2.5 mm, width 2.4 mm; dorsal surface shiny except head densely alutaceous. Color black; head yellow; pronotum with lateral 1/4 yellow; elytron reddish yellow with wide, dark brown lateral margin (Fig. 24, specimen imaged is teneral and does not exhibit lateral margin character); venter yellow except meso-, metasternum brown; abdomen yellow except basal abdominal ventrite with median 1/3 apically brown. Head punctures not visible, hidden in alutaceous sculpture; pronotal punctures small, separated by less than to 3 times a diameter; elytral punctures larger than on pronotum, separated by less than to twice a diameter, becoming larger, denser toward lateral margin; prosternum with punctures separated by less than a diameter; mesosternum with coarse punctures separated by a diameter or less; metasternum with large punctures separated by less than to twice a diameter in median 1/2, punctures becoming sparse or absent in lateral 1/2; abdominal ventrites 1, 2 with coarse punctures separated by less than to twice a diameter; ventrites 3–4 finely, densely punctured medially; ventrite 5 finely, densely punctured. Head with frons parallel sided, 1.5 times as wide as eye, clypeal apex widely emarginate, lateral angle abruptly curved (Fig. 25); eye canthus long, about 3/4 width of eye. Prosternum with lateral carina on each side long, straight, extended from apex of intercoxal process to apex of prosternum. Epipleuron strongly descending externally. Postcoxal line on basal abdominal ventrite curved, extended 7/8 distance to rear margin of ventrite. Genitalia with basal lobe as long as paramere, sides gradually narrowed from base to abruptly rounded apex; paramere slender, nearly straight, apex rounded (Fig. 26, 27); penis short, robust, apex shortly attenuate, in a long flagellum almost as long as the rest of the penis; basal capsule slender, inner arm long, slightly curved, apically rounded, outer arm shorter than inner, apex acute (Fig. 28).

Female. Similar to male except head brown, yellow lateral abdominal margin reduced, obscured with brown; genitalia with spermathecal capsule lost.

Variation. Length 2.3 to 2.5 mm, width 2.3 to 2.4 mm. Teneral specimens tend to have the brown elytral margin reduced or entirely absent, these same specimens also have entirely yellow pronota.

Type material. Holotype male; Tingo Maria, Peru, 1949, J. Dieguez C. (USNM). Paratypes 23, 3, same data as for holotype; 18, Chanchamayo, Peru, Vii 1955, J E Willis coll; 1, Peru: Junin Dept., Chancham[ayo], Prov. San Ramón (Mensajero lodge), S11° 6.50'; W75°20.1', 10–20.01.2012, 825 m, Leg: Garner & Gunter, 2011, BMNH (E) 2013-62 G.H. Garner; 1, Forested eastern foothills of the Andes, 2000ft., PERU: Tingo Maria, 1 km E. of town. At edge of woodland, 5.viii.1971., P.S. & H.L. Broomfield, B.M.1971.486. (BMNH) (MUSM) (USNM).

Remarks. *Pentilia jody* is distinguished by the elytral color pattern and Peruvian type locality. Pale teneral specimens are more difficult to identify but a Peruvian collecting locality will aid in recognition.

6. *Pentilia kendra* Gordon and González, new species

Description. Male holotype. Length 2.3 mm, width 2.0 mm; dorsal surface with faint microsculpture except head densely alutaceous. Color yellow; pronotum medially brown with lateral 1/4 yellow; elytron brownish yellow with wide, yellow lateral margin, sutural margin narrowly yellow with extremely narrow brown vitta on suture (Fig. 29); venter yellow except pro-, meso-, metasternum black; abdomen brown except lateral 1/4, ventrite 5 yellow. Head punctures not visible in alutaceous sculpture; pronotal punctures small, separated by a diameter or less; elytral punctures larger than on pronotum, separated by less than to twice a diameter, becoming larger, denser toward lateral margin; prosternum with small punctures separated by less than a diameter; mesosternum with punctures coarser than on prosternum, separated by a diameter or less; metasternum with punctures smaller than on mesosternum, separated by 1 to 3 times a diameter, absent in lateral 1/3; abdominal ventrites 1, 2 with coarse punctures separated by less than to twice a diameter; ventrites 3–4 finely, densely punctured medially; ventrite 5 finely, densely punctured. Head with frons parallel sided, 1.2 times as wide as eye, clypeal apex widely emarginate, lateral angle abruptly curved (Fig. 30); eye canthus long, about 3/4 width of eye. Prosternum with lateral carina on each side short, straight, extended from apex of intercoxal process 1/4 distance to apex of prosternum. Epipleuron strongly descending externally. Postcoxal line on basal abdominal ventrite with median 1/2 curved, extended 3/4 distance to posterior margin of ventrite. Genitalia with basal lobe about as long as paramere, sides gradually narrowed from base to rounded apex; paramere narrow, nearly straight, apex rounded (Fig. 31, 32); penis long, apex broken; basal capsule slender, inner arm short, slightly curved, apically rounded, outer arm as long as inner arm, apex truncate (Fig. 33).

Female. Similar to male except head brown; genitalia with spermathecal capsule slender, ramus slightly widened, cornu curved, apex rounded (Fig. 34).

Variation. Length 2.0 to 2.6 mm, width 1.9 to 2.4 mm. Male pronotum varies from lateral 1/4 to lateral 1/3 yellow, elytron may be almost entirely dirty yellow, but wide yellow margin still evident, suture may be completely, narrowly bordered with brown.

Type material. Holotype male: A. Fry, Sao Paulo (Brazil), Fry coll. 1905.100. (BMNH). Paratypes 15, same data as for holotype. (BMNH).

Remarks. This dorsally pale species is sufficiently distinctive in dorsal color pattern to be easily recognized. Male genitalia are not particularly distinctive, as is the case for many *Pentilia* taxa.

7. *Pentilia jasmine* Gordon and González, new species

Description. Male. Length 2.6 mm, width 2.4 mm; dorsal surface with faint microsculpture except head densely alutaceous. Color black; head yellow; pronotum with lateral 1/3 yellow; elytron with 2 large, yellow maculae, anterior macula irregularly rectangular, posterior maculae on apical declivity irregularly oval (Fig. 35); venter black except mouthparts, legs yellow; abdomen brown except lateral 1/4, ventrite 5 yellow. Head punctures not visible, hidden in alutaceous sculpture; pronotal punctures small, separated by a less than to twice a diameter; elytral punctures as large as on pronotum, separated by less than to 3 times a diameter, becoming larger, denser toward lateral margin; prosternum with small punctures separated by less than a diameter; mesosternum medially impunctate, lateral punctures as large as on prosternum; metasternum with punctures larger than on mesosternum, separated by less than to twice a diameter in median 1/2, punctures becoming sparse or absent in lateral 1/3; abdominal ventrites 1, 2 with coarse punctures separated by less than to twice a diameter; ventrites 3–4 finely, densely punctured medially; ventrite 5 finely, densely punctured. Head with frons narrow, parallel sided, slightly wider than eye, clypeal apex widely emarginate, lateral angle abruptly curved (Fig. 36); eye canthus long, about 3/4 width of eye. Prosternum with lateral carina on each side short, straight, extended from apex of intercoxal process 1/4 distance to apex of prosternum. Epipleuron strongly descending externally.

Postcoxal line on basal abdominal ventrite slightly flattened medially, extended $3/4$ distance to rear margin of ventrite. Genitalia with basal lobe slightly longer than paramere, sides parallel in basal $7/8$, narrowed to rounded apex in apical $1/8$, bent dorsally in lateral view; paramere slender, weakly curved, apex rounded (Fig. 37, 38); penis short, robust, apex shortly attenuate; basal capsule slender, inner arm long, slightly curved, apically rounded, outer arm shorter than inner, apex nearly truncate (Fig. 39).

Female. Similar to male except head black; genitalia with ramus of spermathecal capsule enlarged, cornu slender, abruptly curved to acute apex.

Variation. Length 2.2 to 2.6 mm, width 1.9 to 2.4 mm, size and shape of yellow elytral maculae differ slightly.

Type material. Holotype male; Colombia, Cnd (Cundinamarca), 1900 m, Guasca, Gacheta, Feb 20 '42, Km 84 Puente Licia, Murillo No 5521 (USNM). Paratypes 44, 1, Monterredondo, Cundinamarca Columb. 1400 m, 1961, leg. Schneble; 1, Monterredondo Cundinamarca Kolumb., 1400 m, leg. Schneble 1961; 1, Buga Colombia Val, 4.II.41, alt. 1010 m, Murillo No 05396; 2, Guayata, Colombia, Boy 18.X.40, altitude 1729 m, Murillo No 5301; 39, Colombia, Guateque (B), Oct. 10, 1938, Murillo No. 5112; 1, nr Gacheta, Colombia, CND 20.31.41, altitdue1900 m, Murillo No 5521. (USNM).

