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Classification, Natural History, and Evolution of the Subfamily Peloniinae OPITZ (Coleoptera: Cleroidea: Cleridae). Part X. Taxonomic revision of the New World genus *Pelonium* SPINOLA

Weston OPITZ

Abstract

The genus *Pelonium* SPINOLA is revised collectively for the first time. Fifty-seven new species are described: *P. abacum*, *P. abruptum*, *P. adunatum*, *P. anteguttatum*, *P. atrahumeratum*, *P. atraliculum*, *P. bibullum*, *P. biliturum*, *P. buenavista*, *P. caborojo*, *P. caraguata*, *P. careoriturum*, *P. caudiculum*, *P. cavei*, *P. caymanensis*, *P. circum*, *P. condylum*, *P. cribellum*, *P. dapsilum*, *P. denotatum*, *P. disjunctum*, *P. divericoatum*, *P. divisum*, *P. effusum*, *P. fissilum*, *P. fucogonium*, *P. fuscum*, *P. gigantum*, *P. granosum*, *P. inagua*, *P. infusum*, *P. latusculum*, *P. lablanci*, *P. leukotaxium*, *P. litum*, *P. lustroatum*, *P. maculoangulum*, *P. megaclerus*, *P. morrisi*, *P. nictuatum*, *P. ocellatum*, *P. plicatum*, *P. popliteum*, *P. rallum*, *P. regina*, *P. rico*, *P. revimentum*, *P. russulentum*, *P. spinulum*, *P. stolonum*, *P. taino*, *P. turnbowi*, *P. ustulatum*, *P. venabulum*, *P. wappesi*, *P. woodruffi*, and *P. xanthorum*.

Previously described species include: *P. aliciae* BARR, *P. alcornae* (KLUG), *P. amabile* SPINOLA, *P. axinoides* (WOLCOTT), *P. badeni* GORHAM, *P. bipunctatum* GORHAM, *P. buqueti* SPINOLA, *P. cyanicollis* (PERACCHI), *P. disconotatum* PIC, *P. erymanthoides* SCHENKLING, *P. fasciculatum* (KLUG), *P. fugax* (KLUG), *P. geniculatum* (KLUG), *P. inaequalicolle* SCHENKLING, *P. junctum* PIC, *P. lampyroides* SPINOLA, *P. leucophaeum* (KLUG), *P. lituratum* (KIRBY), *P. lividum* ERICHSON, *P. longfieldae* BLAIR, *P. luridum* GORHAM, *P. maculicollis* SCHAEFFER, *P. metalloideum* SPINOLA, *P. niveum* (CHEVROLAT), *P. nigroclavatum* CHEVROLAT, *P. nigrosignatum* PIC, *P. notabile* GORHAM, *P. optabile* GORHAM, *P. peninsulare* (SCHAEFFER), *P. percumptum* GORHAM, *P. photinoides* (CHEVROLAT), *P. piciventris* CHEVROLAT, *P. placidum* SCHENKLING, *P. posticum* (KLUG), *P. quadriplagiatum* KUWERT, *P. ramosum* SCHENKLING, *P. riveti* LESNE, *P. rossi* SCHENKLING, *P. scapulare* BARR, *P. schenklingi* GORHAM, *P. semirufum* GORHAM, *P. scoparium* (KLUG), *P. spectabile* (PERACCHI), *P. spinolai* (CHAPIN), *P. suturale* SPINOLA, *P. tricinctum* (PERACCHI), *P. viridipenne* (KIRBY), and *P. zellibori* (PERACCHI).

Lectotype designation for non-synonymic species names involve: *P. badeni* GORHAM, *P. bipunctatum* GORHAM, *P. disconotatum* PIC, *P. erymanthoides* SCHENKLING, *P. fasciculatum* (KLUG), *P. fugax* (KLUG), *P. inaequalicolle* SCHENKLING, *P. junctum* PIC, *P. lituratum* (KIRBY), *P. luridum* GORHAM, *P. nigroclavatum* CHEVROLAT, *P. niveum* (CHEVROLAT), *P. notabile* GORHAM, *P. optabile* GORHAM, *P. photinoides* (CHEVROLAT),

P. piciventre CHEVROLAT, *P. placidum* SCHENKLING, *P. ramosum* SCHENKLING, *P. riveti* LESNE, *P. schenklingi* GORHAM, *P. semirufum* GORHAM, and *Enoplium viridipenne* (KIRBY).

Lectotype designation for junior synonyms involve: *Enoplium auripenne* HOPE, *Enoplium fulvicornis* LUCAS, *Pelonium atronotatum* PIC, *Pelonium corporaali* PIC, *Pelonium lateapicale* PIC, *Pelonium praeustum* SPINOLA, *Pelonium multinotatum* PIC, *Pelonium separatum* PIC, *Pelonium tarsale* SCHENKLING, and *Pelonium unipunctatum* PIC.

Morphological evidence and information from collection labels suggest that these beetles are predators of wood-infesting insects. Some show bark-like cryptic coloration and a body form that implies involvement in Batesian mimicry with Lampyridae. *Pelonium* species are thought to have originated from South American ancestors that eventually generated 15 lines of evolution as indicated via a computer generated phylogeny. This treatise includes a morphological analysis, review of natural history, key to species, discussion of species-group evolution, 199 line drawings, 8 electron micrographs, 8 Auto Montage morphological illustrations, 89 figures of male terminalia, 18 distribution maps, and 105 habitus photographs.

Key words : Checkered beetles, evolution, systematics, phylogeny, natural history, key to species.

Zusammenfassung

Die Gattung *Pelonium* SPINOLA wird erstmalig komplett revidiert. 75 neue Arten werden beschrieben: *P. abacum*, *P. abruptum*, *P. adunatum*, *P. anteguttatum*, *P. atrahumeratum*, *P. atraliculum*, *P. bibullum*, *P. biliturum*, *P. buenavista*, *P. caborojo*, *P. caraguata*, *P. careoitum*, *P. caudiculum*, *P. cavei*, *P. caymanensis*, *P. circum*, *P. condylum*, *P. cribellum*, *P. dapsilum*, *P. denotatum*, *P. disjunctum*, *P. divericoatum*, *P. divisum*, *P. effusum*, *P. fissilum*, *P. fucogonium*, *P. fuscum*, *P. gigantum*, *P. granosum*, *P. inagua*, *P. infusum*, *P. latusculum*, *P. lablanci*, *P. leukotaxium*, *P. litum*, *P. lustroatum*, *P. maculoangulum*, *P. megaclerus*, *P. morrissi*, *P. nictuatum*, *P. ocellatum*, *P. plicatum*, *P. popliteum*, *P. rallum*, *P. regina*, *P. rico*, *P. revimentum*, *P. russulentum*, *P. spinulum*, *P. stolonum*, *P. taino*, *P. turnbowi*, *P. ustulatum*, *P. venabulum*, *P. wappesi*, *P. woodruffi*, und *P. xanthorum*.

Früher beschriebene Arten: *P. aliciae* BARR, *P. alcorne* (KLUG), *P. amabile* SPINOLA, *P. axinoides* (WOLCOTT), *P. badeni* GORHAM, *P. bipunctatum* GORHAM, *P. buqueti* SPINOLA, *P. cyanicollis* (PERACCHI), *P. disconotatum* PIC, *P. erymanthoides* SCHENKLING, *P. fasciculatum* (KLUG), *P. fugax* (KLUG), *P. geniculatum* (KLUG), *P. inaequalicolle* SCHENKLING, *P. junctum* PIC, *P. lampyroides* SPINOLA, *P. leucophaeum* (KLUG), *P. lituratum* (KIRBY), *P. lividum* (ERICHSON), *P. longfieldae* BLAIR, *P. luridum* GORHAM, *P. maculicolle* SCHAEFFER, *P. metalloideum* SPINOLA, *P. niveum* (CHEVROLAT), *P. nigroclavatum* CHEVROLAT, *P. nigrosignatum* PIC, *P. notabile* GORHAM, *P. optabile* GORHAM, *P. peninsulare* (SCHAEFFER), *P. percumptum* GORHAM, *P. photinoides* (CHEVROLAT), *P. piciventre* CHEVROLAT, *P. placidum* SCHENKLING, *P. posticum* (KLUG), *P. quadriplagiatum* KUWERT, *P. ramosum* SCHENKLING, *P. riveti* LESNE, *P. rossi* SCHENKLING, *P. scapulare* BARR, *P. schenklingi* GORHAM, *P. semirufum* GORHAM, *P. scoparium* (KLUG), *P. spectabile* (PERACCHI), *P. spinolai* (CHAPIN), *P. suturale* SPINOLA, *P. tricinctum* (PERACCHI), *P. viridipenne* (KIRBY), und *P. zellibori* (PERACCHI).

Für folgende Arten werden Lectotypen designiert: *P. badeni* GORHAM, *P. bipunctatum* GORHAM, *P. disconotatum* PIC, *P. erymanthoides* SCHENKLING, *P. fasciculatum* (KLUG), *P. fugax* (KLUG), *P. inaequalicolle* SCHENKLING, *P. junctum* PIC, *P. lituratum* (KIRBY), *P. luridum* GORHAM, *P. nigroclavatum* CHEVROLAT, *P. niveum* (CHEVROLAT), *P. notabile* GORHAM, *P. optabile* GORHAM, *P. photinoides* (CHEVROLAT), *P. piciventre* CHEVROLAT, *P. placidum* SCHENKLING, *P. ramosum* SCHENKLING, *P. riveti* LESNE, *P. schenklingi* GORHAM, *P. semirufum* GORHAM, und *Enoplium viridipenne* (KIRBY).

Lectotype-Designation für Juniorsynonyme: *Opilus auripennis* HOPE, *Enoplium fulvicornis* LUCAS, *Pelonium atronotatum* PIC, *Pelonium corporaali* PIC, *Pelonium lateapicale* PIC, *Pelonium praeustum* SPINOLA, *Pelonium multinotatum* PIC, *Pelonium separatum* PIC, *Pelonium tarsale* SCHENKLING, und *Pelonium unipunctatum* PIC.

Morphologische Belege sowie die Informationen der Fundortetiketten weisen darauf hin, dass die Käfer Räuber holzbewohnender Insekten sind. Einige zeigen eine borkenähnliche, kryptische Färbung und eine Körperform, die auf Bates'sches Mimikry mit Lampyridae hindeutet. Man kann davon ausgehen, dass *Pelonium*-Arten sich aus südamerikanischen Vorfahren entwickelt und möglicherweise 15 evolutive Linien hervorgebracht haben, wie anhand der computer-basierten Phylogenie angedeutet wird.

Diese Bearbeitung beinhaltet eine morphologische Analyse, eine Übersicht zur Naturgeschichte, einen Bestimmungsschlüssel der Arten, eine Diskussion zur Evolution der Artengruppen, 199 Zeichnungen, 8 elektronenmikroskopische Aufnahmen, 8 morphologische Automontage-Illustrationen, 89 Abbildungen männlicher Geschlechtsorgane, 18 Verbreitungskarten und 105 Habitusfotos.

Resume

Se revisa por primera vez el género *Pelonium* SPINOLA. Cincuenta y siete especies nuevas se describen: *P. abacum*, *P. abruptum*, *P. adunatum*, *P. anteguttatum*, *P. atrahumeratum*, *P. atraliculum*, *P. bibullum*, *P. biliturum*, *P. buenavista*, *P. caborajo*, *P. caraguata*, *P. careoitum*, *P. caudiculum*, *P. cavei*, *P. caymanensis*, *P. circum*, *P. condylum*, *P. cribellum*, *P. dapsilum*, *P. denotatum*, *P. disjunctum*, *P. divericoatum*, *P. divisum*, *P. effusum*, *P. fissilum*, *P. fucogonium*, *P. fuscum*, *P. gigantum*, *P. granosum*, *P. inagua*, *P. infusum*, *P. latusculum*, *P. lablanci*, *P. leukotaxium*, *P. litum*, *P. lustratum*, *P. maculoangulum*, *P. megaclerus*, *P. morrissi*, *P. nictuatum*, *P. ocellatum*, *P. plicatum*, *P. popliteum*, *P. rallum*, *P. regina*, *P. rico*, *P. revimentum*, *P. russulentum*, *P. spinulum*, *P. stolonum*, *P. taino*, *P. turnbowi*, *P. ustulatum*, *P. venabulum*, *P. wappesi*, *P. woodruffi*, y *P. xanthorum*.

Las especies anteriormente descritas son: *P. aliciae* BARR, *P. alcorne* (KLUG), *P. amabile* SPINOLA, *P. axinoides* (WOLCOTT), *P. badeni* GORHAM, *P. bipunctatum* GORHAM, *P. buqueti* SPINOLA, *P. cyanicollis* (PERACCHI), *P. disconotatum* PIC, *P. erymanthoides* SCHENKLING, *P. fasciculatum* (KLUG), *P. fugax* (KLUG), *P. geniculatum* (KLUG), *P. inaequalicolle* SCHENKLING, *P. junctum* PIC, *P. lampyroides* SPINOLA, *P. leucophaeum* (KLUG), *P. lituratum* (KIRBY), *P. lividum* (ERICHSON), *P. longfieldae* BLAIR, *P. luridum* GORHAM, *P. maculicolle* SCHAEFFER, *P. metalloideum* SPINOLA, *P. niveum* (CHEVROLAT), *P. nigroclavatum* CHEVROLAT, *P. nigrosignatum* PIC, *P. notabile* GORHAM, *P. optabile* GORHAM, *P. peninsulare* (SCHAEFFER), *P. percumpum* GORHAM, *P. photinoides* (CHEVROLAT), *P. piciventre* CHEVROLAT, *P. placidum* SCHENKLING, *P. posticum* (KLUG),

P. quadriplagiatum KUWERT, *P. ramosum* SCHENKLING, *P. riveti* LESNE, *P. rossi* SCHENKLING, *P. scapulare* BARR, *P. schenklingi* GORHAM, *P. semirufum* GORHAM, *P. scoparium* (KLUG), *P. spectabile* (PERACCHI), *P. spinolai* (CHAPIN), *P. suturale* SPINOLA, *P. tricinctum* (PERACCHI), *P. viridipenne* (KIRBY), und *P. zellibori* (PERACCHI).

Se definen Lectotipos para las especies no sinónimas siguientes: *P. badeni* GORHAM, *P. bipunctatum* GORHAM, *P. disconotatum* PIC, *P. erymanthoides* SCHENKLING, *P. fasciculatum* (KLUG), *P. fugax* (KLUG), *P. inaequalicolle* SCHENKLING, *P. junctum* PIC, *P. lituratum* (KIRBY), *P. luridum* GORHAM, *P. nigroclavatum* CHEVROLAT, *P. niveum* (CHEVROLAT), *P. notabile* GORHAM, *P. optabile* GORHAM, *P. photinoides* (CHEVROLAT), *P. piciventre* CHEVROLAT, *P. placidum* SCHENKLING, *P. ramosum* SCHENKLING, *P. riveti* LESNE, *P. schenklingi* GORHAM, *P. semirufum* GORHAM, y *Enoplium viridipennis* (KIRBY).

Se definen Lectotipos para los nombres que corresponden a sinónimos junior siguientes: *Opilus auripennis* HOPE, *Enoplium fulvicornis* LUCAS, *Pelonium atronotatum* PIC, *Pelonium corporaali* PIC, *Pelonium lateapicale* PIC, *Pelonium praeustum* SPINOLA, *Pelonium multinotatum* PIC, *Pelonium separatum* PIC, *Pelonium tarsale* SCHENKLING, y *Pelonium unipunctatum* PIC.

Evidencias morfológicas y los datos de etiquetas sugieren que estos coleópteros son depredadores de insectos que viven en la madera. Algunas especies son crípticas con la corteza y la forma del cuerpo implica que son miméticos de tipo Batesiano de los Lampyridae. Creemos que las especies de *Pelonium* son originarias de Suramérica, con ancestros que generaron 15 líneas evolutivas, indicadas por la filogenia generada por computadora. Este tratado incluye un análisis morfológico, una revisión de la historia natural, una clave de las especies, una discusión sobre la evolución de los grupos de especies, 199 dibujos, 8 micro fotografías de microscopio electrónico, 8 fotografías en Auto Montaje de morfología, 89 figuras de genitalia macho, 18 mapas de distribución, y 105 fotografías de habitus.

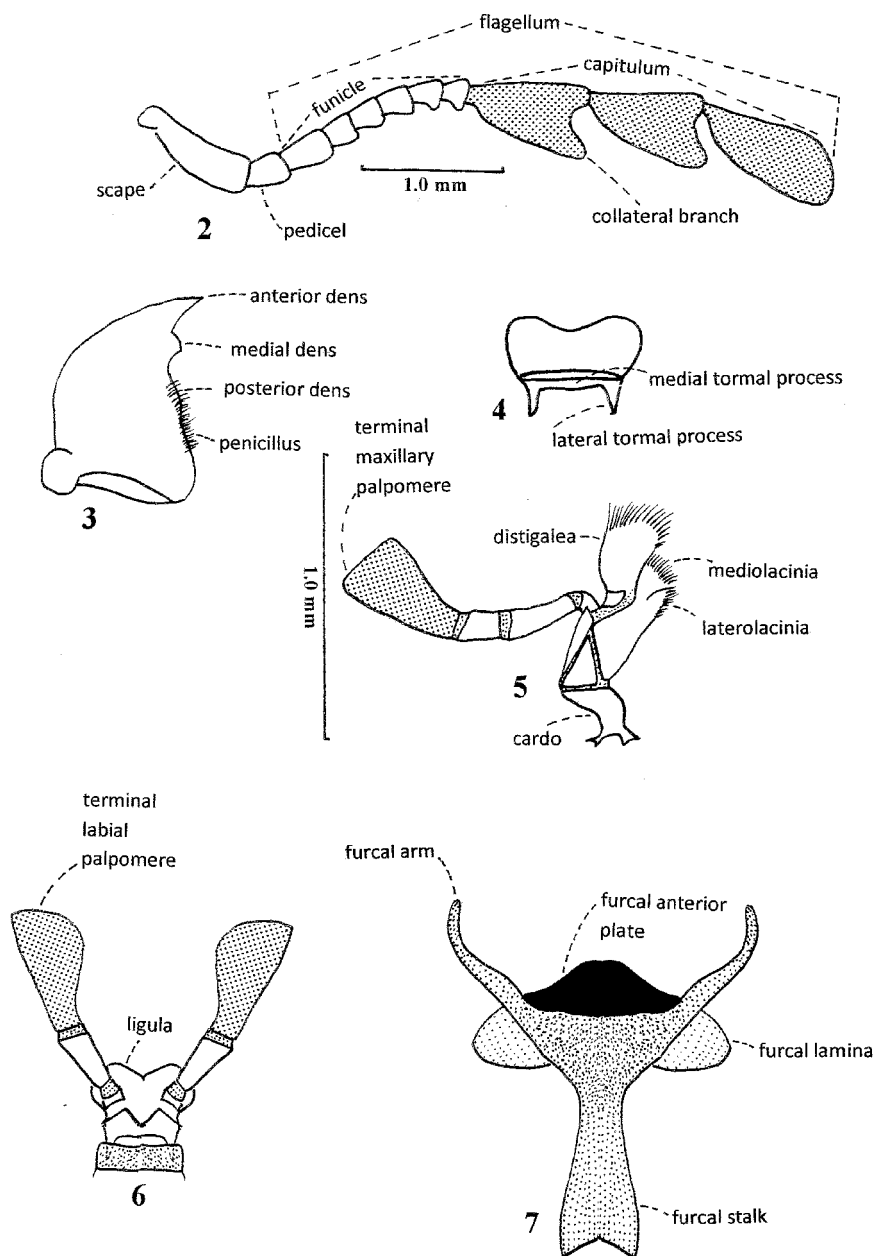
Introduction

There are several taxonomic and nomenclatural issues in the historical treatment of the checkered beetle genus *Pelonium* SPINOLA. Two of the more perplexing are that many vastly discordant species were assigned to the genus, and it is not clear why some authors considered *Corinthiscus* FAIRMAIRE & GERMAIN (1861: 4) a senior synonym of *Pelonium* (SPINOLA 1844a: 347; WOLCOTT 1947: 86; CORPORAAL 1950: 285). To help resolve the first issue, I reassessed the generic composition of the subfamily Peloniinae (OPITZ 2017). The second issue was resolved by BARR (1975) and SOLERVICENS (2005: 45); they resurrected *Pelonium* as a valid genus. With the present contribution I establish the known species composition of *Pelonium* SPINOLA, a speciose New World genus that has never been revised collectively.



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Fig. 1: Habitus of *Pelonium rossi*.



Figs 2-7: Various structures of *Pelonium lampyroides*. (2) Antenna (3) Mandible (4) Labrum (5) Maxilla (6) Labium (7) Metendosternite.

Material and Methods

Methods involving measurements and morphological terminology follow those described in OPITZ (2010a). BROWN (1956) was used to coin scientific names. Abbreviations used in this treatise are defined as follows: EW/FW= eye width (frontal view)/frons width (frontal view); PW/PL= pronotal width (from apex of one tubercle to apex of the other) /pronotal length (from midline anterior margin to midline posterior margin); EL/EW= elytral length (from humeral angle to apex)/elytral width (greatest dorsal width of one elytron). Except for the additional width that the pronotal tubercle adds, the pronotum is quite oblong. Measurements were made at 250X. Microscopic observations were made with a M5 Wild stereoscopic microscope with camera lucida attachment (Leica, Wetzlar, Germany). Habitus photographs were taken with a Leica Z 16 APO microscope equipped with JVC KY-F75U-CCD camera and controlled by Syncrosopy Auto Montage software (Cambridge, United Kingdom). The SEM micrographs were produced with a Scanning Electron Microscope-S-3500N (Hitachi Science Systems, Ltd., Tokyo, Japan). To facilitate the identity of primary type specimens I transcribed their locality information in the exact manner as found on labels.

To determine specific level discontinuities I used morphological criteria, but I adhere to the biological species concepts as discussed by STANDFUSS (1896), DOBZHANSKY (1937), and MAYR (1963). In my experience, morphological divergence is a reasonable criterion with which to hypothesize reproductive isolation. In this study, consideration for species status involves the aedeagus and the color patterns of the dorsum; especially on the elytral disc. Less prominent characteristics involve the structure of the anterior margin of the protibia, configuration of the antennal capitulum, shape of the terminal maxillary and labial palpomeres, and development of the pronotal tubercle. The concepts of HENNIG (1966) were followed for estimations of supra- specific relationships, although I am in agreement with TUOMIKOSKI (1967) who advocates the use of "apotypic" and "plesiotypic" instead of "apomorphic" and "plesiomorphic" because phylogenetic work may not be restricted to morphological criteria.

There is considerable historical literature associated with some of the *Pelonium* nominal species. They are cited in CORPORAAL'S (1950) catalogue of World Cleridae. To avoid the linking of historical misidentified specimens with pre-1950 published names, the pre-1950 references are not included in the species descriptions; however, taxonomic literature published after 1950 is included. The species descriptions are based on the primary type specimen, unless noted otherwise in the "Notes" section at the end of a description. When the primary type is a female, a non-type specimen was used for information about the aedeagus. Moreover, the antennae are usually sex dimorphic; therefore, information about the antenna of both sexes may be included in the species description.

Assessments of Evolutionary States of Characters

Twenty character states are included in a matrix (Table 1), which was analyzed with NONA (GOLOBOFF 2003) in combination with WINCLADA version 100.80 (NIXON 2002); to find to most parsimonious phylogenetic tree. These programs produced one tree derived via heuristic analysis [Maximum trees (hold) = 100, number of replications 1 (mult) = 100, and multiple TBR = TBR (mult max) were used]. Character states given the value of "0" are assessed plesiotypic whereas those judged a value of "1" are assessed apotypic. The genus *Ramosus* OPITZ, and my general knowledge involving other Peloniinae genera, were used as outgroups to assist in character state assessments and to predict the evolutionary states of characteristics. Moreover, I also relied on the methods of character-state analysis employed by EKIS (now OPITZ) (1977), WATROUS and WHEELER (1981), and NIXON & CARPENTER (1993).

Character 0	Pronotal color: not iridescent (0); iridescent (1)
Character 1	Pronotal arch: not scabrose (0); scabrose (1)
Character 2	Pronotal shape: not oblong (0); oblong (1)
Character 3	Elytral disc: not unicolorous (0); unicolorous (1)
Character 4	Elytral surface: not metallic (0); metallic (1)
Character 5	Mimicry: not lampyrid mimics (0); lampyrid mimics (1)
Character 6	Pronotal interstitial spaces: not minutely arenose (0); minutely arenose (1)
Character 7	Elytral asetiferous punctures: not minute (0); minute (1)
Character 8	Body size: not up to 23 mm (0); up to 23 mm (1)
Character 9	Pronotal disc: without slit (0); with slit (1)
Character 10	Elytra: not mottled (0); mottled (1)
Character 11	Antennomere 8: not enlarged (0); enlarged (1)
Character 12	Elytral castaneous fascia: not present (0); present (1)
Character 13	Dorsum: without dark metallic spots (0); with dark metallic spots (1)
Character 14	Legs: not profusely covered with white setae (0); profusely covered with white setae (1)
Character 15	Elytral surface: without punctiform spots (0); with punctiform spots
Character 16	Elytral angular fascia: absent (0); present (1)
Character 17	Elytral posterior ½: not entirely black (0); entirely black (1)
Character 18	Elytral non-angular broad fascia: absent (0); present (1)
Character 19	Elytral color: not highly variable (0); highly variable (1)

Table 1. Character matrix of 20 adult morphological characters involving species of *Ramosus* OPITZ and species groups of *Pelonium* SPINOLA

Taxa	Character																			
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
<i>Ramosus</i>	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>biliturum</i>	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>viridipenne</i>	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>photinoides</i>	0	1	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>lampyroides</i>	0	1	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
<i>axinoides</i>	0	1	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
<i>megaclerus</i>	0	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
<i>niveum</i>	0	1	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
<i>notabile</i>	0	1	1	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0
<i>fasciculatum</i>	0	1	1	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0
<i>inaequalicolle</i>	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
<i>bipunctatum</i>	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
<i>nigroclavatum</i>	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
<i>semirufum</i>	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
<i>alcicorne</i>	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
<i>amabile</i>	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1

Repository of Specimens

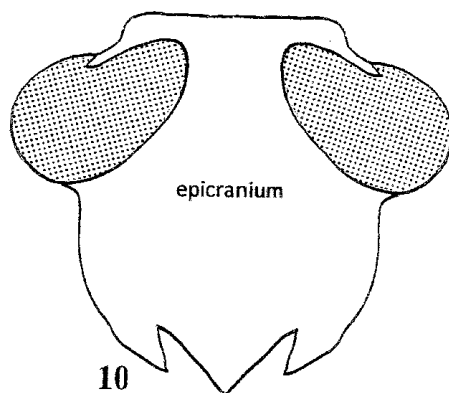
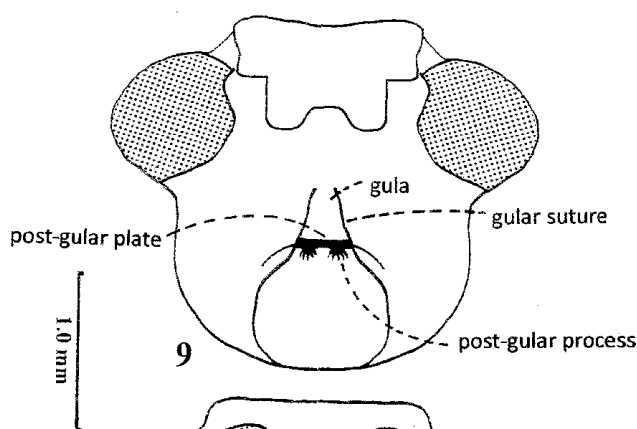
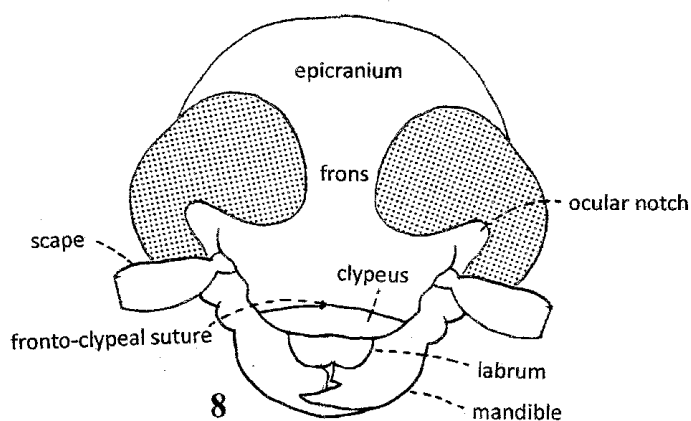
I used codens as noted in ARNETT JR. et al. (1993) to indicate repositories of specimens, with some modifications to accommodate institutional name changes.

ACMT.....American Coleoptera Museum, 8734 Paisano Pass, San Antonio, Texas 78255, United States of America (James E. Wappes; wappes@earthlink.net)

AMNH.....American Museum of Natural History, Department of Entomology, Central Park West at 79th Street, New York, New York 10024-5192, United States of America (Lee Herman; herman@amnh.org)

BMNHBritish Museum of Natural History, Department of Entomology, SW 5BD, London, United Kingdom (Beulah Garner; b.garner@nhm.ac.uk. Maxwell V. L. Barclay; m.barclay@nhm.ac.uk)

CASC.....California Academy of Sciences, Department of Entomology, Golden Gate Park, San Francisco, California 94118, United States of America (Jere Schweikert; jschweikert@calacademy.org)



Figs 8-10: Heads of *Pelonium lampyroides*. (8) Frontal view (9) Ventral view (10) Dorsal view.

- CMNCCanadian Museum of Nature, Insect Collection, Post Office Box 3443,
Station D, Ottawa, Ontario, Canada K1P 6P4, Canada (Robert S. Anderson;
randerson@mus-natur-ca. Francois Genier; fgenier@mus-natur.ca)
- CMNHCarnegie Museum of Natural History, Invertebrate Zoology, 4400
Forbes Avenue, Pittsburgh, Pennsylvania 15213, United States of
America (Robert L. Davidson: davidson@clpgh.org; Robert Androw:
androwr@carnegiemnh.org)
- CNCI.....Agriculture-Food Canada, K.W. Neatby Building, 960
Carling Avenue, Ottawa, K1A 0C6, Canada (Serge Laplante:
serge.laplante@agr.gc.ca)
- CNINInstituto de Biología, UNAM, Departamento de Zoología, Aparado
Postal 70-153, Ciudad Universitaria 04510 México D. F., México
(Santiago Zaragoza: Zaragoza@ibiologia.unam.mx)
- CSCA.....California State Collection of Arthropods, Plant Pest Diagnostics
Branch, California Department of Food & Agriculture, 3294
Meadowview Road, Sacramento, California 95832-1448, United
States of America (Andrew R. Cline; Andrew.cline@cdfa.ca.gov)
- CSCB.....Campos Seabra Collection, Brazil
- DZUP.....Universidade Federal do Paraná, Departamento de Zoologia, Coleção
de Entomologia, Caixa Postal 19020, 81531-990, Curitiba, Paraná,
Brazil (Germano H. Rosado-Neto)
- EMECEssig Museum of Entomology, University of California, College of
Agriculture, Division of Entomology and Parasitology, California
Insect Survey, Berkeley, California 94720, United States of America
(Pete Oboyski; poboyski@nature.berkeley.edu)
- EMUSUtah State University, Department of Biology, 5305 Old Mail Hill,
Logan, Utah 84322-5305, United States of America (James P. Pitts,
Jr.; jpitts@biology.usu.edu)
- FMNH.....Field Museum of Natural History, Department of Entomology,
Roosevelt Road at Lake Shore Drive, Chicago, Illinois 60605, United
States of America (Crystal Maier; cmaier@fieldmuseum.org)
- FSCAFlorida State Collection of Arthropods, Division of Plant
Industry/Entomology, Doyle Connor Building, 1911 SW 34th Street,
Florida Department of Agriculture, Gainesville, Florida 32614-7100.
United States of America (Paul E. Skelley;
paul.skelley@freshfromflorida.com)
- FWSCFredrick W. Skillman Collection, Longhorn Ranch, 751 N Cochise
Stronghold Road, Pearce, Arizona 85606, United States of America
(azbycid@yahoo.com)
- IMLA.....Fundación Miguel Lillo, Dirección de Zoología, Miguel Lillo 251,
Entomología. 4000 San Miguel de Tucumán, Argentina (Virginia
Colomo de Correa; fmizoo@tucbbs.com.ar)

- IOCC.....Instituto Oswaldo Cruz, R. Brg. Galvão, 540-Barra Funda, São Paulo-SP, 01151-000, Brazil
- JNRCJaques Rifkind Collection, 5105 Morella Avenue, Valley Village, California 91607-3219, United States of America (clerid@aol.com)
- JPHC.....Jeffrey P. Huether Collection, 443 Turk Road, Geneva, New York 14456, United States of America (jmeloid@hotmail.com)
- LACM.....Natural History Museum of Los Angeles County, Entomology Section, 900 Exposition Boulevard, Los Angeles, California 90007, United States of America (Brian V. Brown; bbrown@nhm.org)
- MAIC.....Michael A. Ivie Collection, Montana State University, Department of Plant Science and Plant Pathology, 119 Plant BioScience Building, P.O. Box 173150, Bozeman, Montana, 59717-3150, United States of America (mivie@montana.edu)
- MCNZ.....Fundação Zoobotânica do Rio Grande do Sul, Museo de Ciências Naturais, Rua Dr. Salvador Franca, 1427 Caixa Postal 1188, 90001-970, Porto Alegre, RS, Brasil (M. H. M. Galileo; Galileo@fzb.rs.gov.br)
- MCPM.....Milwaukee City Public Museum, Insect Collection, 800 W. Wells Street. Milwaukee, Wisconsin 53233, United States of America (Julia Colby; Colby@mpm.edu)
- MCZC.....Museum of Comparative Zoology, Harvard University, Entomology, 26 Oxford Street, Cambridge, Massachusetts 02138, United States of America (Philip D. Perkins; perkins@oeb.harvard.edu)
- MLPAUniversidad Nacional de la Plata, Facultad de Ciencias Naturales Y Museo, Division Entomologia, 1900 Paseo del Bosque, La Plata, Argentina (Liliana A. Fernández; liliafer@museo.fcnym.unlp.edu.ar)
- MNHN.....Museum d'Histoire Naturelle, Entomologie, 45 bis, Rue de Buffon, Paris (Ve), France (Antoine Mantilleri; amantill@mnhn.fr)
- MNKMMuseo Historia Natural, Noel Kempff Mercado, Santa Cruz de la Sierra, Bolivia (Julieta Ledzema; jledezma@museonoelkempff.org)
- MRSN.....Museo Regionale di Scienze Naturali, Via Giolitti 36, 10123, Torino, Italy (Luca Piccian; luca.piccian@mail.regione.piemont.it)
- MUCRMuseo de Insectos, CIPROC, Escuela de Fitotechnica, Universidad de Costa Rica, San Jose, Costa Rica (Humberto J. Lezama; hlezama@cariari.ver.ac.cr)
- NCBN.....Netherlands Centre for Biodiversity Naturalis, P. O. Box 9517, 2300 Ra, Leiden, Netherlands (Hans Huijbregts; hans.huijbregts@naturalis.nl)
- NCSUNorth Carolina State University, Department of Entomology, 100 Derieux Place, 2301 Gardner Hall, Raleigh, North Carolina 27695-7613, United States of America (Robert L. Blinn; bob_blinn@ncsu.edu)

- NHMBNaturhistorisches Museum Basel, Augustinergasse 2, Postfach 1048,
CH 4001 Basel, Switzerland (†Michel Brancucci)
- OXUMOxford University Museum of Natural History, Hope Entomological
Collections, Parks Road, Oxford, OX1 3 P W, Unites Kingdom
(Amoret Spooner; amoret.spooner@oum.ox.ac.uk)
- RFMCRoy F. Morris II Collection, 2635 Ewell Road, Lakeland, Florida
33811, United States of America (beetlesand birds@gmail.com)
- RGCGRoland Gerstmeier Collection, Technische Universität München,
Lehrstuhl für Zoologie AG Entomologie, Hans-Carl-von-Carlowitz-
Platz 2 85354, Freising, Germany (gerstmei@wzw.tum.de)
- RHTCRobert H. Turnbow, Jr. Collection, 59 Brokenview Court, Enterprise,
Alabama 36330, United States of America
(Robert.h.turnbow.civ@mail.mil)
- SDEIDeutsches Entomologisches Institute, Leibniz-Zentrum für
Agrarlandschafts-und Landnutzungsforschung e. V. Eberswalde Str.
84, D-15374 Müncheberg, Germany (Lutz Behne;
lbehne@senckenberg.de)
- SEMCThe University of Kansas, Snow Entomological Division, The Natural
History Museum of the University of Kansas, Lawrence, Kansas
66045-2454, United States of America (Zachary Falin; ksem@ku.edu)
- TAMUTexas A & M University, College of Agriculture and Life Sciences,
Department of Entomology, Minnie Belle Heep Building, College
Station, Texas 77843-7029, United States of America (Andrew J.
Graf; cipher_the_noble@tamu.edu)
- UCDCUniversity of California- Davis, Department of Entomology, R. M.
Bohart Museum of Entomology, 1 Shields Avenue, Davis, California
95616-85849, United States of America (Steve L. Heydon;
slheydon@ucdavis.edu)
- UGCAUniversity of Georgia Collection of Arthropods, Museum of Natural
History, University of Georgia, Athens, Georgia 30602-2603 (E.
Richard Hoebeke; rhoebecke@uga.edu)
- UEPBUniversidade Estadual Paulista, Department Plant protection-
FEIS/UNESP Avenida Brasil 56, 15385-000- Ilha Solteira/SP, Brasil
(Carlos Flechtmann; flechtma@bio.feis.unesp.br)
- UMRMWilbur R. Enns Entomology Museum, Department of Entomology, 1-
31 Agricultural Building, University of Missouri, Columbia, Missouri
65211-7140, United States of America (Robert W. Sites;
sitesr@missouri.edu)
- USNMUnited States Department of Agriculture. Systematic Entomology
Laboratory, c/o National Museum of Natural History MRC 168,
Washington, D.C. 20560-0165, United States of America (Floyd
Shockley; ShockleyF@si.edu)

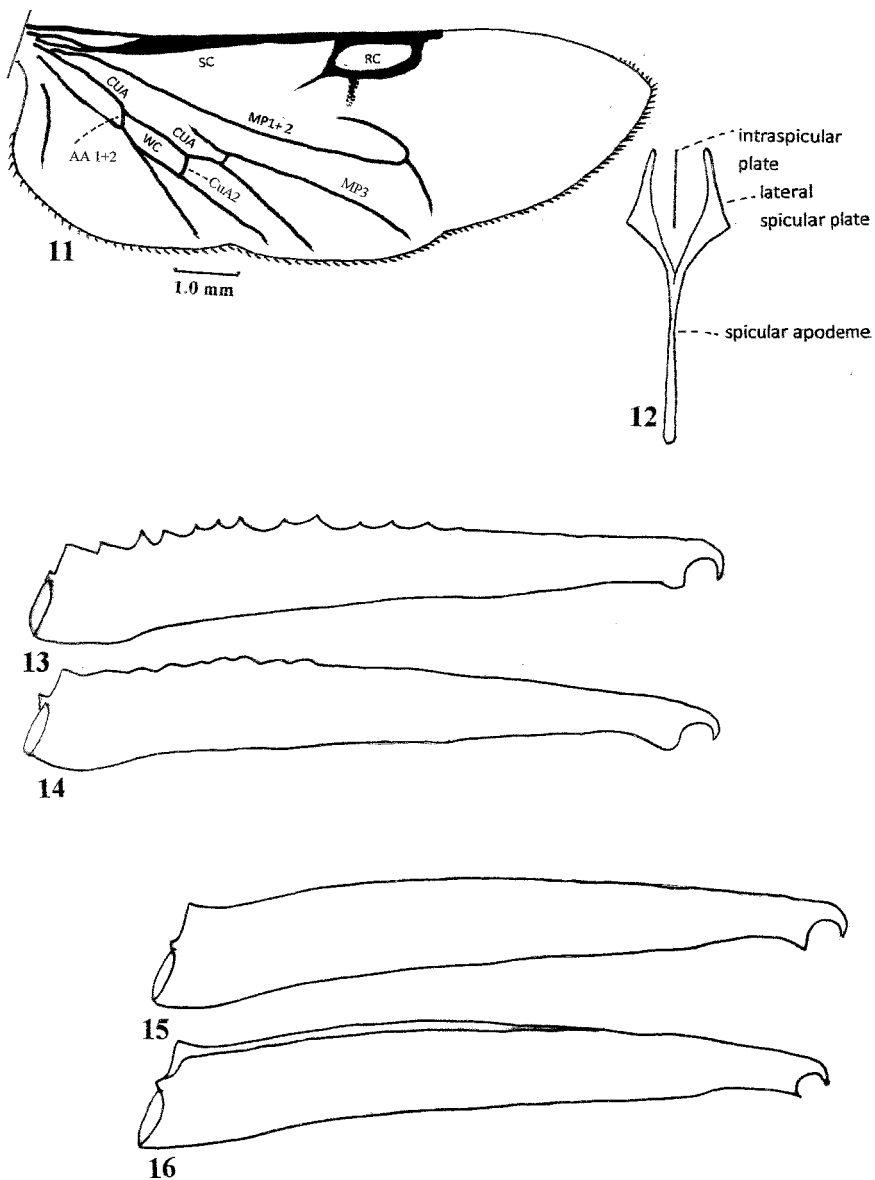
- WFBM.....William F. Barr Museum, University of Idaho, Department of Plant,
Soil, and Entomological Sciences, 606 Rayburn Street, Moscow,
Idaho 83844-2339, United States of America (Luc Leblanc;
leblancl@uidaho.edu).
- WOPC.....Weston Opitz Collection, Research Associate, Florida State Collection
of Arthropods, Division of Plant Industry/Entomology, Florida
Department of Agriculture and Consumer services, 1911 SW 34th
Street, Gainesville, Florida 32614-7100, United States of America
(opitz@kwu.edu)
- ZMHB.....Museum für Naturkunde, Institute für Systematische Zoologie,
Invalidenstrasse 43, D – 10115, Berlin, Germany (Bernd Jaeger;
bernd.jaeger@museum.hu-berlin.de)

External morphology

C r a n i u m : The adult head is hypognathous, and the cranium is usually subquadrate and well sclerotized. The major structures and sclerites on the front of the head are illustrated in Fig. 8. Anteriorly, the cranium is defined by the frons, which is bordered dorsally by the epicranium and ventrally by the clypeus. The epistomal suture traverses the frontoclypeal region, dividing the frontal region of the cranium into the clypeus and frons. The frons is flanked by the compound eyes and lead into the more dorsal epicranium. The clypeus is a narrow transverse plate that is bordered laterally by the antennal carinae. The compound eyes are boldly convex and comprised of large ommatidia, which are interrupted by the ocular notch. The region behind the eye defines the gena, which is ventrally bordered by the post occipital suture. Ventrally, the cranium has a subtrapezoidal gula that shows a well-developed post-gular plate and a pair of setose post-gular processes.