Remarks. *Pentilia jasmine* is distinguished by the two large, yellow maculae on each elytron, a pattern unique within *Pentilia*.

8. *Pentilia rachael* Gordon and González, new species

Description. Male holotype. Length 2.3 mm, width 2.1 mm; dorsal surface with faint microsculpture except head alutaceous. Color yellow; head yellow except clypeus dark brown; pronotum with lateral $3/8$, apical $1/4$ yellow, middle of median brown macula with narrow, reddish yellow vitta; elytron black with 4 large, yellow maculae, scutellar macula oval, anterolateral macula oval, macula on apical declivity oval, macula at apex irregularly oval (Fig. 40). Head punctures small, separated by less than a diameter; pronotal punctures small, separated by less than to twice a diameter; elytral punctures larger than on pronotum, separated by less than to twice a diameter, becoming larger, denser toward lateral margin; prosternum with small punctures separated by less than a diameter; mesosternum with punctures as large as on prosternum, separated by less than a diameter; metasternum with punctures larger than on mesosternum, separated by less than to twice a diameter in median $1/2$, punctures becoming sparse or absent in lateral $1/3$; abdominal ventrites 1, 2 with coarse punctures separated by less than to twice a diameter; ventrites 3–4 finely, densely punctured medially; ventrite 5 finely, densely punctured. Head with frons narrow, parallel sided, 1.2 times as wide as eye, clypeal apex widely emarginate, lateral angle abruptly curved (Fig. 41); eye canthus short, less than $3/4$ width of eye. Prosternum with lateral carina on each side short, straight, extended from apex of intercoxal process $1/4$ distance to apex of prosternum. Epipleuron strongly descending externally. Postcoxal line on basal abdominal ventrite curved, extended nearly to rear margin of ventrite. Genitalia with basal lobe as long as paramere, sides parallel in basal $3/4$, apical $1/4$ rounded to slender apical projection with rounded apex; paramere slender, slightly curved, apex rounded (Fig. 42, 43); penis with basal $3/4$ lost, apex briefly attenuate.

Female. Similar to male except head darker yellow; spermathecal capsule short, ramus slightly enlarged, cornu bent medially, apex rounded (Fig. 44).

Variation. Length 2.0 to 2.4 mm, width 1.8 to 2.1 mm, width of lateral yellow portion of pronotum slightly variable, size and position of elytral maculae vary from that described above to nearly contiguous with all intergrades between.

Type material. Holotype male; Palmira, Colombia, Val (Valles), 15.V.39, altitude 1085 m, Murillo No 5244. (USNM). Paratypes 52. 13, same data as for holotype; 19, Buga, Colombia, Val, 4.II.41, Murillo No 5396; 3, Candelaria, Colombia, Val, 30.I.41; 4, Colombia, Cund (Cundinamarca), 182m, El Ocaso, Sept. 12, 1934, Murillo No 5144; 2, Ex. Rockefeller Foundation Bogota, Col.; 1, Anolaima, Alt. 1800mts. Col. Marin Cartagena; 1, Palmira, Citrus, May. 1946, Gallego; 1, Palmira, Valle, Alt 1–100 mts, 8-1961; 7, Palmira, Mayo, Junio, B. Losada, 1943; 1, COLOMBIA, valle del Cauca, Pradera, Aguacara, Finca HEPRASA, XI-2011, leg. Mauricio Campuzano, Planta: Mandarina arrayana. (CTNI) (USNM).

Remarks. *Pentilia rachael* is distinguished by 4 yellow maculae on each elytron, a character resembling only that of *P. jasmine*, which has 2 such maculae on each elytron.

9. *Pentilia chelsea* Gordon and González, new species

Description. Male holotype. Length 2.5 mm, width 2.4 mm; dorsal surface shiny except head slightly alutaceous. Color black; head yellow; pronotum with lateral 1/3 yellow; elytron with large, yellow, median macula joining macula on opposite elytron (Fig. 45); venter including abdomen yellow. Head punctures large, separated by less than a diameter; pronotal punctures small, separated by a diameter or less; elytral punctures as large as on pronotum, separated by 1–3 times a diameter, becoming larger, denser toward lateral margin; prosternum with small punctures separated by less than a diameter; mesosternum impunctate medially, small lateral punctures separated by less than diameter; metasternum nearly impunctate, with few, widely scattered punctures; abdominal ventrites 1, 2 with coarse punctures separated by less than to twice a diameter; ventrites 3–4 finely, densely punctured medially; ventrite 5 finely, densely punctured. Head with frons parallel sided, 1.5 times as wide as eye, clypeal apex widely emarginate, lateral angle abruptly curved (Fig. 46); eye canthus long, about 3/4 width of eye. Prosternum with lateral carina on each side short, straight, extended from apex of intercoxal process less than 1/2 distance to apex of prosternum. Epipleuron strongly descending externally. Postcoxal line on basal abdominal ventrite curved, extended slightly less than 1/2 distance to rear margin of ventrite. Genitalia with basal lobe as long as paramere, sides nearly parallel in median 7/8, narrowed to broadly rounded apex in apical 1/8; paramere slender, weakly curved, apex rounded (Fig. 47, 48); penis long, slender, apex attenuate, margins separated anterior to apex, lower margin curved; basal capsule slender, inner arm long, curved, apically rounded, outer arm as long as inner, apex rounded.

Female. Similar to male except genitalia with ramus of spermathecal capsule bulbous, cornu slender, slightly curved, apex acute (Fig. 49).

Variation. Length 2.3 to 2.8 mm, width 2.3 to 2.7 mm. Pale macula on elytron highly variable in size. It varies from that described above to a reduced spot completely surrounded by black surface of elytron with all intergrades present between extremes.

Type material. Holotype male; ECUADOR, Sto Domingo, d I Colorados, Feb. 10, 1961, Gmerino M. (USNM). Paratypes 40, 25, same data as for holotype; 3, Ecuador, Montalvo, VII-1956, on citrus, M. Cevallos; 1, Ch.-H.-ECUADOR, 15-VII-06, Leg.: J. Miró; 11, Tumbes, Peru, 01-VII-06, Leg.: J. Miró. (MEUT) (MUSM) (MZUG) (USNM).

Other specimens. 15. British Guiana; Penal Settlement, Bartica District; Georgetown. Colombia; Guayabetal, Cund. (CMNH) (USNM).

Remarks. In spite of the color variation in the elytral maculae, this species may be identified by dorsal color pattern. Male genitalia also aid in identification.

10. *Pentilia mable* Gordon and González, new species

Description. Male holotype. Length 2.2 mm, width 2.0 mm; dorsal surface shiny with faint trace of microsculpture. Color yellow; head reddish brown; pronotum with lateral 1/4 yellow; elytron with dark brown border, sutural border slightly narrower than lateral border, lateral border slightly widened at apical declivity (Fig. 50); venter yellowish brown except mouthparts, legs, epipleuron, abdomen yellow. Head punctures small, separated by a diameter or less; pronotal punctures smaller than on head, separated by a less than to 3 times a diameter; elytral punctures as large as on pronotum, separated by less than to twice a diameter, becoming larger, denser toward lateral margin; prosternum with small punctures separated by less than a diameter; mesosternum with punctures as large as on prosternum, separated by a diameter or less; metasternum with punctures slightly larger than on prosternum, separated by less than to twice a diameter in median 2/3, punctures becoming sparse or absent in lateral 1/3; abdominal ventrites 1, 2 with coarse punctures separated by less than to 3 or 4 times a diameter; ventrites 3–4 finely, densely punctured medially; ventrite 5 finely, densely punctured. Head with frons

parallel sided, 1.2 times as wide as eye, clypeal apex widely emarginate, lateral angle abruptly curved (Fig. 51); eye canthus long, about 3/4 width of eye. Prosternum with lateral carina on each side short, straight, extended from apex of intercoxal process to less than 1/2 distance to apex of prosternum. Epipleuron strongly descending externally. Postcoxal line on basal abdominal ventrite curved, extended 7/8 distance to rear margin of ventrite. Genitalia with basal lobe as long as paramere, narrow, sides narrowed from base to abruptly rounded apex; paramere slender, weakly curved, apex rounded (Fig. 52, 53); penis long, slender, apex with attenuate apex nearly as long as rest of penis; basal capsule slender, inner arm absent, deep excavation in place of it, outer arm long, apex rounded (Fig. 54).

Female. Similar to male except head black, pronotum entirely dark brown; genitalia with spermathecal capsule slender, slightly curved, ramus not enlarged, apex of cornu widely rounded (Fig. 55).

Variation. Length 2.0 to 2.2 mm, width 1.8 to 2.0 mm, dark elytral border varies slightly in width.

Type material. Holotype male; Fusagasugá, Colombia, Cnd (Cundinamarca), I.II.40, Murillo No 76. (USNM). Paratypes 42. 23, same data as holotype except some dates 18.II.40, 6.XI.40; 18, Colombia, Cald, Neira, 5.II.41, alt. 2025, Murillo No 5478. (USNM).

Remarks. *Pentilia mable* somewhat resembles *P. chelsea* but is smaller and has a mostly pale elytron bordered with dark brown. Male genitalia are also dissimilar, with the basal lobe in *P. mable* very narrow, and the penis with an extended attenuation of the apex; the basal lobe in *P. chelsea* is wide and apex is not extremely attenuate.

11. *Pentilia ernestine* Gordon and González, new species

Description. Male holotype. Length 2.8 mm, width 2.6 mm; dorsal surface shiny with faint trace of microsculpture. Color reddish yellow; head yellow; pronotum with lateral 1/3 yellow, median 1/3 dark brown with faint reddish median vitta; elytron reddish yellow with dark brown vitta in lateral 1/4, sutural margin narrowly dark brown (Fig. 56); venter yellow. Head punctures small, separated by less than a diameter; pronotal punctures as large as on head, separated by less than to 3 times a diameter; elytral punctures as large as on pronotum, separated by less than to twice a diameter, becoming larger, denser toward lateral margin; prosternum with small punctures separated by less than a diameter; mesosternum with punctures as large as on prosternum, separated by a diameter or less; metasternum with punctures slightly larger than on prosternum, separated by less than to twice a diameter in median 2/3, punctures becoming sparse or absent in lateral 1/3; abdominal ventrites 1, 2 with coarse punctures separated by less than to 3 or 4 times a diameter; ventrites 3–4 finely, densely punctured medially; ventrite 5 finely, densely punctured. Head with frons parallel sided, 1.5 times as wide as eye, clypeal apex widely emarginate, lateral angle abruptly curved (Fig. 57); eye canthus long, about 3/4 width of eye. Prosternum with lateral carina on each side straight, extended from apex of intercoxal process less than 1/2 distance to apex of prosternum. Epipleuron strongly descending externally. Postcoxal line on basal abdominal ventrite curved, extended 3/4 distance to rear margin of ventrite. Genitalia with basal lobe slightly longer than paramere, sides weakly widened from base to broadly rounded apex, apex slightly indented medially; paramere slender, weakly curved, apex rounded (Fig. 58, 59); penis long, slender, shortly attenuate apically; basal capsule slender, inner arm short, weakly curved, apex rounded, outer arm short, apex rounded (Fig. 60).

Female. Similar to male except spermathecal capsule as in Fig. 61.

Variation. None observed.

Type material. Holotype male; COLOMBIA, Caldas, Neira, Trocaderos, 3-XII-2009, leg. J. Monsalve, Coccideos. (CTNI). Paratypes 2, same data as for holotype (CTNI).

Remarks. *Pentilia ernestine* has male genitalia very similar to those of *P. chelsea*, but both are maintained as valid based on differences in the dorsal color pattern.

12. *Pentilia muriel* Gordon and González, new species

Description. Male holotype. Length 2.3 mm, width 2.0 mm; dorsal surface shiny. Color yellow; head yellow with black clypeus; pronotum with lateral 1/3 yellow; elytron with black border, sutural border narrower than lateral border, with basal projection inside humeral callus (Fig. 62); venter black except mouthparts, legs yellow; epipleuron yellowish brown; abdomen yellow with median 1/3 of ventrites 1-3 dark brown. Head punctures small, separated by less than a diameter; pronotal punctures as large as on head, separated by less than to 3 times a diameter; elytral punctures larger than on pronotum, separated by less than to 3 times a diameter, becoming larger, denser toward lateral margin; prosternum with small punctures separated by less than a diameter; mesosternum with punctures as large as on prosternum, separated by a diameter or less; metasternum with punctures slightly larger than on prosternum, separated by less than to twice a diameter in median 2/3, punctures becoming sparse or absent in lateral 1/3; abdominal ventrites 1, 2 with coarse punctures separated by less than to 3 or 4 times a diameter; ventrites 3-4 finely, densely punctured medially; ventrite 5 finely, densely punctured. Head with frons parallel sided, slightly wider than eye, clypeal apex widely emarginate, lateral angle abruptly curved (Fig. 63); eye canthus about 1/2 width of eye. Prosternum with lateral carina on each side short, straight, extended from apex of intercoxal process less 1/4 distance to apex of prosternum. Epipleuron strongly descending externally. Postcoxal line on basal abdominal ventrite curved, extended 7/8 distance to rear margin of ventrite. Genitalia with basal lobe as long as paramere, sides parallel in basal 3/4, then rounded to narrow apical 1/8, apex rounded; paramere slender, weakly curved, apex rounded (Fig. 64, 65); penis long, slender, apex shortly attenuate; basal capsule slender, inner arm slender, slightly curved, apex rounded, outer arm short, apex abruptly rounded (Fig. 66).

Female. Unknown.

Variation. Unknown.

Type material. Holotype male; Colombia, Antioquia, Medellín, 1600 m, 13-X-2012, leg. J. C. Gómez, En cítricos (*Citrus sinensis*) (CTNI)

Remarks. *Pentilia muriel* is somewhat similar to other species with the same type of dorsal color pattern, but is distinguished by a projection of basal border on the elytron with a projection inside of the humeral callus. The male genitalia also are distinct from those of similar appearing species.

13. *Pentilia elena* Gordon and González, new species

Description. Male holotype. Length 2.4 mm, width 2.3 mm; dorsal surface shiny with faint trace of microsculpture except head densely alutaceous. Color yellow; pronotum with lateral 1/3 yellow, apex at middle with short trace of reddish yellow; elytron with dark brown vitta in lateral 1/2 not quite reaching suture at apex, sutural margin narrowly dark brown (Fig. 67); venter yellow except meso-, metasternum black. Head punctures small, partially hidden in alutaceous sculpture, separated by less than a diameter; pronotal punctures as large as on head, separated by less than to twice a diameter; elytral punctures larger than on pronotum, separated by less than to 3 times a diameter, becoming larger, denser toward lateral margin; prosternum with small punctures separated by less than a diameter; mesosternum with punctures larger than on prosternum, separated by less than a diameter; metasternum with punctures as large as on mesosternum, separated by less than to twice a diameter in median 1/3, punctures becoming sparse or absent in lateral 2/3; abdominal ventrites 1, 2 with coarse punctures separated by less than to 3 or 4 times a diameter; ventrites 3-4 finely, densely punctured medially; ventrite 5 finely, densely punctured. Head with frons parallel sided, 1.2 times as wide as eye, clypeal apex widely emarginate, lateral angle abruptly curved (Fig. 68); eye canthus long, about 3/4 width of eye. Prosternum with lateral carina on each side straight, extended from apex of intercoxal process to less than 1/2 distance to apex of prosternum. Epipleuron strongly descending externally. Postcoxal line on basal abdominal ventrite curved, extended to rear margin of ventrite. Genitalia with basal lobe as long as paramere, sides evenly narrowed from base to abruptly rounded apex; paramere slender, nearly straight, apex rounded (Fig. 69, 70); penis with apical portion lost (Fig. 71).

Female. Similar to male except head yellowish brown; spermathecal capsule long, ramus slender, cornu curved, medially widened, apex rounded (Fig. 72).

Variation. Length 2.0 to 2.4, width 1.8 to 2.4, elytron varies from described above to having brown lateral vitta nearly absent, usually with trace of base remaining.