A n t e n n a : The antenna (Fig. 2) is comprised of 11 antennomeres. The organization of these antennomeres involves the scape, pedicel and flagellum. The latter is further divided into a funicle and capitulum. The scape is oblong, connected to a suboval to subquadrate pedicel. The funicular antennomeres may be subfiliform or slightly triangular; in general, they become progressively shorter as they approach the capitulum. Capitular antennomeres 9 and 10 may be triangular or oblong and may or may not show collateral branches that are longer in males when the antenna is sex dimorphic.

M o u t h p a r t s : The labrum (Fig. 4) is strongly emarginate at its anterior margin. From the hind angles the labrum projects tormal processes, which are divided into a medial and lateral process. The medial processes coalesce at their medial extremities. Anteroventrally, the labrum exhibits a small U-shaped plate, the epipharynx. The mandible (Fig. 3) is triangular, well sclerotized, and prominently visible in repose, and exhibits well-developed anterior dens, medial and posterior dens moderately developed; a setose penicillus is present. The maxillary components involve a triangular base, the cardo, the stipes, the galea, and the lacinia. The lacinia is divided into the mediolacinia and laterolacinia. The terminal maxillary palpomere is securiform to subsecuriform (Fig. 5). The labium connects to the submental region of the cranium. Its mentum is predominantly membranous and feebly sclerotized basally and laterally. The ligula has a fringe of minute setae. The last labial palpomere is securiform to subsecuriform (Fig. 6).



Figs 11-16: Various organs. (11-12) *Pelonium lampyroides*. (11) Metathoracic wing (12) Spicular fork. (13-16) Generalized condition of anterior margin of the protibia (13) Spinose (14) Roughened (15) Plane (16) Ridged.

Prothorax: The prothorax is usually a moderately oblong cylinder connected to the cranium by the cervical membrane; sometimes it measures quadrate due to a widely developed lateral tubercle. The pronotum (Fig. 204) is traversed by anterior subapical and posterior prebasal depressions that delimit the pronotal arch, the pronotal proper, and the pronotal collar. Dorsally, the pronotum is moderately convex and may exhibit shallow tumescences and a midline fissure. The pronotal arch is highly scabrose. The side margins show a variously developed tubercle. Further, the upper sides show a dorsolateral carina that anteriorly extends well beyond the apex of the lateral tubercle. Posteriorly, the carina coalesces with the pronotal hem at the pronotal posterior angle. The anteromedial portion of the prosternum is a narrow transverse plate that extends posteriorly, between the procoxae, as the prointercoxal process, and posterolaterally as the pronotal projections. The latter may approach, but do not conjoin, the prointercoxal process. The floor of the procoxal cavities, the cryptosternum, is incomplete.

Pterothorax: The mesothorax is approximately one-half the length of the metathorax. Its notal plate is divided into an anterior scutum and quadrate scutellum. The mesopleuron is divided into a large triangular mesepisternum and smaller tapering mesepimeron. The mesosternum is subcampanulate in outline and prolonged posteromedially into a mesothoracic intercoxal process. The elytron is oblong and varies in surface sculpturing, and is outlined by three margins, the anterior, sutural, and epipleural margins. The latter margin narrows to the elytral apex. The disc always shows setiferous punctures, and sometimes asetiferous punctures. In some species the disc is adorned with various elevations and depressions and is vested with various setal arrangements, including setal tufts and primary degree (1°) and second degree (2°) setae (OPITZ 2011: 193). The 1° are found on the upper periphery of asetiferous punctations, whereas 2° setae emerge from minute punctations found in areas between the asetiferous punctations; areas defined as interstitial spaces.

The metathorax is minimally sclerotized dorsally, well sclerotized and convex ventrally. The metapleuron consists of a slender metepisternum and mostly membranous metepimeron. The metasternum is trapezoidal and is divided into two halves by the discriminial line. A Hylecocoetoid metendosternite is well-developed (CROWSON 1944: 274). The metendosternite (Fig. 7) consists of furcal arms, a furcal anterior plate, the furcal laminae, and the furcal stalk. The membranous metathoracic wing (Fig. 11) is supported by well-defined veins. I follow the vein nomenclature for the Cleridae as proposed by GERSTMIEIER & EBERLE (2010: 10).

Legs: The leg morphology of *Pelonium* species is similar to other beetles whose lifestyle involves cursorial predatory activities. The leg is comprised of the coxa, trochanter, femur, tibia, and tarsus. The most significant variations in *Pelonium* leg structure involves the character of the anterior margin of the protibiae. This margin may be spinose (Fig. 13), roughened (Fig. 14), ridged (Fig. 16), or plane (Fig. 15). Set in the membranes between the tibia and tarsus are tibial spurs. In some species the male metatibiae show a well-developed secretory pit. The tarsus is comprised of 5 tarsomeres, with the 4th minute and embedded into the anterior depression of the 3rd. The 5th tarsomere, the ungues, do not have a denticle. The venter of the first three tarsomeres is set with well-developed tasal pads that are not incised distally.

Abdomen: The abdomen is soft, flexible, and feebly sclerotized dorsally. Ventrally, it consists of 6 moderately sclerotized visible sternites. The distal margin of the male

sternite VI is usually emarginated in males and evenly arcuate in females. Visible tergite VI, the pygidium, is usually scutiform, but may be subquadrate, and its distal margin may be broadly concave.

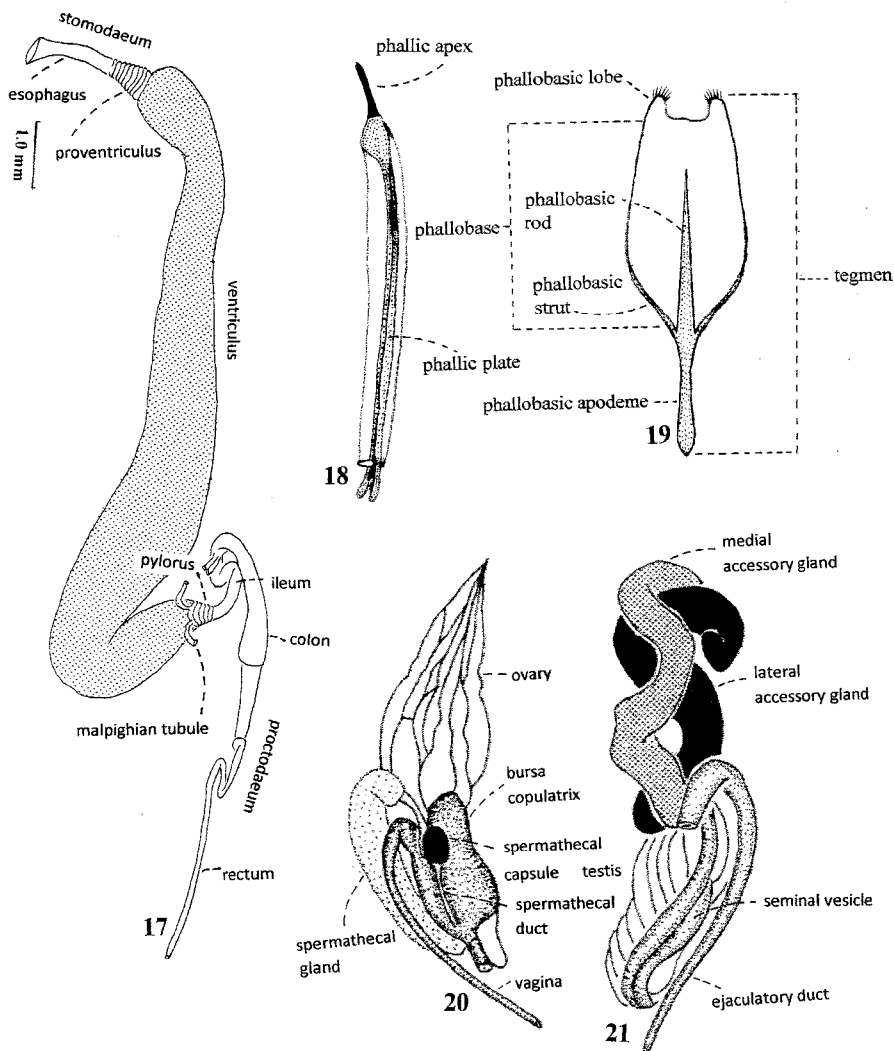
The checkered beetle aedeagus (Figs 18, 19) is comprised of two main structures, the tegmen and the phallus. The tegmen surrounds the phallus when the latter is in repose. For practical reasons the tegmen is divided into phallobasic components, which involve the phallobase, the phallobasic lobes, phallobasic rod, a pair of phallobasic struts, and the phallobasic apodeme. The phallus comprises the phallic apex and the phallic plates. The most extensive variation in aedeagal structure among *Pelonium* species involves the length of the aedeagus, shape of the phallic apex, and extent of setae on the phallobasic lobes. The ovipositor is mostly a membranous tube supported by three pairs of slender sclerites, the oblique bacculi, the ventral bacculi, and a pair of proctigeral bacculi. The coxites are lobes that are slightly sclerotized and setose. Between the dorsal and ventral bases of the coxites are the laminae, which may or may not be lobed. The coxital stylus, which is setose at its extremity, is attached to the posterior limits of the coxite.

Internal morphology

This analysis of internal morphology is based on the dissection involving 18 species of *Pelonium* (OPITZ 2014: 25).

A l i m e n t a r y c a n a l : The adult alimentary canal (Fig. 17) consists of the stomodaeum, ventriculus, cryptonephridial Malpighian tubules, and the proctodaeum. The stomodaeum is comprised of the pharynx, esophagus, and a muscular proventriculus. Internally, the proventriculus shows infoldings that lead to lobes of the stomodeal valve. Based on the species studied, the *Pelonium* stomodeal valve is comprised of 4 primary and 2 secondary lobes. The ventriculus, does not show ventricular papillae. Between the ventriculus and the proctodaeum emerge 4 cryptonephridial Malpighian tubules. These are followed by the components of the proctodaeum, which are, a muscular pylorus, the ileum, the bulbous colon, and the rectum; the latter is considerably longer in females than in males.

M e s o d e r m a l r e p r o d u c t i v e o r g a n s : The mesodermal male reproductive organs (Fig. 21) involve the testes, vas deferens, accessory glands, and ejaculatory duct. The testes are multifollicular. There are 2 pairs of accessory glands. The major female organs (Fig. 20) involve the ovaries, lateral and medial oviducts, bursa copulatrix, spermathecal capsule, spermathecal gland, and the vagina. The ovaries consist of multifollicular acrotrophic follicles that stem from the calyx. This structure connects to short, lateral oviducts that communicate with a longer median oviduct. The bursa copulatrix, is a saccular extension of the proximal region of the vagina. At the base of the bursa there is a punctiform saccular plate, which presumably functions to control the contents of the bursa. The spermathecal capsule is tubular and variously sclerotized. The capsule communicates with the vagina via the spermathecal duct. The place of connection of the spermathecal gland to the spermathecal capsule varies; most often it is attached to the middle of the capsule, but in some species it is attached to the base of the capsule. The vagina is a tubular, highly muscular tapered organ.



Figs 17-21: Various organs. (17-19) *Pelonium lampyroides*. (17) Alimentary canal (18) Phallus (19) Tegmen. (20) Female mesodermal reproductive organs, *Pelonium quadriplagiatum* (21) Male mesodermal reproductive organs, *Pelonium semirufum*.

Natural History

Morphological evidence, such as mouthpart and alimentary canal structure and gut contents, suggest that *Pelonium* members are predatory. Moreover, data from collection labels and descriptions, and personal experience while collecting specimens of *Pelonium*

leucophaeum, indicates that cryptic coloration and Batesian mimicry are integral parts of the predatory strategy.

Members of *P. leucophaeum* have corrugated, bark-like elytra, while those of *P. lampyroides*, *P. photinoides*, and of *P. luridum* are clearly lampyrid mimics. According to GORHAM (1886: 346) "Mr. Champion observed that it (a specimen of *Pelonium luridum*) was much paler when alive, and mimicked some species of Lampyridae".

A variety of methods have been used to capture *Pelonium* specimens including, in order of prominence among label information, beating exfoliated or foliated tree branches, rearing from dead branches or logs, night collections involving MV/UV lights, Malaise traps set in forest clearings, ethanol-baited flight intercept trap, and canopy fogging. Temporally, these beetles were collected most often during spring and summer months. Altitudinally, they were gathered from sea level to 1280 meters.

There is some evidence that *Pelonium* species frequent plant blossoms to conduct their feeding activities. For example, Froede Ødegaard collected a specimen of *P. leukotaxium* on a blossom of the garlic vine [*Cydista aequinoctialis* (LINNAEUS) Miers (Bignoniaceae)]. It is not clear whether this specimen imbibed nectar as is characteristic of the Australian *Eleale aspera* (NEWMAN) (OPITZ 2002: 243). Finally, *Pelonium* specimens have been collected from the following other plants: *Albizia adinocephala* (DONN. SM.) (Fabaceae), *Pseudobombax septenatum* (JACQ.) DUGANO (Bombacoideae), a species of cypress (Cupressaceae), *Betula nigra* LINNAEUS (Betulaceae), bur oak [*Quercus macrocarpa* MICHX. (Fagaceae)], red cedar [*Juniperus virginiana* LINNAEUS (Cupressaceae)], American elm [*Ulmus americana* LINNAEUS (Ulmaceae)], a species of *Carya* NUTT. (Juglandaceae), *Ulmus cassifolia* NUTT. (Ulmaceae), a species of *Morus* LINNAEUS (Moraceae), ash tree [*Fraxinus* LINNAEUS (Oleaceae)], *Carya illinoensis* (WANGENH.) K. KOCH (Juglandaceae), *Cercis canadensis* LINNAEUS (Fabaceae), *Taxodium distichum* (LINNAEUS) RICH. (Cupressaceae), a species of *Cercidium* (= *Parkinsonia* LINNAEUS) (Fabaceae), a species of *Acacia* MILLER (Fabaceae), a species of *Quercus* LINNAEUS (Fagaceae), American sweetgum [*Liquidambar styraciflua* LINNAEUS (Altingiaceae)], and *Eucalyptus grandis* W. HILL ex MAIDEN (Myrtaceae).

Description of *Pelonium* SPINOLA 1844a: 347

WINKLER 1961: 64 (Abb. 38, *Corinthiscus*). EKIS (now OPITZ) 1975: 56 (*Corinthiscus*). BARR 2005: 56. SOLERVICENS 2008: 593. OPITZ 2010a: 100; 2014a: 25. See CORPORAAL (1950: 285) (*Corinthiscus*) for historical citations.

Type species: *Pelonium lampyroides* SPINOLA, 1844a: 347. By subsequent designation (CORPORAAL, 1950: 285).

Diagnosis: Specimens of *Pelonium* differ from those of other genera in Peloniinae by the following combination of characteristics: Body about 3 x longer than broad, terminal maxillary and labial palponmere securiform to subsecuriform, pronotal arch scabrose, pronotal side margins with tubercle, unguis (Fig. 207) without denticle, and elytral disc with minute (Fig. 211) or large (Fig. 210) asetiferous punctures.

Synapotypic characteristics: Pronotal arch scabrose.

Redescription: Size: Length 5.3-23.0 mm; width 1.8-8.0 mm. Form: Oblong rectangular, body deep, about 3 times longer than broad. Vestiture: Dorsum profusely vested with short pubescence, antennal funicle moderately setose, capitulum profusely

vested with microsensilla, elytra abundantly vested with short dark and pale setae, all setae emerge from small punctations.

Head (Figs 8-10, 201): Cranium subquadrate, frons usually narrower than width of eye, profusely indented with small setiferous punctations; gula (Figs 9, 203) large, trapezoidal, sutures converge, gula with two well-developed setose post-gular processes (Fig. 9); labrum (Figs 4, 202) very shallow, broadly incised distally, tormal processes confluent, epipharyngeal area very small; mandible (Fig. 3), body stout, anterior dens subacuminate, medial and posterior dens moderately developed, penicillus well developed; maxilla (Figs 5, 202), laterolacinia present, terminal palpomere securiform to subsecuriform; labium (Fig. 6), ligula deeply incised, ligular lobes not narrowed, terminal palpomere securiform to subsecuriform; eyes (Fig. 208) very large, coarsely faceted, ocular notch deep; antenna (Fig. 2) comprised of 11 antennomeres, capitate, capitulum usually sex dimorphic, funicular antennomeres usually progressively shorter and wider towards capitulum, capitulum longer than combined length of funicular antennomeres, capitular antennomeres 9 & 10 may show collateral branch, branch more prominent in males, antennomere 11 oblong. **Thorax**: Pronotum (Fig. 24) usually oblong, rarely subquadrate, pronotal arch scabrose, anterior limit of dorsolateral carina extends to about 4/5 of pronotal length, posteriorly carina extends to pronotal posterior angles where confluent with pronotal hem, disc convex and finely punctated, side margins with tubercle, latter variable in expression, prointercoxal process (Fig. 205) slightly expanded distally; pronotal projections (Fig. 206) acuminate, they may approximate prointercoxal process; elytral asetiferous punctations usually large and concentrated in elytral basal half (Figs 212, 214), or minute (Fig. 218) and profusely distributed throughout elytral disc, epipleural fold prominent, abruptly narrowed at elytral middle, then narrowly extended to elytral apex, elytral anterior margin not carinate; metathoracic wing as in Fig. 11, wedge cell closed; metendosternite with furcal lamina, furcal anterior plate large; legs, profemora not swollen, anterior margin of tibia spinose or not, tibial spur formula 0-1-1, tarsal pulvillar formula 3-3-3, unguis without basal denticle. **Abdomen**: Aedeagus (Figs 18, 19) phallobase bilobed, lobes notably fimbriate in some species (Fig. 235), lobe setae less conspicuous in others (Fig. 238), tegmen reduced ventrally, submembranous, phallobasic struts confluent with phallobasic apodeme, phallobasic rod present; phallic plates very narrow; spicular plates not flared, spicular apodemes fused completely (Fig. 12), intraspicular plate oblong-linear; ovipositor as long as abdomen, laminae multilobed, laminal rod present. **Alimentary Canal** (Fig. 17): Proventriculus well developed; ventricular crypts poorly defined; 4 cryptonephridial Malpighian tubules. **Mesodermal Male Internal Reproductive Organs** (Fig. 21): Two pairs of accessory glands. **Mesodermal Female Internal Reproductive Organs** (Fig. 20): Spermathecal capsule well defined; spermathecal gland attached to base or middle of spermathecal capsule; bursa copulatrix saccular, with bursal sclerite. **Nervous System**: Brain and ventral nerve cord well developed.

D i s t r i b u t i o n : The distribution of this genus extends from Canada to Argentina.

Key to species of *Pelonium* SPINOLA

In this key, I often distinguish species by their color characteristics, which seem to be remarkably consistent as a convenient diagnostic tool. The species vary in more cryptic characteristics such as differences in the male pygidium, aedeagus, and presence or absence of the secretory pit on the male metatibiae.

1	Elytral disc with metallic sheen (<i>P. viridipenne</i> -group)	2
1'	Elytral disc without metallic sheen	5
	Elytral disc with castaneous fascia (Fig. 328) (Bolivia) <i>Pelonium rossi</i> SCHENKLING	
2'	Elytral disc without castaneous fascia	3
3(2')	Pronotum black (Fig. 327) (Brazil) <i>Pelonium lustroatum</i> OPITZ nov.sp.	
3'	Pronotum castaneous	4
4(3')	Elytral disc uniformly green (Fig. 329) (Bolivia, Brazil) <i>Pelonium viridipenne</i> (KIRBY)	
4'	Elytral disc more castaneous than green (Fig. 326) (Bolivia Brazil) <i>Pelonium effusum</i> OPITZ nov.sp.	
5(1')	Interstitial spaces of pronotal disc minutely granulose (<i>P. photinoides</i> -group)	6
5'	Interstitial spaces of pronotal disc not minutely granulose	14
6 (5)	Elytral apex and/or apex of sutural margin infuscated.....	7
6'	Elytral apex and/or apex of sutural margin not infuscated.....	11
7(6)	Only portion of epipleural margin yellow	8
7'	Entire length of epipleural margin yellow	9
8(7)	Elytral apex brown, epipleural margin region near elytra apex yellow (Fig. 330) (Bolivia, Brazil)..... <i>Pelonium abacum</i> OPITZ nov.sp.	
8'	Only epipleural and sutural margins portion of elytral apex brown, sutural margin region near elytral apex yellow (Fig. 326) (Brazil) <i>Pelonium latusculum</i> OPITZ nov.sp.	
9(7')	Pronotal maculae red-brown (Fig. 324) (Bolivia, Brazil) <i>Pelonium divisum</i> OPITZ nov.sp.	
9'	Pronotal maculae brown.....	10
10(9')	Pronotum mostly dark brown, with testaceous spot at middle (Fig. 338) (Brazil) <i>Pelonium photinoides</i> (CHEVROLAT)	
10'	Pronotum mostly light brown, no spot at middle (Fig. 332) (Bolivia)..... <i>Pelonium buenavista</i> OPITZ nov.sp.	
11(6')	Dorsum dark brown.....	12
11'	Dorsum light brown.....	13
12(11)	Anterior margin of protibiae slightly roughened, aedeagal apex bilobus (Fig. 331) (Brazil) <i>Pelonium bibullum</i> OPITZ nov.sp.	
12'	Anterior margin of protibiae spinose, aedeagal apex not bilobus (Fig. 335) (Brazil) <i>Pelonium granosum</i> OPITZ nov.sp.	
13(11')	Broad yellow region near sutural margin (Fig. 337) (French Guiana, Bolivia)..... <i>Pelonium leukotaxium</i> OPITZ nov.sp.	
13'	Without broad yellow region near sutural margin (Fig. 333) (Trinidad) <i>Pelonium divericoatum</i> OPITZ nov.sp.	
14(5')	Asetiferous punctures minute and profusely distributed throughout elytral disc (<i>P. lampyroides</i> -group)	15
14'	Asetiferous punctures not minute	35
15(14)	Elytral disc mostly testaceous, elytral tip infuscated	16
15'	Color combination not as above	20
16(15)	Femora and tibiae testaceous, tarsi black (Fig. 346) (Panamá, Colombia) <i>Pelonium lampyroides</i> SPINOLA	
16'	Legs uniformly testaceous	17
17(16')	Only margins of elytral apex infuscated	18
17'	Elytral apex broadly infuscated	19

18(17)	Capitulum testaceous (Fig. 340) (Brazil, Ecuador).....	<i>Pelonium careoitum</i> OPITZ nov.sp.	
18'	Capitulum dark brown (Fig. 357) (Brazil).....	<i>Pelonium ustulatum</i> OPITZ nov.sp.	
19(17')	Broad yellow epipleural region near elytral apex (Fig. 341) (Brazil)	<i>Pelonium caudiculum</i> OPITZ nov.sp.	
19'	Narrow yellow epipleural region near elytral apex (Fig. 352) (French Guiana).....	<i>Pelonium regina</i> OPITZ nov.sp.	
20(15')	Pronotal upper flanks red or red-brown		21
20'	Pronotal upper flanks not red or red-brown		24
21(20)	Elytra unicolorous, black (Fig. 351) (Brazil).....	<i>Pelonium ramosum</i> SCHENKLING	
21'	Elytra bicolorous		22
22(21')	Pronotal tubercle minute (Fig. 345) (Panamá).....	<i>Pelonium fucogonium</i> OPITZ nov.sp.	
22'	Pronotal tubercle well developed.....		23
23(22')	Frons very narrow; eyes nearly contiguous; elytral disc dark brown, nearly black; epipleural and sutural margins narrowly yellow, (Fig. 347) (Bolivia, Argentina).....	<i>Pelonium morrissi</i> OPITZ nov.sp.	
23'	Frons moderately wide; eyes not nearly contiguous; elytral disc not dark brown to black; epipleural margin broadly yellow (Fig. 355) (Brazil)	<i>Pelonium suturale</i> SPINOLA	
24(20')	Elytra unicolorous		25
24'	Elytra bicolorous		26
25 (24)	Tibiae and tarsi black (Fig. 359) (Bolivia, Argentina)	<i>Pelonium wappesi</i> OPITZ nov.sp.	
25'	Tibiae and tarsi testaceous (Fig. 343) (Brazil).....	<i>Pelonium cribellum</i> OPITZ nov.sp.	
26(24')	Elytra mostly dark brown or with black marking		27
26'	Elytra not dark brown and without black marking.....		30
27(26)	At least periphery of basal ½ of elytra testaceous.....		28
27'	Basal ½ of elytra dark brown.....		29
28(27)	Basal ½ of elytral disc unicolorous, testaceous (Fig. 350) (Bolivia, Brazil).....	<i>Pelonium posticum</i> (KLUG)	
28'	Basal ½ of elytral disc bicolorous, periphery testaceous, dark brown at middle (Fig. 339)	<i>Pelonium atraliculum</i> OPITZ nov.sp.	
29(27')	Elytral sutural margin partially testaceous (Fig. 348) (Brazil).....	<i>Pelonium nictuatum</i> OPITZ nov.sp.	
29'	Elytral sutural margin testaceous along entire length (Fig. 344) (Argentina).....	<i>Pelonium fissilum</i> OPITZ nov.sp.	
30(26')	Pronotal side margins with very shallow tubercle		31
30'	Pronotal tubercle not shallow		33
31(30)	Pronotum oblong (Fig. 353) (Bolivia)	<i>Pelonium rivimentum</i> OPITZ nov.sp.	
31'	Pronotum quadrate		32
32(31')	Elytral disc with long narrow yellow line and broad yellow marking near epipleural margin (Fig. 349) (Brazil)	<i>Pelonium optabile</i> GORHAM	
32'	Elytral disc without yellow line and without yellow marking near epipleural margin (Fig. 342) (Brazil).....	<i>Pelonium circum</i> OPITZ nov.sp.	
33(30')	Pronotal disc with dark brown angular markings (Fig. 356) (Saint Vincent & Grenadines)	<i>Pelonium taino</i> OPITZ nov.sp.	
33'	Pronotal brown markings not angular.....		34
34(33')	Pronotal disc with two large brown markings contiguous at base; humeral angle brown (Fig. 358) (Brazil).....	<i>Pelonium venabulum</i> OPITZ nov.sp.	

34'	Pronotal disc with two large brown markings not contiguous at base; humeral angle testaceous (Fig. 354) (Brazil)	<i>Pelonium scapulare</i> BARR
35(14')	Antennomere 8 greatly enlarged (<i>P. niveum</i> -group) (Fig. 360) (Brazil).....	<i>Pelonium niveum</i> (CHEVROLAT)
35'	Antennomere 8 not greatly enlarged.....	36
36(35')	Posterior 1/3 of the elytral disc with angular castaneous marking bordered by dark brown (Fig. 215) (<i>P. notabile</i> -group)	37
36'	Posterior 1/3 of elytral disc without angular castaneous marking.....	39
37(36)	Anterior margin of protibia roughened (Figs 14, 362) (USA, México, Guatemala, Honduras, Costa Rica).....	<i>Pelonium peninsulare</i> (SCHAEFFER)
37'	Anterior margin of protibia not roughened.....	38
38(37')	Elytral disc carinose; middle 1/3 of elytral disc testaceous and with asetiferous punctures outlined in brown (Fig. 363) (Costa Rica, Honduras, Brasil).....	<i>Pelonium notabile</i> GORHAM
38'	Elytral disc not carinose; middle 1/3 of elytral disc white and asetiferous punctures not outlined in brown (Fig. 361) (USA)	<i>Pelonium leucophaeum</i> (KLUG)
39(36')	Disc of pronotum and elytra marked with metallic black spots (<i>P. fasciculatum</i> -group)...	40
39'	Disc of pronotum and elytra not marked with metallic black spots	46
40(39)	Middle of anterior margin of pronotal arch with setose tuft	41
40'	Middle of anterior margin of pronotal arch without setose tuft	44
41(40)	Elytral apex with setal tuft (Fig. 367) (Bolivia, Brasil, Paraguay, Argentina)	<i>Pelonium fasciculatum</i> (KLUG)
41'	Elytral apex without setal tuft.....	42
42(41')	Elytral disc with ridge (Fig. 371) (Bolivia, Peru, Brazil, Uruguay, Argentina).....	<i>Pelonium scoparium</i> (KLUG)
42'	Elytral disc without ridge	43
43(42')	Center of elytral disc with obliquely positioned brown oval ring whose center shows white setal tuft (Fig. 368) (Colombia, Venezuela, Bolivia, Argentina)	<i>Pelonium fugax</i> (KLUG)
43'	Elytral without oval ring (Fig. 370) (Brazil, Argentina).....	<i>Pelonium metalloideum</i> SPINOLA
44(40')	Last antennomere partially testaceous; aedeagal apex broad triangular (Fig. 369) (Argentina).....	<i>Pelonium infusum</i> OPITZ nov.sp.
44'	Last antennomere completely testaceous; aedeagal apex acuminate	45
45(44')	Anterior margin of protibia spinose (Fig. 364) (Brazil).....	<i>Pelonium caraguata</i> OPITZ nov.sp.
45'	Anterior margin of protibia roughened (Fig. 366) (Honduras, Panamá, Colombia)	<i>Pelonium cavei</i> OPITZ nov.sp.
46(39')	Legs and elytral disc densely vested with white setae (<i>P. inaequalicolle</i> -group)	47
46'	Legs and elytral disc not densely vested with white setae	48
47(46)	Pronotal disc sculptured with tumescences; metatibia yellow; posterior 1/3 of elytral disc with large brown macula (Fig. 373) (Brazil).....	<i>Pelonium inaequalicolle</i> SCHENKLING
47'	Pronotal disc not sculptured with tumescences; metatibia black; posterior 1/3 of elytral disc without large brown macula (Fig. 372) (Bolivia, Brazil)	<i>Pelonium erymanthoides</i> SCHENKLING
48(46')	Pronotal disc with well-developed fusiform slit (<i>P. axinoides</i> -group).....	49
48'	Pronotal disc without slit.....	51

49(48)	Elytral asetiferous punctures striate (Figs 209, 376) (Cayman Islands).....	<i>Pelonium turnbowi</i> OPITZ nov.sp.	50
49'	Elytral asetiferous punctures not striate.....		50
50(49')	Elytral basal 1/5 marked with broad black marking (Fig. 375) (Bahama Islands, Dominican Republic).....	<i>Pelonium inagua</i> OPITZ nov.sp.	50
50'	Elytral basal 1/5 marked with short narrow black marking near base of sutural margin (Fig. 374) (Cuba).....	<i>Pelonium axinoides</i> WOLCOTT	50
51(48')	Pronotal ground color red-testaceous; very large (up to 23 mm) (<i>P. megaclerus</i> -group) ..		52
51'	Pronotal ground color not red-testaceous; not very large (up to 16 mm).....		53
52(51)	Pronotum unicolorous, without discal black markings; elytral disc avittate (Fig. 377) (Costa Rica).....	<i>Pelonium gigantum</i> OPITZ nov.sp.	53
52'	Pronotum bicolorous, with discal black markings; elytral disc vittate (Fig. 374) (México).....	<i>Pelonium megaclerus</i> OPITZ nov.sp.	53
53(51')	Posterior 1/3 of elytral disc entirely brown-black (Fig. 213) (<i>P. semirufum</i> -group) ...		54
53'	Posterior 1/3 of elytral disc not entirely brown-black.....		59
54(53)	Posteromedial extension of elytral testaceous coloring acuminate		55
54'	Posteromedial extension of elytral testaceous coloring not acuminate		56
55(54)	Elytral humeral angle black (Fig. 375) (Brazil).....	<i>Pelonium atrahumeratum</i> OPITZ nov.sp.	56
55'	Elytral humeral angle not black (Fig. 382) (Brazil).....	<i>Pelonium semirufum</i> GORHAM	56
56(54')	Elytral disc with white transverse fascia; basal half of elytral disc red (Fig. 384).....	<i>Pelonium spinulum</i> OPITZ nov.sp.	57
56'	Elytral disc without white transverse fascia; basal half of elytral disc not red.....		57
57(56')	Pronotal disc with 5 glabrous spots; asetiferous punctures in basal half of elytral disc encircled in brown (Fig. 376) (Argentina).....	<i>Pelonium geniculatum</i> (KLUG)	57
57'	Pronotal disc without glabrous spots; asetiferous punctures in basal half of elytral disc not encircled in brown.....		58
58(57')	Epipleural region of elytral disc devoid of punctures; posterior ½ of elytral disc blue-black (Fig. 383) (Brazil).....	<i>Pelonium schenklingsi</i> OPITZ nov.sp.	58
58'	Epipleural region of elytral disc not devoid of punctures; posterior ½ of elytral disc simply black (Fig. 377) (Brazil)	<i>Pelonium russulentum</i> OPITZ nov.sp.	58
59(53')	Body testaceous, elytral disc with black spots (<i>P. bipunctatus</i> -group).....		60
59'	Color combination not as above		62
60(59)	Testaceous elytra with 2 black spots (Fig. 386) (Brazil).....	<i>Pelonium bipunctatum</i> GORHAM	60
60'	Testaceous elytra with more than 2 spots		61
61(60')	Testaceous elytra with 4 spots (Fig. 385) (Bolivia, Brazil)	<i>Pelonium placidum</i> SCHENKLING	61
61'	Testaceous elytra with 6 spots (Fig. 387) (Bolivia, Brazil)	<i>Pelonium xanthorum</i> OPITZ nov.sp.	61
62(59')	Posterior ½ of elytral disc with large usually rounded black maculae and testaceous elytral apex (Fig. 214) (<i>P. alvicorne</i> -group).....		63
62'	Elytral disc coloration not as described above.....		73
63(62)	Black maculae on posterior ½ of elytral disc somewhat rounded.....		64
63'	Black maculae on posterior ½ of elytral disc not particularly rounded.....		69
64(63)	Anterior ½ of elytral disc, unicolorous, testaceous		65
64'	Anterior ½ of elytral disc infuscated		67

65(64)	Elytral humeral angle red-testaceous (Fig. 396) (French Guiana)	<i>Pelonium plicatum</i> OPITZ nov.sp.
65'	Elytral humeral angle dark brown	66
66(65')	Anterior margin of elytral black macula diffuse (Fig. 389) (Brazil).....	<i>Pelonium alicorne</i> (KLUG)
66'	Anterior margin of elytral black macula not diffuse (Fig. 393) (Panamá, Tobago, Venezuela).....	<i>Pelonium litum</i> OPITZ NOV.SP.
67(64')	Elytral humeral angle dark brown (Fig. 397) (Bolivia, Brazil, Paraguay).....	<i>Pelonium quadriplagiatum</i> KUWERT
67'	Elytral humeral angle testaceous	68
68(67')	Black maculae on posterior ½ of elytral disc divided; pronotal disc unicolorous (Fig. 391) (Brazil)	<i>Pelonium disjunctum</i> OPITZ nov.sp.
68'	Black maculae on posterior ½ of elytral disc not divided; pronotal disc bicolorous, testaceous, with several brown spots (Fig. 395) (Brazil).....	<i>Pelonium ocellatum</i> OPITZ nov.sp.
69(63')	Frons much wider than width of eyes; elytral asetiferous punctures notably striate (Fig. 388) (Peru).....	<i>Pelonium abruptum</i> OPITZ nov.sp.
69'	Frons not wider than width of eyes; elytral asetiferous punctures not notably striate	70
70(69')	Pronotal disc with glabrous elevations	71
70'	Pronotal disc without glabrous elevations	72
71(70)	Elytra widely infuscated near anterior margin (Fig. 394) (México)	<i>Pelonium maculoangulum</i> OPITZ nov.sp.
71'	Elytra at most minimally infuscated near anterior margin (Fig. 392) (Argentina).....	<i>Pelonium junctum</i> PIC
72(70')	Anterior half of elytral disc mostly red-testaceous, disc with small yellow spot; middle of disc with oblique white fascia (Fig. 390) (Brazil)	<i>Pelonium badeni</i> GORHAM
72'	Anterior half of elytral disc mostly testaceous, disc set with brown angular fascia that conjoins with infuscation of anterior margin; middle of disc with pale angular fascia that conjoins with testaceous epipleural region (Fig. 398) (Peru)	<i>Pelonium riveti</i> LESNE
73(62')	Elytral preapical region with dark brown angular fascia (Fig. 216) (<i>P. nigroclavatum</i> -group)	74
73'	Elytral preapical region without dark brown angular fascia	85
74(73)	Anterior margin of protibia distinctly spinous.....	75
74'	Anterior margin of protibia not distinctly spinous, somewhat roughened or plane	78
75(74)	Protibial spines present nearly entire length of tibial anterior margin (Fig 399) (México, Guatemala).....	<i>Pelonium aliciae</i> BARR
75'	Protibial spines concentrated in distal half of tibial margin.....	76
76(75')	Antenna testaceous (Fig. 403) (Dominican Republic).....	<i>Pelonium denotatum</i> OPITZ nov.sp.
76'	Antenna dark brown	77
77(76')	Elytral base broadly black (Fig. 409) (México).....	<i>Pelonium spinolai</i> OPITZ nov.sp.
77'	Elytral base faintly infuscated (Fig. 406) (México, Panamá)	<i>Pelonium popliteum</i> OPITZ nov.sp.
78(74')	Cranium bicolorous, testaceous with castaneous markings	79
78'	Cranium unicolorous, dark castaneous	81
79(78)	Elytral asetiferous punctures distributed to elytral apex; antenna unicolorous, testaceous (Fig. 410) (Dominican Republic)	<i>Pelonium woodruffi</i> OPITZ nov.sp.

79'	Elytral asetiferous punctures end before elytral apex; antenna bicolorous	80
80(79')	Pronotal side margin anterior to tubercle concave, middle and hind legs unicolorous, testaceous (Fig. 402) (Belize).....	<i>Pelonium dapsilum</i> OPITZ nov.sp.
80'	Pronotal side margin anterior to tubercle not concave; middle and hind legs bicolorous, at least middle femur infuscated (Fig. 404) (USA, México).....	<i>Pelonium maculicolle</i> SCHAEFFER
81(78')	Elytral asetiferous punctures end before elytral apex (Fig. 405) (México).....	<i>Pelonium nigroclavatum</i> CHEVROLAT
81'	Elytral asetiferous punctures distributed to elytral apex	82
82(81')	Elytral asetiferous punctures binodal (Fig. 401) (Dominican Republic)	<i>Pelonium condylum</i> OPITZ NOV.SP.
82'	Elytral asetiferous punctures not binodal.....	83
83(82')	Elytral asetiferous punctures striate (Fig. 407) (Dominican Republic).....	<i>Pelonium rallum</i> OPITZ nov.sp.
83'	Elytra asetiferous punctures not striate.....	84
84(83')	Capitular antennomeres bicolored (Fig. 408) (Puerto Rico).....	<i>Pelonium rico</i> OPITZ nov.sp.
84'	Capitular antennomere unicolored, testaceous (Fig. 400) (Cayman Islands).....	<i>Pelonium caymanensis</i> OPITZ nov.sp.
85(73')	Elytral disc unicolorous, devoid of any dark maculae or fascia (<i>P. biliturum</i> -group). 86	
85'	Elytral disc bicolorous (<i>P. amabile</i> -group).....	92
86(85)	Elytral disc from light brown to black	87
86'	Elytral disc light testaceous	89
87(86)	Body black, except distal ½ of epipleural margin yellow (Fig. 414) (MONTERRAT).....	<i>Pelonium fuscum</i> OPITZ nov.sp.
87'	Body not black	88
88(87')	Distal region of epipleural margin broadly yellow (Fig. 416) (Panamá, Colombia, Venezuela).....	<i>Pelonium luridum</i> OPITZ nov.sp.
88'	Elytron uniformly brown (Fig. 415) (Galapagos Islands).....	<i>Pelonium longfieldae</i> BLAIR
89(86')	Pronotal disc marked by 2 large black maculae.....	90
89'	Pronotal disc marked by 4 small maculae.....	91
90(89)	Pronotal black maculae broad (Fig. 413) (Peru).....	<i>Pelonium biliturum</i> OPITZ nov.sp.
90'	Pronotal black maculae narrow (Fig. 411) (Peru).....	<i>Pelonium adunatum</i> OPITZ nov.sp.
91(89')	Pronotal maculae widely separated (Fig. 412) (Peru, Brazil)	<i>Pelonium anteguttatum</i> OPITZ nov.sp.
91'	Pronotal maculae narrowly contiguous (Fig. 417) (Ecuador).....	<i>Pelonium stolonum</i> OPITZ nov.sp.
92(85')	Elytral basal half unicolorous, yellow-testaceous.....	93
92'	Elytral basal half bicolorous	95
93(92)	Pronotum mostly castaneous, sides black (Fig. 422) (Puerto Rico).....	<i>Pelonium leblanci</i> OPITZ nov.sp.
93'	Pronotum testaceous	94
94(93')	Elytral subapical castaneous marks contiguous (Fig. 418) (Panamá, Bolivia).....	<i>Pelonium amabile</i> SPINOLA
94'	Elytral subapical castaneous marks not contiguous (Fig. 421) (Brazil).....	<i>Pelonium disconotatum</i> PIC
95(92')	Pronotum unicolorous	96
95'	Pronotum bicolorous	97

96(95)	Pronotum light castaneous; elytral apex black (Fig. 424) (Brazil)	<i>Pelonium tricinctum</i> (PERACCHI)
96'	Pronotum dark castaneous; elytral apex testaceous (Fig. 420) (Dominican Republic)	<i>Pelonium caborajo</i> OPITZ nov.sp.
97(95')	Pronotal sides testaceous; elytral disc with angular markings (Fig. 365) (Bolivia, Brazil).....	<i>Pelonium spectabile</i> (PERACCHI)
97'	Pronotal sides at least in part dark brown.....	98
98(97')	Sides of pronotum and elytron with black line (Fig. 423) (Brazil)	<i>Pelonium lituratum</i> (KIRBY)
98'	Sides of pronotum not as above.....	99
99(98')	Elytra with large subapical castaneous marks (Fig. 419) (Colombia)	<i>Pelonium percumpum</i> GORHAM
99'	Elytra with small brown marks (Fig. 425) (Cuba, Andros Island).....	<i>Pelonium piciventre</i> CHEVROLAT

Description of *Pelonium* species

The *P. viridipenne* species group

The metallic sheen on the elytral disc distinguishes the members of this species group. Also, the phallobasic lobes are clearly marked by a transverse basal line. Four species belong to this group, whose species are found in Bolivia and Brazil.