Type material. Holotype male; Brasilien, Nova Tetonia, 27° 11' B. 52° 23' L, Fritz Plaumann, Brit. Mus. 1946-121. (BMNH). Paratypes 252, 2, same data as for holotype; 114, Campinas Brazil, III.10.33, K.A. Bartlett, on *Asterolecanium* spp., P.R. #2241; 2, Campinas – Brazil, Sao Paulo, F. C. Camargo; 10, Campinas, S. Paulo, Brazil, F.C. Camargo, on scale insects of citrus trees; 3, nr Campinas.3, Sao Paulo Brazil, PA Berry; 1, Campinas 1939, Sao Paulo, Brazil, PA Berry 3.23; 4, P. Alegre, Brazil, 1003.79; 9, Sao Paulo'42 Brazil, Parker Note No. 666.12B; 5, Sao Paulo Braz, No. 666.5D, Jan. 14.42, Bamboo scale; 2, Brazil, Sao Paulo, V 54, NLH Krauss; 2, Sao Paulo, Bras. Mraz LGT, Mus. Pragense; 2, Brazil, Nova Teutonia, lat. 27-11 S, lon. 52-23 W, VII-21-1948, F. Plaumann. (BMNH) (USNM).

Remarks. *Pentilia elena* has basically the same dorsal color pattern as *P. ernestine* but the male genitalia differentiate them. *Pentilia ernestine* has a basal lobe widened toward the apex and a penis that has the dorsal and ventral margins divided before the apex. This species also has a Brazilian distribution and *P. ernestine* is known only from Colombia.

14. *Pentilia krystal* Gordon and González, new species

Description. Male holotype. Length 2.6 mm, width 2.5 mm; dorsal surface shiny, head slightly alutaceous. Color black; head yellow; pronotum reddish yellow, narrow, obscure brownish red macula on base in median 1/3; elytron with narrow, reddish yellow vitta on lateral margin, vitta narrow from base to apical declivity, then widened from declivity to sutural margin (Fig. 73); venter yellow except metasternum brownish yellow. Head punctures small, separated by less than a diameter; pronotal punctures as large as on head, separated by less than to twice a diameter; elytral punctures as large as on pronotum, separated by less than to 4 times a diameter, becoming larger, denser toward lateral margin; prosternum with small punctures separated by less than a diameter; mesosternum with punctures larger than on prosternum, separated by a diameter or less; metasternum with punctures smaller than on prosternum, separated by 2 to 4 times a diameter in median 2/3, punctures becoming absent in lateral 1/3; abdominal ventrites 1, 2 with coarse punctures separated by about 3 times a diameter; ventrites 3–4 finely, densely punctured medially; ventrite 5 finely, densely punctured. Head with frons parallel sided, 1.5 times as wide as eye, clypeal apex widely emarginate, lateral angle abruptly curved (Fig. 74); eye canthus long, about 3/4 width of eye. Prosternum with lateral carina on each side straight, extended from apex of intercoxal process nearly 2/3 distance to apex of prosternum. Epipleuron strongly descending externally. Postcoxal line on basal abdominal ventrite curved, extended 3/4 distance to rear margin of ventrite. Genitalia with basal lobe as long as paramere, sides parallel from base to apical 7/8, apical 1/8 narrowed to broadly rounded apex; paramere slender, slightly curved, apex rounded (Fig. 75, 76); penis lost.

Female. Unknown.

Variation. Unknown.

Type material. Holotype male; Armero, Colombia, Tol, 13.V.40, Murillo No 101. (USNM).

Remarks. *Pentilia krystal* may be recognized by the relatively narrow, pale lateral border on each elytron, but it is not an extremely distinctive taxon.

15. *Pentilia lora* Gordon and González, new species

Description. Male holotype. Length 2.1 mm, width 1.9 mm; dorsal surface shiny, head alutaceous. Color black; head yellow; pronotum yellow; elytron with small, basal yellow macula on humeral angle, diagonally extended from base posteriorly across humeral callus to lateral margin (Fig. 77); venter yellow except meso-, metasternum black. Head punctures apparently absent, not seen in alutaceous

sculpture; pronotal punctures small, separated by less than to twice a diameter; elytral punctures as large as on pronotum, separated by less than to 3 times a diameter, becoming larger, denser toward lateral margin; prosternum impunctate; mesosternum with large punctures separated by a diameter or less; metasternum with punctures as large as on mesosternum, separated by less than to twice a diameter in median 2/3, punctures becoming sparse, nearly absent in lateral 1/3; abdominal ventrites 1, 2 impunctate medially; ventrites 3, 4 finely, densely punctured medially; ventrite 5 finely, densely punctured. Head with frons weakly tapered from wide base to antennal insertion, clypeal apex widely emarginate, lateral angle curved (Fig. 78); eye canthus long, about 3/4 width of eye. Prosternum with lateral carina on each side straight, extended from apex of intercoxal process 1/2 distance to apex of prosternum. Epipleuron strongly descending externally. Postcoxal line on basal abdominal ventrite curved, extended to rear margin of ventrite. Genitalia with basal lobe slightly longer than paramere, sides parallel from base nearly to apex, apex diagonally narrowed to narrowly emarginate apex; paramere slender, slightly curved, apex rounded (Fig. 79, 80); penis with basal portion lost, apex, apical portion extremely slender (Fig. 81).

Female. Similar to male except head black with yellowish brown clypeal apex, pronotum completely black; spermathecal capsule unusual, ramus large, spoon shaped, dark brown, cornu wide basally, narrowed toward apex, apex lost (Fig. 82).

Variation. Length 1.9 to 2.2 mm, width 1.8 to 1.9 mm, size of male elytral macula varies slightly from not enclosing humeral callus to completely enclosing it.

Type material. Holotype male; Paramaribo, C. Guiana, Sep. 3, '37, K A Bartlett, PR 1949, 37-23363. (USNM). Paratypes 24, same data as for holotype. (USNM).

Remarks. Males of *P. lora* are identified by the yellow humeral macula, but females can be recognized only by the extremely unusual spermathecal capsule.

16. *Pentilia egena* Mulsant

Pentilia egena Mulsant 1850: 502; Crotch 1874: 199; Gorham 1894: 180; Korschefsky 1931: 224; Blackwelder 1945: 450.

Pentilia minutus Kraatz 1873: 195; Korschefsky 1931: 224; Blackwelder 1945: 450.

Description. Male. Length 2.4 mm, width 2.3 mm; dorsal surface shiny except head densely alutaceous, pronotum with faint microsculpture. Color black (Fig. 83); head yellow with black clypeal apex; pronotum with lateral 1/4 yellow; venter black except mouthparts, legs yellow; epipleuron brown medially; abdomen brownish yellow. Head with punctures concealed in alutaceous sculpture; pronotal punctures small, separated by less than to twice a diameter; elytral punctures slightly larger than on pronotum, separated by less than to 3 times a diameter; prosternal punctures large, separated by less than a diameter; mesosternal punctures as large as on prosternum, separated by a diameter or less; metasternal punctures as large as on mesosternum, separated by less than to 3 times a diameter, absent in lateral 1/3; abdominal ventrites 1, 2 with coarse punctures separated by a diameter or less; ventrites 3–4 with fine punctures separated by less than a diameter; ventrite 5 with dense, fine punctation. Head with frons parallel sided, 1.2 times width of eye, apex widely emarginate, lateral angle abruptly rounded (Fig. 84); eye canthus long, about 3/4 width of eye. Prosternum with lateral carina on each side straight, extended from apex of intercoxal process 1/3 distance to apex of prosternum. Epipleuron strongly descending externally. Postcoxal line on basal abdominal ventrite evenly curved, extended 7/8 distance to rear margin of ventrite. Genitalia with basal lobe as long as paramere, basal 3/4 parallel sided, apical 1/4 narrowed to rounded apex; paramere robust, curved, apex rounded (Fig. 85, 86); penis with apex shortly attenuate; basal capsule slender, inner arm short, curved, apex acute, outer arm tapered from base to abruptly rounded apex (Fig. 87).

Female. Similar to male except head brown, pronotum entirely black; genitalia with spermathecal capsule long, slender, slightly widened from base of ramus to rounded apex of cornu (Fig. 88).

Variation. Length 2.1 to 2.6 mm, width 2.0 to 2.4 mm. Female head, lateral 1/4 of pronotum may vary from described above to brown or black.

Type locality. “Bresil.”

Type depository. Dejean collection, Musée des confluences, Lyon, France, lectotype here designated (DCMC).

Geographical distribution. Argentina, Brazil, Ecuador, Peru, and Venezuela.