Pelonium effusum OPITZ nov.sp. (Figs 51, 52, 219, 314, 326)

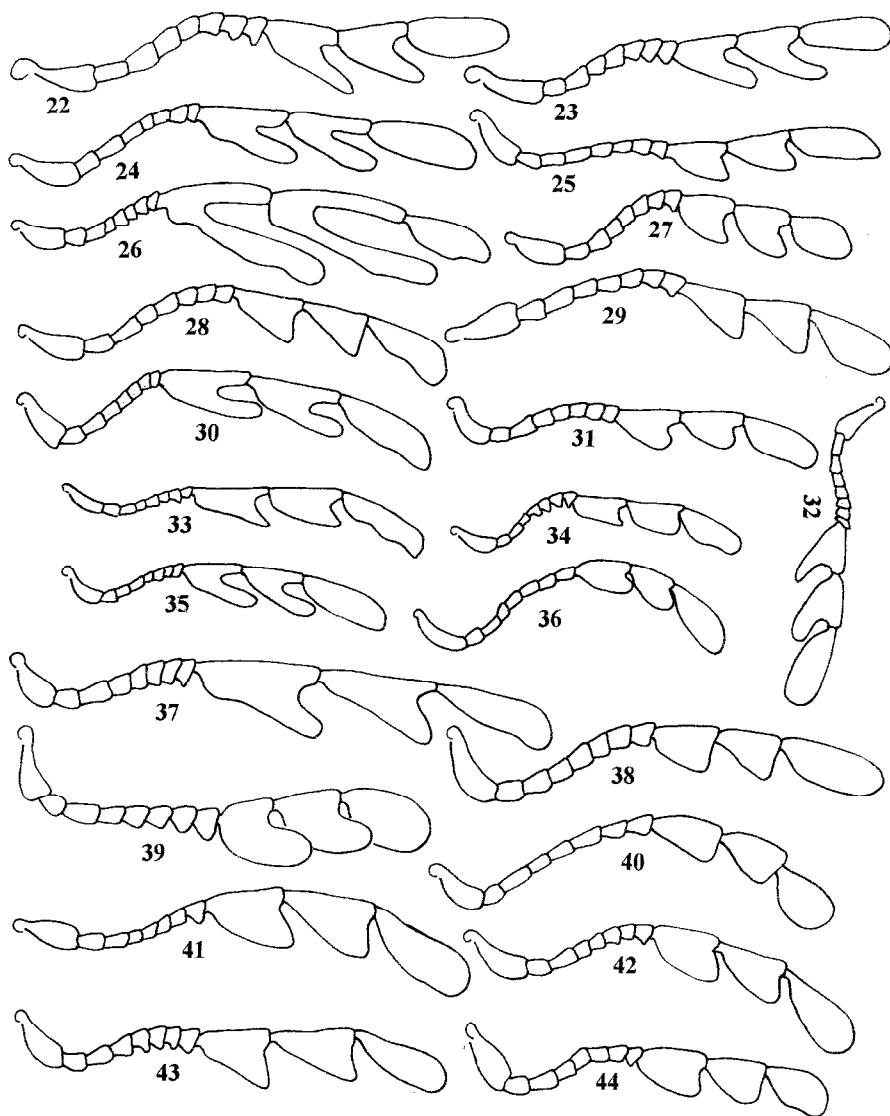
H o l o t y p e : ♂. Brazil: Bahia, Encruzilhada, XI-1974, 960 m (FSCA).

P a r a t y p e s : Twenty-five. Bolivia: Departamento de Santa Cruz, Potrerillo del Guenda, Snake Farm, 17°40'S 63°27'W, 20-23-X-2011, Skillman & Wappes (FWSC, 1); Florida, 4 km N Bermejo, 18°06'S 63°36'W, 6-8-XII-2015, 1000-1200, Skillman, Wappes & Kuckartz (FWSC, 1; WOPC, 1); 20 km N Cameri, Road to Eyti, 6-8 km E Highway, 9, 19°52' 63°29'W, 1250 m, Skillman Wappes, Bonaso (FWSC, 1; WOPC, 1); 3.7 km SSE Buena Vista, Hotel Flora & Fauna, 17°29.949'S 63°33.152'W, 5-15-XI-2001, 405 m, tropical transitional forest, M. C. Thomas & B. D. Dozier (FSCA, 1); Santa Cruz, 20 km N Camiri, Road to Eyti, 6-8 km E Hwy 9, 19°52'S 63°29'W, 5, 6, 10 December 2012, Wappes, Bonaso, Skillman (ACMT, 2); idem, Refugio Los Volcanes, 18°06'S 63°36'W, 16-20 Sept. 2012, 3400-4200 ft., Wappes, Skelley, Bonaso, Hamel (ACMT, 1); idem, Potrerillo del Guenda, Snake Farm, 17°40'S 63°27'W, 14-16 October 2011, Wappes & Skillman (ACMT, 2). Brazil: Estado do Bahia, Cochimbo, 1890, Ch. Pujol (MNHN, 9; WOPC, 4); Estado do Santa Catarina, Nova Teutonia, X-1972, 300-500 m, F. Plaumann (WOPC, 1).

D i a g n o s i s : The somewhat brownish metallic color of the elytra of these specimens distinguished them from any other members of the *P. viridipenne*-group.

D e s c r i p t i o n : Size: Length 10.0 mm; width 3.2 mm. Form: As in Fig. 326. Color: Mostly testaceous, elytral periphery with metallic luster. Head: Capitular antennomeres 9 and 10 with short collateral branch (Figs 52, 53), antennomere 11 oblong-subtruncate; frons very narrow (EW/FW 22/13). Thorax: Pronotum oblong (PW/PL 55/70), side margin with shallow tubercle, disc sparsely punctate; elytral asetiferous punctation arranged into 10 striae that end at about elytral middle (EL/EW 220/45); protibial anterior margin not spinose. Abdomen: Pygidial body scutiform; phallic apex subacuminate.

V a r i a t i o n : Size: Length 9.0-14.0 mm; width 2.5-5.0 mm. Two specimens from Bolivia are more melanistic and show a faint metallic sheen.



Figs 22-44: Antennae. (22) *Pelonium abacum*, male. (23) *P. abacum*, female. (24) *P. adunatum*, male. (25) *P. adunatum*, female. (26) *P. alciorne*, male. (27) *P. alciorne*, female. (28) *P. amabile*, male. (29) *P. amabile*, female. (30) *P. alicae*, male. (31) *P. alicae*, female. (32) *P. bibullum*, male. (33) *P. badeni*, male. (34) *P. badeni*, female. (35) *P. biliturum*, male. (36) *P. biliturum*, female. (37) *P. bipunctatum*, male. (38) *P. bipunctatum*, female. (39) *P. atraliculum*, female. (40) *P. abruptum*, female. (41) *P. caraguata*, male. (42) *P. caraguata*, female. (43) *P. cavei*, male. (44) *P. cavei*, female.

Natural history: Specimens were collected from October to December; two at an altitudinal range of 960 to 1280 m. The specimens collected near Cameri are considerably darker than the other types.

Distribution (Fig. 314): This species is known from Bolivia and Brazil.

Etymology: The specific epithet, *effusum* (= diffuse), is a Latin adjective. I refer to the "bleached" brownish-testaceous color at the middle of the elytra.

***Pelonium lustratum* OPITZ nov.sp. (Figs 124, 125, 220, 134, 327)**

Holotype: ♂. BRAZIL: Bahia, VI-1972, Moacir Alvarenga (FSCA).

Paratypes: Thirty-two. Brazil: Rio Grande do Sul, Encruzilhada, XI-1974, 960 m, M. Alvarenga (FSCA, 10; SDEI, 1; WOPC, 10; OXUM, 1); idem, VI-1972, 960 m, M. Alvarenga (FSCA, 3; WOPC, 4); Minas Gerais, Pedra Azul, XI-1972, 800 m (FSCA, 3).

Diagnosis: These beetles resemble superficially those of *P. viridipenne*, but in *P. lustratum* specimens the prothorax is black. The prothorax is castaneous in *P. viridipenne* specimens.

Description: Size: Length 14 mm; width 4.5 mm. Form: As in Fig. 327. Color: Mostly black, elytra mostly green, posterior half of disc with an aeneous luster. Head: Antennomeres 5-8 sub-serrate, caputular antennomeres 9 and 10 with short or long collateral branch (Figs 124, 125), antennomere 11 oblong; frons much narrower than width of eye (EW/FW 32/15). Thorax: Pronotum oblong (PW/PL 85/100), side margin with well-developed tubercle, disc with small setiferous punctation; elytral asetiferous punctation subseriate, extends to middle of disc (EL/EW 305/75); protibial anterior margin not spinose. Abdomen: Pygidium scutiform; sixth visible sternite deeply incised; aedeagus (Fig. 320) slightly sclerotized ventrally, phallic apex triangular; phallobasic apodeme widely splayed distally.

Variation: Size: Length 10.0-16.0 mm; width 3.2- 4.0 mm. The aeneous luster on the posterior half of the elytral disc varies in intensity.

Natural history: Specimens were collected during June and November, some at altitudes ranging from 800-960 m.

Distribution (Fig. 314): This species is known only from Brazil.

Etymology: The specific epithet, *lustratum*, is a Latin noun that stems from *lustrum* (= illuminate). I refer to the metallic luster that reflects from the elytral disc.

***Pelonium rossi* SCHENKLING (Figs 188, 189, 221, 314, 328)**

Pelonium rossi SCHENKLING, 1916: 153. **Holotype** ♂. New Status. Brazil, (Pará), Obidos, P. LE COINTE, 1906. A second label reads: E. Ross, 22-6-1914 (SDEI). CORPORAAL 1950: 290 (*Corinthiscus*).

Diagnosis: Within the *P. viridipenne*-group, only in *P. rossi* do we find a testaceous fascia on the elytral disc.

Redescription: Size: Length 16.0 mm; width 5.5 mm. Form: As in Fig. 328. Color: Reddish-brown, except elytra mostly metallic green, elytral disc with a curvate reddish fascia that extends from epipleural margin to sutural margin; elytral apex reddish. Head: Caputular antennomeres 9 and 10 with short or long collateral branch (Figs 188,

189), antennomere 11 oblong-subtruncate; frons narrower than width of eye (EW/FW 36/25). Thorax: Pronotum oblong (PW/PL 92/108), side margin with small tubercle, disc with several shallow swellings and depressions and small setiferous punctation; elytral asetiferous punctation subseriate, extends to slightly beyond middle of disc (EL/EW 340/95); protibial anterior margin not spinose. Abdomen: Pygidium scutiform; aedeagus (Fig. 221) slightly sclerotized ventrally, phallic apex digitiform.

Variation: Size: Length 13.0-17.0 mm; width 4.5-6.5 mm. Other than body size the available specimens are quite homogeneous.

Natural history: Specimens have been collected during October, November, and March; some at altitudes ranging from 400 to 500 m.

Distribution (Fig. 314): In addition to the holotype I examined 50 specimens from: Bolivia: Departameto de Santa Cruz, 4 km SSE Buena Vista, F & F Hotel, 14-16 Oct 2000, Wappes & Morris; Hotel Flora Y Fauna, 4-6 km SSE Buena Vista, 17°29'.95"S 63°33'.15"W, 400-500 m, 3-14 November 2003, N. E. Woodley cabin lights; Potrerillos del Guenda, reserve natural, Aka snake farm, 17°40'S 63°27'W, 3-5 March, 2011, 370 m, J. Wappes & D. Thomas. Specimens are deposited in ACMT, FSCA, JNRC, SDEI, TAMU, and WOPC.

***Pelonium viridipenne* (KIRBY) (Figs 186, 187, 222, 314, 329)**

Enoplium viridipenne KIRBY, 1818: 393. Lectotype. ♀. Here designated. Brazil, Goyas (Goiás) (BMNH). CORPORAAL 1950: 290 (*Corinthiscus*). Gorham did not specify in his description whether his nominal species is based on more than one specimen. Therefore, I invoke Recommendation 73F of the ICZN (1999) and designate a lectotype for this nominal species.

Opilus auripennis HOPE, 1835: 95. nov. syn. Lectotype. ♀. Here designated. Brazil, Rio de Janeiro (BMNH). CORPORAAL 1950: 286 (*Corinthiscus*). There is some evidence in Hope's description that suggests that he had more than one specimen before him while describing this species. However, Hope did not tag one specimen to be the name barer of this species. Therefore, I invoke Recommendation 73F of the ICZN (1999) and designate a lectotype for this junior synonym.

Diagnosis: These beetles resemble superficially those of *P. lustroatum*, but in *P. viridipenne* specimens the prothorax is castaneous. The prothorax is black in *P. lustroatum* specimens.

Redescription: Size: Length 16.5 mm; width 5.0 mm. Form: As in Fig. 329. Color: Reddish-brown, except elytra metallic green. Head: Capitular antennomeres 9 and 10 with short or long collateral branch (Figs 186, 187), antennomere 11 oblong-subtruncate; frons narrower than width of eye (EW/FW 30/27). Thorax: Pronotum oblong (PW/PL 95/113), side margin with small tubercle, disc with small setiferous punctation; elytral asetiferous punctation subseriate, extends to slightly beyond middle of disc (EL/EW 340/80); protibial anterior margin not spinose. Abdomen: Pygidium scutiform; aedeagus (Fig. 222) slightly sclerotized ventrally, phallic apex digitiform.

Variation: Size: Length 10.0-19.0 mm; width 2.8-5.0 mm. The metallic luster on the elytral disc varies from green to blue. The width of the frons is sexually dimorphic (male EW/FW= 35/20, female EW/FW= 33/26).

Natural history: Specimens have been collected during a period from October through January, at an altitude range between 405 to 960 m; some with MV/UV lights.

Distribution (Fig. 314): In addition to the lectotype, I examined 96 specimens

from: Bolivia: Departamento de Santa Cruz, Florida, 4 km N Bermejo, Refugio Los Volcanes, 18°06'S 63°36'W, 1000-1200 m, 15°W, 28-X-2011, Skillman, Wappes & Kuckartz; 3.7 k SSE Buena Vista, Hotel Flora & Fauna, 17°29'94"S 63°33'152"W, 5-15 XI 2001, tropical transitional forest, 405 m, M. C. Thomas & B. K. Dozier; idem, 13-16 Nov. J. Wappes, Morris & Nearn; Oct. 22-31 2002, Wappes & Morris; 4 km N Bermajo, Refugio los Volcanes, 18°06'S 63°36'W, 10-12.XII.2015, Wappes, Kuckartz, & Skillman; Potrerillo, 17°40'S 63°26'W, October 27-29. 2013, MV/UV lights, Wappes & Kuckartz; Santa Cruz, Potrerillo del Guenda, 17°40'26"S 63°27'44"W, XI-9-28.2006, B. H. Dozier, F. & J. Romero. Brazil: Rio Tijuca, 1884, E. Gounelle; Estado do Bahia, VI-1972, 960 m, M. Alvarenga; idem, Encruzilhada, XI-1974, 960 m, M. Alvarenga; Cachimbo, 1890, Ch. Pujol; Villa Victoria, 1890, Ch. Pujol; S. Antonio da Barra, 1890, Ch. Pujol; Estado de Goiás, Jatai Goiás, 1890, Ch. Pujol; Trinidad, 1890, Ch. Pujol; Rio Piracicaba, February 1885, P. Germain; Estado do São Paulo, Serqueira Cesar, January 1899, E. Gounelle; Estado do Rio de Janeiro; Specimens are deposited in ACMT, FSCA, JNRC, MNHN, SDEI, and WOPC.

The *P. photinoides* species group

The members of this species group are characterized by having minutely granulose sculpturing on the interstitial spaces of the pronotal disc, and the maxillary and labial terminal palpomeres are subsecuriform. There are 9 species in this group, whose distribution involves Bolivia, Brazil, French Guiana, and Trinidad.

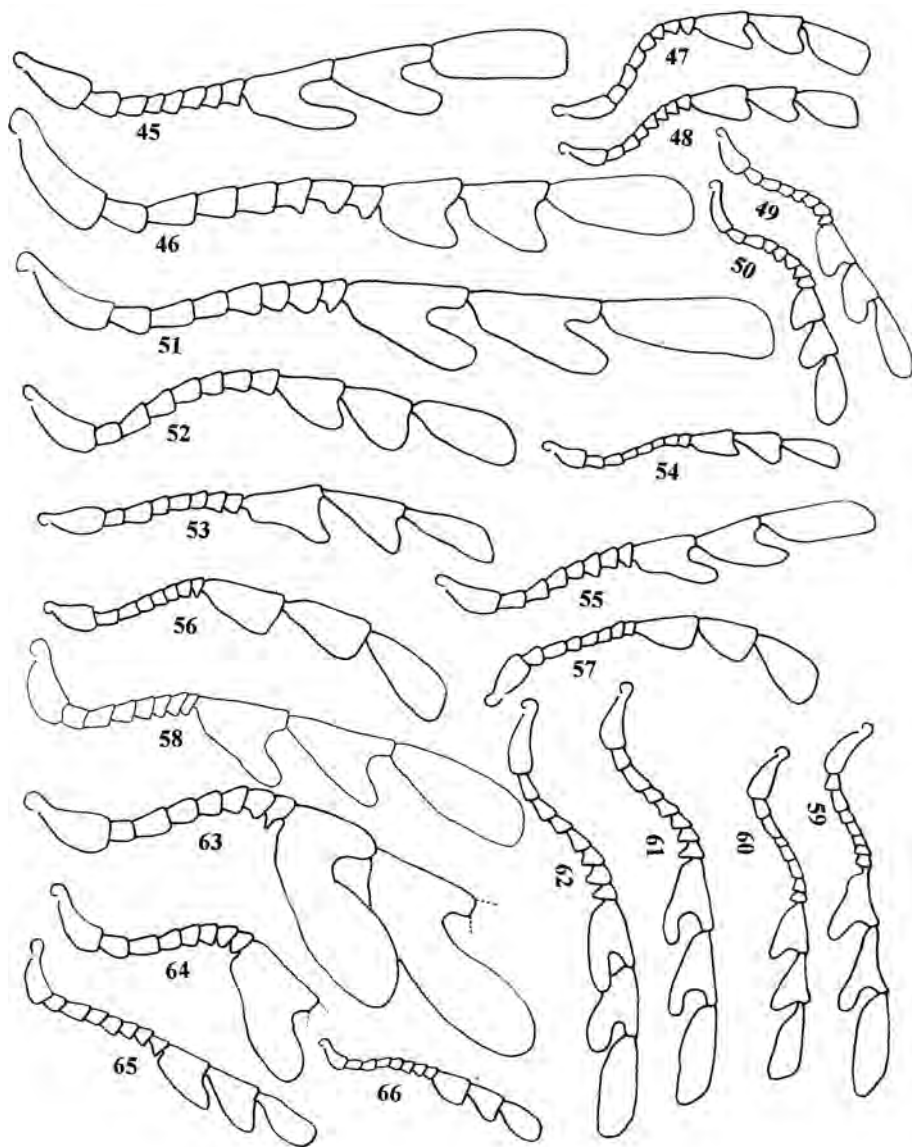
***Pelonium abacum* OPITZ nov.sp. (Figs 22, 23, 223, 315)**

H o l o t y p e : ♀. Amazonas, Terapote, M. de Mathan, 4th Trimestre, 1885 (MNHN).

P a r a t y p e s : Six. Peru: Provincia de San Martin, Terapoto 4th Trimestre, 1885 (WOPC, 1); Bolivia: Departamento de Santa Cruz, Andres Ibanes, Potrerillos del Guenda, Reserva Natural, 17°40'S; 63°27'W, 16-22Oct, 2006, 370 m, Wappes, Nearn & Eya (ACMT, 1); idem, Snale farm, 14-16-X-2011, 370-400 m, Skillman & Wappes (FWSC, 1); Buena Vista, F & F Hotel, 21-25-X-2003, Morris, Nearn, Wappes (WOPC, 1); idem, 23-25-X-2000, R. Morris (RFMC, 1). Brazil: Estado do Mato Grosso, Corumba (FMNH, 1).

D i a g n o s i s : The epipleuron is broadly yellow near the humerus and elytral apex. This characteristic will distinguish the members of this species from others in the *P. photinoides*-group.

D e s c r i p t i o n : Size: Length 15.0 mm; width 5.0 mm. Form: As in Fig. 315. Color: Mouthparts testaceous, except mandibles black; castaneous; antenna brown; pronotum, arch testaceous, remainder of disc castaneous; elytra mostly castaneous, with two yellow lunules near each epipleuron, elytral apex infuscated. Head: Antennomeres 6-8 slightly serrate, capitular antennomeres 9 and 10 with short collateral branches (Figs 22, 23), antennomere 11 oblong-subtruncate; frons much narrower than width of eye (EW/FW 40/18). Thorax: Pronotum slightly oblong (PW/PL 100/108) interstitial spaces arenose, side margin with pronounced tubercle, disc finely punctate and shallowly undulate; elytral asetiferous punctation minute and profusely distributed throughout disc (EL/EW 315/95); protibial anterior margin spinose. Abdomen: Pygidium scutiform; aedeagus (Fig. 223) slightly sclerotized ventrally, phallic apex large, triangular, and with an extended apical lobe.



Figs 45-66: Antennae. (45) *Pelonium circum*, male. (46) *P. circum*, female. (47) *P. cribellum*, male. (48) *P. cribellum*, male. (49) *P. anteguttatum*, male. (50) *P. anteguttatum*, female. (51) *P. effusum*, male. (52) *P. effusum*, female. (53) *P. inaequalicolle*, male. (54) *P. inaequalicolle*, female. (55) *P. fissilum*, female. (56) *P. condilum*, male. (57) *P. condilum*, female. (58) *P. caborojo*, male. (59) *P. buenavista*, male. (60) *P. buenavista*, female. (61) *P. caudiculum*, male. (62) *P. caudiculum*, female. (63) *P. atraliculum*, male. (64) *P. atrahumeratum*, male. (65) *P. atrahumeratum*, female. (66) *P. taino*, female.

Variation: Size: Length 10.0-15.0 mm; width 3.5-5.0 mm. Other than body length, the available specimens are quite homogeneous.

Natural history: The specimen from Bolivia was collected in October.

Distribution (Fig. 315): This species is known only from South America, the **Holotype** from Peru and the paratypes from Bolivia and Brazil.

Etymology: The specific epithet, *abacum*, stems from the Latin *abacus* (= divided into square components). The name refers to the four yellow lunules that form near the corners of the elytral disc.

***Pelonium bibullum* OPITZ nov.sp. (Figs 32, 224, 315, 331)**

Holotype: ♂. BRAZIL: Mato Grosso, Sinop, X-1974, Moacir Alvarenga (FSCA).

Diagnosis: These checkered beetles resemble superficially those of *P. granosum*, but in *P. bibullum* the aedeagus apex is bilobed, which is not the case in *P. granosum* specimens.

Description: Size: Length 9.5 mm; width 3.0 mm. Form: As in Fig. 331. Color: Castaneous, except mandibles and antennae dark brown. Head: Funicular antennomeres 6-8 serrate, capitulum longer than combined length of funicular antennomeres, capitular antennomeres 9 and 10 with collateral branches (Fig. 32), antennomere 11 oblong-subquadrate; frons much narrower than width of eye (EW/FW 27/10). Thorax: Pronotum slightly oblong (PW/PL 65/71), interstitial spaces arenose, side margin with tubercle, disc finely punctate; elytral asetiferous punctation small, distributed throughout disc (EL/EW 210/60); protibial anterior margin minutely spinose. Abdomen: Pygidium scutiform; aedeagus (Fig. 224), apex bilobate, phallobasic rod bifid.

Natural history: The available specimens were collected in October.

Distribution (Fig. 315): This species is known only from Brazil.

Etymology: The trivial name, *bibullum*, is a Latin compound name that stems from the prefix *bi-* (= two) and the noun *bulla* (= bubble). I refer to the bilobed condition of the phallic apex.

***Pelonium buenavista* OPITZ nov.sp. (Figs 59, 60, 225, 315, 332)**

Holotype: ♂. BOLIVIA, Santa Cruz, 4-6 km SSE Buena Vista, F & F Hotel, Oct 22-31 2002 Wappes & Morris (MNKM).

Paratype: One. Bolivia: Santa Cruz, 4-6 km SSE Buena Vista, F & F Hotel, 23-26 October 2000 Wappes & Morris (ACMT).

Diagnosis: These beetles resemble superficially those of *P. photinoides*, but the pronotum of *P. buenavista* specimens is marked by two large light brown maculae. In *P. photinoides* specimens the pronotum is nearly entirely dark brown.

Description: Size: Length 12.0 mm; width 4.0 mm. Form: As in Fig. 332. Color: Testaceous, except mandibles dark brown, pedicel and funicular antennomeres brown, anterior margin of funicular antennomeres brown, pronotal disc with two large light brown maculae, elytral disc broadly yellow along epipleural margin, and sutural margin yellow, but infuscated distally. Head: Funicular antennomeres 6-8 serrate, capitular antennomeres 9 and 10 with collateral branch (Figs 59, 60), antennomere 11 oblong-subtruncate; frons

much narrower than width of eye (EW/FW 30/ 15). Thorax: Pronotum slightly oblong (PW/PL 75/85), interstitial spaces arenose, side margin with tubercle, disc finely punctate; elytral asetiferous punctation minute, distributed throughout disc, epipleuron region slightly explanate (EL/EW 250/65); protibial anterior margin minutely spinose. Abdomen: Pygidium scutiform; aedeagus (Fig. 225) triangular, apex triangular, phallobasic apodeme bifid.

V a r i a t i o n : The available specimens are quite homogeneous.

N a t u r a l h i s t o r y : The available specimens were collected in October.

D i s t r i b u t i o n (Fig. 315): This species is known only from Bolivia.

E t y m o l o g y : The trivial name, *buenavista*, constitutes a noun in apposition and refers to the type locality.

***Pelonium divericoatum* OPITZ nov.sp. (Figs 82, 83, 226, 315, 333)**

H o l o t y p e : ♂. Tunapuna, Trinidad, W. I. Aug. 11-13, 1969, H. & A. Howden (CMNC).

P a r a t y p e s : Four. Trinidad: West Indies, County of Saint George, Morne Bleu, 6-VIII-1969, 2700', H. & A. Howden (WOPC); idem, 8-VIII-1969, 2700', H. & A. Howden (CMNC); Trinidad, F. Birch, 1904 (BMNH, 1); Simla Field Station, Arima Valley, 17-27-V-1977, P. Feinsinger (FMNH, 1).

D i a g n o s i s : Within the *P. photinoides*-group, only in specimens of *P. divericoatum* is the distal half of the epipleural region broadly yellow. Males have a secretory pit on the distal portion of the metatibiae.

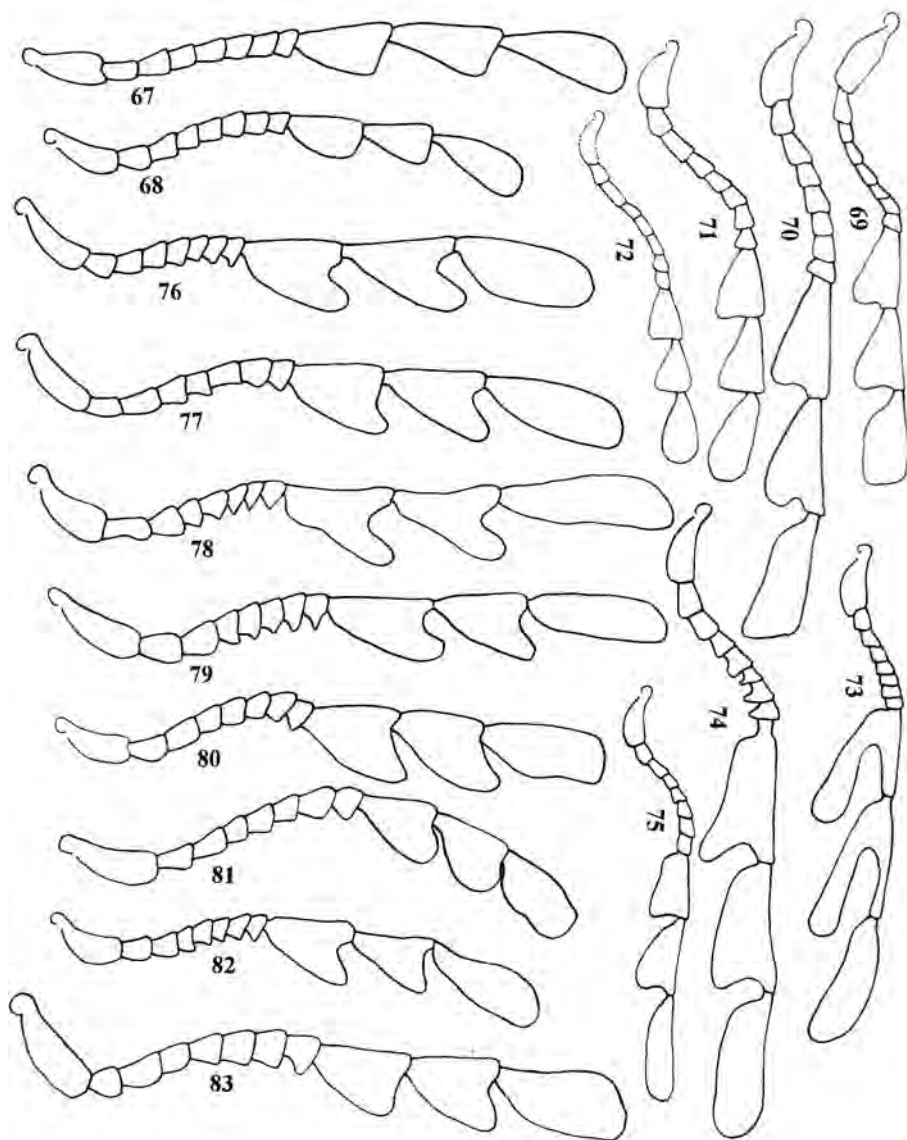
D e s c r i p t i o n : Size: Length 8.3 mm; width 2.9 mm. Form: As in Fig. 333. Color: Mostly testaceous, cranium, scape, pedicel, pronotal disc, prothoracic tibiae, pterothoracic venter, and tarsi brown; elytral disc slightly yellow in posterior half near epipleural margin and with a faint narrow line near sutural margin. Head: Funicular antennomeres 5-8 serrate, caputular antennomeres 9 and 10 with short collateral branch (Figs 82, 83), antennomere 11 oblong-subtruncate; frons much narrower than width of eye (EW/FW 20/9). Thorax: Pronotum slightly oblong (PW/PL 51/55), interstitial spaces arenose, side margin with shallow tubercle, disc finely punctate; elytral asetiferous punctation minute, distributed throughout disc, epipleuron region slightly explanate (EL/EW 190/45); protibial anterior margin roughened, metatibiae with secretory pit. Abdomen: Pygidium scutiform; aedeagus (Fig. 226) triangular, apex triangular-lobular, middle of base with narrow posterior extension, phallobasic apodeme bifurcated distally.

V a r i a t i o n : Size: Length 6.5-11.0 mm; width 2.8-4.0 mm. The darker regions of the pronotal disc may show a reddish tinge.

N a t u r a l h i s t o r y : The available specimens were collected during August, the paratypes at 823 m.

D i s t r i b u t i o n (Fig. 315): This species is known from the West Indies island of Trinidad.

E t y m o l o g y : The specific epithet, *divericoatum*, is a Latin adjective that stems from *diverico* (= spread apart. The name refers to the distal bifurcation of the phallobasic apodeme.



Figs 67-83: Antennae. (67) *Pelonium caymanensis*, male. (68) *P. caymanensis*, female. (69) *P. dapsilum*, female. (70) *P. denotatum*, male. (71) *P. disconotatum*, male. (72) *P. disconotatum*, female. (73) *P. inagua*, male. (74) *P. spectabile*, male. (75) *P. spectabile*, female. (76) *P. careoitum*, male. (77) *P. careoitum*, female. (78) *P. divisum*, male. (79) *P. divisum*, female. (80) *P. disjunctum*, male. (81) *P. disjunctum*, female. (82) *P. divericoatum*, male. (83) *P. divericoatum*, female.

***Pelonium divisum* OPITZ nov.sp. (Figs 78, 79, 227, 315, 334)**

H o l o t y p e : ♀. Goyaz (Goias, Brazil) (SDEI).

P a r a t y p e s : Six. Brazil, Goias, Jatai, (SDEI, 1; WOPC, 1). Bolivia: Departamento de Santa Cruz, Potreillos del Guenda, Snake Farm, 17°40'S; 63°27'W, 20-23-X 2011, 370-400 m, Skillman & Wappes, (FWSC, 1); Buena Vista, Flora & Fauna Hotel, 14-16/X/2000, R. Morris (RFMC, 1); idem, October 18-25, 1992, E. Giesbert (FSCA,1); Departamento de Cochabamba, Germain (MNHN, 1).

D i a g n o s i s : The pronotum shows two large reddish maculae. This characteristic will distinguish the members of this species from others in the *P. photinoides*-group. Males have a secretory pit on the distal portion of the metatibiae.

D e s c r i p t i o n : Size: Length 8.0 mm; width 3.0 mm. Form: As in Fig. 334. Color: Mouthparts testaceous, except maxillary and labial palpomeres and mandibles dark brown; cranium testaceous, except venter brown; antenna brown, except disc of funicular antennomeres testaceous; pronotum tricolorous, lower sides and pronotal collar brown, disc with two large reddish macula, latter divided by brown basal V-like marking, pronotal arch testaceous, pterothorax brown; elytra bicolorous, disc light brown at center, brown region flanked by narrow yellow line near sutural margin and much broader yellow marking near posterior half of epipleural margin, sutural margin dark brown; legs, femora testaceous distally, brown in remainder, prothoracic and mesothoracic tibiae brown, metathoracic tibiae testaceous, tarsi brown. Head: Funicular antennomeres 5-8 serrate, capitular antennomeres 9 and 10 with short collateral branch (Figs 78, 79), antennomere 11 oblong-subtruncate; frons much narrower than width of eye (EW/FW 20/10). Thorax: Pronotum slightly oblong (PW/PL 50/55), interstitial spaces arenose, side margin with shallow tubercle, disc finely punctate; elytral asetiferous punctation minute, distributed throughout disc, epipleuron region slightly explanate (EL/EW 185/55); protibial anterior margin minutely spinose, male metatibiae with secretory pit. Abdomen: Pygidium scutiform; aedeagus (Fig. 227) triangular, apex triangular-lobular, middle of base with narrow posterior extension.

V a r i a t i o n : Size: Length 8.0- 9.5 mm; width 3.0-3.5 mm. The brown V-shaped marking at the base of the pronotal disc may extend forward to reach the pronotal anterior margin.

N a t u r a l h i s t o r y : Specimens have been collected during October, one at an altitude that ranges from 370 to 400 m.

D i s t r i b u t i o n (Fig. 315): This species is known from Bolivia and Brazil.

E t y m o l o g y : The specific epithet, *divisum* (= cut), is a Latin adjective. The name refers to the bifurcated brown marking at the base of the pronotum.

***Pelonium granosum* OPITZ nov.sp. (Figs 95, 228, 315, 335)**

H o l o t y p e : ♂. BRAZIL: Santa Catarina: Nova Teutonia, 27°11'S 52°23'W, X-1974, Fritz Plaumann (ZMHB).

P a r a t y p e : One. Brazil: Estado do Santa Catarina: Nova Teutonia, 2711S 5223W, X-1974, Fritz Plaumann (WOPC).

D i a g n o s i s : These checkered beetles resemble superficially those of *P. bibullum*. But in *P. granosum* the aedeagus apex is not bilobed, which is the case in *P. bibullum* specimens.

Description: Size: Length 11.4 mm; width 4.0 mm. Form: As in Fig. 335. Color: Castaneous, except mandibles and antennae dark brown. Head: Funicular antennomeres 5-8 serrate, capitular antennomeres 9 and 10 with collateral branch (Fig. 95), antennomere 11 oblong, frons much narrower than width of eye (EW/FW 35/ 15). Thorax: Pronotum slightly oblong (PW/PL 80/85), interstitial spaces arenose, side margin with tubercle, disc finely punctate; elytral asetiferous punctation small, distributed throughout disc (EL/EW 250/70); protibial anterior margin minutely spinose. Abdomen: Pygidium scutiform; aedeagus (Fig. 228) triangular, apex lobate.

Variation: Size: Length 9.5-11.4 mm; width 3.0- 4.0 mm. Other than body size, the available specimens are quite homogeneous.

Natural history: The available specimens were collected in October.

Distribution (Fig. 315): This species is known only from southern Brazil.

Etymology: The trivial name, *granosum*, is a Latin noun that stems from *granum* (= seedy). I refer to the sieve-like punctation of the elytral disc.

***Pelonium latusculum* OPITZ nov.sp. (Figs 101, 102, 229, 315, 336)**

Holotype: ♂. BRAZIL: Bahia, Itapetinga, IX-1969, F. M. Oliveira (FSCA).

Paratypes: Twenty-three. Brazil: Estado do Bahia, Villa Victoria, 1890, Ch Pujol (MNHN, 1; WOPC, 1); Cachimbo, 1880, Ch Pujol (MNHN, 4; WOPC, 3); Estado do Goiás, Jataí (MNHN, 8; SDEI, 1; WOPC, 1); Rio Verde (MNHN, 1); Estado do Minas Gerais, Mineiro, 1912, H. Donckier (MNHN, 1); Estado do Santa Catarina, Nova Teutonia, X-1972, F. Plaumann (WOPC, 1); Estado do Espírito Santo, Linhares, V-1972, M. Alvarenga (WOPC, 1);

Diagnosis: There is a broad yellow marking in the posterior region of the sutural margin. This characteristic will distinguish the members of *P. latusculum* from others in the *P. photinoides*-group.

Description: Size: Length 12.5 mm; width 4.5 mm. Form: As in Fig. 336. Color: Mouthparts brown; antenna dark brown; cranium mostly castaneous, upper frons testaceous; pronotum bicolored, testaceous at upper sides and at center of disc; legs mostly brown, mesofemora and metafemora testaceous distally; elytra mostly brown, epipleural and sutural margins yellow at middle; abdomen testaceous. Head: Capitular antennomeres 9 and 10 with short or slightly longer collateral branch (Figs 101, 102), antennomere 11 subtruncate; frons much narrower than width of eye (EW/FW 38/15). Thorax: Pronotum slightly oblong (PW/PL 95/100), interstitial spaces arenose, side margin with well-developed tubercle, disc finely punctate; elytral asetiferous punctation very small, profusely distributed throughout disc (EL/EW 270/83); protibial anterior margin spinose. Abdomen: Pygidium scutiform; aedeagus (Fig. 229) slightly sclerotized ventrally, phallic apex slightly uncinat.

Variation: Size: Length 11.0-13.0 mm; width 3.8-4.5 mm. The male 9th and 10th antennomeres have longer collateral branches than those found in females.

Natural history: Specimens have been collected during May, September, and October.

Distribution (Fig. 315): This species is known only from Brazil.

Etymology: The specific epithet, *latusculum*, stems from the Latin *latus* (= flank). I refer to the yellow marking narrow testaceous mark at the middle of the epipleural margin.

***Pelonium leukotaxium* OPITZ nov.sp. (Figs 103, 230, 315, 337)**

H o l o t y p e : ♀. BRAZIL: Espirito Santo, Linhares, IX-1973, Moacir Alvarenga (FSCA).

P a r a t y p e s : Sixty-eight. Belize: Distrito Cayo, Chiquibul Forest Reserve, Las Cuevas field station, 88°59'W 16°44'N, June 2006, James Kitson (BMNH, 1). Costa Rica: Provincia de Guanacaste, 3 km SE Rio Naranjo, 1-3 July 1993, F. D. Parker (EMUS, 1); Guanacaste, Volcán Orosi, February 1992, 600 m, F. Araya (MUCR, 1); idem, 28 February-10 March 1992, E. Lopez (WOPC, 1); Guanacaste, Parque Nacional Rincón de la Vieja, April 1994, 800 m, D. Garcia (WOPC, 1); Panamá: Provincia de Colon, Fort Sherman, 9°17'N 79°50'W, 4 May 2002, on *Cydista aequinoctialis*, F. Ødegaard (WOPC, 1); Panamá, Barro Colorado Island, 29 V-4 VI 1980, H. Wolda (WOPC, 2); idem, 10-17 V 1980, H. Wolda (WOPC, 1); idem, V 7 1980, Henk Wolda (UCDC, 1; WOPC, 1); Provincia de Panamá, Bayano District, vicinity Ipeti, May 16 1982, E. Giesbert (FSCA, 1); 11-15 km N El Llano, 13 May 1991, 350 m, R. Turnbow (RHTC, 1). French Guiana: Subdivision of Kourou, Kourou Piste Soumourou, 16/23.VIII. 2001, Denis Faure (WOPC, 1). Bolivia: Departamento de Santa Cruz, Potrerillo del Guenda, Snake Farm, 17°40'S 63°27'W, 2-3-XII-2012, Skillman & Wappes; Santa Cruz, Amboro National Park, Los Volcanes, 18°06'S 63°36'W, 20-XI-12-XII-2004, 1000 m, Malaise trap on tree fall, M. V. I. Barclay, & H. Mendel (BMNH, 2); Santa Cruz, 3.7 km SSE Buena Vista, Hotel Flora & Fauna, 14-28-X-2000, 430 m, B. K. Dozier (FSCA, 1; WOPC, 2); idem, 23-25/X/00, R. Morris (RFMC, 1; WOPC, 1); idem, 17-20-X-2000, R. Morris (RFMC, 5); idem, 22-26-X- 2002, Morris & Wappes (WOPC, 2); idem, 22-XI-2013, Skillman & Wappes (FWSC, 1); idem, 14-16-X-2000, R. Morris (WOPC, 1); idem, 27-31-X-2002, Morris & Wappes (WOPC, 1); idem, October 22-31 2002, Wappes & Morris (ACMT, 3; WOPC, 2); idem, 14-16 October 2000, Wappes & Morris (ACMT, 1); idem, 27-29 October 2000, Wappes & Morris (ACMT, 1); Santa Cruz, Porterillos del Guenda, 40 km NW Santa Cruz de la Sierra, X/1-10/08, Morris & Wappes (RFMC, 1); Departamento de Cochabamba, Germain (MNHN, 1). Brazil: Estado do Mato Grosso, Sinop, X-1976, M. Alvarenga (SDEI, 1; WOPC, 5); idem, X-1974 (WOPC, 2); idem, X-1973 (WOPC, 1); Mato Grosso, 1886, P. Germain (MNHN, 1); Estado do Rondônia, 62 km SE Ariquemes, 5-16 November 1996, W. J. Hanson (EMUS, 2; FMNH, 1; WOPC, 2); idem, 7-18 November 1995 (EMUS, 2); Estado do Pará, Óbidos, IX-1959, A. Maller (DZUP, 1); Estado do Bahia, Chapada (CMNH, 1).