Specimens examined. *Argentina.* Posadas, Misiones; Misiones, Dep. Concep, Sta. Maria. *Brazil.* Bahia; Beltera; Campinas; Minas Gerais, Monte Verde, Vicosa; Parana Foz de Iguassu; Rio de Janeiro, Campo Grande, Paqueta I.; Sao Paulo. *Ecuador.* Manabi Prov., Manta. *Peru.* Chiclayo, Lambayeque; Loreto, Padre Isla; Piura. *Venezuela.* Aragua, El Limon; Lara Carorita, Sector Andres Bello; Carabobo, Taearique; Lara Tarabana; Montalbán. (CPGG) (USNM).

Remarks. *Pentilia egena* is distinguished from other species with a black dorsal surface only by examination of male genitalia. The lectotype is labeled “viridis”; remainder of green label illegible.

17. *Pentilia nadine* Gordon and González, new species

Description. Male holotype. Length 2.7 mm, width 2.6 mm; dorsal surface shiny except head slightly alutaceous. Color dark brown; head yellow with brown clypeal apex; pronotum with lateral 1/3, anterior 1/3 yellow (Fig. 89); venter yellow except pro-, meso-, metasternum yellowish brown. Head punctures small, separated by less than a diameter; pronotal punctures smaller than on head, separated by a less than to twice a diameter; elytral punctures small, extremely sparse, nearly absent; prosternum with small punctures separated by less than a diameter; pro-, meso-, metasternum nearly impunctate, with small, widely scattered punctures; abdominal ventrites 1, 2 with small punctures separated by about 1–5 times a diameter; ventrites 3–4 finely, densely punctured medially; ventrite 5 finely, densely punctured. Head with frons parallel sided, 1.2 times as wide as eye, clypeal apex widely emarginate, lateral angle abruptly curved (Fig. 90); eye canthus long, about 3/4 width of eye. Prosternum with lateral carina not visible. Epipleuron strongly descending externally. Postcoxal line on basal abdominal ventrite curved, extended 3/4 distance to rear margin of ventrite. Genitalia with penis guide long, basal lobe as long as paramere, sides parallel in basal 3/4, curved to rounded apex in apical 1/4; paramere slender, curved, apex rounded (Fig. 91, 92); penis slender, apex attenuate, dorsal, ventral margins separated before apex, lower margin curved; basal capsule slender, inner arm curved, apically rounded, outer arm tapered from base to abruptly rounded apex (Fig. 93).

Female. Unknown.

Variation. None observed.

Type material. Holotype male; Trinidad: Port of Spain. viii.1905. F. Birch. B.M.1927-540. (BMNH). Paratypes; 3, same data as for holotype. (BMNH).

Remarks. Male genitalia must be examined to identify *Pentilia nadine*, but the nearly impunctate elytron and venter also will aid recognition.

18. *Pentilia kari* Gordon and González, new species

Description. Male holotype. Length 2.0 mm, width 1.8 mm; dorsal surface shiny. Color black; head yellow with brown clypeal apex; pronotum with lateral 1/3, anterior 1/3 yellow (Fig. 94); venter yellow; abdomen yellow except median 1/3 of ventrites 1, 2, light brown. Head punctures small, separated by less than a diameter; pronotal punctures as large as on head, separated by less than a diameter; elytral punctures larger than on pronotum, separated by less than to 3 times a diameter, becoming larger, denser toward lateral margin; prosternum with small punctures separated by less than a diameter; mesosternum with punctures larger than on prosternum, separated by about a diameter; metasternum with punctures in median 1/3 as large as on mesosternum, separated by less than to twice a diameter in

median 1/3, punctures absent in lateral 1/3; abdomen with ventrites 1, 2 coarsely punctured, punctures separated by about a diameter; ventrites 3, 4 densely punctured; ventrite 5 finely, densely punctured. Head with frons parallel sided, 1.2 times as wide as eye, clypeal apex widely emarginate, lateral angle abruptly curved (Fig. 95); eye canthus long, about 3/4 width of eye. Prosternum with lateral carina on each side straight, extended from apex of intercoxal process to about 1/4 distance to apex of prosternum. Epipleuron strongly descending externally. Postcoxal line on basal abdominal ventrite curved, extended 3/4 distance to rear margin of ventrite. Genitalia with penis guide long, basal lobe as long as paramere, sides nearly parallel in basal 2/3, gradually narrowed from base to rounded apex in apical 2/3; paramere weakly sinuate, apex rounded (Fig. 96, 97); penis long, slender, apex briefly attenuate; basal capsule with inner arm short, narrow, apically acute, outer arm wide, long, apex rounded (Fig. 98).

Female. Similar to male except head, pronotum black; spermathecal capsule with widened ramus, cornu slender, medially bent, apex rounded (Fig. 99).

Variation. Length 1.8 to 2.2 mm, width 1.7 to 2.0 mm. Female head, pronotum may be dark brown instead of black, extent of yellow area on male pronotum variable, male venter may have meso-, metasternum dark brown.

Type material. Holotype male; COLOMBIA: Sasaima, Cund. (Cundinamarca), 19 Mar 1965, J. A. Ramos collector. (USNM). Paratypes 36, 2, same data as for holotype except dates 19 Mar 1965, 28 Aug 1965; 24, Colombia, Pacho, 1859m, 26.IX.'40, 25.II.'40, 26.IX.'40, various Murillo numbers; 1, Garzón, Colombia, Huila, 25.X.39, Murillo No 40; 1, San Vicente de Chucuri, Colombia, Sant (Santander), 8-XI-'35, Murillo No 82; 1, Colombia, Cauca 1000m, Puerta Tejada, May 23, 1939, Murillo No 5269; 1, Pto Tejada, Colombia, Cauca, 23.V.39, Murillo No 5269; 3, Colombia, Cnd 26 II'42, Rio Negro below Pacho, Murillo No 664; 1, LETICIA, Amazonas, Colombia 700 ft., Feb. 23-Mar.1974, H. & A. Howden; 2, V. Medellin, en Naranjo, Jul. 1944, Gallego. (USNM).

Other specimen. 1, Carinas, Rio Beni, Boliv. Jan, MR Lopez Collector, Mulford BioExpl, 1921-22. (USNM).

Remarks. This Colombian species is recognized primarily by the male genitalia, but a pronotum with wide lateral and anterior yellow areas also is of value in identification, especially in distinguishing it from *P. egena*.

19. *Pentilia estelle* Gordon and González, new species

Description. Male holotype. Length 2.2 mm, width 2.0 mm; dorsal surface shiny. Color black; head yellow with brown clypeal apex; pronotum yellow with small, basomedian brown macula; elytron with lateral margin narrowly, obscurely blackish red (Fig. 100); venter black except mouthparts, legs yellow; epipleuron dark reddish brown; abdomen with lateral 1/4, ventrite 5 yellow, medially dark brown. Head punctures large, separated by less than a diameter; pronotal punctures as large as on head, separated by a less than to twice a diameter; elytral punctures as large as on pronotum separated by less than to 3 times a diameter; prosternum with small punctures separated by less than a diameter; mesosternum with punctures larger than on prosternum, separated by about a diameter; metasternum with punctures as large as on mesosternum, separated by less than to twice a diameter in median 1/3, absent in lateral 1/3; abdominal ventrites 1, 2 with small punctures separated by about 1-3 times a diameter; ventrites 3-4 finely, densely punctured medially; ventrite 5 finely, densely punctured. Head with frons parallel sided, slightly wider than eye, clypeal apex widely emarginate, lateral angle abruptly curved (Fig. 101); eye canthus long, about 3/4 width of eye. Prosternum with lateral carina straight, extended 1/2 distance from apex to base of prosternum. Epipleuron strongly descending externally. Postcoxal line on basal abdominal ventrite curved, extended 3/4 distance to rear margin of ventrite. Genitalia with penis guide long, basal lobe as long as paramere, sides nearly parallel in basal 2/3, gradually narrowed to rounded apex in apical 1/3; paramere slender, curved, apex rounded (Fig. 102, 103); penis long, slender, apex extremely attenuate, attenuate portion at least as long as 1/2 length of penis; basal capsule sinuate, inner arm short, narrow, weakly bent, outer arm short, curved, apex V-shaped, rounded (Fig. 104).

Female. Similar to male except head brown, pronotum black with lateral 1/4 yellow; spermatheca not examined.

Variation. Length 1.9 to 2.2 mm, width 1.8 to 2.0 mm.