D i a g n o s i s : Most of the sutural margin is broadly yellow. This characteristic will distinguish the members of *P. leukotaxium* from others in the *P. photinoides*-group. Males have a secretory pit on the distal portion of the metatibiae.

D e s c r i p t i o n : Size: Length 10.0 mm; width 3.3 mm. Form: As in Fig. 337. Color: Testaceous, except mandibles and antenna black, front tarsi brown, and pronotal disc and elytral disc with light brown regions and yellow midline broad fusiform line that extends from elytral apical 1/4 to elytral apex. Head: Capitular antennomeres 9 and 10 with short collateral branch (Figs 103), antennomere 11 oblong-subtruncate; frons much narrower than width of eye (EW/FW 29/13). Thorax: Pronotum slightly oblong (PW/PL 70/78), side margin with broad tubercle, disc finely punctate, interstitial spaces arenose; elytral asetiferous punctation very small, distributed throughout disc (EL/EW 220/60); protibial anterior margin with one distal spine; males with metatibial secretory pit. Abdomen: Pygidium scutiform; aedeagus (Fig. 230) short, with short subglobal apex

V a r i a t i o n : Size: Length 8.0- 15.0 mm; width 3.0-5.0 mm. The yellow fusiform marking on the elytra varies in expression.

N a t u r a l h i s t o r y : Specimens have been collected throughout the year, at elevations that range from 350 to 1000 m. One specimen was taken by Froede Ødegaard on the blossoms of *Cydista aequinoctialis* (L.) MIERS; two others were captured in a Malaise trap on tree fall.

D i s t r i b u t i o n (Fig. 315): This species is known from Belize, Costa Rica, Panamá, French Guiana, Bolivia, and Brazil.

E t y m o l o g y: The specific epithet, *leukotaxium*, is a compound name that stems from the Greek *leukos* (= white) and the Greek *taxis* (= line). The name refers to the yellow fusiform mark at the middle of the elytral disc.

***Pelonium photinoides* (CHEVROLAT) (Figs 120, 131, 315, 338)**

Orthopleura photinoides CHEVROLAT, 1876: 42. Lectotype. ♂. Here designated. (Brazil) Brazilia, Petrópolis (MNHN), CORPORAAL 1950: 290 (*Corinthiscus*). Chevrolat did not specify in his description whether his nominal species is based on one specimen. Therefore, I invoke Recommendation 73F of the ICZN (1999) and designate a lectotype for this nominal species.

D i a g n o s i s: These beetles resemble superficially those of *P. buenavista*, but the pronotum of *P. photinoides* specimens is nearly entirely dark brown. In *P. buenavista* specimens the pronotum shows two large light brown maculae. Males have a secretory pit on the distal portion of the metatibiae.

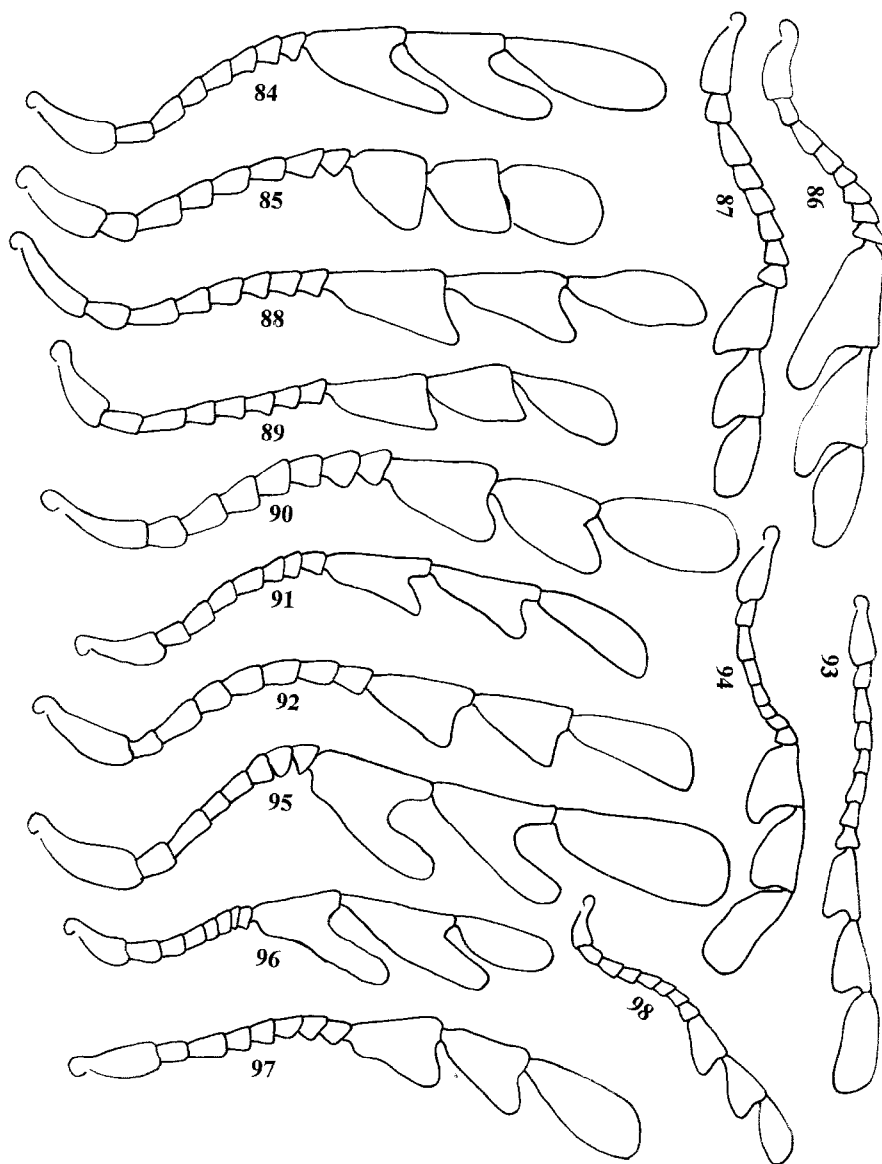
R e d e s c r i p t i o n: Size: Length 10.5 mm; width 4.0 mm. Form: As in Fig. 338. Color: Maxillae and labium testaceous, except terminal palpomeres brown, labrum and mandibles brown; antenna brown; cranium and pronotum black, except cranium with testaceous macula on upper frons and pronotum with three testaceous maculae behind pronotal arch; profemur testaceous in basal half, black in remainder, mesofemur infuscated distally, metafemur testaceous, tibia with dorsal and lateral facies brown, tibial venter testaceous, tarsus brown; elytral disc brown, epipleural margin broadly yellow, sutural margin yellow; abdomen brown. Head: Funicular antennomeres 6-8 serrate, capitular antennomeres 9 and 10 with short collateral branch (Figs 120, 121), antennomere 11 oblong-ova; frons much narrower than width of eye (EW/FW 28/17). Thorax: Pronotum (Fig.) slightly oblong (PW/PL 75/80), interstitial spaces arenose, side margin with well-developed tubercle, disc moderately punctate; elytral asetiferous punctation randomly distributed, small and diminutive towards elytral apex, (EL/EW 240/53); protibial anterior margin spinose, male metatibia with secretory pit. Abdomen: Pygidium scutiform; aedeagus (Fig. 231) slightly sclerotized ventrally, phallic apex spheroid.

V a r i a t i o n: Size: Length 11.0-12.0 mm; width 3.8-4.0 mm.

D i s t r i b u t i o n (Fig. 315): Two specimens from Brazil; one deposited in MNHN and one in WOPC.

The *P. lampyroides* species group

The members of this species group have minute asetiferous punctures (Fig. 218) that are profusely distributed on the elytral disc. The punctures are not arranged in striae and may be so small that they are obscured by a profuse covering of short setae (Fig. 211). There are 22 species in this group whose distribution includes Argentina, Brazil, Ecuador, French Guiana, Guyana, Panamá, and the The Grenadines (Mustique Island, Union Island).



Figs 84-98: Antennae. (84) *Pelonium erymanthoides*, male. (85) *P. erymanthoides*, female. (86) *P. geniculatum*, male. (87) *P. geniculatum*, female. (88) *P. fasciculatum*, male. (89) *P. fasciculatum*, female. (90) *P. fuscum*, male. (91) *P. gigantum*, male. (92) *P. gigantum*, female. (93) *P. fucogonium*, female. (94) *P. infusum*, male. (95) *P. granosum*, male. (96) *P. junctum*, male. (97) *P. junctum*, female. (98) *P. taino*, male.

***Pelonium atraliculum* OPITZ nov.sp. (Figs 39, 63, 232, 316, 339)**

H o l o t y p e : ♀. ARGENTINA: Salta Medanus ca. Cafayate, 8-XI-2004, L. Stange, Blacklight (FSCA).

P a r a t y p e s : Eight. Bolivia: Departamento de Tarija, Tarija, 23 km E Vilamontes, 15/XII/2011, 360 m, R. Morris. (RFMC, 1). Argentina: Provincia de Catamarca, Belén, La Cienega, Catamarca, 1925, Weiser Wolters (SDEI, 3); Belén, Catamarca, 1-XII-1970A. Cobos (WFBC, 1; WOPC, 1). Provincia de Salta, Salta Medanus ca. Cafayate, 8-XI-2004, blacklight, L. Stange (WOPC, 1). Provincia de Tucumán, Tafi del Valle, 28.XI.1965, E. W. Willink-A. Garcia (IMLA, 1).

D i a g n o s i s : The combination of forebody (head & prothorax) entirely black and elytral disc with two large black maculae will distinguish the members of this species from others in the *P. lampyroides*-group

R e d e s c r i p t i o n : Size: Length 14.0 mm; width 3.7 mm. Form: As in Fig. 339. Color: Black, except elytra with testaceous regions behind anterior margin, along epipleural and sutural margins, and with slight inward extension at middle of disc. Head: Antennomeres 6-8 slightly serrate, capitular antennomeres 9 and 10 with short collateral branch (Figs 39, 63), antennomere 11 ovate; frons narrow (EW/FW 34/22). Thorax: Pronotum oblong (PW/PL 88/98), side margin with shallow tubercle, disc coarsely punctate, disc with three glabrous streaks at base; elytral asetiferous punctation very small, punctures become smaller towards elytral apex (EL/EW); protibial anterior margin spinose. Abdomen: Pygidial body scutiform; aedeagus (Fig. 232) with curvate phallic apex, phallic plates narrow.

V a r i a t i o n : Size: Length 14.0-18.0 mm; width 4.5-6.5 mm. The black maculation of the anterior 1/2 of the elytral disc varies in expression.

N a t u r a l h i s t o r y : The available specimens were collected in November and December; two with a black light, one at 360 m.

D i s t r i b u t i o n (Fig.): This species is known from Bolivia and Argentina.

E t y m o l o g y : The specific epithet is a Latin compound name that stems from *atra* (= black) and the noun *allicula* (= coat). I refer to the predominant body color of this beetle.

***Pelonium careoitum* OPITZ nov.sp. (Figs 76, 77, 233, 322, 340)**

H o l o t y p e : ♀. BRAZIL: Pará, Jacareacanga, X-1969, F. R. Barrosa (FSCA).

P a r a t y p e s : Six. French Guiana: Subdivision Saint-Laurent-du-Maroni, Nouveau Chantier, January (MNHN, 1). Ecuador: Provincia de Orellana, Res. Ethnica Waorani, 1 km S Onkone Gare Camp, 0039S 7626W, 23-I-1994, 220 m, T. L. Erwin (USNM, 1); idem, 6-X-1994, 220 m, T. L. Erwin (USNM, 1). Brazil: Estado do Rondônia, 62 km SW Atiquemes, nr Fzda. Rancho Grande, Nov, 1-17-1997, B. K. Dozier (FSCA.1); idem, 7-18 Nov. 1995, W. J. Hanson (EMUS, 1; SDEI, 1).

D i a g n o s i s : The members of this species group resemble superficially those of *P. ustulatum*, but in *P. careoitum* specimens the elytral apex is broadly yellow which is not the case in *P. ustulatum* specimens.

D e s c r i p t i o n : Size: Length 8.0 mm; width 3.0 mm. Form: As in Fig. 340. Color: Testaceous, except mandibles black, pronotal disc with paralateral infuscations, epipleural margin yellow, and sutural margin infuscated at elytral apex. Head: Capitular antennomeres 9 and 10 with short collateral branch (Figs 76, 77), antennomere 11 oblong-subtruncate; frons much narrower than width of eye (EW/FW 23/10). Thorax: Pronotum slightly oblong (PW/PL 56/66), side margin with shallow tubercle, disc coarsely punctate;

elytral asetiferous punctation randomly distributed, small and diminutive towards elytral apex, (EL/EW 190/52); protibial anterior margin minutely spinose. Abdomen: Pygidium scutiform; aedeagus (Fig. 233) slightly sclerotized ventrally, phallic apex spheroid.

Variation: Size: Length 8.0-8.5 mm; width 3.8-3.2 mm. Other than body size, the available specimens are quite homogeneous.

Distribution (Fig. 322): This species is known from French Guiana, Ecuador, and Brazil.

Etymology: The trivial name, *careoitum*, is a Latin derivative that stems from *careo* (= be without). I refer to the lack of dark maculae on the elytral disc.

***Pelonium caudiculum* OPITZ nov.sp. (Figs 61, 62, 234, 316, 341)**

Holotype: ♂. BRAZIL, Rondonia, 62 km SE Ariquemes, 22-31 Oct 1997, W. J. Hanson (FSCA).

Paratypes: Two. Brazil: Estado do Rondônia, 62 km SE Ariquemes, 22-31 Oct 1997, W. J. Hanson (EMUS, 1); Rondonia, 62 km SW Ariquemes, near Fzda Rancho Grande, Nov. 1-17. 1997 (FSCA, 1).

Diagnosis: The members of this species resemble superficially those of *P. regina*, but in *P. caudiculum* specimens the epipleural margin near elytral apex is broadly yellow, which is not the case in *P. regina* specimens.

Description: Size: Length 13.0 mm; width 4.5 mm. Form: As in Fig. 341. Color: Testaceous, except mandibles dark brown, pronotal disc with castaneous macula, elytral apical 1/5 yellow near epipleural margin, and elytral apex brown. Head: Funicular antennomeres 5-8 serrate, capitular antennomeres 9 and 10 with collateral branch (Figs 61, 62), antennomere 11 oblong-subtruncate; frons much narrower than width of eye (EW/FW 39/15). Thorax: Pronotum slightly oblong (PW/PL 95/103), side margin with tubercle, disc finely punctate; elytral asetiferous punctation minute, distributed throughout disc, epipleuron region slightly explanate (EL/EW 265/75); protibial anterior margin minutely spinose. Abdomen: Pygidium scutiform; aedeagus (Fig. 234) triangular, apex triangular.

Variation: Size: Length 12.0-13.0 mm; width 3.5-4.5 mm. Except for body size, the available specimens are quite homogeneous.

Natural history: Specimens have been collected during October and November.

Distribution (Fig. 316): This species is known only from Brazil.

Etymology: The specific epithet, *caudiculum* (= tail), is a Latin noun. The name refers to the infuscation on the elytral apex.

***Pelonium circum* OPITZ nov.sp. (Figs 45, 46, 235, 316, 342)**

Holotype: ♂. Rio Caraguata, M. Grosso, Brazil, XI-1953, 21°48'S; 52°27'W; 400 M alt., Fritz Plaumann leg (FMNH). Paratypes: Eight. Brazil: Estado do Goiás, Jatai, Dayrolle (MNHN, 1); Estado do Mato Grosso, XI-1953, 21°48'S; 52°27'W; 400 M alt., Fritz Plaumann (FMNH, 3; WOPC, 2); idem, XII-1953, 21°48'S; 52°27'W; 400 M alt., Fritz Plaumann (FMNH, 1); idem, I-1954, 21°48'S; 52°27'W; 400 M alt., Fritz Plaumann (WOPC, 1).

Diagnosis: The members of this species resemble superficially those of *P. optabile*, but in *P. optabile* specimens the elytral disc shows a long narrow yellow line which is not the case in *P. circum* specimens.

Description: Size: Length 9.0 mm; width 3.5 mm. Form: As in Fig. 342. Color: Mouthparts testaceous, except mandibles black; cranium testaceous, except venter and post ocular region brown; antenna brown, except disc of 11th antennomere testaceous; pronotum testaceous, except center of disc infuscated; elytral disc with light brown markings near anterior margin, epipleural margin widely yellow, remainder of disc light brown. Head: Capitular antennomeres 9 and 10 with short collateral branch (Figs 45, 46), antennomere 11 oblong-subtruncate; frons much narrower than width of eye (EW/FW 20/12). Thorax: Pronotum slightly oblong (PW/PL 54/60), side margin with shallow tubercle, disc finely punctate; elytral asetiferous punctation minute, distributed throughout disc, epipleuron region slightly explanate (EL/EW 200/60); protibial anterior margin minutely spinose. Abdomen: Pygidium scutiform; aedeagus (Fig. 235), phallic apex digitiform, phallic lobes with basal line, phallic plates broad.

Variation: Size: Length 8.0-13.5 mm; width 3.0-5.0 mm. The yellow marking on the elytra disc varies in expression.

Natural history: Specimens have been collected during November and January, at 400 m.

Distribution (Fig. 316): This species is known only from Brazil.

Etymology: The specific epithet, *circum* (= around), is a Latin adjective. The name refers to the coloration of the 11th antennomere; the testaceous disc is encircled by a brown border.

***Pelonium cribellum* OPITZ nov.sp. (Figs 47, 48, 236, 316, 343)**

Holotype: ♂. BRAZIL: Mato Grosso, Sinop, X-1974, Moacir Alvarenga (FSCA).

Paratypes: Two. Brazil: Estado do Mato Grosso, Sinop, X-1974, Moacir Alvarenga (WOPC, 2).

Diagnosis: The members of this species resemble superficially those of *P. wappesi*, but in *P. wappesi* specimens the tibiae and tarsi are black, whereas in *P. cribellum* specimens they are testaceous.

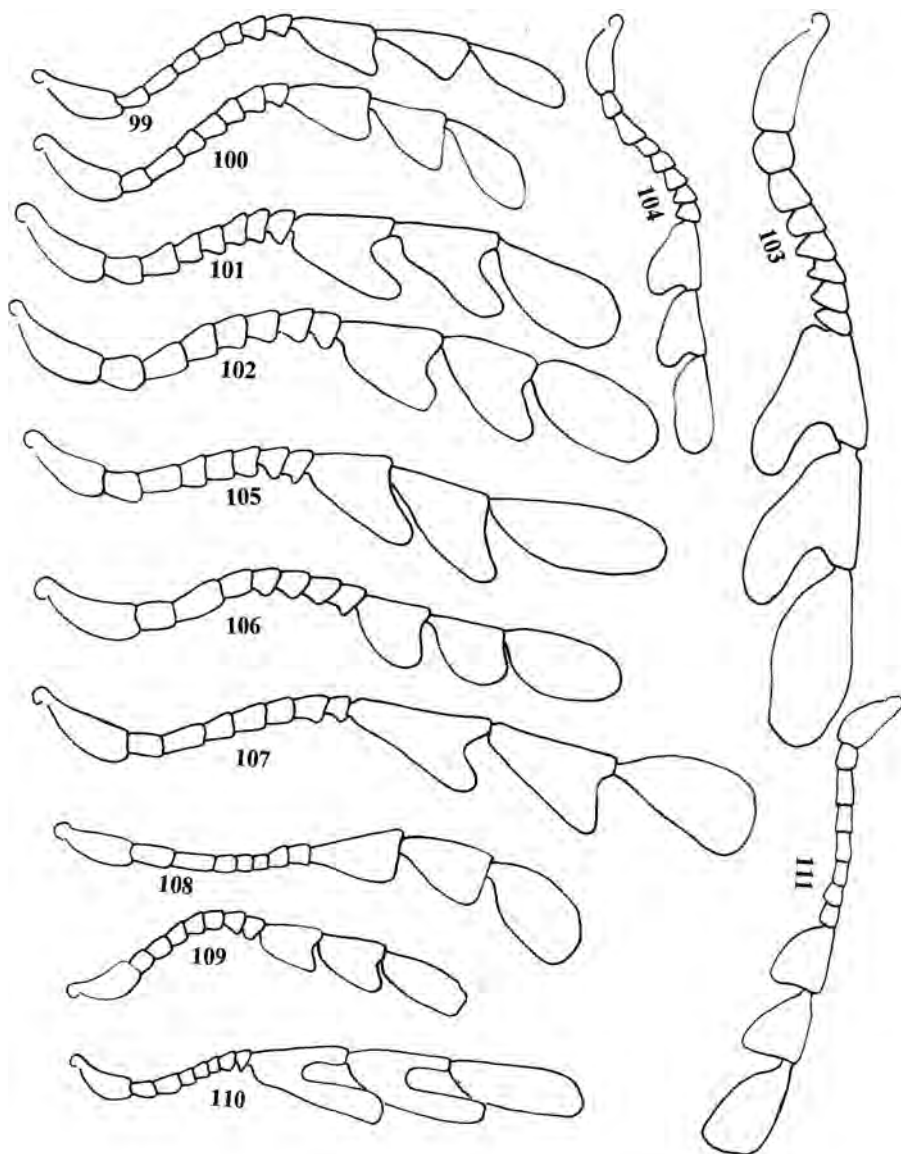
Description: Size: Length 10.5 mm; width 3.5 mm. Form: As in Fig. 343. Color: Light castaneous, except mandibles dark brown. Head: Capitular antennomeres 9 and 10 with collateral branch (Figs 47, 48), antennomere 11 oblong-subtruncate; frons much narrower than width of eye (EW/FW 30/ 15). Thorax: Pronotum slightly oblong (PW/PL 75/85), side margin with tubercle, disc finely punctate; elytral asetiferous punctation minute, distributed throughout disc (EL/EW 250/63); protibial anterior margin minutely spinose. Abdomen: Pygidium scutiform; aedeagus (Fig. 236), phallic apex triangular, phallic plates broad.

Variation: Size: Length 8.0-10.5 mm; width 2.5-3.5 mm. Except for body size, the available specimens are quite homogeneous.

Natural history: The types were collected in October.

Distribution (Fig. 316): This species is known only from Brazil.

Etymology: The trivial name, *cribellum*, is a Latin noun that stems from *cribrum* (= sieve). The name refers to the sieve-like appearance of the elytral disc.



Figs 99-111: Antennae. (99) *Pelonium fugax*, male. (100) *P. fugax*, female. (101) *P. lutusculum*, male. (102) *P. lutusculum*, female. (103) *P. leukotaxium*, male. (104) *P. ustulatum*, female. (105) *P. litum*, male. (106) *P. litum*, female. (107) *P. leucophaeum*, male. (108) *P. leucophaeum*, female. (109) *P. longfieldae*, male. (110) *P. longfieldae*, female. (111) *P. maculicolle*, female.

***Pelonium fissilum* OPITZ nov.sp. (Figs 55, 316, 344)**

H o l o t y p e : ♀. Argentina, Misiones, J. Foerster. A second label reads: Paranay, 17.I.1989, Lichtfang (NHMB).

P a r a t y p e s : Two. Bolivia: Departamento de Santa Cruz, 4 km N Bermejo, Refugio Los Volcanes, 18°06'S 63°36'W, 12-XII-2015, 1000-1200 m, Skillman, Wappes, Kuckartz (FWSC). Argentina: Provincia de Misiones, Paranay, 17.I.1989, Lichtfang, J. Foerster (WOPC, 1).

D i a g n o s i s : The members of this species resemble superficially those of *P. nictuatum*, but in *P. fissilum* specimens the entire length of the sutural margin is testaceous which is not the case in *P. nictuatum* specimens.

R e d e s c r i p t i o n : Size: Length 14.5 mm; width 6.0 mm. Form: As in Fig. 344. Color: Mouthparts, and antenna black; cranium mostly black, with testaceous mark between eyes; pronotum bicolored, collar, humeral region and anterior margin yellow, remainder of disc black, anterior margin of black portion of disc incised anteriorly by yellow streak; pterothorax brown; elytral disc mostly dark brown, sutural and epipleural margins yellow, yellow coloration of epipleural margin broadened to preapical region; profemur light brown in basal 3/4, dark brown in apical 1/4, mesofemur and metafemur light brown in basal 3/4, testaceous in apical 1/4; tibiae, tarsi, and abdomen dark brown. Head: Funicular antennomeres 6-8 serrate, capitular antennomeres 9 and 10 with collateral branch (Fig. 55), antennomere 11 oblong-subtruncate; frons narrower than width of eye (EW/FW 37/20). Thorax: Pronotum slightly quadrate (PW/PL 97/97), side margin with well-developed tubercle, disc finely punctate; elytral asetiferous punctation minute, randomly distributed throughout disc (EL/EW 360/110); protibial anterior margin spinose. Abdomen: Pygidium scutiform.

V a r i a t i o n : The available specimens are quite homogeneous.

N a t u r a l h i s t o r y : The types were collected during January, with a light trap.

D i s t r i b u t i o n (Fig. 316): This species is known only from Argentina.

E t y m o l o g y : The trivial name, *fissilum*, is a Latin noun that stems from *findo* (= split). The name refers to yellow incision of the black portion of the pronotal disc.

***Pelonium fucogonium* OPITZ nov.sp. (Figs 93, 211, 218, 310, 345)**

H o l o t y p e : ♀. PANAMÁ: Barro Colorado Island, 23-V-1940 (FSCA).

P a r a t y p e s : Two. Panamá: Provincia de Panamá, 29 km E Cañita, Bayano Dist., V-16-1989, F. Hovore (WFBM, 1; WOPC, 1).

D i a g n o s i s : The members of this species resemble superficially those of *P. optabile*, but in *P. fucogonium* specimens the hind corners of the pronotum show a reddish macula which is not the case in *P. optabile* specimens.

D e s c r i p t i o n : Size: Length 13.0 mm; width 4.5 mm. Form: As in Fig. 345. Color: Maxillae and labium testaceous except terminal palpomeres brown, labrum and mandibles brown; antenna bicolored, scape pedicel, and funicular antennomeres brown, capitular antennomeres encircled in brown with disc testaceous; cranium bicolorous, clypeus, lower frons and cranial venter brown, upper frons and epicranium testaceous; pronotum tricolored, venter and upper sides yellow, lower sides red, and disc middle light brown; legs light brown, except femoral distal short portion yellow; elytral disc mostly light brown, epipleural margin broadly yellow in posterior 2/3, sutural margin yellow, narrow faintly yellow line in center of disc; abdomen light brown. Head: Capitular antennomeres

9 and 10 triangular (Fig. 93), antennomere 11 oblong-subtruncate; frons much narrower than width of eye (EW/FW 30/13). Thorax: Pronotum slightly oblong (PW/PL 72/90), side margin with faintly developed tubercle, disc finely punctate, with two paralateral depressions near base; elytral asetiferous punctation very small, distributed at discal basal 1/3, remainder of disc profusely vested with minute punctation (EL/EW 310/80); protibial anterior margin with two distal spines. Abdomen: Pygidium scutiform.

Variation: Size: Length 13.0-14.5 mm; width 6.0-6.5 mm. Other than body size, the available specimens are quite homogeneous.

Natural history: The available specimens were collected in May, from vegetation in a tropical rain forest.

Distribution (Fig. 310): This species is known only from Panamá.

Etymology: The specific epithet, *fucogonium*, stems from the Latin *fusco* (= rouge) and the Greek *gonia* (= corner). The name refers to the red characteristic of the posterior angles of the pronotum.

***Pelonium lampyroides* SPINOLA (Figs 2-10, 118, 119, 237, 316, 346)**

Enoplium lampyroides SPINOLA, 1844a: 350.

Holotype: ♀. La Colombie (Colombia) (MRSN). CORPORAAL 1950: 288 (*Corinthiscus*). EKIS (now OPITZ), 1975: 57 (*Corinthiscus*).

Diagnosis: The members of this species resemble superficially those of *P. circum* and of *P. optabile*, but in *P. lampyroides* specimens the pronotum shows two large disconnected brown maculae, which is not the case in specimens of the aforementioned other species.

Redescription: Size: Length 12.0 mm; width 4.0 mm. Form: As in Fig. 346. Color: Maxillae and labium testaceous, labrum, clypeus, and mandibles brown; antenna brown; cranium and pronotum light castaneous, pronotal disc with two large brown paralateral maculae; profemur infuscated apically, mesofemur and metafemur testaceous, tibiae become increasingly testaceous from profemora to metafemora, tarsus black, except pulvilli testaceous; elytra mostly testaceous, disc region near epipleural margin increasingly yellow from humerus to elytral apex, latter brown, sutural margin yellow; abdomen brown, sternites with paralateral yellow spots. Head: Funicular antennomeres 5-8 serrate, capitular antennomeres 9 and 10 with short or slightly longer collateral branch (Figs 118, 119), antennomere 11 oblong-ova; frons much narrower than width of eye (EW/FW 30/10). Thorax: Pronotum oblong (PW/PL 75/83), side margin with well-developed tubercle, disc coarsely punctate; elytral asetiferous punctation randomly distributed, diminutive towards elytral apex, (EL/EW 240/62); protibial anterior margin spinose. Abdomen: Pygidium scutiform; aedeagus (Fig. 237) slightly sclerotized ventrally, phallobasic lobes truncate and densely setose, phallic apex extraordinarily large triangular, apex subacuminate.

Variation: Size: Length 10.5-14.5 mm; width 3.5- 5.0 mm. Other than body size the available specimens are quite homogeneous.

Natural history: Specimens were collected during from April-June; one specimen from the legume *Albizia adinocephala* (DONN.SM.) (Fabaceae), and one on *Pseudobombax septenatum* (JACQ.) DUGANO (Bombacoideae).

Distribution (Fig. 316): In addition to the holotype I examined 12 specimens from: Panamá: Provincia de Panamá, Panamá, La Chorrera; Pr. Nat. Metropolitano, 17 May 1996, on *Albizia adinocephala*, F. Oedegaard; idem, 8 May 1995, on *Pseudobombax septenatum*, F. Oedegaard; Cerro Campana, June 1 1984, E. Giesbert; idem, Cerro Campana road, 19 May 1991, 1930', R. Turnbow. Colombia: Departamento de Magdalena, Río Frio, 15-V-1918, Darlington; Departamento de Bolívar, Bolívar SFF Los Colorados Alto el Mirador, 95°4'N 75°07'W, 21.IV.2001, Malaise, 400 m, E. Deulufeut. Specimens are deposited in BMNH, FSCA, RHTC, SDEI, and WOPC.

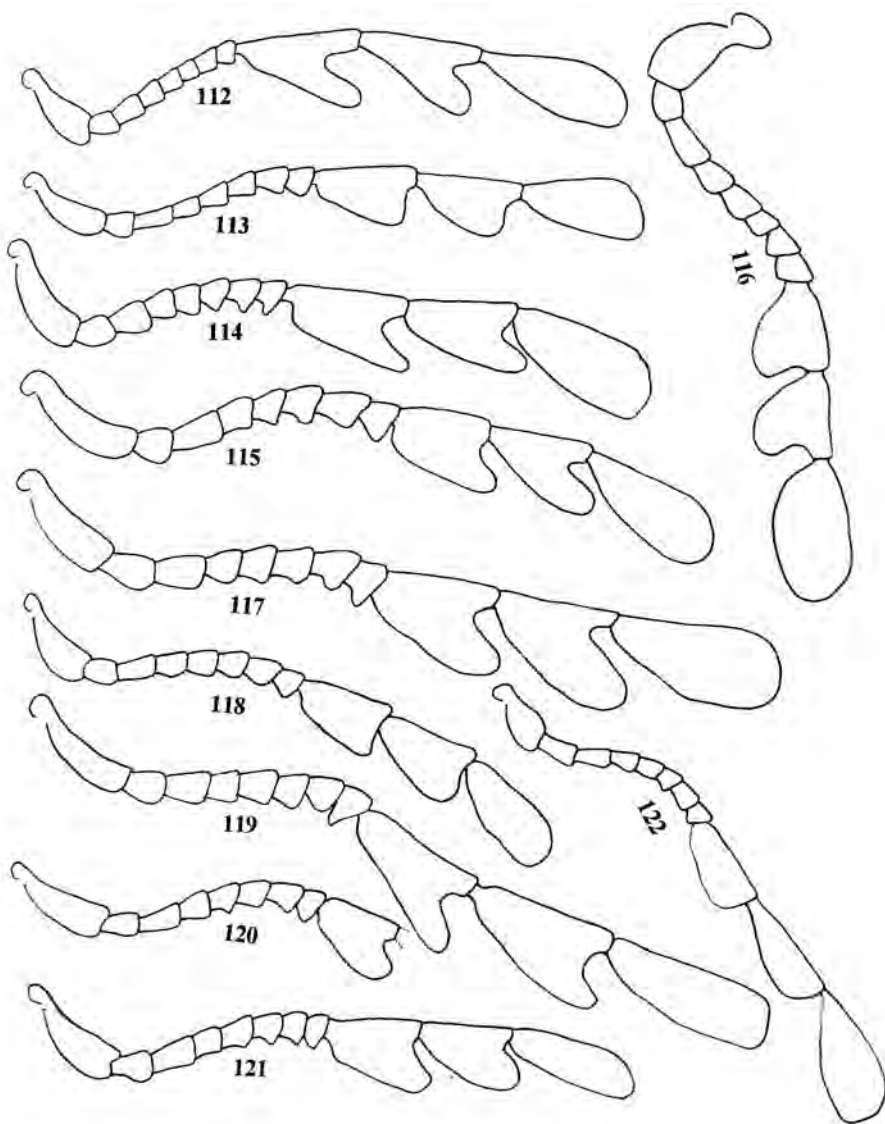
***Pelonium morrisi* OPITZ nov.sp. (Figs 126, 127, 238, 316, 347)**

Holotype: ♂. BOLIVIA: Santa Cruz, Buena Vista vic., Flora & Fauna Hotel, 23-25/X/00, R. Morris (MNKM).

Paratypes: Twenty. Bolivia: Departamento de Santa Cruz, Potrerillo del Guenda, snake farm, 17°40'S 63°27'W, 21-24 October 2011, 370-400 m, Wappes & Skillman (ACMT, 1); idem, 9/28-XI-2006, 400 m, B. K. Dozier (WOPC, 1); 4.6 k SSE Buena Vista, F & F Hotel, October 22-31 2002, Wappes & Morris (ACMT, 1); idem, Nov 1-8 2002, J. E. Wappes (ACMT, 1); idem, 3.7 km SSE Buena Vista, Flora & Fauna Hotel, XI.10-29.2003, blacklight trap, B. K. Dozier (FSCA, 1); idem, 17°29.949'S-63°33.152'W, 5-15-XI-2001, 430 m, trop. Transition forest, BLT, M. C. Thomas; idem, 5-15-XI-2001, 430 m, M. C. Thomas (WOPC, 1); idem, 22-25.X.2007, Galileo & Martins (MCNZ, 1); idem, 7-10-X-2004, Morris & Wappes (RFMC, 1); 20 km N Camin, Road to Eytim, 19°52'S 63°29'W, 5, 6, 10 December, 2012, Wappes, Bonaso, Skillman (ACMT, 1); 4 km N Bermejo, 19°52'S 63°29'W, 10-12-XII-2015, Wappes, Kuckartz & Skillman (ACMT, 1); idem, Refugio los Volcanes, 18°06'S 63°36'W, 17-24-XII-2014, Wappes & Morris (WOPC, 1); idem, 4-9 XII-2013, Wappes & Skillman (WOPC, 1); idem, 6-8-XII-2013, Skillman & Wappes (FWSC, 1); idem, 10-12-XII-2015, Skillman, Wappes & Kuchartz (FWSC, 1). Argentina: Provincia de Salta, El Brete, 2-V-94, Di Iorio; Sumalao, 27-VII-93, Di Iorio (WOPC, 2); Salta, El Brete, 7-V-1994, emerged from dead wood of *Celtis tala* GILLET (FSCA, 4).

Diagnosis: The members of this species resemble superficially those of *P. ramosum*, but in *P. morrisi* specimens the entire length of the sutural margin is testaceous. The sutural margin is black in *P. ramosum* specimens.

Description: Size: Length 8.0 mm; width 2.5 mm. Form: As in Fig. 347. Color: Mouthparts testaceous, except terminal maxillary and labial palpomeres and mandibles black; cranium multicolored, lower frons yellow, upper frons red, epicranium with yellow fleck, then black, epicranial sides brown; antenna dark brown except scape testaceous ventrally; pronotum multicolored, middle disc and lower sides black, anterior sides yellow, posterior sides red, pronotal collar yellow; elytral disc dark brown, epipleural margin broadly yellow, sutural margin yellow; legs mostly dark brown, distal region of femora yellow. Head: Capitular antennomeres 9 and 10 with short or long collateral branch (Figs 126, 127), antennomere 11 oblong-rectangulate; frons narrower than width of eye (EW/FW 22/5). Thorax: Pronotum slightly oblong (PW/PL 45/50), side margin with small tubercle, subapical transverse depression well developed, disc with shallow posterolateral depression, small setiferous punctation abundant at sides and on pronotal arch, center of disc subglabrous; elytral asetiferous punctation small and scattered throughout disc, punctures diminish in size behind middle, epipleural fold slightly explanate (EL/EW 180/40); protibial anterior margin spinose. Abdomen: Pygidium scutiform; aedeagus (Fig. 238) slightly sclerotized ventrally, phallic apex digitiform, phallic plates broad, flared subapically.



Figs 112- 122: Antennae. (112) *Pelonium maculicole*, male. (113) *P. maculoangulum*, female. (114) *P. luridum*, male. (115) *P. luridum*, female. (116) *P. lituratum*, female. (117) *P. lituratum*, male. (118) *P. lampyroides*, female. (119) *P. lampyroides*, male. (120) *P. photinoides*, female. (121) *P. photinoides*, male. (122) *P. percumptum*, female.

Variation: Size: Length 7.0-9.5 mm; width 2.3-4.0 mm. The width of the frons and the antennal capitulum are sex dimorphic; in males, the 9th and 10th collateral branch are longer. Also, the red marking on the upper frons and posterior sides of the pronotum varies in size. The width of the frons is sex dimorphic, in relation to the width of the eyes. The males have proportionally narrower frons (male EW/FW= 22/5, female EW/FW= 23/15)

Natural history: Specimens were collected from October to December; at altitudes ranging from 370-430 m. Four specimens emerged during May, in Argentina, from the wood of *Celtis tala* GILLET ex PLANCH.

Distribution (Fig. 316): This species is known from Bolivia and Argentina.

Etymology: The specific epithet is a patronymic that honors Roy F. Morris for his contributions to field Coleopterology.

***Pelonium nictuatum* OPITZ nov.sp. (Figs 128, 129, 239, 316, 348)**

Holotype: ♀. Brazil: Espírito Santo, Linhares, M. Alvarenga (FSCA).

Paratypes: Four. Brazil, Estado do Espírito Santo, Município Linhares Lagoa do Mucucu, 26 Oct 1972, J. P. Abravaja (WOPC, 1); Espírito Santo, Soortama, 11/1967, F. M. Oliveira (DZUP, 1); Estado do Bahia, Itapetinga, XI-1969, M. Alvarenga (WOPC, 1); "Brazil" (MNHN, 1).

Diagnosis: The members of this species resemble superficially those of *P. fissilum*, but in *P. nictuatum* specimens the sutural margin is only yellow at the middle. The sutural margin is entirely yellow in *P. fissilum* specimens.

Description: Size: Length 13.0 mm; width 4.8 mm. Form: As in Fig. 348. Color: Mouthparts testaceous, except maxillary and labial palpomeres brown, mandibles brown; antenna dark brown; cranium mostly castaneous, upper frons testaceous; pronotum tricolored, testaceous at upper sides and at center of disc, brown at lower sides, red at posterior angles and across pronotal collar; profemora testaceous in basal half brown in remainder, mesofemora and metafemora testaceous, protibiae light brown, mesotibiae and metatibiae mostly testaceous, infuscated apically, tarsi brown; elytra mostly light brown, epipleural and sutural margins with yellow regions, distal limits of epipleural and sutural margins infuscated; abdomen testaceous. Head: Capitular antennomeres 9 and 10 with short or slightly longer collateral branch (Figs 128, 129), antennomere 11 subovoid; frons much narrower than width of eye (EW/FW 32/15). Thorax: Pronotum slightly oblong (PW/PL 78/95), side margin with well-developed tubercle, disc coarsely punctate at sides, sparsely punctate at middle; elytral asetiferous punctation very small, profusely distributed throughout disc (EL/EW 260/75); protibial anterior margin spinose. Abdomen: Pygidium scutiform; aedeagus (Fig. 239) slightly sclerotized ventrally, phallic apex large triangular.

Variation: Size: Length 12.0-13.0 mm; width 4.0-5.0 mm. The male 9th and 10th antennomeres have longer collateral branches than those found in females.

Natural history: Specimens have been collected during October and November.

Distribution (Fig. 316): This species is known only from Brazil.

Etymology: The specific epithet, *nictuatum*, stems from the Latin *nicto* (= wink). I refer to the yellow mark on the epipleural margin.

***Pelonium optabile* GORHAM (Figs 142, 145, 240, 316, 349)**

Pelonium optabile GORHAM, 1877: 419. Lectotype. ♀. Here designated. (Brazil), Brazilien, Minas Geraes (Minas Gerais) (BMNH). CORPORAAL 1950: 289 (*Corinthiscus*). Gorham did not specify in his description whether his nominal species is based on more than one specimen. Therefore, I invoke Recommendation 73F of the ICZN (1999) and designate a lectotype for this nominal species.

D i a g n o s i s : The members of this species resemble superficially those of *P. circum*, but in *P. optabile* specimens the elytral disc shows a long narrow yellow line which is not the case in *P. circum* specimens.

R e d e s c r i p t i o n : Size: Length 18.0 mm; width 7.5 mm. Form: As in Fig. 349. Color: Maxillae and labium testaceous, except terminal palpomeres brown, labrum and mandibles brown; scape testaceous, funicular antennomeres brown, capitular antennomeres partly brown and partly testaceous; pronotum testaceous, but infuscated at middle; elytra mostly testaceous, with a yellow lunate mark contiguous with middle of epipleural margin, mark has narrow anterior projection, disc with faint pale lines. Head: Capitular antennomeres 9 and 10 with short or long collateral branch (Figs 142, 145), antennomere 11 oblong-subtruncate; frons narrower than width of eye (EW/FW 38/23). Thorax: Pronotum slightly oblong (PW/PL 115/117), side margin with very small tubercle, disc with minute setiferous punctation; elytral asetiferous punctation minute and scattered throughout disc, pubescence short and densely distributed (EL/EW 340/80); protibial anterior margin minutely spinose. Abdomen: Pygidium scutiform; aedeagus (Fig. 240) slightly sclerotized ventrally, phallic apex digitiform.