Type material. Holotype male; Port-of-Spain, Trinidad, BWI, 8-28-37, KA Bartlett, PR 1945, 37-23363. (USNM). Paratypes 8, 1, Icacos, Trinidad, BWI, February, 1947; 1, Dept. Agr. grounds, Port-of-Spain, Trin, Oct. 24, 1918. A-818, Harold Morrison.; 1, St. Augustine, Trinidad, II-1-'39, P.R. #2247, K. A. Bartlett; 1, Port-of-Spain, Trinidad BWI, 8-28-'37, KA Bartlett, PR 1945, 37-22363; 1, Trinidad, BWI, St. Augustine, Aug.28.'37, *Asterolecanium miliaris* sp, 1963.37-24924, KA Bartlett; 1, St. Augustine, Trinidad II. 1.'39, P.R. #2247, K.A. Bartlett. (USNM).

Remarks. The male genitalia with basal lobe are quite different from those of *P. nadine*, also a Trinidad species. The mostly yellow male pronota also are of value in recognition as is the narrow, reddish, lateral elytral margin.

20. *Pentilia dianna* Gordon and González, new species

Description. Male holotype. Length 2.4 mm, width 2.2 mm; dorsal surface shiny except head slightly alutaceous. Color dark brown; head yellow with clypeal apex narrowly brown; pronotum with lateral 1/3, anterior 1/3 yellow; abdomen becoming slightly paler toward lateral margin (Fig. 105); venter reddish yellow; abdomen yellow. Head punctures small, separated by less than a diameter; pronotal punctures as large as on head, separated by a less than to twice a diameter; elytral punctures smaller than on pronotum, barely visible, separated by 1 to 4 times a diameter; prosternum with small punctures separated by less than a diameter; mesosternum with punctures larger than on prosternum, separated by about a diameter; metasternum with punctures larger than on mesosternum, separated by less than to 3 times a diameter in median 1/3, absent in lateral 2/3; abdominal ventrites 1, 2 impunctate medially; ventrites 3–4 finely, densely punctured medially; ventrite 5 finely, densely punctured. Head with frons parallel sided, 1.5 times as wide as eye, clypeal apex widely emarginate, lateral angle abruptly curved (Fig. 106); eye canthus long, about 3/4 width of eye. Prosternum with lateral carina about 1/2 distance from apex to base of prosternum. Epipleuron strongly descending externally. Postcoxal line on basal abdominal ventrite curved, extended 3/4 distance to rear margin of ventrite. Genitalia with penis guide long, basal lobe as long as paramere, gradually narrowed at apical 1/3 to rounded apex, apex slightly emarginate; paramere slender, nearly straight, apex rounded (Fig. 107, 108); penis short, robust, apex lost and base lost, median portion (Fig. 109).

Female. Similar to male except head brown, lateral 1/4 of pronotum yellow; penis capsule not examined.

Variation. Length 2.1 to 2.4 mm, width 1.9 to 2.2 mm, elytral color varies from paler to darker brown.

Type material. Holotype male; British Guiana, Feb. 1954, Collector F. J. Simmonds. (USNM). Paratypes 72, 7, same data as for holotype; 3, British Guiana, Feb. 1954, Collector F. J. Simmonds; 59, Georgetown, Br. Guiana, 9-24,'37, KA Bartlett, P.R. 1956; 1. Bot. Gard. Georgetown, Brit. Guiana, Sept.26, 1918A706, Harold Morrison; 1, On Coconut, Nickerie, Surinam, April 1951, Collector F. J. Simmonds (USNM).

Remarks. The all brown dorsum of *Pentilia dianna* distinguish it from those species with black elytra. The male genitalia and Guyana type locality will further confirm an identification.

21. *Pentilia paulette* Gordon and González, new species

Description. Male holotype. Length 2.2 mm, width 1.9 mm; dorsal surface weakly alutaceous. Color black; head yellow with black clypeal apex; pronotum with lateral 1/3, anterior 1/4 yellow (Fig. 110); venter black except mouthparts, pro- and mesolegs yellow; metafemur brown; epipleuron reddish brown; abdomen yellow except median 1/3 of ventrites 1–4 brown. Head punctures small, separated by less than a diameter; pronotal punctures as large as on head, separated by a less than to twice a diameter; elytral punctures larger than on pronotum, separated by less than to 3 times a diameter; prosternum with small punctures separated by less than a diameter; mesosternum nearly impunctate; metasternum with

punctures in median 2/3 larger than on prosternum, separated by less than to twice a diameter, absent in lateral 1/3; abdominal ventrites 1, 2 nearly impunctate with small scattered punctures; ventrites 3–4 finely, densely punctured medially; ventrite 5 finely, densely punctured. Head with frons parallel sided, 1.2 times as wide as eye, clypeal apex widely emarginate, lateral angle abruptly curved (Fig. 111); eye canthus long, about 3/4 width of eye. Prosternum with lateral carina straight, extended from apex about 1/2 distance to base of prosternum. Epipleuron strongly descending externally. Postcoxal line on basal abdominal ventrite curved, extended 7/8 distance to rear margin of ventrite. Genitalia with penis guide long, basal lobe as long as paramere, gradually narrowed in basal 2/3, slightly more strongly tapered in apical 1/3 to rounded apex; paramere slender, nearly straight, apex rounded (Fig. 112, 113); penis slender, apical 1/5 attenuate; basal capsule with inner arm short, straight, apex curved, outer arm widened from base to broadly rounded apex (Fig. 114).

Female. Similar to male except head brown, lateral 1/4 of pronotum brown; spermathecal capsule long, slender, ramus not enlarged, cornu bent before apex, apex rounded (Fig. 115).

Variation. Length 2.2 to 2.5 mm, width 1.9 to 2.1 mm.

Type material. Holotype male; PERU 1947, Tingo Maria, Weyrauch. (USNM). Paratypes 28, 7, same data as for holotype; 9, Tingo Maria, Peru 1949, J. DieguezC; 4, Tingo Maria, (Rio Huallaga), 700 m, X.1946, leg. Weyrauch; 2, Tingo Maria, Peru, 16.I.49, D. Isely collector; 6, Peru, Madre de Dios, Tahuamanu, Inapari, 295 manm. 22-IV-2010. Leg. J. Miró. Citricos. (MEUT) (MUSM) (USNM).

Remarks. Male genitalia must be examined to identify this species, but the Peruvian type locality will aid in recognition.

Acknowledgments

Collections curators and other individuals listed here have made preparation of this publication possible. For loan of type material we are indebted to Roger Booth (BMNH), Edgar Turner and Russell Stebbings (UMZC). We thank Harold Labrique (Musée des Confluences, Lyon, France) for images of a type specimen in the Dejean Collection. For additional loan of specimens, we are indebted to Roger Booth and Max Barclay (BMNH), Robert Andrew (CMNH), Natalia Vandenberg (USNM). Guillermo González (Santiago, Chile) provided, in addition to specimens from his personal collection, specimens gathered from a number of South American institutions and collectors, including MEUT (thanks to Jimmy Miró and Pedro Castillo from Tumbes, Peru), who also donate part of his material to MUSM and MZUG, and Mauricio Campuzano and Luis Carlos Gómez Vallejo, both from Colombia, who donated their material to CTNI. We thank Lúcia Massutti de Almeida and Thomas J. Henry for their reviews of the manuscript. Guy Hanley provided all color images.

Literature Cited

- Blackwelder, E. 1945.** Checklist of the coleopterous insects of Mexico, Central America, the West Indies and South America. Part 3, Bulletin of the United States National Museum 185: 343–550.
- Crotch, G. R. 1874.** A revision of the coleopterous family Coccinellidae. E. W. Janson; London. 311 p.
- González, G., G. A. Hanley, and R. D. Gordon. 2019.** South American Coccinellidae (Coleoptera), Part XIX: overview of Cryptognathini, systematic revision of South American *Cryptognatha* Mulsant. Insecta Mundi 0714: 1–32.
- Gordon, R. D. 1971.** A generic review of the Cryptognathini, new tribe, with a description of a new genus (Coleoptera: Coccinellidae). Acta Zoologica Lilloana 26: 179–196.
- Gordon, R. D. 1985.** The Coccinellidae (Coleoptera) of America north of Mexico. Journal of the New York Entomological Society 93: 1–912.
- Gorham, H. S. 1894.** Biologia Centrali-Americana, Insecta, Coleoptera, Coccinellidae 77: 177–208.
- Kirsch, T. 1876.** Beiträge zur Kenntnis der peruanischen Käferfauna auf Dr. Abendroth's Sammlungen basirt. Deutsche Entomologische Zeitschrift 20: 81–133.
- Korschefsky, R. 1931.** Coccinellidae I. Coleopterorum Catalogus. Part 118. W. Junk; Berlin. 224 p.