V a r i a t i o n : Size: Length 10.0-18.0 mm; width 4.0-7.6 mm. The lunate mark on the elytral disc varies in expression.

N a t u r a l h i s t o r y : Specimens were collected during a period from October to December, some with a black light in a tropical transitional forest with; one at 440 m and on at 960 m.

D i s t r i b u t i o n (Fig. 316): In addition to the lectotype I examined 61 specimens from: Bolivia: Departamento de Santa Cruz, 3.7 km SSE Buena Vista, Hotel Flora & Fauna, 17°29'949"S 63°33'152"W, 5-15-XI-2001, 405 m, tropical transition forest, blacklight trap, M. C. Thomas & B. K. Dozier, idem, 10-22-X-2004, 440 m, J. E. Eger. Ecuador: Provincia de Napo, Oriente, 20-X-1984. Brazil, Estado do Mato Grosso, Dimantino, Fazenda Rio Arinos, X-1983, Eurides Furtado; Estado do Minas Gerais, Pirapora, XI-1975, M. Alvarenga; Estado do Rondônia, 62 km SE Ariquemes, 5-16 Nov 1996, W. J. Hansen; Estado do Goiás, Jataí Goiás; idem, Rio Verde, G. A. Baer, 1908; Estado do Rio do Janeiro, Trindade, Ch.Pujol; Estado do Bahia, Bahia, S. Antonio da Barra, 11.12.1888, Gounelle; Bahia, Villa Vera, October 1973; idem, Encruzilhada, XI-1974, 960 m, M. Alvarenga. Specimens are deposited in BMNH, MNHN, SDEI, WFBM, and WOPC.

***Pelonium posticum* (KLUG) (Figs 153, 154, 212, 241, 316, 350)**

Enoplium posticum KLUG, 1842: 362. Lectotype. Gender not known. Brasilien (Brazil) (ZMHB). CORPORAAL 1950: 289 (*Corinthiscus*). Klug did not indicate the number of specimens that formed the basis of his description. Therefore, I invoke Recommendation 73F of the ICZN (1999) and designate a lectotype.

D i a g n o s i s : Elytral basal half entirely light gray, elytral posterior half mostly black.

These characteristics will distinguish the members of this species from others in the *P. lampyroides*-group.

Redescription: Size: Length 14.5 mm; width 5.0 mm. Form: As in Fig. 350. Color: Mouthparts, antennae, thorax, legs, abdomen black; elytra bicolored, basal ½ light gray, posterior half with large black macula, latter outlined in light gray. Head: Antennomeres 6-8 slightly serrate, capitular antennomeres 9 and 10 with short or long collateral branch (Figs 153, 154), antennomere 11 oblong subtruncate; frons much narrower than width of eye (EW/FW 35/15). Thorax: Pronotum oblong (PW/PL 77/97), side margin with shallow tubercle, disc finely punctate, disc with glabrous regions near base; elytral asetiferous punctation minute, distributed throughout disc (EL/EW 300/83); protibial anterior margin spinose. Abdomen: Pygidium subtruncate; aedeagus (Fig. 241) slightly sclerotized ventrally, phallic apex digitiform.

Variation: Size: Length 12.0-18.0 mm; width 4.0-6.0 mm. Other than body size, the available specimens are quite homogeneous.

Natural history: Specimens have been collected during a period from October through December, some with a MV/UV light, at altitudes ranging from 370-960 m.

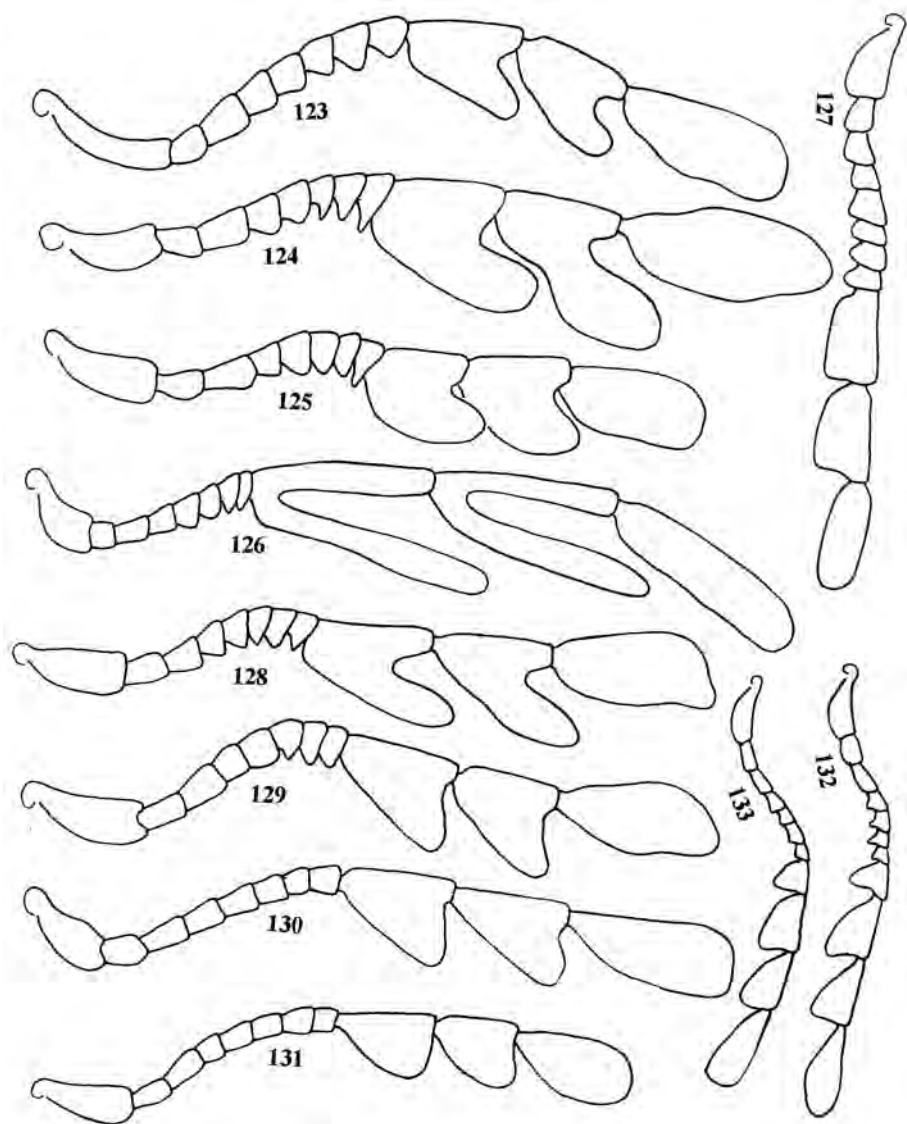
Distribution (Fig. 316): In addition to the lectotype I examined 137 specimens from: Bolivia: Departamento de Santa Cruz, nr Potrerillo, 63°26'W17°40'S, October 27-29.2013, 430 m, MV/UV lights, Wappes & Kuckartz; 4-6 SSE Buena Vista, F & F Hotel, Oct. 22-31-2002, Wappes & Morris; 4 km N. Bermejo, Refugio los Volcanes, 18°06'S 63°36'W, October 17-24.2014, Wappes & Morris; Potreillos del Guenda, Reserva Natural, 17°40'S 63°27'W; 4-Oct.-2007, Blacklight/Mercury Vapor Light, 370 m, Wappes & Morris; 20 km N Camiri, 5, 6, 10 December, 2012, Wappes, Bonaso, Skillman. Brazil: Estado do Piauí, Susuapara, Ch Pujol; Estado do Bahia, Chapada; Encruzilhada, XI-1974, 960 m, M. Alvarenga; Estado do Pará, Cachimbo, 1890, Ch Pujol; Estado do Goiás, Jatai Goiás, Rio Verde, 1908, G. A. Baer; Estado do Rio de Janeiro, Trindade, Ch Pujol; Estado do São Paulo, Batataes, Nov, B. Pohl; Estado do Minas Gerais, Minas Gerais; Estado do Espírito Santo, Pedra Azul, 800 m, XI-1974, Seabra & Oliveira; Estado do Santa Catarina, Nova Teutonia, XII- 1977, F. Plaumann; Rio de Janeiro. Specimens are deposited in ACMT, FSCA, MNHN, SDEI, WFBM, WOPC, and ZMHB.

***Pelonium ramosum* SCHENKLING (Figs 155, 156, 242, 316, 351)**

Pelonium ramosum SCHENKLING, 1900: 402. Lectotype, ♂. Here designated. (Brazil), Bahia, Brazilia (MNHN). CORPORAAL 1950: 289 (*Corinthiscus*). Schenklings did not specify in his description whether his nominal species is based on more than one specimen. Therefore, I invoke Recommendation 73F of the ICZN (1999) and designate a lectotype for this nominal species.

Diagnosis: The members of this species resemble superficially those of *P. morrissi*, but in *P. ramosum* specimens the sutural margin is entirely black, whereas in *P. morrissi* specimens it is entirely yellow.

Redescription: Size: Length 9.5 mm; width 3.0 mm. Form: As in Fig. 351. Color: Mouthparts brown; cranium multicolored, lower frons yellow, upper frons red, epicranium with yellow fleck, then black, epicranial sides castaneous; antennomeres 1-8 black, capitular antennomeres brown; pronotum multicolored, middle disc and lower sides black, upper sides yellow, posterior sides red; elytral disc dark brown, epipleural margin



Figs 123-133: Antennae. (123) *Pelonium leukotaxium*, male. (124) *P. lustratum*, male. (125) *P. lustratum*, female. (126) *P. morrissi*, male. (127) *P. morrissi*, female. (128) *P. nictuatum*, male. (129) *P. nictuatum*, female. (130) *P. nigroclavatum*, male. (131) *P. nigroclavatum*, female. (132) *P. niveum*, male. (133) *P. niveum*, female.

yellow; legs dark brown. Head: Capitular antennomeres 9 and 10 with short or long collateral branch (Figs 155, 156), antennomere 11 oblong-rectangulate; frons narrower than width of eye (EW/FW 21/12). Thorax: Pronotum slightly oblong (PW/PL 58/64), side margin with very small tubercle, subapical transverse depression well developed, disc with shallow depression posterolaterally, small setiferous punctation abundant at sides and on pronotal arch, center of disc subglabrous; elytral asetiferous punctation small and scattered throughout disc, punctures diminish in size behind middle, epipleural fold slightly explanate (EL/EW 190/50); protibial anterior margin spinose. Abdomen: Pygidium subquadrate; aedeagus (Fig. 242) slightly sclerotized ventrally, phallic apex triangular, phallic plates broad, flared subapically.

V a r i a t i o n : Size: Length 7.0-13 mm; width 2.3-4.5 mm. Also, specimens from Bolivia and Argentina are less melanistic; the mid-discal pronotal black band is reduced and the sutural margin is testaceous.

N a t u r a l h i s t o r y : Specimens were collected during May, July, October and December.

D i s t r i b u t i o n (Fig. 316): In addition to the lectotype, I examined 12 specimens from: Brazil: Estado do Bahia, Bahia; idem, Socodo. Specimens are deposited in MNHN, SDEI, and WOPC.

***Pelonium regina* OPITZ nov.sp. (Figs 157, 243, 316, 352)**

H o l o t y p e : ♂. Guyane (French Guiana), Régina, Rn 2 Pk 125 + 3, 11.I.2008. A second label reads: plège vitre d' interception (FSCA).

P a r a t y p e : One. French Guiana: E. Le Moul 1909 (MNHN).

D i a g n o s i s : The members of this species resemble superficially those of *P. caudiculum*, but in *P. regina* specimens the epipleural margin near the elytral apex is narrowly yellow; it is broadly yellow in *P. caudiculum* specimens.

D e s c r i p t i o n : Size: Length 11.5 mm; width 4.0 mm. Form: As in Fig. 352. Color: Testaceous, except mandibles dark brown, pedicel and funicular antennomeres brown, pronotal disc with two large brown maculae that are contiguous basally, margin of elytral apex brown, tarsi, and abdomen mostly brown. Head: Funicular antennomeres 5-8 serrate, capitular antennomeres 9 and 10 with collateral branch (Fig. 157), antennomere 11 oblong-subtruncate; eyes coarse and bulging, frons much narrower than width of eye (EW/FW 37/9). Thorax: Pronotum slightly oblong (PW/PL 87/95), side margin with tubercle, disc finely punctate; elytral asetiferous punctation minute, distributed throughout disc, epipleuron region slightly explanate (EL/EW 265/75); protibial anterior margin minutely spinose. Abdomen: Pygidium scutiform; aedeagus (Fig. 243), apex triangular and with slight posterior extension.

V a r i a t i o n : Size: Length 7.5- 11.5 mm; width 2.0-4.0 mm. Except for body size, the available specimens are quite homogeneous.

N a t u r a l h i s t o r y : The holotype was collected in January.

D i s t r i b u t i o n (Fig. 316): This species is known only from French Guiana.

E t y m o l o g y : The trivial name, *regina*, constitutes a noun in apposition and refers to the type locality.

***Pelonium rivimentum* OPITZ nov.sp. (Figs 158, 316, 353)**

H o l o t y p e : ♂. BOLIVIA: Santa Cruz. 5 km SSE Buena Vista, Hotel Flora & Fauna, 440 m, W63°39.128' S17°29.925', 10-22-X-2004, J. E. Eger. A second label reads: Coll. at UV. MV, and Incandescent Lights (MNKM). Paratypes: Four. Bolivia: Departamento de Santa Cruz, 15 km N Terebento, Xavier Chaco, 1-XII-2012, Skillman & Wappes (FWSC, 2; WOPC, 2).

D i a g n o s i s : The large yellow lunate mark at the middle of the epipleural margin will distinguish the members of this species from others in the *P. lampyroides*-group.

R e d e s c r i p t i o n : Size: Length 12.5 mm; width 5.5 mm. Form: As in Fig. 353. Color: Mouthparts testaceous, except mandibles black; antenna mostly testaceous, anterior margin of capitular antennomeres dark brown; thorax testaceous, except pronotal disc with three infuscations that stem from pronotal collar; elytra mostly testaceous, with a yellow lunate mark contiguous with middle of epipleural margin, epipleural yellow region extends to elytral apex, disc with faint pale line, epipleural margin also briefly yellow behind humeral angle, sutural margin yellow. Head: Capitular antennomeres 9 and 10 with very short collateral branch (Fig. 158), antennomere 11 oblong-subtruncate; frons narrower than width of eye (EW/FW 27/18). Thorax: Pronotum oblong (PW/PL 73/92), side margin with very shallow tubercle, disc with minute setiferous punctation; elytral asetiferous punctation minute and scattered throughout disc, pubescence short and densely distributed (EL/EW 340/80); protibial anterior margin minutely spinose. Abdomen: Pygidium scutiform; aedeagus, apex large triangular, pallobasic lobes densely fimbriate.

N a t u r a l h i s t o r y : The holotype was collected during October, with UV MV, and incandescent lights; at 440 m. The paratypes were captured during December.

D i s t r i b u t i o n (Fig. 316): This species is known from Bolivia.

E t y m o l o g y : The specific epithet, *rivimentum* (= edging), is a Latin noun. I refer to the yellow markings on the epipleural margin.

***Pelonium scapulare* BARR (Figs 161, 162, 244, 325, 354)**

Pelonium scapulare BARR, 2005: 60.

H o l o t y p e : Gender not known. México, 8 km S San Blas, Bahia Matachen, Nayarit, 16-VII-1995, F. A. Noguera y A. Rodríguez (CNIN). Paratypes: Twelve from localities and held in repositories as noted in BARR 2005: 61.

D i a g n o s i s : The elytral humeral angle is yellow. This characteristic will distinguish the members of this species from others in the *P. lampyroides*-group.

R e d e s c r i p t i o n : Size: Length 12.0 mm; width 3.5 mm. Form: As in Fig. 354. Color: Mouthparts testaceous, except mandibles black; antenna black; cranium light castaneous; pronotal outline, and narrow line at middle, light castaneous, disc with two large black maculae; pterothorax light castaneous; abdomen brown. Head: Capitular antennomeres 9 and 10 with short collateral branch (Figs 161, 162), antennomere 11 oblong, narrowed to apex; frons narrower than width of eye (EW/FW 28/13). Thorax: Pronotum oblong (PW/PL 80/90), side margin with shallow tubercle, disc moderately punctate; elytral asetiferous punctation randomly distributed, small and diminutive towards elytral apex, (EL/EW 145/65); protibial anterior margin spinose. Abdomen: Pygidium scutiform; aedeagus (Fig. 244) slightly sclerotized ventrally, phallic apex large triangular.

V a r i a t i o n : Size: Length 8.5-14.0 mm; width 3.2-5.0 mm. Except for body size, the available specimens were quite homogeneous.

Natural history: Specimens were collected during a time period from April through July, some at light and some at altitudes ranging from 1106-2530 m.

Distribution (Fig. 325): I examined 35 specimens from: México: Estado de Campeche, 186 W near Conhuas, 5-VI-1991, beating slash, F. W. Skillman, Jr; Estado de Quintana Roo, 20 km W Puerto Morelos 14-16-VI-1993, J. E. Wappes; 18-24 km N San Felipe Carr. Pte., 5/27/-6/1/-1984, J. E. Wappes; Quintana Roo, 23 km W Pto. Morelos, June 14-18-1993, E. Giesbert; Estado de Veracruz, 14-16 km W Sontecompan, 10-13-IV-1993; Lake Catemaco, 9-VI-1969, H. Howden; Estación Biológica Las Tuxtlas, IV-20/30-1991, F. Hovore; Sinaloa, 15 mi. N. Mazatlan, Aug 8, 1973, G. Giesbert; Estado de Yucatán, Campeche, 4 km E Xpujil, 30-V-1984, J. E. Wappes; Veracruz, Los Tuxtlas, vic. Balzapote, April 29-May 6, 1989, E. Giesbert; 1 km S Xcalacoop, June 11 1983, E. Giesbert; Estado de Chiapas, 17 km W Tuxtla Gutierrez, June 27-July 8, 1986, 3300', E. Giesbert; Estado de Jalisco, Jalisco, Estación Biológica Chamela, 23-31-VII-1990, at lights, Chemsak; 20 mi SW Autlan, 13-VII-1982, blacklight, Fred G. Andrews; Pacific slope, Cordilleras, ?-?-1919, L. Hotzen. Guatemala: Departamento de Petén, Tikal, 16-May-1956, at light, T. H. Hubbell; Departamento de Izabal, 25 km SE Morales, May 31-June 2, 1997, 900 m, E. Giesbert, J. Monzon. Nicaragua: Departamento de Granada, Reserva Silvestre Domatila, 11°42.322'N 85°56.884'W, V-31/VI-6-2005, 300 ft., A. J. Gilbert. Specimens are deposited in ACMT, CNIN CSCA, EMEC, JNRC, FSCA, RHTC, SDEI, WFBM, and WOPC.

Note: This description is based on a non-type specimen.

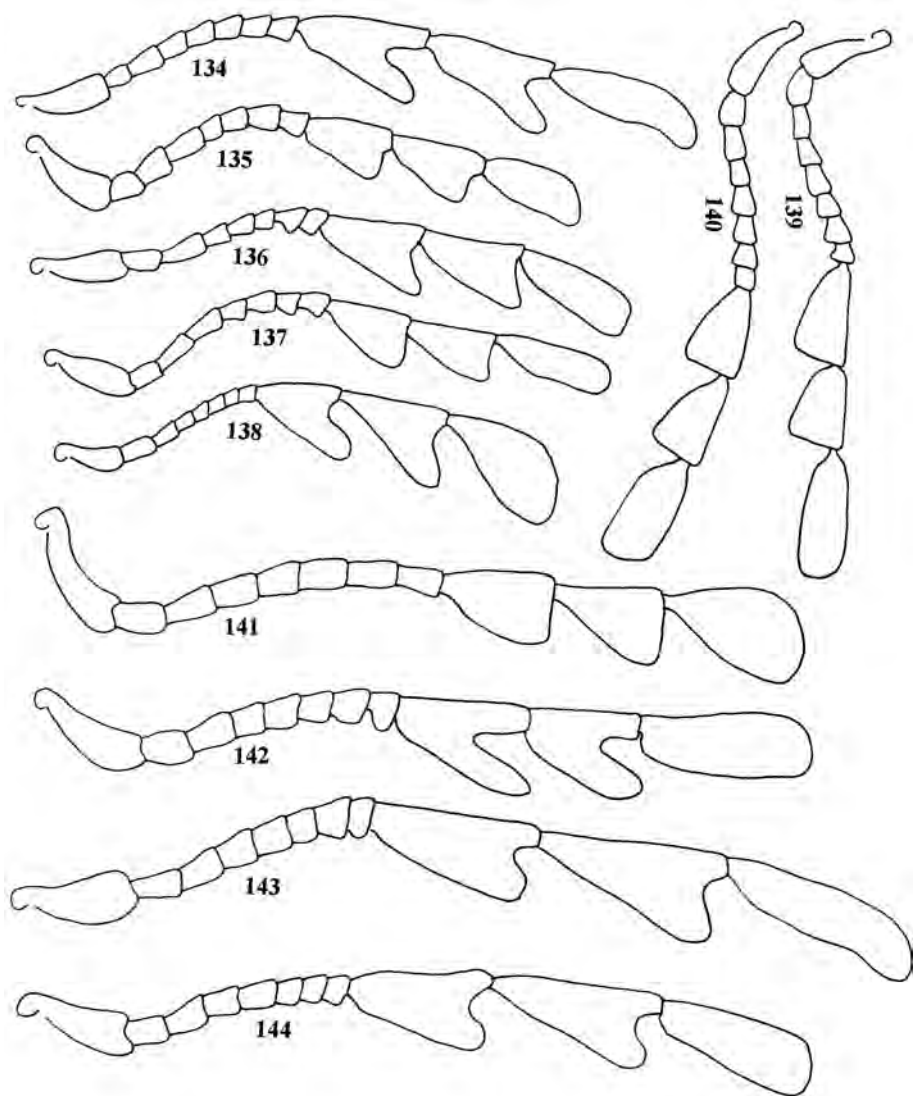
***Pelonium suturale* SPINOLA (Figs 90, 91, 245, 355)**

Pelonium suturale SPINOLA, 1844a: 352.

Holotype: ♀. (Brazil), Le Bresil (MRSN). CORPORAAL, 1950: 290 (*Corinthiscus*). EKIS (now OPITZ), 1975: 57 (*Corinthiscus*).

Diagnosis: The center of the pronotum is marked by a large black macula that is outlined in reddish-brown. This characteristic will distinguish the members of this species from others in the *P. lampyroides*-group.

Redescription: Size: Length 12.0 mm; width 4.0 mm. Form: As in Fig. 255. Color: Mouthparts brown; cranium multicolored, lower frons yellow, upper frons red, epicranium with yellow fleck, then black, epicranial sides castaneous; antennomeres 1-8 black, capitular antennomeres brown; pronotum multicolored, middle disc with broad black band that does not reach anterior margin, upper sides yellow, posterior sides red; elytral disc dark brown, epipleural margin yellow; legs and pterothorax dark brown. Head: Capitular antennomeres 9 and 10 with short or long collateral branch (Figs 190, 191), antennomere 11 oblong-rectangulate; frons narrower than width of eye (EW/FW 27/20). Thorax: Pronotum slightly oblong (PW/PL 82/85), side margin with very small tubercle, subapical transverse depression well developed, small setiferous punctation abundant at sides and on pronotal arch, center of disc subglabrous; elytral asetiferous punctation small and scattered throughout disc, punctures diminish in size behind middle, epipleural fold distinctly explanate (EL/EW 170/75); protibial anterior margin spinose. Abdomen: Pygidium oblong; aedeagus (Fig. 245) slightly well sclerotized ventrally, phallic apex triangular, phallic plates broad, flared subapically.



Figs 134-144: Antennae. (134) *Pelonium megaclerus*, male. (135) *P. megaclerus*, female. (136) *P. metalloideum*, male. (137) *P. metalloideum*, female. (138) *P. notabile*, male. (139) *P. ocellatum*, male. (140) *P. ocellatum*, female. (141) *P. notabile*, female. (142) *P. optabile*, male. (143) *P. piciventre*, male. (144) *P. piciventre*, female.

Variation: The anterior portion of the black pronotal band is more defined in the female specimen.

Distribution: In addition to the holotype, I examined two specimens from Brazil. Specimens are deposited in MNHN and WOPC.

Notes: I examined and photographed Spinola's type in 1974. The redescription included herein is based on a non-type specimen.

***Pelonium taino* OPITZ nov.sp. (Figs 66, 98, 313, 356)**

Holotype: ♀. Mustique I. Grenadines, W. I., H. H. Smith (BMNH).

Paratype: One. Saint Vincent & Grenadines, Union Island, Chatham Bay, Water Rock Reservoir, 12°36.18'N 61°26.59'W, 16-VIII-2009, 125 m, tall Forest, S. Peck (CMNC).

Diagnosis: The center of the pronotum is marked by an angular black macula. This characteristic will distinguish the members of this species from others in the *P. lampyroides*-group.

Redescription: Size: Length 7.0 mm; width 2.5 mm. Form: As in Fig. 356. Color: Maxillae and labium testaceous, labrum, clypeus, and mandibles brown; antenna brown; cranium dark castaneous; pronotum mostly testaceous, disc with wavy brown marking; elytra mostly brown, epipleural and discal portion of epipleural margin increasingly yellow from humerus to elytral apex, sutural margin yellow, yellow portion contiguous with yellow epipleural line at elytral apex; femora infuscated apically, tibiae and tarsi brown; abdomen brown, sternites with paralaralateral yellow spots. Head: Capitular antennomeres 9 and 10 with short collateral branch (Figs 66, 98), antennomere 11 oblong-oval; frons much narrower than width of eye (EW/FW 20/12); cranium coarsely punctate. Thorax: Pronotum oblong (PW/PL 52/55), side margin with well-developed tubercle, disc coarsely punctate; elytral asetiferous punctation randomly distributed, diminutive towards elytral apex, (EL/EW 155/45); protibial anterior margin spinose. Abdomen: Pygidium scutiform.

Variation: Size: Length 7.0-8.0 mm; width 2.5- 3.0 mm. Other than body size the available specimens are quite homogeneous.

Distribution (Fig. 313): Known from the West Indies islands of Grenadines and Trinidad.

Etymology: The specific epithet, *taino*, is a dedicative patronymic. It honors the Taino Indian culture. These indigenous people colonized the islands of the Granadines.

***Pelonium ustulatum* OPITZ nov.sp. (Figs 104, 196, 313, 357)**

Holotype: ♀. BRAZIL: Mato Grosso, X-1975, Moacir Alvarenga (FSCA).

Diagnosis: The members of this species resemble superficially those of *P. careoriturum*, but in *P. ustulatum* specimens the elytral apex is not broadly yellow which is not the case in *P. ustulatum* specimens.

Description: Size: Length 14.5 mm; width 5.0 mm. Form: As in Fig. 357. Color: Testaceous, except mandibles black, antennae dark brown, and pronotal disc with paralaralateral infuscations. Head: Capitular antennomeres 9 and 10 with short collateral branch (Figs 104, 196), antennomere 11 oblong; frons much narrower than width of eye

(EW/FW 35/20). Thorax: Pronotum slightly oblong (PW/PL 108/112), side margin with shallow tubercle, disc coarsely punctate; elytral asetiferous punctation randomly distributed, small and diminutive towards elytral apex, (EL/EW 330/85); protibial anterior margin minutely serrate. Abdomen: Pygidium scutiform.

Distribution (Fig. 313): This species is known from Brazil.

Etymology: The trivial name, *ustulatum*, is a Latin derivative that stems from *ustulatus* (= browned). I refer to the color of this beetle.

***Pelonium venabulum* OPITZ nov.sp. (Figs 197, 247, 313, 358)**

Holotype: ♂. Corupá, SC, BR., 60 m, XII-1962, A. Maller col. (Brazil, Santa Catarina) (DZUP).

Paratype. One. Brazil: Estado do Santa Catarina, São Francisco, SC, X-1960, A. Maller col. (WOPC, 1);

Diagnosis: The members of this species resemble superficially those of *P. optabile*, but in *P. venabulum* specimens the pronotal disc dark marking is bifid which is not the case in *P. optabile* specimens.

Redescription: Size: Length 16.0 mm; width 6.0 mm. Form: As in Fig. 358. Color: Maxillae and labium testaceous, their palpi brown, labrum and clypeus brown, mandibles black; antenna dark brown; cranium mostly yellow, clypeus brown, antennal carina and frons infuscated; pronotum bicolored, periphery mostly yellow, base of lower sides infuscated, disc with two large oblong maculae; pterothorax brown; elytral mostly light brown, basal half of disc with faintly expressed yellow line, sutural and epipleural margins yellow, yellow coloration of distal half of epipleural margin broadened to preapical region; profemur and mesofemur testaceous in basal 3/4, infuscated in apical 1/4, metafemur, tibiae, tarsi, and abdomen brown, except anterior margin of metafemur faintly testaceous. Head: Funicular antennomeres 6-8 serrate, capitular antennomeres 9 and 10 with collateral branch (Fig. 197), antennomere 11 oblong; frons narrower than width of eye (EW/FW 35/25). Thorax: Pronotum slightly oblong (PW/PL 100/105), side margin with well-developed tubercle, disc finely punctate; elytral asetiferous punctation minute, randomly distributed throughout disc, (EL/EW 360/110); protibial anterior margin spinose. Abdomen: Pygidium scutiform; aedeagus (Fig. 247) slightly sclerotized ventrally, phallic apex narrow triangular, phallic plate with uncus near apex.

Variation: Size: Length 15.0-16.0 mm; width 5.5- 6.0 mm. The paratype epicranium shows three infuscations and its elytral disc is less pigmented.

Natural history: The types were collected during October, at 60 m.

Distribution (Fig. 313): This species is known only from southern Brazil.

Etymology: The trivial name, *venabulum* (= hunting spear), is a Latin noun. The name refers to the spear- like form of the phallus.

***Pelonium wappesi* OPITZ nov.sp. (Figs 177, 178, 248, 313, 359)**

Holotype: ♂ BOLIVIA, Santa Cruz, 4-6 k SSE Buena Vista, F & F Hotel, 19-22-October 2004, Wappes & Morris (MNKM).

Paratypes: Eight. Bolivia: Departamento de Santa Cruz, 3.7 km SSE Buena Vista, Hotel Flora & Fauna, 17°29.949'S 63°33.152'W, 5-15-XI-2001, 405 m, tropical transitional forest, M. C. Thomas & B. K. Dozier (FSCA, 10); 4-6 km SSE Buena Vista, F & F Hotel, Oct 22-31 2002, Wappes & Morris (ACMT, 1); Potrerillo, 63°26'W 17°40'S, October 27-29, 2013, 430 m, MV/UV lights, Wappes & Morris (ACMT, 1); Reserva Privada Potrerillos de Guenda, 17°40.26'S 63°26.44'W, 9/28-XI-2006, 400 m, B. K. Dozier (FSCA, 2); Buena Vista vic. Flora & Fauna Hotel, 23-25/X/2000, R. Morris (RFMC, 1). Paraguay: Departamento Presidente Hayes, Lolita, Yaragui, 23°06'S 59°38'W, 23-27.XI.2007, U. Drechsel (JNRC, 1). Argentina: Provincia de Chaco, Charata (WOPC, 1).

Diagnosis: The members of this species resemble superficially those of *P. cribellum*, but in *P. wappesi* specimens the tibiae and tarsi are black, whereas in *P. cribellum* specimens they are testaceous.

Description: Size: Length 9.0 mm; width 3.8 mm. Form: As in Fig. 359. Color: Mouthparts testaceous, except mandible tips black; antenna black except scape testaceous, cranium, thorax, elytra, and abdomen reddish-testaceous, elytral disc with a faint pale fascia behind middle; legs bicolored, femora mostly testaceous, femoral apex, tibiae and tarsi black. Head: Antennomeres 6-8 slightly serrate, capitular antennomeres 9 and 10 with short or long collateral branch (Figs 177, 178), antennomere 11 obovate; frons very narrow (EW/FW 24/16). Thorax: Pronotum slightly oblong (PW/PL 58/75), side margin with well-developed tubercle, disc coarsely punctate at sides, sparsely punctate at middle; elytral asetiferous punctation subseriate, punctures end slightly beyond middle (EL/EW 190/60); protibial anterior margin spinose. Abdomen: Pygidial body scutiform; aedeagus (Fig. 248) with large triangular phallic apex.

Variation: Size: Length 7.0-9.0 mm; width 2.5-3.8 mm. Other than body size, the available specimens are quite homogeneous.

Natural history: Specimens were collected in October and November, at altitudes that range from 405 to 430 m; one from a tropical transitional forest with a MV/UV lights.

Distribution (Fig. 313): This species is known from Bolivia, Paraguay, and Argentina.

Etymology: The specific epithet is a dedicative patronymic honoring my colleague and friend Jim Wappes for his many accomplishments in field and collection-oriented Coleopterology.

***Pelonium zellibori* (PERACCHI) (Fig. 428)**

Corinthiscus zellibori PERACCHI, 1962: 301.

Holotype. ♂. Brasil, Estado do São Paulo (CSCB).

Description: I have not studied specimens of this species, but a photograph of a holotype was examined. The broad bands of the elytral disc will distinguish the members of this species from others of the *P. lampyroides*-group.

The *P. niveum* species group

The members of this monotypic species group have an enlarged 8th antennomere (Fig. 132). The species is distributed in Brazil.

***Pelonium niveum* (CHEVROLAT) (Figs 132, 133, 249, 313, 360)**

Enoplium niveum CHEVROLAT, 1843: 35. Lectotype. ♂. Here designated. (Brazil) Brazilia, Rio de Janeiro (MNHN). CORPORAAL 1950: 289 (*Corinthiscus*). Chevrolat did not specify in his description whether his nominal species is based on one specimen. Therefore, I invoke Recommendation 73F of the ICZN (1999) and designate a lectotype for this nominal species.

D i a g n o s i s: The enlarged 8th antennomere (Figs 132, 133) will easily distinguish the members of this species from congeners.

R e d e s c r i p t i o n: Size: Length 5.5 mm; width 2.0 mm. Form: As in Fig. 360. Color: Maxillae, labium, and antennae testaceous, mandibles brown; antenna mostly testaceous, capitular antennomeres dark brown except 11th antennomere testaceous in apical half; cranium bicolored, castaneous in front except lower and upper frons infuscated, cranial venter black, cranium pronotum and elytra vested with white pubescence; pronotum bicolorous, venter castaneous, disc castaneous, with black markings, pterothorax castaneous, mesoscutellum castaneous; legs testaceous, femora infuscated at base; elytra admixture of testaceous, castaneous regions, with dense patches of white setae particularly on discal posterior half, many punctures encircled in black in anterior half of disc; abdomen brown. Head: Funicular antennomere 8 greatly enlarged, capitular antennomeres 9 and 10 triangular (Fig. 132, 133), antennomere 11 oblong-ovoid; eyes coarse and bulging, frons narrower than width of eye (EW/FW 15/10). Thorax: Pronotum oblong (PW/PL 43/55), side margin with well-developed tubercle, disc with two black elevations and base with large glabrous black patch; elytral disc with large randomly distributed punctation at basal half, distal half without asetiferous punctation, and (EL/EW 140/32); protibial anterior margin spinose. Abdomen: Pygidium scutiform; aedeagus (Fig. 249) slightly sclerotized ventrally, phallic apex narrowly triangular, phallic plates sinuous in apical half.

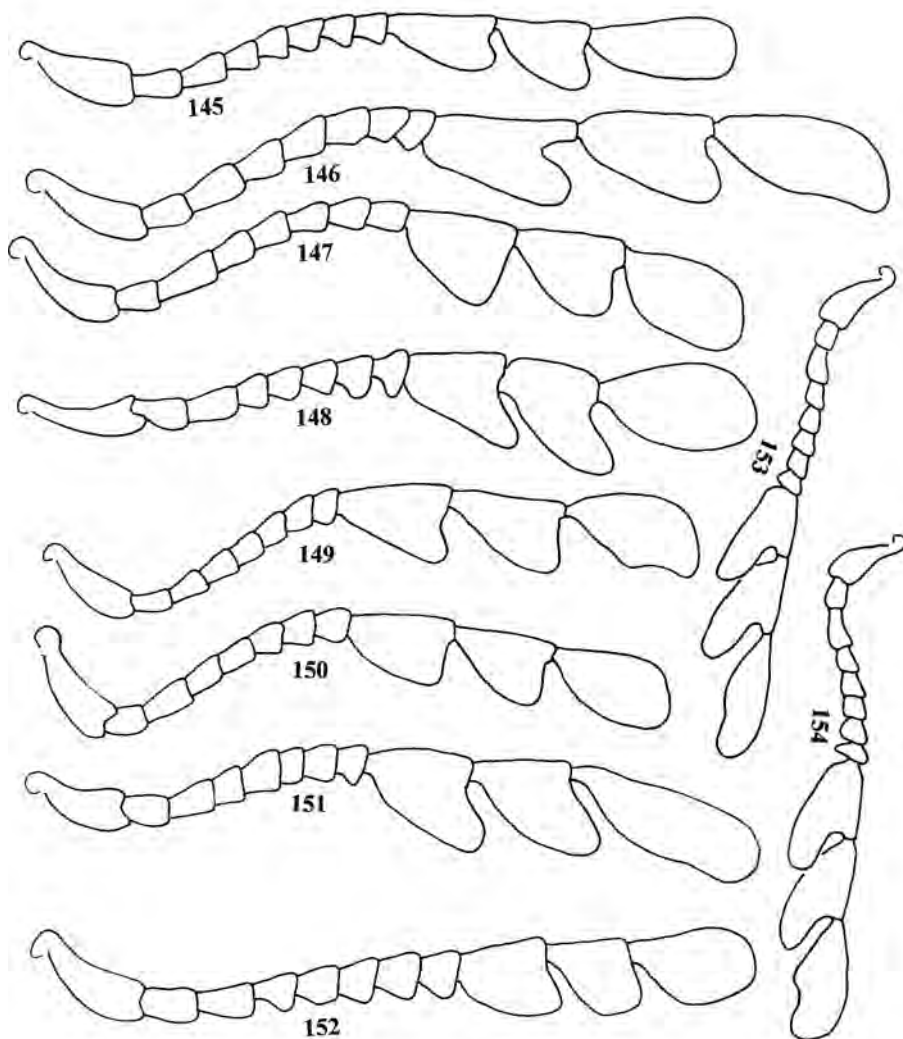
V a r i a t i o n: Size: Length 6.0-8.0 mm; width 2.0-2.5 mm. Other than body size the available specimens are quite homogeneous.

N a t u r a l h i s t o r y: Specimens were collected in November, December, and February, some at an altitude range of 300 to 500 m.

D i s t r i b u t i o n (Fig. 313): In addition to the lectotype, I examined 7 specimens from: Brazil: Estado do Bahia, Cachimbo, 1890, Ch Pujol; Estado do Santa Catarina, Nova Teutonia, II-1974, 300-500 m, F. Plaumann; idem, 27°11'S 52°23'W, XI-1965, F. Plaumann; idem, XII-1965. F. Plaumann. Specimens are deposited in MNHN, WFBM, and WOPC.

The *P. notabile* species group

In the members of this group the pronotal disc has a narrow central slit (Fig. 217) and the posterior 1/3 of the elytral disc shows an angular castaneous making bordered in dark brown (Fig. 215). There are 3 species whose geographi distribution includes the United States of America, México, Guatemala, Honduras, Costa Rica, and Brazil.



Figs 145-154: Antennae. (145) *Pelonium optabile*, female. (146) *P. peninsulare*, male. (147) *P. peninsulare*, female. (148) *P. plicatum*, female. (149) *P. popliteum*, male. (150) *P. popliteum*, female. (151) *P. quadriplagiatum*, male. (152) *P. quadriplagiatum*, female. (153) *P. posticum*, male. (154) *P. posticum*, female.

***Pelonium leucophaeum* (KLUG) (Figs 107, 108, 201-208, 250, 308, 361)**

Enoplium leucophaeum KLUG, 1842: 366.

H o l o t y p e : ♀. Amer. Sept. (North America) (ZMHB). CORPORAAL 1950: 288 (*Corinthiscus*).

Enoplium venustum HALDEMAN, 1847: 126.

Pelonium vetustum SPINOLA, 1844a: 360.

Priocera albomaculata ZIEGLER, 1845: 268.

Pelonium granulatum WOLCOTT, 1909: 100. nov. syn.

H o l o t y p e : Gender not known. United States of America, Texas (MCPM).

D i a g n o s i s : The middle 1/3 of the elytral disc is mostly white. This characteristic will distinguish the members of this species from superficially similar specimens of *P. peninsularis*, in which the middle 1/3 of the elytral disc is more light brown and shows several black markings. Also, this is a North American species, whereas *P. peninsularis* is found in México.

R e d e s c r i p t i o n : Size: Length 9.0 mm; width 3.0 mm. Form: As in Fig. 361. Color: Mouthparts testaceous except maxillary and labial terminal palpomeres brown and mandibles black; scape mostly brown, testaceous ventrally, pedicel, and funicular antennomeres castaneous, capitular antennomeres mostly dark brown, 11th antennomere testaceous in apical 1/3; cranium bicolored, mostly dark castaneous, clypeus black, epicranium at center and behind eyes narrowly castaneous and cranial venter black; prothorax mostly black, disc with small castaneous regions; pterothorax black; mesoscutellum castaneous; elytra tricolored, anterior 1/4 mostly castaneous, discal portion of white small interstitial spots, middle 1/2 mostly white, with few lateral black spots, posterior 1/3 tricolored, with angular light castaneous marking outlined in dark brown, apical region very light castaneous; prothoracic legs black, except tarsi light yellow, mesothoracic and metathoracic legs testaceous basally and apically, black at middle, tarsi light yellow; abdomen mostly brown, with testaceous spots at sides. Head: Capitular antennomeres 9 and 10 with or without short collateral branch (Figs 107, 108), antennomere 11 oblong- subtriangular; epicranium with tufts of brown setae; frons narrower than width of eye (EW/FW 20/16). Thorax: Pronotum oblong (PW/PL 56/70), side margin with well-developed tubercle, disc with narrow slit at center and shallow tumescences vested with brown setae; elytral disc with midline ridge and large randomly distributed punctation that extend to elytral apex, punctures binodal in basal 1/4, interstitial spaces elevated at anterior 1/4, more posterior disc with carina (EL/EW 190/40); protibial anterior margin roughened. Abdomen: Pygidium scutiform; aedeagus (Fig. 250) slightly sclerotized ventrally, phallic apex short-triangular, phallic plates broad.