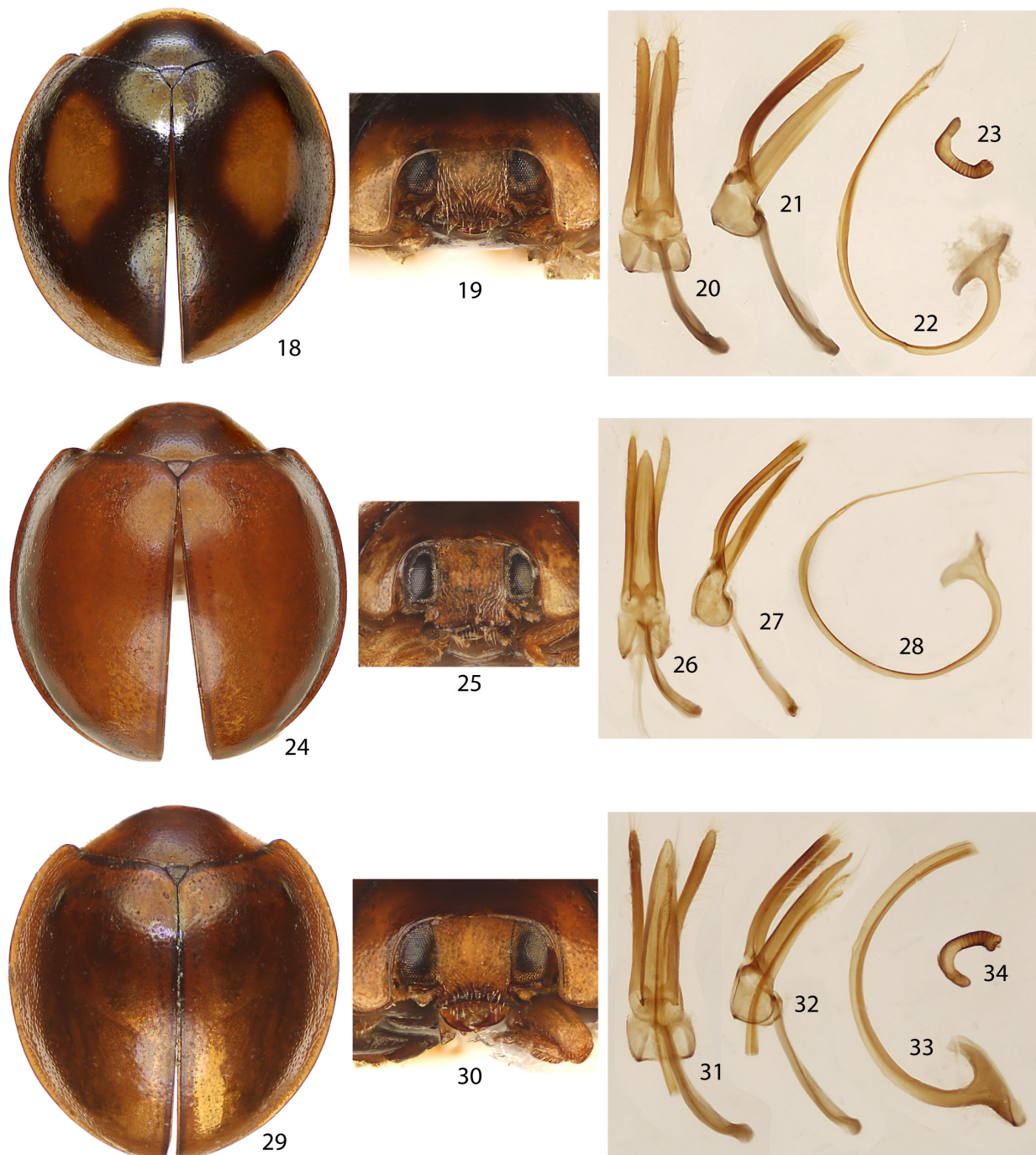
- Kraatz, G. 1873.** Eine neue deutsche *Exochomus*-art. Berliner Entomologische Zeitschrift 1:195.
- Mulsant, M. E. 1850.** Species de coléoptères trimères sécuripalpes. Annales des Sciences Physiques et Naturelles, Lyon 2: 1–1104.
- Seago, A. E., J. A. Giorgi, L. Jiahui, and A. Slipinski. 2011.** Phylogeny, classification and evolution of ladybird beetles (Coleoptera: Coccinellidae) based on simultaneous analysis of molecular and morphological data. Molecular Phylogenetics and Evolution 60: 137–151.
- Slipinski, A. 2007.** Australian ladybird beetles (Coleoptera: Coccinellidae. Their biology and classification. Dept. of the Environment and Water Resources Australian Biological Resources Study XVIII. CSIRO; Canberra. v–xvii + 286 p.

Received August 13, 2019; accepted September 9, 2019.

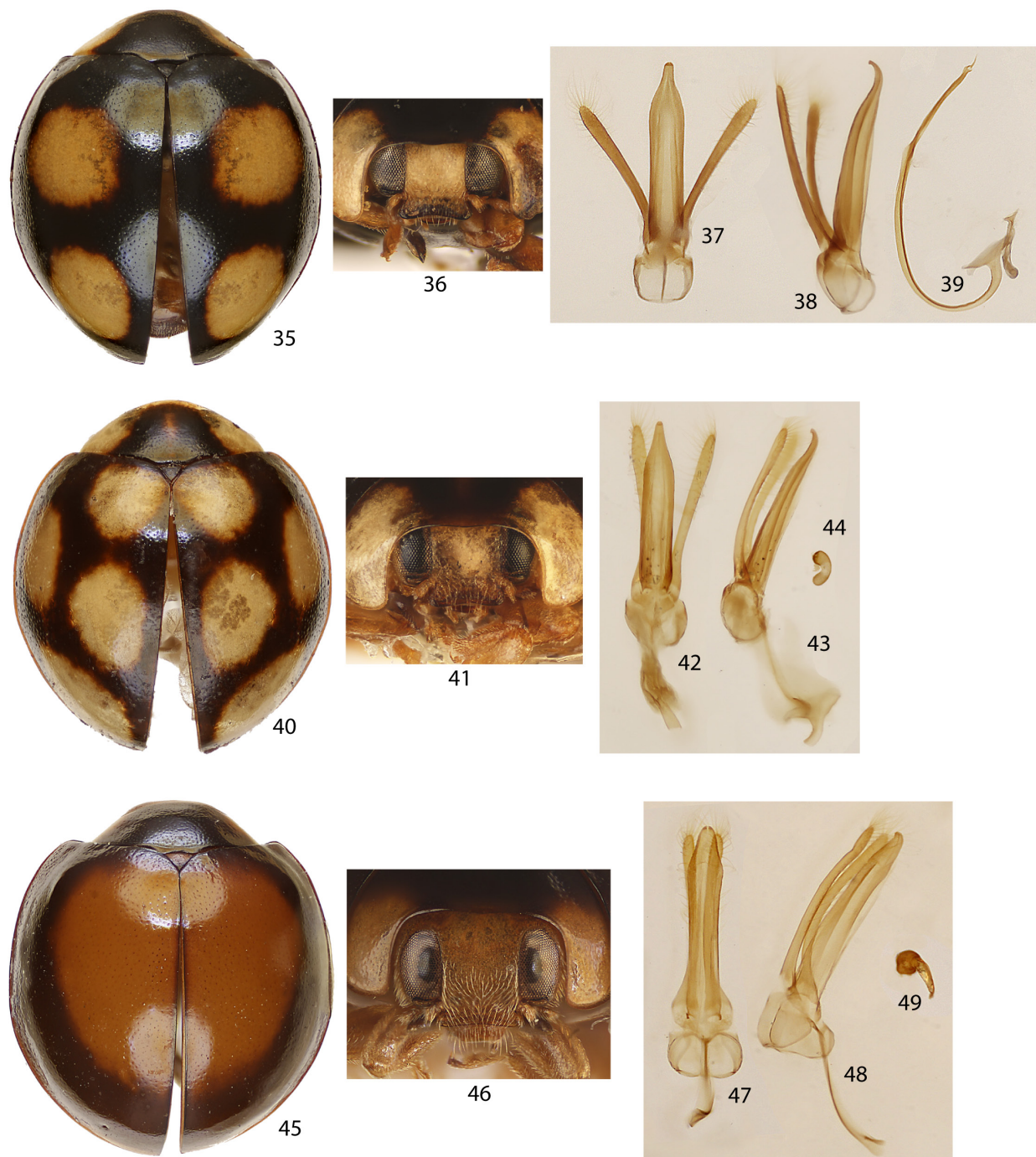
Review editor Gareth S. Powell.