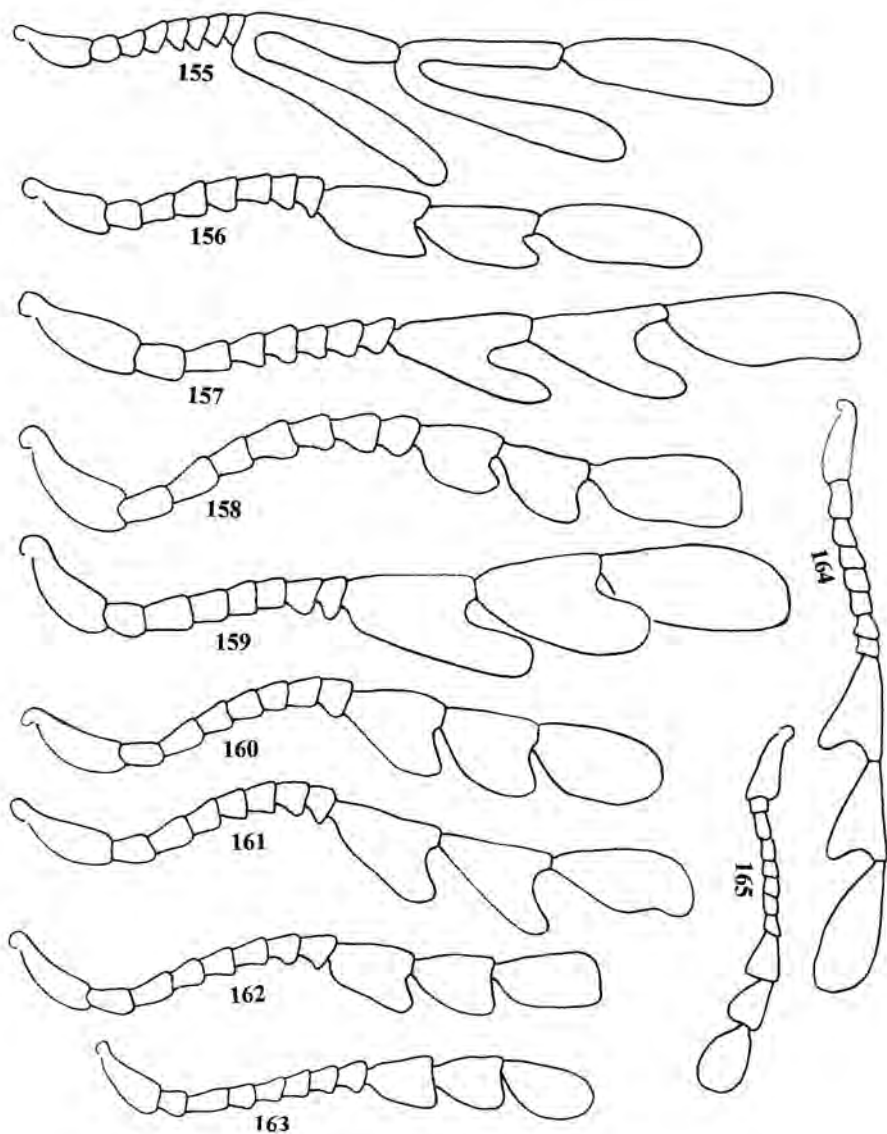
V a r i a t i o n : Size: Length 4.5-11.5 mm; width 1.5-4.0 mm. The melanistic portions of the elytral disc vary in intensity. The apical region of the elytral disc varies from castaneous to yellow.

N a t u r a l h i s t o r y : Most specimens were collected during spring and summer months (May-July). In several cases collectors secured dead wood from which beetles emerged; wood species includes cypress (Cupressaceae), *Betula nigra* LINNAEUS (Betulaceae), bur oak *Quercus macrocarpa* MICHX. (Fagaceae), red cedar *Juniperus virginiana* LINNAEUS (Cupressaceae), American elm *Ulmus Americana* LINNAEUS (Ulmaceae), *Carya* NUTT. (Juglandaceae), *Ulmus cassifolia* NUTT. (Ulmaceae), *Morus* LINNAEUS (Moraceae), the ash tree *Fraxinus* LINNAEUS (Oleaceae). *Carya illinoensis* (WANGENH.) K. KOCH (Juglandaceae), *Cercis Canadensis* LINNAEUS (Fabaceae), and *Taxodium distichum* (LINNAEUS) RICH. (Cupressaceae). Other specimens were collected on *Diospyras virginiana* LINNAEUS (Ulmaceae), the grapefruit *Citrus paradisi* MACTAD. (Rutaceae), the bromeliad *Tillandsia fasciculata* SW. (Bromeliaceae), *Citrus aurantium* LINNAEUS (Rutaceae), and *Sambucus canadensis* LINNAEUS (Adoxaceae). Collecting

techniques involved use of Lindgren funnel laced with ethanol, Steiner traps, Jackson traps, medfly traps, beating sheets, black lights, suction traps, sweep nets, and canopy traps.

Distribution (Fig. 308): I examined 340 specimens from: Canada: Quebec, Montréal, 27-III-?, larvae reared from cypress slab, A. D. Seguin. United States of America: Arizona Santa Cruz County, Rio Rico, ?-VII-1982, Dr. Lenczy; New Jersey, Malaga, 9-VII-?, H. W. Wenzel; Michigan, Oakland County, 26-VII-1940, A. W. Andrews; Virginia, Alexandria, 27/28-VI-197; Cape Henry; Maryland, Sparrows Point, 8-VII-1932, J. W. Green; Takoma Park, 3-VIII-1953, sweeping weeds, D. G. Kissinger; Kansas, Douglas County, 22-VII-1956, R. Barr; Saline County, Salina, ?-VI-2000, W. Opitz; Brown County, Hiawatha, 13-VI-1957, beating dead elm leaves, G. H. Nelson; Cherokee County, 2 mi S Galena, 37°2.64'N 94°38.18'W, 13-VII-2005, canopy trap, G. A. Salisbury; Rooks County, 1 mi W Webster State Park, 39°22.84'N 99°32.31'W, 29-VI-19-VII-2005, canopy trap, R. Buhler; Bourbon County, 9 mi SW Fort Scott, 37°46.98'N 94°49.42'W, 14-28-VI-2005, canopy trap, G. A. Salisbury; Sedgwick County, Wichita, S Saint Paul Street & W 17th street, 37°22.53'N 97°22.53'W, 21-30-VI-2005, canopy trap, G. A. Salisbury; Atchison County, Atchison, 1-VIII-1957, J. W. McReynolds; Lawrence, 25-VII-1953, C. H. Curran; Missouri, Clark County, vicinity SW corner Rose Pond Construction Area, collected branch of *Betula nigra* L. (Betulaceae) on 13-III-2004, specimen emerged on 1-10-VI-2004, T. C. MacRae; Boone County, 5 mi N Prathersville, collected dead branch of *Quercus macrocarpa* on 4-V-2001, specimen emerged 16-23-V-2001, T. C. MacRae; Franklin County, 8 mi WSW New Haven, 14-V-1987, T. C. MacRae; Taney County, Minci Construction area, emerged 1-10-IV-1999 from dead wood of *Juniperus virginiana*, T. C. MacRae & R. S. Thomas; Henry County, 7 mi E Clinton, 20-VI-1976, on *Diospyros virginiana*, G. H. Nelson; Lathrop, 25-VI-1955, E. C. Becker; Jackson County, Burr Oak Woods, Natural Area, 9-VI-2000, on *Quercus macrocarpa*, G. H. Nelson; Jackson County, Raytown, 17-VII-1973, at light, G. H. Nelson; idem, wood collected on 12-X-1968, reared from *Ulmus americana* 24-XII-1968, G. H. Nelson; Illinois, Mason County, Mason State Forest, 19-VI-1960, J. M. Campbell; Indiana, Crawford County, Grantsburg, 10-VI-1967, Dianne Eckhart; Clay County, Poland, 15-IV-1976, reared from *Carya*, Charles E. White; Tippecanoe County, 8-VIII-1980, N. M. Downie; Ohio, Athens County, Athens, 15-VII-1942, W. C. Stehr; Tennessee, Warren County, McMinnville, TCU, 35.70715°N 85.74441°W, emerged from *Quercus*, 2004-2005, Nadeer N. Youssef; Knoxville, 30-IV-1930, reared from cedar, B. Dozier; idem, 24-V-1957, light, H & A. Howden; Oklahoma, Latimer County, 5 mi W Red Oak, VIII-1980, Karl H. Stephan; Cleveland County, 26-VI-1975, light trap, William. D. Shepard; Louisiana, Baton Rouge, 28-V-1986, C. B. Barr & E. G. Riley; Cedo Parish, Jacobs Nature park, 17-19-VIII-1985, L. R. Raymond; Texas, Bastrop County, Buescher State Park, 10-V-1985, UV light, C. S. Wolfe; Tyler County, Tyler Street Park, 6-V-1988, S. C. Wolfe; Travis County, vicinity Long Hollow Creek, 30°27.43'N 97°52.19, 5-VI-1993, on *Ulmus crassifolia*, Alexander, Quinn, Riley, Wharton; Karnes County, 1 mi NE Range, 28.8937°N 97.6967°W, 11-V-2007, on *Zanthoxylum hirsutum* Buckl.; Karnes County, Ecletto, Metz Ranch, 29-IV-1957, Beierl; Live Oak County, Three Rivers, 11-V-1978, J. E. Wappes; Bexar County, Leon Valley, 26-VI-1982, on *Dyospiros, texana*, G. H. Nelson; Kerr County, Kerrville, 11-VIII-1958, H. F. Howden; Mason County, 2 mi w Castell, emerged from wood of *Morus* sp. on 1/10-V-1992, D. W. Sundberg; Bandera County,

Bandera, 14-V-2003, S. G. Wellso; Gillespie County, Lyndon B. Johnson National Historical park, 21-V-1989, E. G. Riley; Cameron County, Sabal Palm Grove, 13-IV-1991, D. J. Heffern; Starr County, Salineno, emerged from *Fraxinus*, D. J. Heffern, Hidalgo County Bentsen, Rio Grande State Park, 4-IV-1955, reared hackberry, H. F. Howden; Brazos County, College Station, 1-10 May-1981, ex. *Carya illinoensis*, Engl. & Graebn; idem, 31-V-1964, emerged from *Cercis canadensis*, S. G. Wellso; San Patricio County, Welder Wildlife Refuge, 28-VI- 1969, Boadr & Hafernik; Collin County, Allen, 27-IV-1978, J. K. Weaver; Sam Houston National Forest, Kelly's Pond, 14-VI-1990, at light, W. F. Chamberlain; Fort Bend County, 0-2 mi NW 159 & Brazos River 12-V-1985, Dan Heffern; Grimes County, 11 mi E Navasota, 14-VI-1986, Heffern & Wappes; Mason County, 2 mi W Castell, emerged from *Morus* species, 1-10-V-1992, D. W. Sundberg; Harris County, by Houston Airport, emerged V-1990 from wood collected II-1990, D. J. Heffern; Chambers County, Trinity River, emerged from dead *Taxodium distichum* during IV-1993, D. J. Heffern; North Carolina, Charlotte, 6-IX-1953, H. V. Autry; Wake County, Raleigh, Schenck Forest, from *Quercus* species, R. L. Blinn; South Carolina, Myrtle Beach, VII-1961, W. Rosenberg; Georgia, Newton County, Emory University Field, 12-VI-1957; Appling County, 5 mi S Baxley, Cypress wood collected 17-X-1986, specimen emerged 4-VI-1987, R. Morris; Upson County, Spirewell Bluff area, 29-V-1987, R. Morris; Clark County, Whitehall Forest, 14-V-1974, emerged from *Juniperus virginiana* L., R. Turnbow; Clinch County, 6.5 mi NE Edith on Hwy 177, 24-31. V. 1998, lower trunk standing of *Taxodium distichum* (L.), T. C. MacRae; Whitehall Forest 1-V-1974, emerged from *Juniperus virginiana* L.; Putnam County, 14-V-1964, *Juniperus* infected with bark beetles, L. A. Cambre; Louisiana, East Baton Rouge, Baton Rouge, 14-V-1986, E. G. Riley; Mississippi, Washington County, Stoneville, Delta Experimental Forest, 28/29-V-1981, R. L. Penrose; Harrison County, Long Beach, 2-VI-1969, UV trap, L. H. Williams; Madison County, 19-V-1964, L. A. Cambre; Alabama, Tuscaloosa County, Tuscaloosa, 1952, B. Valentine; Jefferson County, Birmingham, 2-VIII-1968, T. King; Mobile County, V-1957, H. K. Dozier; Florida, Bay County, Panama City, 17-VI-1977, T. King; Broward County, Hollywood, 4-V-1994, *Citrus paradisi*, B. Coy; Hernando County, Withlacoochee State Forest, Goat Road, 27-28-IX-1990, R. Morris; Highlands County, Archibold Biological Station 26-IV-1976, L. L. Lampert, Jr.; idem, 19-V-1949, in *Tillandsia fasciculata*, A. & B. Patterson; Taylor County, 13 mi N. Steinhatchee County Road 361, 13-V-1995, beating, M. C. Thomas; Indian River County, Indian River, 5 mi W I-95, (26-30)-VI-1975, M. C. Thomas; Indian River County, Fellshmere, 18-IV-1983, on *Sambucus canadensis*, E. W. Campbell; Indian River County, Vero Beach, 8-VI-1964, suction trap, W. L. Biolingayer; Alachua County, Gainesville, 1-VII-1956, T. Denmark; Lake Elizabeth, 6-V-2001, reared from cypress, B. K. Dozier; Orange County, Orlando, 20-V-1964, J. R. Woodley; idem, 28-IV-2009, Lindgren funnel with ETHOH & *Persea*, M. Weiss; Pinellas County, Fort Desoto Park, 6-VI-1995, R. F. Morris II; Dade County, Ojus, 29-IV-1971, D. R. DeHaven; Manatee County, Palma Sola, 27-X-1963, in Steiner trap, D. C. Chancy; Manatee County, Parrish, 29-VII-1964, D. C. Chancy; Lake County, Mascotte, VII-1960, in medfly trap, C. L. Felshaw; Polk County, Auburndale, 11-VI-1992, Jackson trap, M. Simpson; Polk County, Frostproof, 25-IV-1961, R. E. Vild; Sarasota County, Sarasota, 3-VI-1987, on *Citrus aurantium*, K. Jenkins; Flagler County, Marineland, 28-V-1962, G. W. Desin. Specimens are deposited in ACMT, CASC, CMNC, CNCI, EMEC, LACM, NCSU, NMNH, RFMC, RHTC, SEMEC, USNM, WFBM, and WOPC.



Figs 155-165: Antennae. (155) *Pelonium ramosum*, male. (156) *P. ramosum*, female. (157) *P. regina*, male. (158) *P. revimentum*, female. (159) *P. russulentum*, male. (160) *P. russulentum*, female. (161) *P. scapulare*, male. (162) *P. scapulare*, female. (163) *P. placidum*, female. (164) *P. riveti*, male. (165) *P. riveti*, female.

***Pelonium peninsulare* (SCHAEFFER) (Figs 146, 147, 251, 309, 310, 362)**

Cregya peninsularis SCHAEFFER. Lectotype. ♂. Santa Rosa, Low. Cal. (USNM). CORPORAAL 1950: 289 (*Corinthiscus*). Paralectotypes: Two specimens from the same locality as the lectotype (USNM).

Corinthiscus sinaloae CHAPIN, 1920: 53.

D i a g n o s i s: The middle 1/3 of the elytral disc is mostly light brown and shows several short black lines. This characteristic will distinguish the members of this species from superficially similar specimens of *P. leucophaeum*, in which the middle 1/3 of the elytral disc is white and shows punctiform black markings. Also, this is mostly a Mexican species, whereas *P. leucophaeum* has only been found in North America north of México.

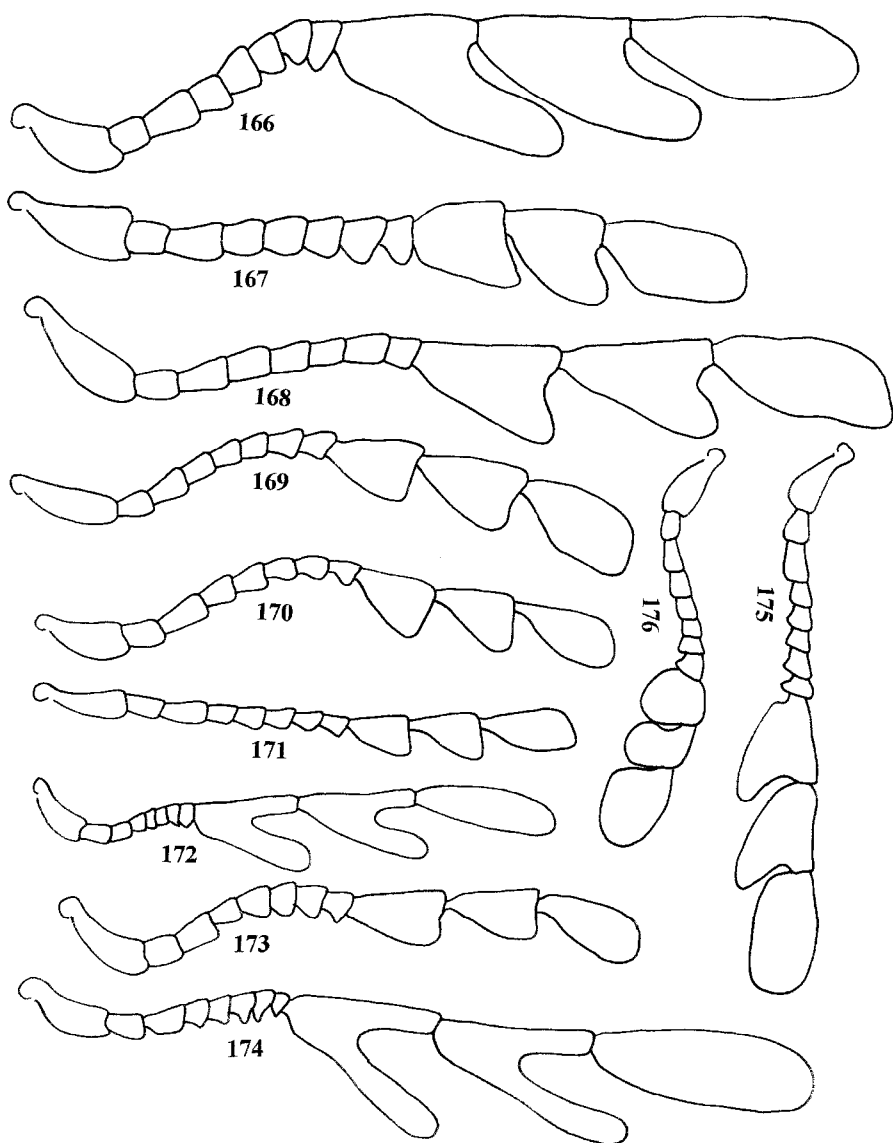
R e d e s c r i p t i o n: Size: Length 15.0 mm; width 3.5 mm. Form: As in Fig.. Color: Mouthparts testaceous except mandibles dark brown; scape, pedicel, and funicular antennomeres testaceous, capitular antennomeres mostly dark brown, 11th antennomere testaceous in apical 1/3; cranium and thorax castaneous; elytra tricolored, anterior 1/4 admixture of castaneous, brown and light yellow coloration, middle 1/2 mostly light yellow, with few lateral black spots, posterior 1/3 tricolored, with angular light castaneous marking outlined in dark brown, apical region very light castaneous; prothoracic legs brown, except tarsi testaceous, mesothoracic and metathoracic femora brown in basal 2/3, testaceous in remainder, tibiae and tarsi testaceous; abdomen brown. Head: Capitular antennomeres 9 and 10 with or without short collateral branch (146, 147), antennomere 11 oblong- suboval; frons narrower than width of eye (EW/FW 25/15). Thorax: Pronotum oblong (PW/PL 65/75), side margin with shallow tubercle, disc with central slit and shallow tumescences; elytral disc without midline ridge, with large randomly distributed punctuation that extend to elytral apex, punctures less numerous at middle near sutural margin (EL/EW 205/50); protibial anterior margin spinose in distal 1/3. Abdomen: Pygidium scutiform; aedeagus (Fig. 251) slightly sclerotized ventrally, phallic apex broad-triangular, apex slightly expanded posteriorly at middle base, phallic plates broad.

V a r i a t i o n: Size: Length 6.0-14.0 mm; width 1.8-5.0 mm. The melanistic portions of the elytral disc vary in intensity. The apical region of the elytral disc varies from castaneous to yellow.

N a t u r a l h i s t o r y: Most specimens were collected during spring and summer months (May-September), at altitudes ranging from 114 to 1433 m; some with a black light. Collection data suggest that these beetles are associated with *Cercidium* (= *Parkinsonia* LINNAEUS) (Fabaceae), *Acacia* MILLER (Fabaceae), and *Quercus* LINNAEUS (Fagaceae).

D i s t r i b u t i o n (Figs 309, 310): I examined 225 specimens from: United States of America: Arizona, Yavapai County, US 93, 23 mi NW Wickenburg, 23-VII-1987, W. B. Warner; Pima County, Baboquivari Mountains, western slope of Sycamore Canyon, 29-VII-1959, R. H. Arnett, Jr.; Santa Cruz County, Montosa Canyon, 25-VII-1979, E. Giesbert; Pena Blanca, Pajarito Mts., 6-VIII-1961, R. H. Arnett, Jr., E. Van Tassell; Cochise County, Leslie Canyon, 16.5 mi N Douglas, 18-VII-1976, 4700 ft, at black light, J. M. Campbell. México: Estado de Chihuahua, Sierra Madre Mountains, La Bufa, 7-VII-1972, 900 m, Derham, Guliani; Estado de Sonora, Desemboque, 8-VIII-1953, B. Malkin; Estado de Michoacán, 9 mi S Cuatros Caminos, 11-VII-1972, on *Cercidium*, G. H. Nelson; 13.3 mi S. Capirio, 17-VI-1987, B. K. Dozier; 17.3 mi S Nueva Italia, 30-VII-1988, Ferreira, Schaeffner; 5 mi E Apatzingán, 19-VII-1954, E. G. Linsley, J. F. MacSwain, R.

F. Smith; Estado de Oaxaca, 19 mi S Matias Romero, 24-25-V-1969, D. Bright & M. Campbell; Estado de Sinaloa, N. Mazatlan, 25-VII-1973, J. A. Chemsak, E. G. Linsey, A. M. M. Michelbacher; 5 mi N Mazatlan, 507-1964, H. F. Howden; 15 mi N. Mazatlan, 7-VIII-1973, E. Giesbert; 3 km E El Marmol, 8-VIII-1983, E. Giesbert; 2 mi SE Villa Union, 28-VII-1973, E. Giesbert; 5 mi N Mazatlan, 9-VIII-1965, on Acacia, G. H. Nelson; Cuilacá, 6 mi S, 6-VIII-1964, J. A. Chemsak & J. Powell; 10-12 mi N Los Mochis, 27-VII-1984, B. K. Dozier; Villa Union, 6 mi E, 30-VI-1965, at light, J. A. & M. A. Chemsak, E. G. & J. M. Linsley; Venedio, 31-VII-1918; 26 mi N Pericos, 13-VIII-1960, P. H. Arnaud, Jr., E. S. Ross, D. C. Rentz; Estado de Jalisco, MX 200, 1.2 km, S La Cumbre, 28-VII-2011, Skillman & Turnbow; Tequila, 55 mi, W, 28-VI-1963, J. Doyen; 15 km N Melaque Junction, 15-VII-1992, Bryan K. Eya; Chamela Research Station, 19°29'N105°02'W, 8-VII-2003, at light, 375 ft, F. G. Andrews; Chamela, vic UNAM, 9-19-VII-1993, J. E. Wappes; 3 km N Tomatlan, 13-VII-1985, E. Giesbert; 6.6 mi SE El Programma, hwy 200, 7-VII-1987, C. L. Bellamy; Rio Las Juntas, hwy 200, km 160, 25-VII-1990, W. F. Barr; 21 km N Melanque, 6-VII-2006, Skillman & Hildebrandt; 21 km NW El Tuito, 25-VII-1990, W. F. Barr; Estado de Nayarit, Punta Mita, 26-VII-1990, R. L. Penrose; Los Barriles, 27-IX-1978, D. E. Foster; 6.5 mi S, 1 mi E El Pescadero, 20-21-VI-1977, Dozier & Wescott; 3 km N Los Divisadetros, 23°52'N 110°6'W, 11-VII-1980, on Quercus, W. F. Barr; Tepic, El Cora, Ludeke; Estado de San Luis Potosi, Tamazunchale, 21-VI-1963, D. Bixler; Estado de Morelos, Alpuyeca, 27-VI-1951, P. D. Hurd; Estado de Baja California, 3.5 mi NE San Pedro, 7-IX-1967, J. Chemsak, M. Michenbacher; Punta Pamilla, 13-IX-1967, J. Chemsak, M. Michenbacher; La Paz, 7 mi SW, 4-VIII-1966; E. & J. Linsley, J. Chemsak; 4.3 mi W hwy 1 on Ramal a el Rosario, 6-7-IX-1988, E. G. Riley; Morelos, 21-VI-1950, L. Navarro; Santa Rosa; 29 km W Todos Santos, km 23, 26-VIII-1977, Fischer & Wescott; Los Barriles, 28-IX-1970, on Cercidium, W. F. Barr; Estado de Baja California Sur, vic. Boca de la Sierra, NW of Miraflores, 12-VIII-1980, at light, C. L. Bellamy; 8 mi NW San Bartolo, 18-VIII-1982, F. Hovore; 7 km V Cabo San Lucas, 26-27-VIII-1976, E. Giesbert; 8.4 mi W on Ramal a Los Naranjos, 13-IX-1988, E. G. Riley; vicinity Santiago, 27-29-VIII-1994, J. E. Wappes; Estado de Guerrero, Mezcala, 29-VI-1951, at light, H. Evans; Cacahuamilpa, 17-VI-1945, C. Bolivar; Hwy. 200, 51 km NE Ixtapa, 18-21-VII-1985, J. E. Wappes; Petaquillas, 27-VII-1983, J. Chemsak; Estado de Oaxaca, highway 190, 24.8 km W Jalapa de Marquez, 11-VII-1992, on dead limbs, G. H. Nelson; 11 mi W Tecpan, 22-VI-1966, W. Chernoff; 30 mi NE Tehuantepec, 8-VII-1955, Derham Giuliani; 19 S Matias Romero, 24-25-VI-1969, D. Bright & J. M. Campbell; Estado de Colima, Armeria, 21-VII-1953, collector ?; 18 km W Tepalcatepec, 13-VII-2006, slash pile, Acacia, weeds, Skillman & Hildebrandt; 8 mi NW Armeria hwy 200, 7-VII-1987, C. L. Bellamy; 1.5 km W Los Orlices, 19°05.930'N103°44.009'W, 1175', 16-VII-2003, A. J. Gilbert; Estado de Chiapas, 2.3 mi W Las Cruces, 13-VII-1962, J. M. Campbell; Cinco Cerros, km 30 on hwy 190, 8-VI-1989, 1500 m, H. Howden; El Chorreadero, 26-VI-1990, R. Turnbow; hwy 190, 7 km E Rizo de Oro, 18-VI-1992, R. A. Cunningham; El Aguacero, 16 km W Ocozocouautla, 28-VI-8-VII-1986, E. Giesbert; Cinco Cerros, km 30 on Hwy 190, 8-VI-1989, 1500 m, H. Howden. Guatemala: Departamento de Zacapa, rd to San Lorenzo, 30-V-4-VI-?, E. Giesbert; 6 km W Teculut; 6 km W Teculután, La Palmilla, 5-VI-1991, H. & A. Howden. Specimens are deposited in ACMT, CASC, CMNC, CNCI, EMEC, FMNH, FSCA, JNRC, MNHN, RHTC, TAMU, USNM, WFBM, and WOPC.



Figs 166-176: Antennae. (166) *Pelonium schenklingi*, male. (167) *P. schenklingi*, female. (168) *P. spinolai*, male. (169) *P. spinolai*, female. (170) *P. scoparium*, male. (171) *P. scoparium*, female. (172) *P. rallum*, male. (173) *P. rallum*, female. (174) *P. stolonum*, male. (175) *P. semirufum*, male. (176) *P. semirufum*, female.

***Pelonium notabile* GORHAM (Figs 138, 141, 215, 217, 252, 325, 363)**

Pelonium notabile GORHAM, 1883: 188. Lectotype. ♀. Here designated. (Panamá), Bugaba, 800-1500 ft. Champion (BMNH). CORPORAAL 1950: 289 (*Corinthiscus*). Gorham specified that he based his description on four specimens, but he did not single out a name-bearer for his nominal species. Therefore, I invoke Recommendation 73F of the ICZN (1999) and designate a lectotype for this nominal species. Paralectotypes. Three. Panamá: Bugaba, 800-1500 ft. Champion (BMNH, 2; MNHN, 1).

D i a g n o s i s : Within the *P. notabile*-group, only in the members of this species are there ridges on the elytral disc.

R e d e s c r i p t i o n : Size: Length 8.0 mm; width 3.0 mm. Form: As in Fig. 363. Color: Maxillae and labium testaceous, except terminal palpomeres are brown, labrum and mandibles brown; antenna testaceous, except apical region of capitular antennomeres 9 and 10 brown, 11th antennomere infuscated at middle; cranium castaneous, except upper frons black, epicranium behind eyes infuscated; pronotum castaneous, except disc with black curving lines and with large black subquadrate patch near sub-base; anterior legs mostly infuscated, middle and hind legs testaceous; elytral disc with admixture of yellow, light brown and dark brown, posterior 1/3 tricolored, with angular light castaneous marking outlined in dark brown, apical region very light castaneous, humeral region slightly infuscated; abdomen dark brown, visible sternites I-V with paralateral unpigmented spots. Head: Capitular antennomeres 9 and 10 with short or long collateral branches (Figs 138, 141), antennomere 11 obovate; cranium with upper tumescence; frons much narrower than width of eye (EW/FW 22/16). Thorax: Pronotum oblong (PW/PL 57/72), side margin with well-developed tubercle, disc with curvate swellings and slit at middle, and minute setiferous punctation; elytra widens towards apex, disc with linear carina and subapical tumescence, disc sculptured with large subseriate punctation that extends to elytral apical 4/5; interstitial spaces elevated (EL/EW 185/45); protibial apex with one spine. Abdomen: Pygidium scutiform; aedeagus as in Fig. 252; phallus with large triangular apex, latter has acuminate posterior extension.

V a r i a t i o n : Size: Length 8.0-13.0 mm; width 3.8-4.5 mm. Other than body size, the available specimens were quite homogeneous.

N a t u r a l h i s t o r y : Specimens have been collected during a period from January to May, and during July. T. J. Creedy collected one specimen by canopy fogging a tree of the American sweetgum *Liquidambar styraciflua* LINNAEUS (Altingiaceae), in a Honduran primary broadleaved rainforest; during July, at 1294 m. The other specimens were taken from Panamá at altitudes ranging from 244 to 457 m. In Costa Rica, specimens were collected November and from January to April; at altitudes ranging from 800-1350 m.

D i s t r i b u t i o n (Fig. 325): In addition to the lectotype and paralectotypes, I examined 44 specimens from: Honduras: Departamento de Cortés, Parque Nacional Cusuco, Guanales, VII.2014, Canopy Fogging, *L. styraciflua* in primary broad-leaved rainforest. Costa Rica: Provincia de Cartago, 18 km NE Turrialba, Feb 4-10-1978, E. Giesbert; Provincia de Puntarenas, Monteverde, Feb. 1 1978, E. Giesbert; idem, April 11-14-1981, E. Giesbert; Monteverde, Pension Quezal, 22-24 May 1985, F. T. Hovore; idem, La Reserva, 23-28-II-1980, R. S. Anderson; idem, 3/8-I-1989, F. Hovore; idem, 10/20-III-90, W. Haber; idem, II-1991, 1350 m. Provincia de Guanacaste, Volcán Sandero, 28 Nov. 1993-5 Jan. 1994, 800 m, E. Araya; SW side Volcán Cacao, July 1989-March 1990, Malaise trap; Rincón de la Vieja, 9-27 February 1993, 800 m, K. Taylor; Arenales, W side

of Volcán Cacao, 1988-1989, 900 m; Volcán Orosi, 27 Feb-10 Mar. 1992, 600 m, K. Martinez. Panamá: Provincia de Chiriquí, Bugaba, 800-1500 ft., Champion. Specimens are deposited in BMNH, FSCA, MUCR, OXUM, SDEI, WFBM, and WOPC.

The *P. fasciculatum* species group

The members of the 7 species of this group have the disc of the pronotum and elytra marked with metallic black spots. The geographic range of these species includes Argentina, Bolivia, Brazil, Colombia, Honduras, México, Panamá, Paraguay, Uruguay, and Venezuela.

Pelonium caraguata OPITZ nov.sp. (Figs 41, 42, 253, 317, 364)

H o l o t y p e : ♀. Rio Caraguata, M. Grosso, Brazil, X-14-1954, 21°48'; 52°27', 400 M. alt., F. Plaumann leg. (WFBM).

P a r a t y p e s : Thirty-two. Bolivia: Provincia de Santa Cruz, 3.7 km SSE Buena Vista, Hotel Flora & Fauna, 17°29.949'S 63°33.152'W, 5-15-XI-2001, 405 m, tropical transition forest, M. C. Thomas & B. K. Dozier (FSCA, 1); idem, 4.6 km SSE Buena Vista, Hotel Flora & Fauna, 27-29 October 2000, Wappes & Morris (WOPC, 1); Potr. del Guenda, Reserva Natural, aka, Snake Farm, 17°40'.15"S 63°27'.26", October 23-30. 2013, 400 m, Wappes & Kuckartz (ACMT, 1); idem, 16-22 October 2006, 370 m, Wappes, Nearn & Eya (ACMT, 1); idem, 12-13 October 2007, 370 m, BL/MV lights, Cline & Wappes (CSCA, 1); Departamento de La Paz, Nor Yungas, Coroico, XII-1949 (WOPC, 1). Brazil: Estado do Goiás, Jatai, 1895-1896, Ch Pujol (BMNH, 1; MNHN 8; SDEI, 4; WOPC, 5); Rio Verde, 1908, G. A. Baer (MNHN, 2); Estado do Minas Gerais, Sertão de Diamantina, 10-11-1902, E. Gounelle (MNHN, 1); Estado do Mato Grosso, Rio Caraguata, XII-1963, 21°48'; 52°27', 400 m, F. Plaumann leg. (WFBM, 2; WOPC, 2); Estado do Santa Catarina, Nova Teutonia, Fritz Plaumann (MNHN, 1); Brazil (BMNH, 1).

D i a g n o s i s : From superficially similar specimens of *P. cavei*, *P. caraguata* specimens are distinguished by the spinous condition of the anterior margin of their protibiae. In *P. cavei* specimens the margin is slightly roughened, not spinous. Also, *P. cavei* is a Middle American species, whereas *P. caraguata* is from South America.

D e s c r i p t i o n : Size: Length 7.0 mm; width 2.5 mm. Form: As in Fig. 364. Color: Mouthparts light brown; cranium bicolored, mostly castaneous, upper frons with black spot, cranial venter infuscated; antenna bicolored, scape, pedicel, funicular antennomeres and 11th antennomere testaceous, antennomeres, 9 and 10 dark brown; prothorax mostly castaneous, pronotal disc with several black spots, two just behind pronotal arch and one angular large black spot near base; elytral disc mostly testaceous, with admixture of dark brown flecks and small tufts of white 2° setae; legs mostly testaceous, femoral basal half dark brown. Head: Capitular antennomeres 9 and 10 with short collateral branch (Figs 41, 42), antennomere 11 oblong; frons very narrow (EW/FW 20/10). Thorax: Pronotum slightly oblong (PW/PL 45/50), side margin with well-developed tubercle, disc sparsely punctate, black regions glabrous; elytral asetiferous punctation scattered, punctures end at elytral middle (EL/EW 145/45); protibial anterior margin spinose. Abdomen: Pygidial body scutiform; aedeagus (Fig. 253) with acuminate phallic apex.

V a r i a t i o n : Size: Length 5.5-7.5 mm; width 2.0-2.5 mm. The dark spot on the upper frons may not be present. There is some variation in the configuration of the black marks on the elytral disc. Their visibility often depends on the extent of presence of the white elytral setae.

N a t u r a l h i s t o r y : Specimens were collected during periods from October to

December, at altitudes that range from 370 to 405 m. Some specimens from Bolivia were captured within a tropical transitional forest.

Distribution (Fig. 317): This species is known from Bolivia and Brazil.

Etymology: The trivial name, *caraguata*, constitutes a noun in apposition and refers to the type locality.

***Pelonium cavei* OPITZ nov.sp. (Figs 43, 44, 255, 320, 366)**

Holotype: ♂. HONDURAS, Morazán, San Antonio de Oriente, El Zamorano, 22-29 Mar 1990, col. R. Cave. A second label reads: Trampa Malaise en plantación de café bajo Inga (FSCA).

Paratypes: Eighteen. México: Estado de Chiapas, Lag. Belgica, 16 km NW Ocozocoautla, 130VI-1990, B. Gill (WOPC, 1). Guatemala: Departamento de Izabal, 25 km SE Morales, May 21-24. 1996, 2800', E. Giesbert, J. Monzon (FSCA, 1). Belize: Distrito de Cayo, Chiquibul Forest, Las Cuevas Field station, 88°59'W 16°43'N, V-2010, 500-700 m, H. Mendel & M. V. L. Barclay (BMNH, 4, WOPC, 1). Costa Rica: Provincia de Guanacaste, 3 km SE R. Naranjo, 1-11 May 1992, F. D. Parker (WOPC, 1). Panamá: Provincia de Panamá, 27-I-1925, G. Bateson (BMNH, 1); 3 km E Epeti, II-9-1992 (WFBM, 2; WOPC, 1); Barro Colorado Island, 16-27-I-1985, L. T. at ground level, H. Wolda (WOPC, 1); Provincia de Chiriquí, Bugaba, 800-1500 m, Champion (BMNH, 1; MNHN, 2). Colombia: Departamento de Magdalena, PNN Tayrona Palangana, 4-24-V-2001, 30 m, Malaise, R. Henríquez (WOPC, 2).

Diagnosis: From superficially similar specimens of *P. caraguata*, specimens of *P. cavei* are distinguished by the lack of spines on the anterior margin of their protibiae. In *P. cavei* specimens the margin is slightly roughened, not spinose. Also, *P. cavei* is a Middle American species whereas *P. caraguata* is from South America.

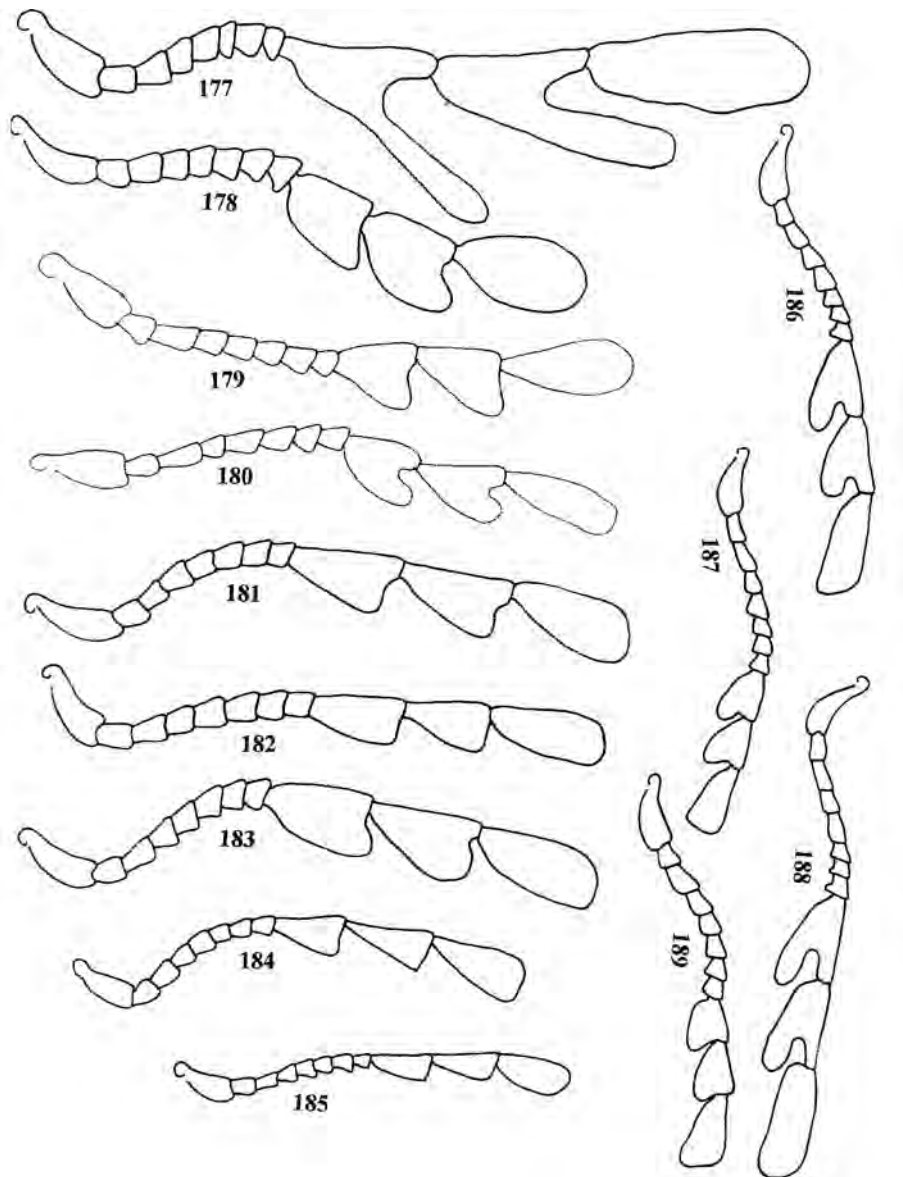
Description: Size: Length 7.0 mm; width 2.3 mm. Form: As in Fig. 366. Color: Mouthparts testaceous, except mandibles black; cranium bicolored, castaneous in front, black middle-epicranium and cranial venter; antenna bicolored, scape, pedicel, funicular antennomeres and 11th antennomere testaceous, antennomeres, 9 and 10 dark brown; prothorax mostly castaneous, pronotal disc with several black spots, three large ones, two just behind pronotal arch and one angular large black spot near base; elytral disc mostly testaceous, with admixture of dark brown flecks and small tufts of white 2° setae; legs mostly testaceous, femoral basal half dark brown. Head: Antennomeres 5-8 slightly serrate, capitular antennomeres 9 and 10 with short collateral branch (Figs 43, 44), antennomere 11 oblong; frons very narrow (EW/FW 14/08). Thorax: Pronotum slightly oblong (PW/PL 45/53), side margin with well-developed tubercle, disc sparsely punctate, black regions glabrous; elytral asetiferous punctation scattered, punctures end at elytral middle, (EL/EW 150/43); protibial anterior margin spinose. Abdomen: Pygidial body scutiform; aedeagus (Fig. 255) with large triangular narrow phallic apex.