Figures 1–17. *Pentilia* spp. 1–6) *Pentilia sadie*. 1) Habitus. 2) Frons. 3) Penis guide ventral. 4) Penis guide lateral. 5) Penis. 6) Spermathecal capsule. 7–12) *Pentilia bernadette*. 7) Habitus. 8) Frons. 9) Penis guide ventral. 10) Penis guide lateral. 11) Penis. 12) Spermathecal capsule. 13–17) *Pentilia traci*. 13) Habitus. 14) Frons. 15) Penis guide ventral. 16) Penis guide lateral. 17) Penis.



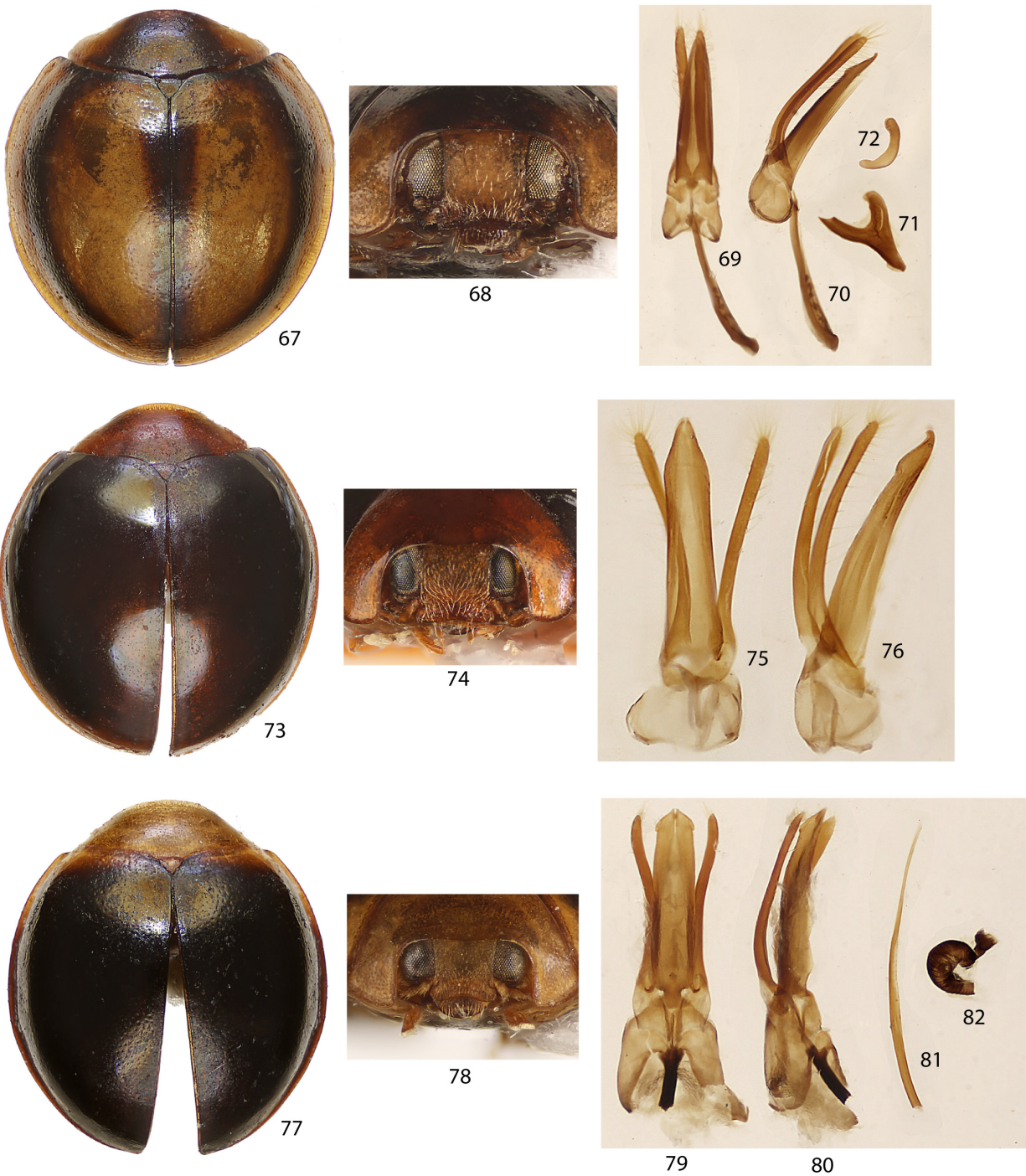
Figures 18–34. *Pentilia* spp. 18–23) *Pentilia nichole*. 18) Habitus. 19) Frons. 20) Penis guide ventral. 21) Penis guide lateral. 22) Penis. 23) Spermathecal capsule 24–29) *Pentilia jody*. 24) Habitus. 25) Frons. 26) Penis guide ventral. 27) Penis guide lateral. 28) Penis. 29–34) *Pentilia kendra*. 29) Habitus. 30) Frons. 31) Penis guide ventral. 32) Penis guide lateral. 33) Penis. 34) Spermathecal capsule.



Figures 35–49. *Pentilia* spp. **35–39)** *Pentilia jasmine*. **35)** Habitus. **36)** Frons. **37)** Penis guide ventral. **38)** Penis guide lateral. **39)** Penis. **40–44)** *Pentilia rachael*. **40)** Habitus. **41)** Frons. **42)** Penis guide ventral. **43)** Penis guide lateral. **44)** Spermathecal capsule. **45–49)** *Pentilia chelsea*. **45)** Habitus. **46)** Frons. **47)** Penis guide ventral. **48)** Penis guide lateral. **49)** Spermathecal capsule.



Figures 50–66. *Pentilia* spp. **50–55)** *Pentilia mable*. **50)** Habitus. **51)** Frons. **52)** Penis guide ventral. **53)** Penis guide lateral. **54)** Penis. **55)** Spermathecal capsule. **56–61)** *Pentilia ernestine*. **56)** Habitus. **57)** Frons. **58)** Penis guide ventral. **59)** Penis guide lateral. **60)** Penis. **61)** Spermathecal capsule. **62–66)** *Pentilia muriel*. **62)** Habitus. **63)** Frons. **64)** Penis guide ventral. **65)** Penis guide lateral. **66)** Spermathecal capsule.



Figures 67–82. *Pentilia* spp. **67–72)** *Pentilia elena*. **67)** Habitus. **68)** Frons. **69)** Penis guide ventral. **70)** Penis guide lateral. **71)** Base of penis. **72)** Spermathecal capsule. **73–76)** *Pentilia krystal*. **73)** Habitus. **74)** Frons. **75)** Penis guide ventral. **76)** Penis guide lateral. **77–82)** *Pentilia lora*. **77)** Habitus. **78)** Frons. **79)** Penis guide ventral. **80)** Penis guide lateral. **81)** Apical 1/2 of penis. **82)** Spermathecal capsule.



Figures 83–99. *Pentilia* spp. **83–88) *Pentilia egena*.** 83) Habitus. 84) Frons. 85) Penis guide ventral. 86) Penis guide lateral. 87) Penis. 88) Spermathecal capsule. **89–93) *Pentilia nadine*.** 89) Habitus. 90) Frons. 91) Penis guide ventral. 92) lateral. 93) Penis. **94–99) *Pentilia kari*.** 94) Habitus. 95) Frons. 96) Penis guide ventral. 97) Penis guide lateral. 98) Penis. 99) Spermathecal capsule.



Figures 100–115. *Pentilia* spp. **100-104)** *Pentilia estelle*. **100)** Habitus. **101)** Frons. **102)** Penis guide ventral. **103)** Penis guide lateral. **104)** Penis. **105-109)** *Pentilia dianna*. **105)** Habitus. **106)** Frons. **107)** Penis guide ventral. **108)** Penis guide lateral. **109)** Median portion of penis. **110-115)** *Pentilia paulette*. **110)** Habitus. **111)** Frons. **112)** Penis guide ventral. **113)** Penis guide lateral. **114)** Penis. **115)** Spermathecal capsule.



116



117



118

Figures 116–118. *Pentilia* spp. 116) Frons. 117) Epipleura ventral. 118) Prosternum and head ventral.