Variation: Size: Length 7.0-8.0 mm; width 2.0-2.5 mm. There is some variation in the configuration of the black marks on the elytral disc.

Natural history: Specimens were collected in January, March, May, and June; one in a coffee plantation beneath trees of *Inga* MILL. (Fabacea). Altitudinally, specimens were collected from 30 to 854 m. Collecting techniques involved beating tree foliage and the Malaise trap.

Distribution (Fig. 320): This species is known from México, Guatemala, Honduras, Belize, Costa Rica, Panamá, and Colombia.

Etymology: The specific epithet is a dedicative patronym honoring my colleague and friend Ronald D. Cave for his many accomplishments in Coleopterology.



Figs 177-189: Antennae. (177) *Pelonium wappesi*, male. (178) *P. wappesi*, female. (179) *P. tricinctum*, female. (180) *P. axinoides*, female. (181) *P. woodruffi*, male. (182) *P. woodruffi*, female. (183) *P. placidum*, male. (184) *P. xanthorum*, male. (185) *P. xanthorum*, female. (186) *P. viridipenne*, male. (187) *P. viridipenne*, female. (188) *P. rossi*, male. (189) *P. rossi*, female.

***Pelonium fasciculatum* (KLUG) (Figs 88, 89, 256, 371, 367)**

Enoplium fasciculatum KLUG, 1942: 364. Lectotype. ♀. Here designated. Brasilien, Minas Geraes (Brazil, Minas Gerais) (ZMHB). CORPORAAL 1950: 286 (*Corinthiscus*). SOLERVICENS, 2005: 46; 2008: 593. Klug did not specify in his description whether his nominal species is based on one specimen. Therefore, I invoke Recommendation 73F of the ICZN (1999) and designate a lectotype for this nominal species.

Enoplium amoenum GUÉRIN, 1844: 55.

Enoplium fasciculatum aberration *cyaneomaculatus* BLANCHARD, 1844: 94.

D i a g n o s i s : Within the *P. fasciculatum*-group, only in the members of this species does the elytral apex have a tuft of black setae.

R e d e s c r i p t i o n : Size: Length 8.5 mm; width 3.0 mm. Form: As in Fig. 367. Color: Mouthparts testaceous, except mandibles black; scape, pedicel, and funicular antennomeres castaneous, capitular antennomeres mostly dark brown, 11th antennomere brown in basal half, testaceous in apical half; cranium castaneous; pronotum mostly castaneous, with irregular black glabrous markings at center just behind pronotal arch, and with large irregular marks at center just before pronotal collar; elytra mostly castaneous, disc with network of dark markings, with broad patch of white setae in posterior half of disc, subapical portion of disc with transverse glabrous black marking; prothoracic femur testaceous underneath, black in remainder, prothoracic tibia castaneous in basal half, brown in remainder, mesothoracic and metathoracic femora black in middle half, testaceous in remainder, and tibiae testaceous, mesothoracic and metathoracic tibiae castaneous in basal half brown in remainder, tarsi testaceous; abdomen brown. Head: Capitular antennomeres 9 and 10 with very short collateral branch (Figs 88, 89), antennomere 11 oblong- subtruncate; epicranium with tuft of brown setae; frons narrower than width of eye (EW/FW 20/15). Thorax: Pronotum slightly oblong (PW/PL 52/58), side margin with well-developed tubercle, midline of anterior margin vested with large tuft of black setae; elytral disc roughened in basal half, large randomly distributed punctation that extend to elytral distal 1/2 (EL/EW 190/43); elytral apex with tuft of black setae; protibial anterior margin spinose. Abdomen: Pygidium scutiform, not truncate; aedeagus (Fig. 256), phallic apex triangular, spicular plate not particularly robust.

V a r i a t i o n : Size: Length 8.0-11.0 mm; width 2.5-3.9 mm. Other than body size, the available specimens are quite homogeneous.

N a t u r a l h i s t o r y : Specimens were collected throughout the year, some at altitudes ranging from 300 to 1940 m.

D i s t r i b u t i o n (Fig. 317): In addition to the lectotype, I examined 117 specimens from: Bolivia: Departamento de Santa Cruz, Santa Cruz, 15-X-1956, G. Pinckert; idem, 5-II-1957, G. Pinckert; road to Amboro above Achira, 18°07.43'S 63°47.98'W, 10-11 October 2006, 1940 m, Agricultural cut/burn area, Wappes, Neams & Eya; Agua Clara Cemeterio, 19 November 2003, J. Wappes, Morris & Neams; Departamento de Tarija, G. Chaco, 2 km SW Villamontes, 21°16'S 63°29'W, 12-16 December 2011, Wappes, Bonaso & Morris; Santa Cruz, February 1956, G. Pinckert. Brazil: Rio de Janeiro; Estado do Mato Grosso, 1886, P. Germain; Estado do Bahia, Cachimbo, 1890, Ch. Pujol; Estado do Bahia, S. Antonio da Barra, 1890, Ch. Pujol; Estado do Santa Catarina, Nova Teutonia, 27°11'S 52°23'W, X-1965, 300-500 m, Fritz Plaumann; idem, IX-1973, Fritz Plaumann; idem, XII-1965, Fritz Plaumann; idem, XI-1971, Fritz Plaumann; Goias, Jatai, VI-1972, F. M. Oliveira. Paraguay, Departamento de Cordillera, Rio San Bernadino, W. Eissenlohr V.

Argentina: Provincia de Santiago del Estero, Bords du Rio Salado, Env. D' Icaño, Mistol Paso, 1909, E. R. Wagner; Provincia del Chaco, Chaco de Santa-Fé, Las Gareas, 26 km a L'O. D' Ocampo, 1903, E. R. Wagne; Santa Fe, Villa Ana, 1.18.II.1946, Hayward, Willink; Provincia de Santiago del Estero, Rio Salado, April; idem, January; idem, Rio Dulce, December; Chaco, Corzuela, 11-1994. Uruguay: Department of Montevideo. Specimens are deposited in ACMT, CMNH, FSCA, IMLA, JNRC, MNHN, RGCG, SDEI, WFBM, and WOPC.

N o t e s : This redescription is based on a homotype specimen. I examined the holotype in 1979.

***Pelonium fugax* (KLUG) (Figs 99, 100, 257, 317, 368)**

Enoplium fugax KLUG, 1842: 365. Lectotype. Sex not known. Here designated. Aragua, Moritz (Venezuela) (ZMHB). Paralectotype: One. Aragua, Moritz (Venezuela) (ZMHB). CORPORAAL 1950: 287 (*Corinthiscus*). SOLERVICENS, 2005: 46; 2008: 593. Klug did not specify in his description whether his nominal species is based on one specimen. Therefore, I invoke Recommendation 73F of the ICZN (1999) and designate a lectotype for this nominal species.

D i a g n o s i s : The members of this species resemble superficially those of *P. fasciculatum*, but in *P. fugax* the elytral apex does not show a setal tuft. Also, in *P. fugax* specimens the center of the elytral disc shows a brown oval ring whose center has a white setal tuft. The ring is not present in specimens of *P. fasciculatum*.

R e d e s c r i p t i o n : Size: Length 8.5 mm; width 2.5 mm. Form: As in Fig. 368. Color: Mouthparts testaceous except maxillary and labial terminal palpomeres brown and mandibles black; scape, pedicel, and funicular antennomeres castaneous, capitular antennomeres mostly dark brown, anterior margin of antennomere 9 and 10 slightly testaceous and 11th antennomere testaceous in apical half; cranium bicolored, clypeus black, lower and upper frons castaneous, except dark spot between eyes, epicranium and cranial venter black; pronotum bicolorous, venter black, most of disc castaneous, center of disc with large metallic black angular marking, pterothorax black, mesoscutellum castaneous; elytra mostly testaceous, anterior portion of disc with network of narrow dark markings, middle of disc with suboval yellow macula outlined in black, yellow macula vested with tuft of white setae, subapical portion of disc with triangular metallic black macula, macula vested with tuft of black setae; prothoracic leg dark brown, mesothoracic and metathoracic legs mostly testaceous, except femoral basal half brown; abdomen brown in middle and testaceous at sides. Head: Capitular antennomeres 9 and 10 with very short collateral branch (Figs 99, 100), antennomere 11 oblong- subtruncate; epicranium with tufts of brown setae; frons narrower than width of eye (EW/FW 22/18). Thorax: Pronotum oblong (PW/PL 60/65), side margin with well-developed tubercle, disc with shallow tumescences, center of disc with large glabrous black patch that is vested with three tufts of brown setae, midline of anterior margin vested with small tuft of brown setae; elytral disc with midline ridge and large randomly distributed punctation that extend to elytral distal 4/5 (EL/EW 185/50); protibial anterior margin spinose. Abdomen: Pygidium scutiform; aedeagus (Fig. 257) slightly sclerotized ventrally, phallic apex triangular, phallic plates broad.

V a r i a t i o n : Size: Length 5.0-8.5 mm; width 2.0-3.0 mm. The melanistic portions of the elytral disc vary in intensity.

N a t u r a l h i s t o r y : Specimens were collected throughout the year, at altitudes

ranging from 100 to 1600 m; among the collecting techniques used were the Malaise trap, pantrap, and an ethanol-baited flight intercept trap in a stand of *Eucalyptus grandis* W. HILL ex MAIDEN (Myrtaceae). One specimen was collected in an ethanol-baited FIT, from a clone of a one year old rubber tree, *Hevea brasiliensis* MÜLL. ARG.

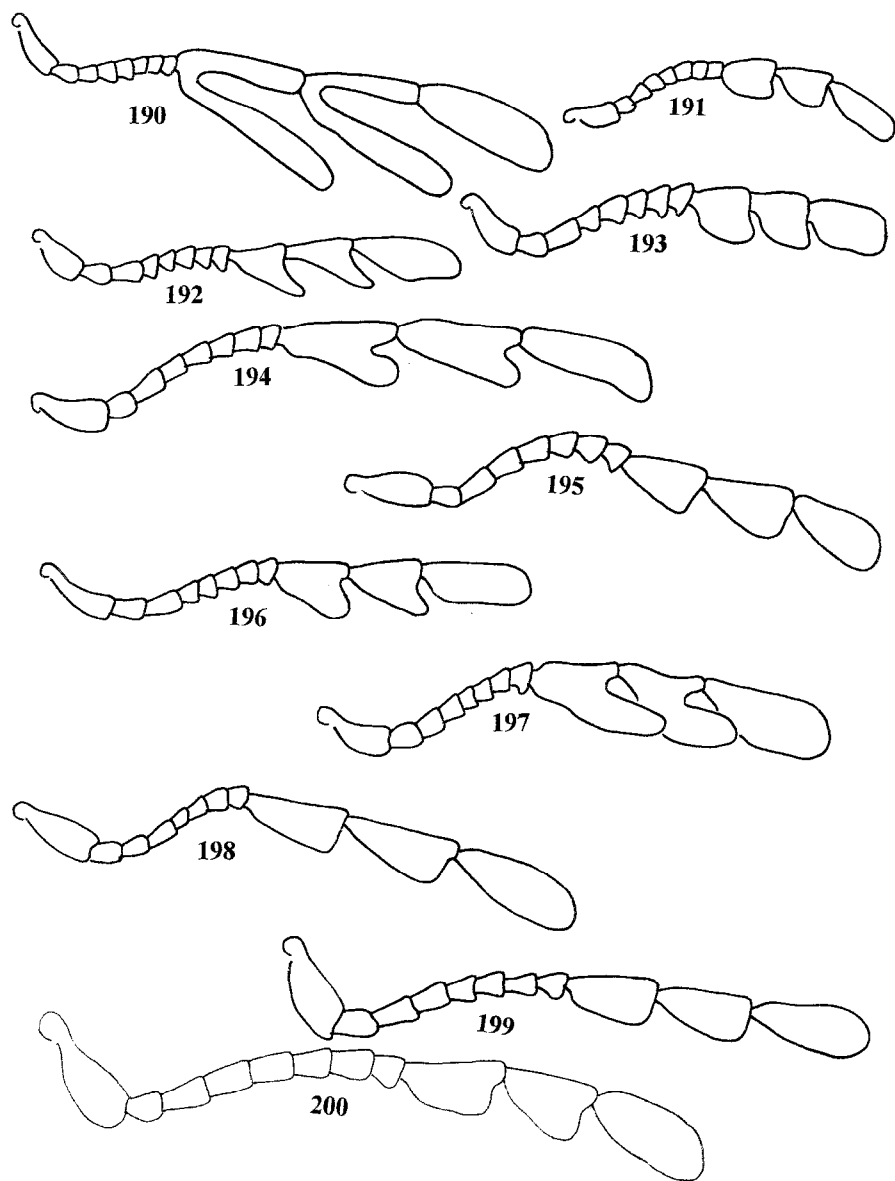
Distribution (Fig. 317): I examined 146 specimens from: Colombia: Departamento de Vichada, PNN Tuparro Bosque Sabana, 27-XII-2000, Malaise, 100 m, M. Villalba; idem, 5-14-I-2001, 140 m, Malaise, M. Villalba; Departameto de Meta, Meta PNN Sierra de la Macarena Caño Curia Parcela, 3°21'N 73°56'W, 29-XII-2001-1-I-2002, Malaise, 460 m, D. Campos. Venezuela: Estado de Bolívar, Rio Caroni, at Paso Caruachi, 9-II-1976, C. M. & O. S. Flint, Jr.; 35 km SW Puerto Ordaz, 13-VII-2-VIII-1987, Malaise, woodland on sand, S & J Peck; Orinoco, Moritz; Ciudad Bolívar, 20-22-VI, 1898, E. A. Klages; Estado de Aragua, Rancho Grande, 20-21-II-1971, H. & A. Howden. Bolivia: Provincia de Santa Cruz, 4-6 km SSE Buena Vista, F&F Hotel; 14-16 October 2000, Wappes & Morris; idem, 2-9 January 2004, Robin Clarke; idem, 23-25/X/2000, R. Morris; idem, 17°29.949'S 63°33.152'W, 5-15-XI-2001, M. C. Thomas & B. K. Dozier; Est. Experimental Gral. Saavedra, L. Stange-C. Porter. Brazil: Estado do Amapá, Environmental Protection area of Rio Curiaru, 0°8'49. 97"N 51°24'41.76"W, savanna grassland, ethanol-baited FIT, A. Jordao; Estado do São Paulo, Três Fronteiras, Sítio Lagoa Azul, 20°15'08. 66"S 50°54'54.69"W, 1 year old clone of *Hevea brasiliensis*, ethanol-baited FIT, J. C. P. Silva; Estado do Mato Grosso do Sul, Selviria, UNESP farm, 20°22.57.67"S 17°29.949'S 51°24.41.76'W, 26/X/2013, Tropical latifoliated semideciduous fragment in transition with serradao, 6 m, ethanol-baited FIT, F. L. L. Leonel; Estado do Rio Grande do Sul, Encruzilhada, XI-1974, M. Alvarenga; Estado do Goiás, Jataí; Estado do Rio de Janeiro, Trindade, Ch. Pujol; MS-Três Lagoas, Horto Rio Verde, 15/XI/1994, ethanol-baited flight intercept trap in *Eucalyptus grandis* stand, C. A. H. Flechtmann; Estado do Piauí, Ch. Pujol; Chapada, October; Estado do Bahia, S. Antonio de Barra, Ch Pujol; Estado do Mato Grosso, Rio Caraguato, 21°48' S 52°27'W, XI-1953, 400 m, Fritz Plaumann; idem, XII-1953, F. Plaumann; Estado do Santa Catarina, Nova Teutonia, X-1972, 300-500 m, F. Plaumann. Argentina: Provincia de Mendoza. Parque Provincial Telteca, 10-23Oct97, pantrap, M. E. Erwin, F. D. Parker, S. Roig; Provincia Entre Rios, Dept. Colon, I-1990, Liebig; Provincia de Tucumán; Provincia La Rioja, Santa Vera Cruz, 28°67'S 66°96'W, 15-XII-2003, 1600 m, P. Fidalgo; Sierra de Argañaraz, 29 km N Chepes, 31°10.81'S 66°41.26'W, 2/16-IX-1999, 1020 m, M. E. Erwin & F. D. Parker; La Rioja, Santa Cruz, 15031-XII-2003, Malaise trap, Fidalgo & L. Stange. Paraguay, Departamento Central, Luque, ?-XII-1949, collector not note; Dr. Drake. Specimens are deposited in ACMT, CMNC, CMNH, EMUS, FMNH, IMLA, JNRC, MNHN, RGCG, SDEI, UEPB, USNM, WFBM, and WOPC.

Notes: This redescription is based on a specimen identified by comparison with a photograph of the lectotype.

***Pelonium infusum* OPITZ nov.sp. (Figs 94, 258, 317, 369)**

Holotype: ♂. MISSIONES-ARGENTINA, Dep. Concep.-Sta Maria, X-1944M. J. Viana (MLPA).

Diagnosis: These beetles resemble superficially those of *P. caraguata*, but the last antennomere of *P. infusum* specimens is partially testaceous. In *P. caraguata* specimens the last antennomere is entirely testaceous.



Figs 190-200: Antennae. (190) *Pelonium suturale*, male. (191) *P. suturale*, female. (192) *P. spinulum*, male. (193) *P. spinulum*, female. (194) *P. turnbowi*, male. (195) *P. turnbowi*, female. (196) *P. ustulatum*, female. (197) *P. vanabulum*, male. (198) *P. leblanci*, male. (199) *P. leblanci*, female. (200) *P. rico*, female.

Description: Size: Length 7.5 mm; width 2.3 mm. Form: As in Fig. 369. Color: Mouthparts light brown, except last maxillary and labial palpomeres dark brown, mandibles black; cranium bicolored, lower frons black, with spheroid castaneous spot, upper frons castaneous, epicranium and venter black; antenna bicolored, scape, pedicel, and funicular antennomeres testaceous, antennomeres, 9 and 10 dark brown, 11th antennomere with basal half black and distal half testaceous; prothorax mostly black, pronotal disc with several black spots, two large spots just behind pronotal arch and one subquadrate large black spot near pronotal base; elytral disc mostly testaceous, with admixture of dark brown flecks and small tufts of white 2° setae; legs mostly testaceous, femoral basal half dark brown. Head: Capitular antennomeres 9 and 10 with short collateral branch (Fig. 94, antennomere 11 oblong; frons very narrow (EW/FW 20/10). Thorax: Pronotum slightly oblong (PW/PL 48/55), side margin with well-developed tubercle, disc sparsely punctate, black regions glabrous; elytral asetiferous punctation scattered, punctures end at elytral middle (EL/EW 160/40); protibial anterior margin spinose. Abdomen: Pygidial body scutiform; aedeagus (Fig. 258) with triangular phallic apex.

Natural history: The holotype was collected in October.

Distribution (Fig.): This species is known from Argentina.

Etymology: The trivial name, *infusum*, is a Latin name that stems from *infundo* (= mix). I refer to the mixture of colors that characterizes the elytral disc.

***Pelonium metalloideum* SPINOLA (Figs 136, 137, 259, 317, 370)**

Pelonium metalloideum SPINOLA, 1844a: 358.

Holotype. ♂. La Magellanie (Argentina) (MRSN). CORPORAAL 1950: 287 (*Corinthiscus*). SPINOLA (1844: 360) noted, "Dans une femelle, de la Magellanie, ...". On the basis of this statement, made in his treatment of "VARIÉTÉS", I conclude that Spinola examined one specimen of this species.

Enoplium cyaneomaculatum BLANCHARD, 1844: 94. nov.syn. Lectotype. Gender not known. Republica de Argentina, Corrientes (MNHN). In his description Blanchard provides some evidence (two measurements of body size) that there was more than one specimen of this species available to him, but he did not tag one of these to be the name barer of this nominal species. Therefore, I invoke Recommendation 73F of the ICZN (1999) and designate a lectotype.

Pelonium multinotatum PIC, 1935: 100. nov.syn. Lectotype. ♀. Republ. Argentina, Chaco de Santiago del Estero, Rio Tapenago (MNHN). CORPORAAL 1950: 289 (*Corinthiscus*). In his description Pic provides some evidence (two measurements of body size) that there was more than one specimen of this species available to him, but he did not tag one of these to be the name barer of this nominal species. Therefore, I invoke Recommendation 73F of the ICZN (1999) and designate a lectotype.

Diagnosis: Specimens of this species resemble those of *P. fasciculatum*, but *P. metalloideum* beetles do not show a black setal tuft on the elytral apex, which is the case in *P. fasciculatum* specimens.

Redescription: Size: Length 8.5 mm; width 2.5 mm. Form: As in Fig. 370. Color: Mouthparts testaceous, except mandibles black; scape, pedicel, and funicular antennomeres castaneous, capitular antennomeres mostly dark brown, 11th antennomere brown in basal half, testaceous in apical half; cranium bicolored, clypeus black, lower frons testaceous at sides, black at middle, remainder of frons black, epicranium and cranial venter castaneous; pronotum mostly castaneous, with two punctiform black glabrous spots

at center just behind pronotal arch, and with three black oblong spots at center just before pronotal collar; elytra mostly testaceous, disc with network of narrow dark markings, with oblique oblong patch of white setae, subapical portion of disc with subquadrate glabrous black marking; prothoracic femur black underneath, castaneous in remainder, prothoracic tibia brown in basal half, testaceous in remainder mesothoracic and metathoracic femora and tibiae testaceous, tarsi brown; abdomen mostly brown, with testaceous spots at sides. Head: Capitular antennomeres 9 and 10 with very short collateral branch or without collateral branch (Figs 136, 137), antennomere 11 oblong- subtruncate; epicranium with tuft of brown setae; frons much narrower than width of eye (EW/FW 25/10). Thorax: Pronotum quadrate (PW/PL 55/55), side margin with well-developed tubercle, midline of anterior margin vested with small tuft of brown setae; elytral disc roughened in basal half, large randomly distributed punctuation that extend to elytral distal 1/2 (EL/EW 190/50); protibial anterior margin spinose. Abdomen: Pygidium scutiform, somewhat truncate; aedeagus (Fig. 259), phallic apex triangular, spicular plate particularly robust.

V a r i a t i o n : Size: Length 5.3-8.5 mm; width 1.8-3.0 mm. Other than body size, the available specimens are quite homogeneous.

N a t u r a l h i s t o r y : Specimens were collected throughout the year, some in a Malaise trap and others at altitudes ranging from 300 to 534 m.

D i s t r i b u t i o n (Fig. 317): In addition to the holotype, I examined 64 specimens from: Bolivia: Departamento de Santa Cruz, 5 km S. Pampa Grande, Oleoducto Road, 18-20-X-2003, Morris, Nearn, Wappes; Provincia del Sara, November 1912, Steinbach; Santa Cruz, 3 km N Brazilia, 27-February-8 March 1999, 1750', Malaise, M. E. Irwin, F. Parker. Brazil: Estado do Goias, Jatai; Estado do Bahia, S. Antonio da Barra, 1890, Ch Pujol; Encruzilhada, XI-1972, Moacir Alvarenga; Estado do Mato Grosso, Rio Caraguata. 21°48'S 52°27'W, XII-1953, 400 m, Fritz Plaumann; Estado do Santa Catarina, Nova Teutonia, 27°11'S 52°23'W, XI-1965, 300-500 m, Fritz Plaumann; idem, XII-1965, Fritz Plaumann. Paraguay, Filadelfia, Fern. Col. Chaco, 15-XI-1955, at light, J. L. Nickel. Paraguay: Departamento de Kanindeyu, Tava Yopoi, 24°22'S 54°23'W, 26.X.-04.XI.2007, U. Drechsel; Argentina: Tucuman, 11 km cerca de Las Cejas, Trampa Malaise; Provincia de Catamarca, Coneta 16 km S Catamarca, 25-X-12-IX, 2003, 554 m, Malaise trap, M. E. Irwin & F. D. Parker; Catamarca, Los Nacimientos de Abajo, 16-30.XI.1968, Malaise, Willink, Terán, Stange; Chaco, Corzuela, 11-1994; Provincia de Entre Rios, Dpt. Colon, I-1989, Liebig; Provincia de Santiago del Estero, Rio Salado, November; Environs D'Icano, Mistol Paso, 1912, E. R. Wagner; Bords du Rio Salado, Env. D' Icaño, Mistol Paso, 1909, E. R. Wagner; Provincia del Chaco, Gran Chaco, Bords du Rio Tapenaga, Colonie Florencia, 1903, E. R. Wagner; Chaco de Santa-Fé, Las Gareas, 26 km a L'O. D' Ocampo, 1903, E. R. Wagner; Formosa, Clorinda, 25-XI-1948, R. Golbach; Provincia La Rioja, La Rioja, Anillaco, 24-VI-1998. Specimens are deposited in CMNH, EMEC, EMUS, FMNH, FSCA, IMLA, JNRC, MNHN, RFMC, RGCG, SDEI, UGCA, WFBM, and WOPC.

N o t e s : This redescription is based on a homotype specimen. I examined the holotype in 1974.

***Pelonium scoparium* (KLUG) (Figs 170, 171, 260, 317, 371)**

Enoplium scoparium KLUG, 1842: 365.

H o l o t y p e . (gender not known). Brasilien (Brazil) (ZMHB). CORPORAAL 1950: 290 (*Corinthiscus*). SOLERVICENS, 2005: 46.

Enoplium fulvicorne LUCAS, 1857: 95. **Lectotype.** ♂. Brazil, Rio de Janeiro (MNHN). CORPORAAL, 1950: 290 (*Corinthiscus*). Lesne did not specify about the number of specimens that forms the basis of his description. Therefore, I invoke Recommendation 73F of the ICZN (1999) and designate a lectotype for this nominal species.

D i a g n o s i s : Within the *P. fasciculatum*-group, only in members of *P. scoparium* do we find ridges on the elytral disc

R e d e s c r i p t i o n : Size: Length 10.0 mm; width 3.0 mm. Form: As in Fig. 371. Color: Mouthparts brown; antenna castaneous; cranium bicolored, mostly castaneous, dark brown between eyes and on middle of epicranium, anterior region of epicranium with tuft of white setae; pronotum bicolorous, venter black, disc mostly castaneous around periphery, center of disc black metallic marking and with two small tufts of black setae; pterothorax dark castaneous, center of anterior margin with small tuft of black setae; mesoscutellum castaneous; elytra admixture of testaceous and dark brown regions, with patch of white setae near middle next to curvate black metallic marking, and with two small tufts of black setae on subapical tuberosities; legs testaceous; abdomen brown. Head: Capitular antennomeres 9 and 10 triangular (Figs 170, 171), antennomere 11 oblong subtruncate; frons as wide as width of eye (EW/FW 20/20). Thorax: Pronotum oblong (PW/PL 67/78), side margin with well-developed tubercle, center of disc postulate, anterior portion of disc with two small black elevations, posterior portion of disc with two large glabrous black elevations; elytral disc carinose, with large randomly distributed punctuation that end at middle and with two subapical tuberosities vested with small tuft of black setae, elytral apex narrowed (EL/EW 210/45); protibial anterior margin spinose. Abdomen: Pygidium scutiform; aedeagus (Fig. 260) slightly sclerotized ventrally, phallic apex subacute, phallic plates narrow.

V a r i a t i o n : Size: Length 7.0-10.0 mm; width 2.0-3.2 mm. The pigmentation of the elytral disc varies in expression to an extent that the posterior half of the disc may be completely testaceous.

N a t u r a l h i s t o r y : Specimens were collected throughout the year at altitudes that ranges from 300 to 1940 m.

D i s t r i b u t i o n (Fig. 370): In addition to the holotype, I examined 281 specimens from: Bolivia: Departamento de Cochabamba, Germain; Departamento de Santa Cruz, Rd to Amboro above Achira, 28°07.43'S 63°47.98' W, 14-15 Oct 2006, Ag cut/burn area, 1940 m, Wappes, Nearns & Eya. Peru: Provincia de Rodríguez de Mendoza, IV-1889, M. de Mathan. Uruguay: Col. 1 km. E. R. 21, km 184, Feb. 9, 1989, C. W. & L. O'Brien & G. Wibmer. Brazil: Estado do Paraná; Estado do Santa Catarina, Nova Teutonia, 27°11'S 52°23'W, XI-1966, 300-500 m, Fritz Plaumann; idem, I-1974, F. Plaumann; idem, XII-1973, F. Plaumann; idem, X-1971, F. Plaumann; idem, IX-1973, F. Plaumann; Estado do Bahia, Encruzilhada, XI-1974, 960 m, M. Alvarenga; Bahia, Salobro, 6.7.1885, E. Gounelle; Bahia, S. Antonio da Barra, 11.12.1888, Gounelle; Bahia, Villa Victoria, 1890, Ch. Pujo; Bahia, Cachimbo, 1890, Ch. Pujol; Pernambuco, 12-3-1893, Gounelle; Estado do Goiás, Jataí, VI-1972, F. M. Oliveira; Estado do São Paulo, Cerqueira Cesar, 1-1899, E. Gounelle; São Paulo, Huambo; São Paulo, Quéluz, P. Germain; Estado do Piauí,

Suapura, Ch. Pujol; Estado do Rio de Janeiro, Petrópolis, May 1885, P. Germain; Rio de Janeiro; Estado do Rio Grande do Sul, Porto Alegre, XI-1959, K. E. Hüdelpohl; Rio Grande do Sul, Belém, I-1959; Santo Agostinho, IV-1966, O. Roppa; Estado do Minas Gerais, Pedra Azul, F. M. Oliveira; Minas Gerais, Caraca, 1884, P. Germain; Minas Gerais, Mineiro. Paraguay: Departamento de Paraguari, Sapucaí, 5-8-XI-1997, U. Drechsel. Argentina: Provincia Entre Rios, 12-1991, Liebig; Provincia de Salta, Salta, X-23-1968, at light, L. & C. W. O'Brien. Specimens are deposited in BMNH, FSCA, JNRC, MNHN, RGCG, WFBM, and WOPC.

Notes: This redescription is based on a homotype specimen. I examined the holotype in 1979.

The *P. inaequalicolle* species group

The *P. inaequalicolle* species group is comprised of two species, whose specimens are characterized by having a particularly dense vestiture of white setae that are most prominent on the legs and the elytral disc. The species are found in Brazil and Bolivia.

***Pelonium erymanthoides* SCHENKLING (Figs 84, 85, 261, 318, 372)**

Pelonium erymanthoides SCHENKLING, 1906: 313. Lectotype ♀. Here designated. (Brazil) S. Paulo (SDEI). CORPORAAL 1950: 286 (*Corinthiscus*). Paralectotype: One. Brazil: Jataí Goiás (SDEI). In his description Schenkling did not single out a specimen that was to be the name bearer of this nominal species. Therefore, I invoke Recommendation 73F of the ICZN (1999) and designate a lectotype.

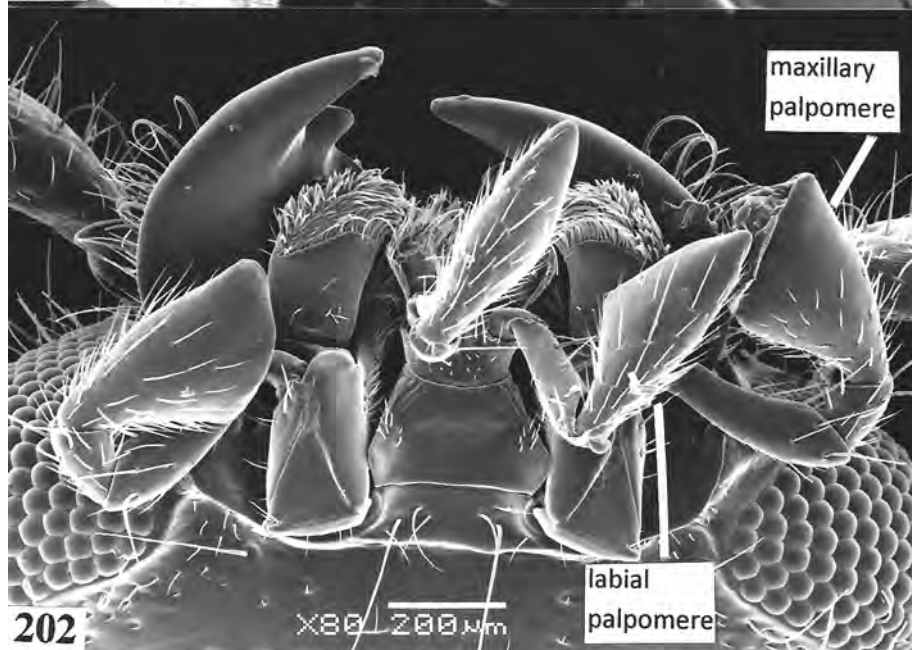
Diagnosis: From specimens of *P. inaequalicolle*, the only other species in the *P. inaequalicolle*-group, *P. eurymanthoides* differ by showing a fairly smooth pronotal surface. The pronotum of

P. inaequalicolle is sculptured with several tumescences.

Redescription: Size: Length 10.0 mm; width 4.0 mm. Form: As in Fig. 372. Color: Mouthparts and antenna brown; cranium and thorax castaneous; abdomen dark brown; femora castaneous, remainder of legs dark brown; elytra admixture of brown and testaceous regions, body vested profusely with white setae. Head: Capitular antennomeres 9 and 10 with short collateral branch (Fig.), antennomere 11 narrowly oblong; frons narrower than width of eye (EW/FW 25/15). Thorax: Pronotum oblong (PW/PL 62/72), side margin with well-developed tubercle, disc finely punctate, central disc with three subglabrous elevations; elytral base with very few asetiferous punctures, disc with very shallow swellings (EL/EW 225/58); protibial anterior margin spinose. Abdomen: Pygidium scutiform; aedeagus (Fig. 261), phallic apex digitiform, phallic plates explanate just before phallic apex.

Variation: Size: Length 9.0-11.0 mm; width 3.5-4.0 mm. Other than body size the available female specimens are quite homogeneous.

Natural history: Specimens were collected from October to February; one from Bolivia at 405 m, one at 370 m. Another specimen was collected by beating vegetation in the Brazilia Atlantic forest, at 200 m. Two other specimens were gathered from Santa Catarina (Brazil) at an elevation that ranges from 300 to 500 m.



Figs 201-202: Morphologic structures of *Pelonium leucophaeum*. (201) Head, frontal view. (202) Mouthparts.

Distribution (Fig. 318): In addition to the lectotype I examined 4 specimens from: Bolivia: Departamento de Santa Cruz, 3.7 km SSE Buena Vista, Hotel Flora & Fauna, 17°29'S 63°33'W, 5-15-XI-2001, 405 m, tropical transition forest, M. C. Thomas & B. K. Dozier; Potrerillos del Guenda, 40 km NW Santa Cruz, Preserva Natural, 17°40'S 63°27'W, 30 Sept.-3 Oct. 2007, Wappes & Morris. Brazil: Estado do Goiás, Jataí; Estado do Rio do Janeiro, Trindade, Ch. Pujol; idem, Mineiro, 1912, H. Donckier. Estado do Mato Grosso, Rio Caraguata, 21°48'S 52°27'W, XI-1953, Fritz Plaumann. Specimens are deposited in ACMT, MNHN, SDEI, WFBM, and WOPC.

***Pelonium inaequalicolle* SCHENKLING (Figs 53, 54, 262, 318, 373)**

Pelonium inaequalicolle SCHENKLING, 1902: 331. Lectotype ♀. Here designated. (Brazil) S. Paulo (SDEI). CORPORAAL 1950: 287 (*Corinthiscus*). Paralectotype: One. Amerique Méridionale (South America) (MNHN). In his description Schenkling indicates that his description is based on more than one specimen, but he did not tag one of these to be the name bearer of this nominal species. Therefore, I invoke Recommendation 73F of the ICZN (1999) and designate a lectotype.

Diagnosis: From specimens of *P. erymanthoides*, the only other species in the *P. inaequalicolle*-group, *P. inaequalicolle* specimens differ by showing several tumescences on the pronotal disc. The pronotal disc of *P. erymanthoides* is relatively smooth.

Redescription: Size: Length 12.0 mm; width 4.0 mm. Form: As in Fig. 373. Color: Mouthparts testaceous, except mandibles brown; antenna brown, cranium, thorax, and abdomen dark brown; profemur testaceous at base, dark brown in remainder, protibiae dark brown, mesofemur and metafemur mostly testaceous, but femora infuscated at middle, tarsi brown; elytra mostly reddish-brown in basal half, testaceous in remainder, except with two brown spots at elytral posterior 2/3 near sutural margin, body vested profusely with white setae. Head: Capitular antennomeres 9 and 10 with short collateral branch (Figs 53, 54), antennomere 11 narrowly oblong; eyes coarse and bulging, frons slightly narrower than width of eye (EW/FW 32/28). Thorax: Pronotum oblong (PW/PL 90/100), side margin with well-developed tubercle, discal sides coarsely punctate, central disc with five subglabrous elevations; elytral asetiferous punctuation subseriate and extends to slightly beyond middle of disc, disc with swellings (EL/EW 280/80); protibial anterior margin spinose. Abdomen: Pygidium scutiform; aedeagus (Fig. 262) slightly sclerotized ventrally, phallic apex triangular, phallic plate broad.

Variation: Size: Length 10.0-14.5 mm; width 3.0- 5.0 mm. The 9th and 10th antennomeres are larger in males. Also, the color of the dorsum varies from dark brown to light brown.

Natural history: Specimens were collected from October to February; one by beating vegetation in the Brazilia Atlantic forest, at 200 m. Two other specimens were gathered from Santa Catarina (Brazil) at an elevation that ranges from 300 to 500 m. The specimen from Bolivia was collected at an altitude between 1000 and 1200 m.

Distribution (Fig. 318): In addition to the lectotype I examined 14 specimens from: Bolivia: Departamento de Santa Cruz, 4 km N Bermejo, Refugio Los Volcanes, 18°06'S 63°36'W, 12-XII-2015, 1000-1200 m, Skillman, Wappes, Kuckartz. Paraguay: Departamento de Cordillera, San Bernadino. Brazil: Estado do São Paulo, São Paulo, Jardim Botânica, 5-IX-1966, G. W. Kranz & J. L. Mellott; Marília XI-1945; Estado do Santa Catarina, Ibirama, Wiggenshauser's Forest, January 7, 1993, Beierl; Nova Teutonia, 27°11'S 52°23'W, XI-1965, Fritz Plaumann; idem, X-1965, Fritz Plaumann; São Paulo,

Val. of Rio Pardo, 12-1998, E. Gounelle; Estado do Minas Gerais, Minas Gerais, Rio Piracicaba, February 1885, P. Germain. Specimens are deposited in FWSC, JNRC, MNHN, NCSU, SDEI, WFBM, and WOPC.

The *P. axinoides* species group

This species group includes 3 species, which are characterized by having very slender spicular plates on the spicular fork, and the pronotal disc shows a well-developed fusiform slit. The combined geographic distribution of these species involve the Cayman Islands, Cuba, and the Dominican Republic.

***Pelonium axinoides* (WOLCOTT) (Figs 180, 320, 374)**

Corinthiscus axinoides WOLCOTT, 1923: 3.

H o l o t y p e : ♀. Guantanamo, Cuba, 4 July, 1915, Coll. C. T. Ramsden (AMNH).

D i a g n o s i s : These checkered beetles resemble superficially those of *P. inagua*. But in *P. axinoides* the elytral base is mostly testaceous, whereas in *P. inagua* specimens the elytral base is broadly brown.

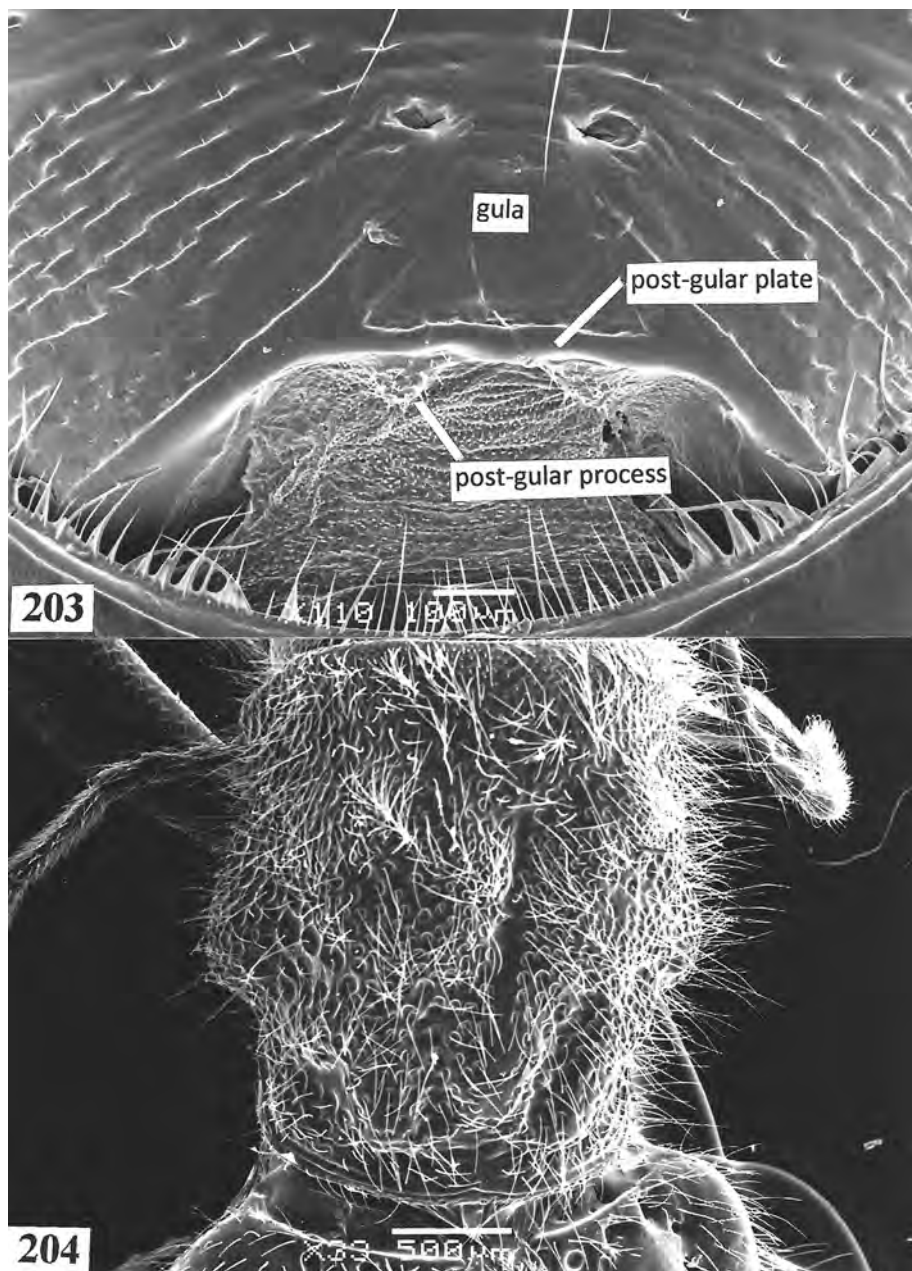
R e d e s c r i p t i o n : Size: Length 20.0 mm; width 6.0 mm. Form: As in Fig. 374. Color: Cranium, clypeus, thorax black; mouthparts and antenna castaneous, except mandible black; elytra mostly castaneous, with black markings at base of sutural margin, at basal region of epipleural region, and near elytral apex near epipleural margin, with small faintly brown spot at discal middle; legs mostly light castaneous, femora infuscated distally, tibiae infuscated basally. Head: Capitular antennomeres 9 and 10 with short collateral branch (Fig. 180), antennomere 11 subtruncate; frons narrow (EW/FW 40/30); cranium coarsely punctate. Thorax: Pronotum quadrate (PW/PL 150/150), side margin with tubercle, arch spinose, disc coarsely punctate, disc at middle with short shallow depression from which thin glabrous line extends posteriorly; large elytral asetiferous punctation scattered throughout disc, punctures progressively diminish in size to elytral apex (EL/EW 490/105); protibial anterior margin spinose. Abdomen: Pygidial body scutiform.

D i s t r i b u t i o n (Fig. 320): This species is known from la Provincia de Guantanamo, Cuba.

***Pelonium inagua* OPITZ nov.sp. (Figs 73, 263, 320, 375)**

H o l o t y p e : ♂. BAHAMAS: Great Inagua, Middle Point, 15 July 2007, R. Turnbow (FSCA, 1).

P a r a t y p e s : Eight. Bahamas: Great Inagua, Middle Point, 15 July 2007, R. Turnbow (RHTC, 1). Dominican Republic: Provincia de Independencia, 4 km S Los Pinos, Loma de Vientos, 23-VII-1992, 455 m, R. Davidson, J. Rawlins, S. Thompson, C. Young (CMNH, 1); 4 km S Los Pinos, Loma de Vientos, 18°35'N 71°46'W, 23 July 1992, semiarid deciduous forest with pastures, R. Davidson, J. Rawlins, S. Thompson, C. Young (WOPC, 1); Provincia La Altagracia, Punta Cana near Ecological Reserve, 18°30.477'N 68°22.499'W, 12-14 June 2005, 0-5 m, attracted to lights, N. E. Woodley (CMNH, 1); Parque del Este, Caseta Guaraguao, 4.4 km SE Bayahibe, 18°19.59'N 68°48.42'W, 26-27 May 2004, 3 m, semiarid forest near sea, limestone, C. Young, J. Rawlins, J. Fetzner, C. Nunez (CMNH, 2; WOPC, 1); idem, Parque Nacional del Este, Guaraguao, 18°19.568'N 68°48.500'W, 28 June 2005, 0-5 m, S. W. Lingafelter (WOPC, 1).



Figs 203- 204: Morphologic structures of *Pelonium leucophaeum*. (203) Gular region of head. (204) Pronotum, dorsal view.

D i a g n o s i s : These checkered beetles resemble superficially those of *P. axinoides*. But in *P. inagua* specimens the elytral base is broadly brown, whereas in *P. axinoides* specimens the elytral base is mostly castaneous.

R e d e s c r i p t i o n : Size: Length 17.0 mm; width 5.8 mm. Form: As in Fig. 375. Color: Mostly dark castaneous, except elytra with 3 testaceous angular macula, one in front of middle, one behind middle, and one near apex; femora testaceous in basal 2/3, black in remainder, prothoracic tibiae mostly black, somewhat testaceous distally, mesothoracic and metathoracic tibiae black in basal 1/3, testaceous in remainder, tarsi testaceous. Head: Capitular antennomeres 9 and 10 with long collateral branch (Fig. 73), antennomere 11 subtruncate; frons narrow (EW/FW 45/22); cranium coarsely punctate. Thorax: Pronotum quadrate (PW/PL 130/130), side margin with tubercle, disc coarsely punctate, disc at middle with short shallow depression from which thin glabrous line extends posteriorly; large elytral asetiferous punctation scattered throughout disc, punctures progressively diminish in size to elytral apex (EL/EW 390/90); protibial anterior margin spinose. Abdomen: Pygidial body scutiform, 7th sternite with acumination at middle of basal margin; aedeagus (Fig. 263) with triangular phallic apex, apex constricted at base, phallic plates not broad.

V a r i a t i o n : Size: Length 12.0-18.0 mm; width 3.0-6.0 mm. The specimens from the Dominican Republic are less melanistic than those from the Bahamas.

N a t u r a l h i s t o r y : Specimens were collected during an interval from May to July; one was attracted to light, one was collected in a semiarid forest near the sea near limestone, and one was captured in a semiarid deciduous forest with pastures. Altitudinally, these beetles were taken from sea level to 5 m.

D i s t r i b u t i o n (Fig. 320): This species is known from the Bahamas, Great Inagua, and from the Dominican Republic.

E t y m o l o g y : The specific epithet, *inagua*, constitutes a noun in apposition and refers to the type locality.

***Pelonium turnbowi* OPITZ nov.sp. (Figs 194, 195, 209, 364, 320, 376)**

H o l o t y p e : ♂. CAYMAN: Little Cayman, 3 km SE Spot Bay, 26 May 2009, R. Turnbow (FSCA). Paratypes: Twelve. Cayman Islands: Caymen Brac Island, Major Donald Dr., at Bright Rd, 22 June 2009, R. Turnbow (WOPC, 1); Little Cayman Island, 3 km SE Spot Bay, 26 May 2009, R. Turnbow (RHTC, 1); idem, North Side Rd., 1 km W jct. Olivine Kirk Dr., 5 July 2013, black light trap, R. Turnbow (RHTC, 1); idem, 3 km S Spot Bay, 8-VII-2013, black light trap, M. C. Thomas (FSCA, 2; WOPC 1); idem, North Coast Road, 1 km W Divine Kirk Drive, 26-V-2009, black light trap, Thomas, Turnbow, & Ball (WOPC, 1); idem, Parrot Reserve, 4 VII-2013, black light trap, R. Turnbow (WOPC, 1); idem, North Coast of Stakes Bay, 26-V-1938, light trap (Oxford University Cayman Island Biological Expedition, 17.IV-26-VIII-1938), C. B. Lewis & G. H. Thompson (BMNH, 1); idem, 28-V-1938, light trap, C. B. Lewis & G. H. Thompson (BMNH, 1); idem, East end of Interior of Muddy foot's area, light trap, 6-VI-1938, C. B. Lewis & G. H. Thompson (BMNH, 1). Jamaica: Parish of Trelawny, Jacksontown, ?-V-1930, B.W. I. (USNM, 1).

D i a g n o s i s : The large asetiferous punctures, and their arrangement into striae (Fig. 209), will separate the members of this species from congeners.

R e d e s c r i p t i o n : Size: Length 12.5 mm; width 4.0 mm. Form: As in Fig. 376. Color: Dark castaneous, except elytra with 3 testaceous macula, one in front of middle, one behind middle, and one near apex; femora testaceous in basal 1/2. Head: Male

capitular antennomeres 9 and 10 with short collateral branch (Fig. 194), female capitular antennomeres 9 and 10 triangular (Fig. 195), antennomere 11 subtruncate; frons narrow (EW/FW 39/18); cranium coarsely punctate. Thorax: Pronotum oblong (PW/PL 98/102), side margin with tubercle, anterior margin spinose, disc coarsely punctate, disc at middle with short shallow depression; large elytral asetiferous punctation arranged into 10 striae, punctures extend to elytral apex (EL/EW 180/75); protibial anterior margin spinose. Abdomen: Pygidial body narrow scutiform; aedeagus (Fig. 364) with very long triangular phallic apex, apex constricted at base, phallic plates not broad.

V a r i a t i o n : Size: Length 12.5-19.0 mm; width 4.0-6.0 mm. The testaceous maculae on the elytral disc vary in expression. In this species, there exists a dark "morph" in which the elytral testaceous macula is evident only on the elytral apex.

N a t u r a l h i s t o r y : Specimens were collected during May through August.

D i s t r i b u t i o n (Fig. 320): This species is known only from Little Cayman, of the Cayman Islands.

E t y m o l o g y : The specific epithet is a patronymic that honors Robert H. Turnbow, Jr. for his many contributions to field and curatorial Coleopterology.

The *P. megaclerus* species group

This species group is comprised of two species, whose members are extraordinarily large in body size (up to 23 mm). Geographically, they are found in Costa Rica, Guatemala, and México.

***Pelonium gigantum* OPITZ nov.sp. (Figs 91, 92, 265, 310, 377)**

H o l o t y p e : ♀. COSTA RICA, Estac. Cacao. 1000-14000 m, SW side Volcan Cacao, Guanac. Pr., Apr. 1988, GNP Biod. Sur., 323300, 375700 (FSCA). Paratypes: Thirteen. Costa Rica: Provincia de Guanacaste, Est. Pitilla, 9 km S Sta. Cecillia. P. N., 1-15 July 1992, 700 m, C. Moraga (WOPC, 1); idem, April, 700 m, C. Moraga (WOPC, 1); idem, Est. Rosa, June 1991, 800 m, D. J. Janzen & W. Hallwache (WOPC, 1); Est. Cacao, lado SO Vol. Cacao, P. N., 12-17 July 1993, 800- 1600 m, F. A. Quesada (WOPC, 1); idem, SW side Volcan Cacao, April 1988, 1000-1400 m (WOPC, 1), idem, July 1989, 1000-1400 m (WOPC, 1); idem, 21-29-May-1992, 1000-1400 m, G. Gallardo (WOPC, 1); idem, 12-17-July-1993, 800-1600, M. Segura (WOPC, 1); idem, Est. Maritza, 1 km E de la Entrada a Guajiniquil, 9-14 May 1996, 600 m (WOPC, 1); idem, Meriza, lado oeste del Volcan Orosi, August 1990 (WOPC, 1); idem, Est. Las Pailas, P. N. Rincón de la Vieja, 7-26 May 1994, 800 m, D. G. Garcia (MUCR, 1); Provincia de Alajuela, Fea. San Gabriel, 2 km SW Dos Rios, May 1989, 600 m (WOPC, 1); Cartago, Turrialba, 16-18-June 1986, MV & UV lights, F. T. Hovore (WFBM, 1).

D i a g n o s i s : *Pelonium gigantum* specimens are very similar to those of *P. megaclerus*. But, *P. gigantum* specimens lack the testaceous line on the elytral disc, which is present in *P. megaclerus* specimens.

D e s c r i p t i o n : Size: Length 23.0 mm; width 8.0 mm. Form: As in Fig. 377. Color: Maxilla and labium testaceous, except maxillary and labial terminal palpi brown, labrum and mandibles brown; antenna brown, except scape mostly testaceous; cranium, lower frons reddish, upper frons testaceous, epicranium behind eyes brown; pronotum bicolored, lower side margins brown, disc reddish-testaceous; elytra bicolored, mostly brown, epipleural margin broadly yellow, sutural margin narrowly yellow; legs, femora mostly testaceous, brown at apices, tibiae brown basally and apically, testaceous in remainder,

tarsi brown; venter of mesothorax black; metathorax mostly castaneous, sides dark brown; abdomen dark brown. Head: Capitular antennomeres 9 and 10 triangular or with collateral branch (Figs 91, 92), antennomere 11 oblong, gradually narrows to apex; frons narrower than width of eyes (EW/FW 58/38). Thorax: Pronotum transverse (PW/PL 180/165), side margin with very prominent tubercle, disc slightly punctate at sides, impunctate at middle; elytral asetiferous punctation small and profusely distributed throughout disc, punctures become smaller towards elytral apex (EL/EW 600/130); protibial anterior margin minutely spinose. Abdomen: Pygidial body scutiform, not incised at anterior margin; aedeagus (Fig. 265), phallic apex slightly uncinat.

V a r i a t i o n : Size: Length 16.0-23.0 mm; width 6.0-8.0 mm. The red coloration on the pronotal disc varies in intensity.

N a t u r a l h i s t o r y : The available specimen was collected during a period from April thru July; at altitudes ranging from 600 to 1400 m.

D i s t r i b u t i o n (Fig. 310): This species is known from Costa Rica.

E t y m o l o g y : The specific epithet, *gigantum*, stems from the Greek adjective *gigas* (= giant). I refer to the large size of these checkered beetles.

***Pelonium megaclerus* OPITZ nov.sp. (Figs 134, 135, 266, 324, 378)**

H o l o t y p e : ♀. MEXICO: Jalisco, Chamela, vic. ESTC UNAM, 9-19-VII-1993, J. Huether (FSCA). Paratypes: Eight. México: Estado de Veracruz, Los Tuxtlas, Estacion Biol., IV 20/30-1991, F. Hovore (WFBM, 1); idem, April 26-May 6, 1989, E. Giesbert (FSCA, 1); Estado de Jalisco, Est. Biol. Chamela, July 10-20, 1985, E. Giesbert (WOPC, 1); idem, VII-8/16-85, at light, J. Chemsak, H. Katsura, A. & E. Michelbacher (EMEC, 1); Estado de Chiapas, El Aguacero, 16 km W Ocozocoautla, June 28-July-1986, E. Giesbert (WOPC, 1); Laguna Belgica, 16 km NW, Ocozocoautla, 28-V-1990, 970 m, H. & A. Howden (CMNC). Guatemala: Departamento de Izabal, 25 km SE Morales, May 21-24, 1996, 2800', E. Giesbert, J. Monzon (FSCA, 1); Departamento de Petén, Tical Natl. Park, 25-VI-1994, D. Brzoska (FSCA, 1).

D i a g n o s i s : The brown elytral disc shows a testaceous line in specimens of *P. megaclerus*. This line is absent in specimens of *P. gigantum*, the only other species in the *P. megaclerus* species group.

D e s c r i p t i o n : Size: Length 21.0 mm; width 7.0 mm. Form: As in Fig. 378. Color: Maxilla and labium testaceous, except maxillary and labial terminal palpi brown, labrum and mandibles brown; antenna brown, except scape mostly testaceous; cranium, lower frons reddish, upper frons yellow, epicranium behind eyes brown; pronotum tricolored, side margins yellow, sides red with 2 discal brown patches, middle of disc yellow anteriorly, reddish posteriorly; elytra bicolored, mostly brown, epipleural margin broadly yellow, sutural margin narrowly yellow, disc with a medial yellow line; legs, femora mostly yellow, brown at apices, tibiae brown basally, yellow in remainder, tarsi brown; venter of mesothorax and metathorax mostly testaceous, sides dark brown, abdomen brown. Head: Capitular antennomeres 9 and 10 triangular or with collateral branch (Figs 134, 135), antennomere 11 oblong, gradually narrows to apex; frons narrower than width of eyes (EW/FW 50/42). Thorax: Pronotum transverse (PW/PL 170/155), side margin with very prominent tubercle, disc coarsely punctate at sides, slightly punctated at middle; elytral asetiferous punctation small and profusely distributed throughout disc (EL/EW 480/130); protibial anterior margin minutely spinose. Abdomen: Pygidial body scutiform, anterior margin incised deeply; aedeagus (Fig. 266), phallic apex slightly uncinat.

Variation: Size: Length 14.5-24.0 mm; width 5.0-8.0 mm. Other than body size, the available specimens are quite homogeneous.

Natural history: The available specimen was collected during a period from April through July; one at light and one at an altitude of 854 m.

Distribution (Fig. 324): This species is known from México and Guatemala.

Etymology: The specific epithet, *megaclerus*, stems from the Greek adjective *megas* (= large) and the noun *Clerus*. It is considered a noun in apposition that refers to the large size of these checkered beetles and the genus name *Clerus*.

The *semirufum* species group

The members of this species group are characterized by having the posterior 1/3, or more, region of the elytral disc entirely black (as in Fig. 213). There are 6 species in this group, whose combined geographic distribution involves Argentina, Brazil, and Guyana.

Pelonium atrahumeratum OPITZ nov.sp. (Figs 64, 65, 210, 267, 318, 379)

Holotype: ♂. Brasil, S. C. (Santa Catarina), 800 m, R. Vermelho. A second label reads: Rio Vermelho, SC. BR. 800 m, XII-1964, A. Maller (MCZC).

Paratype: One. Brazil: Estado do Santa Catarina, Nova Teutonia, X-1972, F. Plaumann (WOPC).

Diagnosis: Within the *P. semirufum*-group only in members of *P. atrahumeratum* and *P. geniculatum* do we find the elytral humeral angle black. *Pelonium atrahumeratum* specimens differ by having the basal ½ of the elytral disc unicolorous/ testaceous. In *P. geniculatum* specimens the basal ½ of the elytral disc shows asetiferous punctures that are outlined in brown.

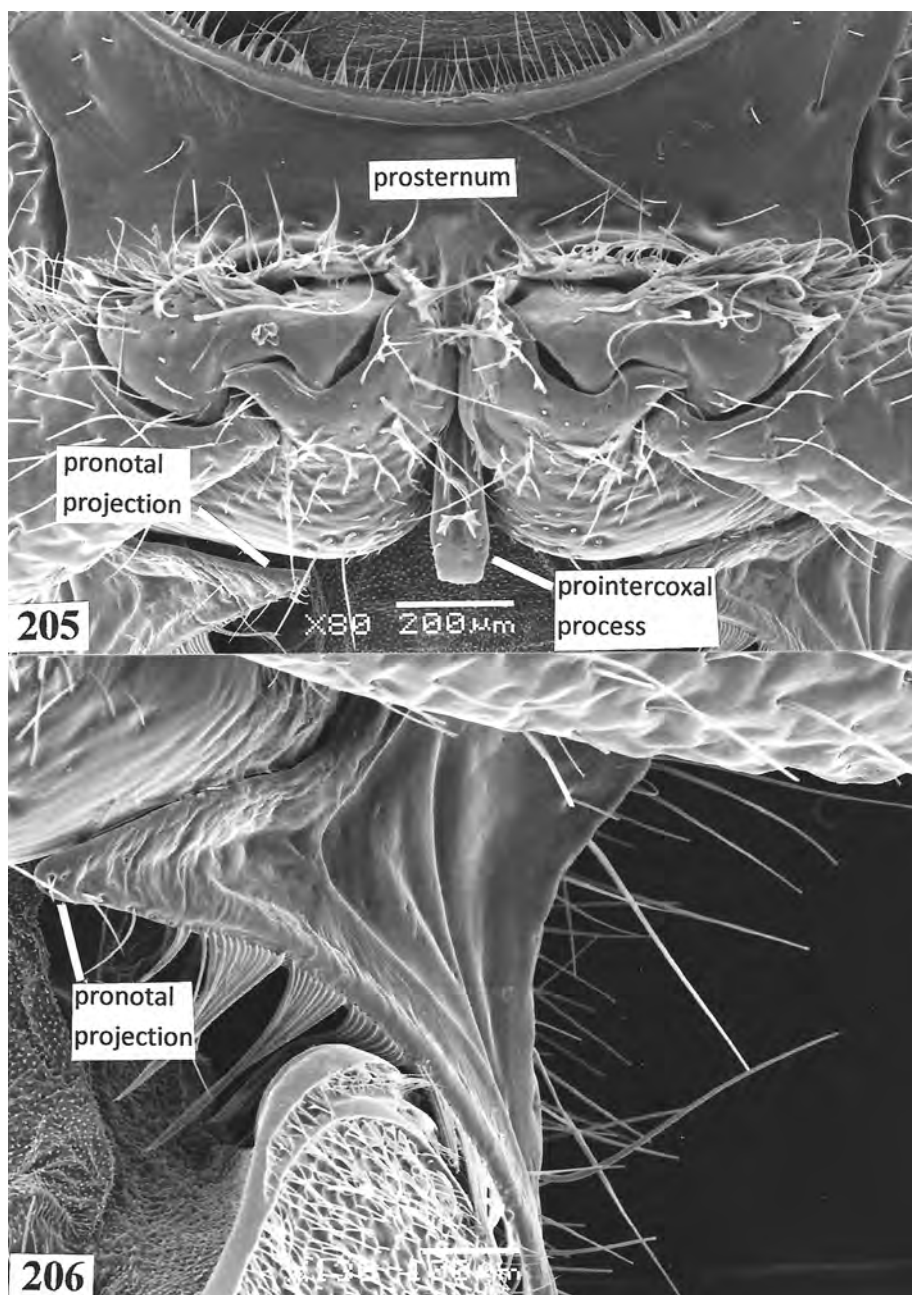
Description: Size: Length 16.0 mm; width 6.0 mm. Form: As in Fig. 379. Color: Maxillae, labium, labrum testaceous, mandibles black; antenna black, except scape testaceous beneath; cranium and pronotum black, except pronotal disc castaneous anteriorly; femora testaceous in basal 2/3, black in remainder, tibiae black basally, testaceous in remainder, tarsi testaceous; mesoscutellum black; elytra mostly reddish-testaceous, humerus black, disc black in posterior 1/3; pterothorax castaneous; abdomen testaceous. Head: Male capitular antennomeres 9 and 10 with collateral branch (Fig. 64), female capitular antennomeres 9 and 10 with short collateral branch (Fig. 65); frons narrower than width of eye (EW/FW 38/25). Thorax: Pronotum slightly oblong (PW/PL 92/105), side margin with well-developed tubercle, disc coarsely punctate; elytral asetiferous punctuation subseriate, punctuation does not reach black portion of subapical region (EL/EW 345/90); protibial anterior margin spinose. Abdomen: Pygidium scutiform; aedeagus (Fig. 267) with uncinat phallic apex, phallic plates broad.

Variation: Size: Length 13.0-16.0 mm; width 5.0-6.0 mm. Other than body size the available specimens are quite homogeneous.

Natural history: The holotype was collected in December, at 800 m; the paratype during October.

Distribution (Fig. 318): This species is known only from Brazil.

Etymology: The specific epithet, *atrahumeratum*, is a Latin compound name that stems from *atra* (= black) and *humerus* (= shoulder). I refer to the black coloration of the elytral humeral angle.



Figs. 205- 206: Morphologic structures of *Pelonium leucophaeum*. (205) Prothorax, ventral view. (206) Posterior angle of pronotum.

***Pelonium geniculatum* (KLUG) (Figs 86, 87, 268, 318, 380)**

Enoplium geniculatum KLUG, 1842: 360.

H o l o t y p e : Gender not known. Montevideo (Uruguay) (ZMHB). CORPORAAL 1950: 287 (*Corinthiscus*). SOLERVICENS, 2005: 46; 2008: 593.

Pelonium praeustum SPINOLA, 1844a: 368. Lectotype. ♂. Designated by Ginter Ekis (now Weston OPITZ) 1975: 57. Colombia, Magdalena (MRSN). CORPORAAL 1950: 287 (*Corinthiscus*).

Pelonium principale SPINOLA, 1844a: 368.

Enoplium geniculatum KLUG, aberration *seminiger* CHEVROLAT, 1843: 34.

Pelonium lateapicale PIC, 1935b: 100. Lectotype. ♂. Here designated. Argentina, Chaco de Santiago del Estero (MNHN). Pic did not specify in his description whether his nominal species is based on one specimen. Therefore, I invoke Recommendation 73F of the ICZN (1999) and designate a lectotype for this nominal species.

D i a g n o s i s : The asetiferous punctures on the basal ½ of the elytral disc are outlined in brown. This trait will distinguish *P. geniculatum* specimens from others in the *P. semirufum* species group.

R e d e s c r i p t i o n : Size: Length 18.0 mm; width 5.0 mm. Form: As in Fig. 380. Color: Maxillae and labium testaceous, labrum brown, mandibles black; antenna black; cranium and thorax dark castaneous; elytra tricolored, humeral angle, black, elytral basal half testaceous and with punctures that are encircled in black, elytral apical half dark castaneous; legs mostly testaceous, with distal portion of femora and proximal portion of tibiae black; abdomen testaceous. Head: Antennomeres 6-8 slightly serrate, capitular antennomeres 9 and 10 with short or long collateral branch (Figs 86, 87), antennomere 11 oblong; frons narrower than width of eye (EW/FW 44/32). Thorax: Pronotum oblong (PW/PL 110/125), side margin with broad tubercle, disc coarsely punctate, disc with four glabrous spots, two basal, two more anterior, disc center with narrow glabrous vertical line; elytral asetiferous punctation subseriate, punctures extend to elytral middle, posterior region asperous (EL/EW 360/100); protibial anterior margin spinose. Abdomen: Pygidium incised at middle of anterior margin; aedeagus (Fig. 268) slightly sclerotized ventrally, phallic apex triangular.

V a r i a t i o n : Size: Length 10.0-17.0 mm; width 3.5-6.0 mm. In some specimens the anterior half of the elytral disc is infuscated near the sutural margin. The incision on the distal margin of the pygidium varies in expression.

N a t u r a l h i s t o r y : Specimens were collected throughout the year at altitudes ranging from 1,160- 1500 m.

D i s t r i b u t i o n (Fig. 318): In addition to the lectotype, I examined 30 specimens from: Bolivia: Departamento de Tarija, Tapecua, 21°26'S 63°55'W, 6-8.VII.1991, 1500 m, S. L. Gardner. Brazil, Estado do Rio Grande do Sul, Serra Herval, Dec-Jan. Paraguay: Departamento de Presidente Hayes, Transchaco Highway km 388,15-V-1986, blacklight trap, R. E. Woodruff; Lolita, Yaragui, 23°06'S 59°38'W, 23-27.XI.2007, U. Drechel. Argentina: Provincia de Santiago del Estero, Environs D'Icano, Mistol Paso, 1911, E. L. Wagner; Provincia de Córdoba, Panilla, I-1947, V. Uagañe; Provincia de Buenos Aires, H. Richter; San Fernando, 9-I-1993, Daguerie; Tandil, 29-XI-1951; Provincia de Salta, L. Cabral Corral, 3.XII-1985, 1160 m, W. Wittmer; idem, El Carcadero, XII-1985; Laro, Entre Rios, I-1941, B. Pohl; idem, 4-II-1998 Leibig; Provincia de Catamarca, 47 km S Belén, 27°57'.73"S 67°12'34"W, 12-14-9-1999, 1,160 m, malaise, M. E. Erwin, F. D. Parker; Provincia de Entre Rios, 12.1991, Liebig; Provincia de Catamarca, 6 km N Belén,

I-15-XII-1969, Malaise, Willink-Terán, Strange; Provincia de Tucumán, Parque Aconquija; Provincia de La Pampa, Victorica, 29-XII-1920, A. Wetmore. Uruguay: Departamento de Montevideo, 1912, P. Serre. Specimens are deposited in IMLA, JNRC, MNHN, RGCG, SDEI, USNM, and WOPC.

Notes: CORPORAAL (1950: 287) lists *seminiger* CHEVROLAT (1843: 34) as an aberration of this species. I did not find the type specimen that corresponds to this name in the MNHN collection; the usual repository of Chevrolat types. I therefore assign this name to the incertae sedis category. This redescription is based on a homotype specimen deposited in WOPC. I examined the holotype in 1974 during a visit to the Museum für Naturkunde on der Humboldt-Universität zu Berlin. The identity of this holotype was also confirmed recently by a photograph deposited in the WFBM.

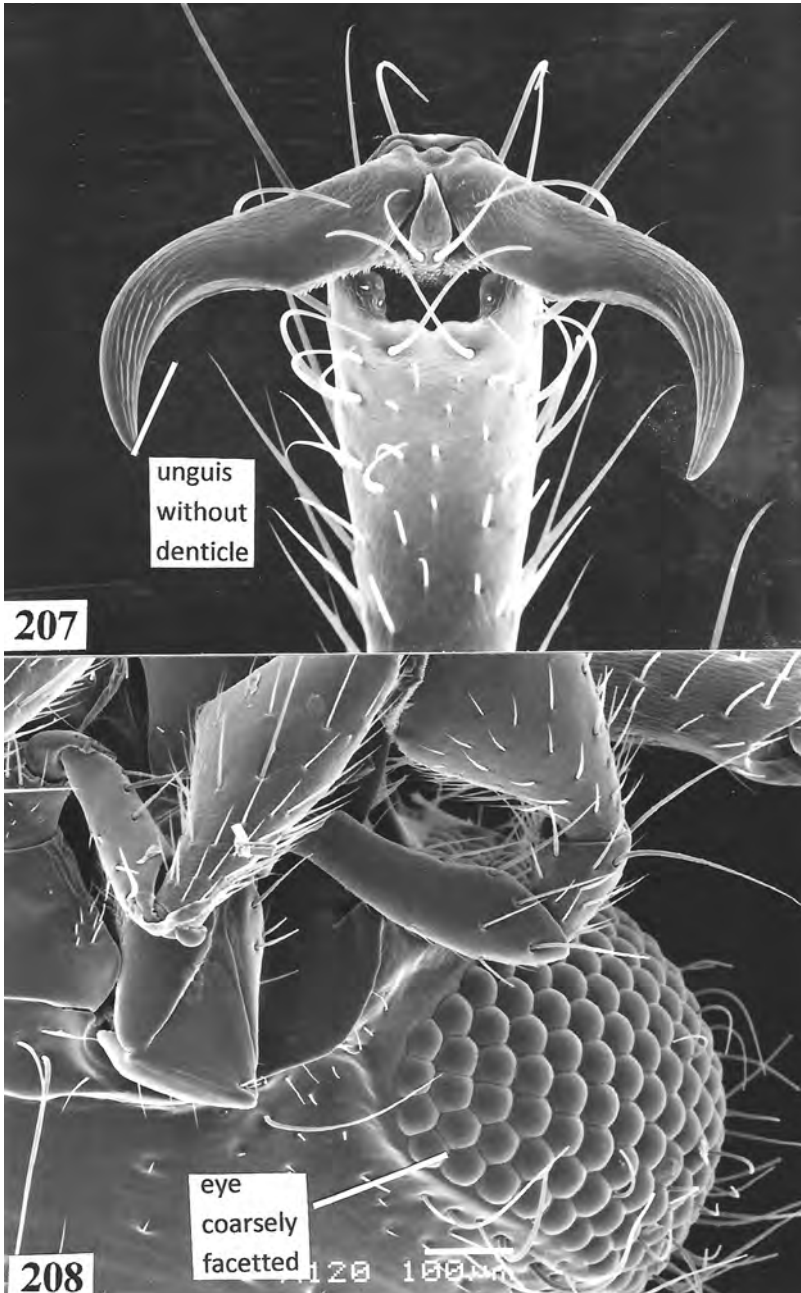
***Pelonium russulentum* OPITZ nov.sp. (Figs 159, 160, 269, 318, 381)**

Holotype: ♂. BRAZIL: Bahia, Encruzilhada, XI-1974, 960 m (FSCA).

Paratypes: Seventy-three. Bolivia: Provincia de Santa Cruz, San José Chiquitos, 26-IX-1926, Lind., D. Chaco-Exped. (NCBN, 1); Santa Cruz, 4 km N Bernajo, Refugio los Volcanes, 18°06'S 63°36'W, 5-7.XII.2015, 1045-1350 m, Kuchartz & Skillman (ACMT, 1); idem, Oct. 31-Nov. 3, 2013, Wappes & Kuchartz (ACMT, 1); 20 km N Camiri Rd. to Eyti, 6-8 km E Hwy 9, 19°52'S 63°29'W, 8-9.XII.2015, 1250 m, Wappes, Kuchartz & Skillman (ACMT, 1); 3.7 km SSE Buena Vista, Hotel Flora & Fauna, 17°29.949'S 63°33.152'W, 5-15-XI-2001, 405 m, tropical transitional forest, M. C. Thomas & B. K. Dozier (FSCA, 1); Porterillos del Guenda, 40 km NW Santa Cruz de la Sierra, 12-18/X/2014, Morris & Wappes (RFMC, 1); idem, 17°40.26'S 63°27.44'W, 2-3-XII-2012, Skillman & Wappes (FWSC, 1); idem, 5-20-XI-2004, B. K. Dozier (FSCA, 1). Brazil: Estado do Bahia, Cachimbo, 1890, Ch. Pujol (MNHN, 6; WOPC, 3); Bahia, Villa Victoria, 1890, Ch. Pujol (MNHN, 4; WOPC, 2); Bahia, S. Antonio da Barra, 1890, Ch. Pujol (MNHN, 1; WOPC, 1); Encruzilhada, XI-1974, M. Alvarenga (FSCA, 9; WOPC, 4); Estado do Goiás, Jataí, Rio Verde (MNHN, 1; WOPC, 1); Estado do Mato Grosso, Cáceres, 21.XI.1984, C. Elias (DZUP, 1); Estado do Paraná, Brazil, I-XI-1974 (DZUP, 1); Estado do Espírito Santo, Linhares, 15/11/1971, A. C. Domingos (DZUP, 1); Estado do Santa Catarina, Nova Teutonia, 27°11'S 52°23'W, XII-1980, Fritz Plaumann (DZUP, 1); idem, ?-X-1971, F. Plaumann (WOPC, 1); idem, I-1971, F. Plaumann (WOPC, 1); idem, XII-10-1941-1941, F. Plaumann (AMNH, 1); idem, I-10-1942, F. Plaumann (AMNH, 1; WOPC, 1); idem, I-31-1942, F. Plaumann (AMNH, 1); idem, I-2-1942, F. Plaumann (WOPC, 2); idem, I-17-1942, F. Plaumann (WOPC, 1); idem, I-24-1942, F. Plaumann (AMNH, 2); idem, XII-15-1941, F. Plaumann (AMNH, 1); idem, XII-24-1941, F. Plaumann (WOPC, 2); idem, idem, II-28-1942, F. Plaumann (AMNH, 1); XII-22-1941, F. Plaumann (AMNH, 1); idem, II-14-1942, F. Plaumann (AMNH, 1; WOPC, 1); idem, II-7-1942, F. Plaumann (AMNH, 1; WOPC, 3); idem, Mar, B. Pohl (WFBM, 1); Estado do São Paulo, XI-1945 (NCBN, 1); Estado do Minas Gerais, Pedra Azul, XI-1972, M. Alvarenga (WOPC, 2).

Diagnosis: *Pelonium russulentum* specimens are very similar to those of *P. schenklingi* and *P. semirufum*, but *P. russulentum* specimens differ by having a full set of asetiferous punctures reach the posterior black mark of the elytral disc.

Description: Size: Length 9.0 mm; width 3.5 mm. Form: As in Fig. 381. Color: Maxillae, labium, labrum testaceous, mandibles brown; antenna brown, cranium and pronotum castaneous, pronotum variously black around periphery; profemur testaceous in basal half, black in remainder, mesofemur and metafemur testaceous in basal 2/3, black in distal 1/3, tibia black, tarsus testaceous; elytra reddish-testaceous in basal 2/3, black in remainder; pterothorax brown at sides, testaceous at middle; abdomen testaceous. Head: Capitular antennomeres 9 and 10 with short or slightly longer collateral branch (Figs 159, 160), antennomere 11 oblong-oval; frons much narrower than width of eye (EW/FW 30/10). Thorax: Pronotum oblong (PW/PL 68/78), side margin with well-developed tubercle,



Figs 207-208: Morphologic structures of *Pelonium leucophaeum*. (207) Ungues, metatarsus. (208) Mouthparts and eye, ventral view.

disc coarsely punctate; elytral asetiferous punctation subseriate, punctation extends to posterior black macula (EL/EW 215/43); protibial anterior margin spinose. Abdomen: Pygidium scutiform; aedeagus (Fig. 269) slightly sclerotized ventrally, phallic apex triangular.

V a r i a t i o n : Size: Length 8.0-14.0 mm; width 2.3-4.0 mm. The male 9th and 10th antennomeres have longer collateral branches than those found in females.

N a t u r a l h i s t o r y : Specimens have been collected during a period that extends from October through February, at altitudes ranging from 960 to 1350 m.

D i s t r i b u t i o n (Fig. 318): This species is known from Bolivia and Brazil.

E t y m o l o g y : The specific epithet, *russulentum*, stems from the Latin *russus* (= red) and the Latin suffix *-lentus* (= abundance). I refer to the extensively reddish color of the elytral disc.

***Pelonium schenklingi* GORHAM (Figs 166, 167, 271, 318, 383)**

Pelonium schenklingi GORHAM, 1903: 169. Lectotype ♀. As is here designated. (Brazil) Jatahy Goyas (Jatai Goias) (MNHN). CORPORAAL 1950: 290 (*Corinthiscus*). In his description, Gorham indicates that he worked with seven type specimens; one specimen has been found and credibly identified as a cotype. I invoke Recommendation 73F of the ICZN (1999) and designate this cotype as the a lectotype of this nominal species.

D i a g n o s i s : Specimens of this species are superficially similar to those of *P. semirufum*.

However, in *P. schenklingi* specimens the elytral black posterior mark extends to elytral middle, whereas in *P. semirufum* specimens the black mark extends only to elytral distal 1/3.

R e d e s c r i p t i o n : Size: Length 13.0 mm; width 4.5 mm. Form: As in Fig. 383. Color: Maxillae and labium testaceous, labrum and mandibles brown; antenna mostly brown, scape testaceous, cranium and pronotum black; legs bicolorous, mostly testaceous, apical region of femora and basal region of tibiae infuscated; elytra reddish-testaceous in basal 2/3, black in remainder; pterothorax and abdomen testaceous. Head: Capitular antennomeres 9 and 10 with short or longer collateral branch (Figs 166, 167), antennomere 11 digitiform; frons much narrower than width of eye (EW/FW 32/25). Thorax: Pronotum oblong (PW/PL 93/102), side margin with prominent tubercle, disc coarsely punctate; elytral asetiferous punctation subseriate, punctation does not extend to posterior black macula (EL/EW 240/55); protibial anterior margin spinose. Abdomen: Pygidium scutiform; aedeagus (Fig. 271) slightly sclerotized ventrally, phallic lobes minute, phallic apex subtruncate.

V a r i a t i o n : Size: Length 7.0-15.0 mm; width 2.0-5.0 mm. The male 9th and 10th antennomeres have a short collateral branch in females and a longer collateral branch in males. The width of the frons is sex dimorphic, in relation to the width of the eyes. The males have proportionally narrower frons (male EW/FW= 37/17, female EW/FW= 32/25). The female pygidium is broadly incised at its anterior margin.

N a t u r a l h i s t o r y : Specimens have been collected from October through December; some with MV/UV lights, at altitude ranging from 400-890 m.

D i s t r i b u t i o n (Fig. 318): In addition to the lectotype, I examined 53 specimens

from: Panamá, Barro Colorado Island, Canal Zone, 7-V-1980, Henk Wolda. Bolivia: Departamento de Santa Cruz, Dpt. Potr. del Guenda, 17°40'15"S 63°27'26"W, Reserva Natural, Snake Farm, 2-3 XII- 2012, 370-400 m, Skillman & Wappes; idem, 20-23 X-2011, 370-400 m, Wappes & Skillman; idem, 2-3 XII- 2013, 400 m, Wappes & Skillman; Huaico, nr. Potrerillo, 17°40'S 63°26'W, October 27-29, 2013, MV/UV lights, 430 m, Wappes & Kuckartz; 4km SSE Buena Vista, Hotel Flora & Fauna, 17°29'S 63°49'W, 22-25-XI- 2013, 350-400 m, Wappes & Skillman; idem, 17-X- 2011, 300-400 m, Skillman & Wappes; idem, 27-29 Oct. 2000, Wappes & Morris; idem, 17°29.949'S 63°33.152'W, 5-15-XI-2001, tropical transitional forest, M. C. Thomas & B. K. Dozier; Road to Itai, 83 km N. Camiri, 19°20'S 63°28'W, 17-18 December 2011, 890 m, Wappes, Lingafelter & Woodley; idem, 22-26-X-2002, Morris, Nearns, Wappes. Brazil: Estado do Mato Grosso, Sinop, X, 1974, M. Alvarenga; Estado do Goiás, Jatai; Jatai Goiás, Mineiro, 1912, H. Donckier; Jatai Goiás, Rio Verde; Estado do Rio de Janeiro, Tinidade, Ch. Pujol; Estado do Rondonia, 62 km SW Ariquemes, nr. Fzda Rancho Grande, 5-17-X-1993, Black light trap, J. E. Eger. Paraguay. Argentina: Provincia de Salta, Salta Forestal, 35 km N. E. Joaquín, 27-XI-1979, Willink- Fidalgo Dominguez. Specimens are deposited in ACMT, BMNH, FSCA, IMLA, MNHN, RFMC, UCDC, WFBM, and WOPC.

***Pelonium semirufum* GORHAM (Figs 21, 175, 176, 213, 270, 318, 382)**

Pelonium semirufum GORHAM, 1877: 420. Lectotype ♀. Here designated. (Brazil) Rio de Janeiro (BMNH). CORPORAAL 1950: 290 (*Corinthiscus*). Gorham did not specify in his description which of the two available specimens is to be the name barer of this nominal species. Therefore, I invoke Recommendation 73F of the ICZN (1999) and designate a lectotype for this nominal species. Paralectotype: One. Brazil: Rio de Janeiro (BMNH).

Pelonium tarsale SCHENKLING, 1900: 407. nov.syn. Lectotype ♂. Brazil, Jatai Goiás, Paralectotypes: Seven. Brazil: Jatai Goiás (FMNH, 1; SDEI, 2). Paraguay: Dr. Drake, 188 (SDEI, 2). SOLERVICENS, 2008: 593. The characteristics that Schenkling used to establish this nominal species are identical to those of the senior synonym. Two of the paralectotypes are *Pelonium schenklingi* GORHAM (MNHN).

D i a g n o s i s: Specimens of this species are superficially similar to those of *P. schenklingi*. However, in *P. semirufum* specimens the elytral black posterior mark extends only to elytral distal 1/3, whereas in *P. schenklingi* specimens the black mark extends to elytral middle.

R e d e s c r i p t i o n: Size: Length 11.5 mm; width 3.5 mm. Form: As in Fig. 382. Color: Maxillae and labium testaceous, labrum and mandibles brown; antenna brown, cranium and pronotum black, except pronotal mid-anterior margin castaneous; profemur testaceous in basal half, black in remainder, mesofemur and metafemur testaceous in basal 2/3, black in distal 1/3, tibia black, tarsus brown dorso-basally, testaceous in remainder; elytra reddish-testaceous in basal 2/3, black in remainder; abdomen testaceous. Head: Capitular antennomeres 9 and 10 with short or slightly longer collateral branch (Figs. 175, 176), antennomere 11 oblong-oval; frons narrower than width of eye (EW/FW 25/15). Thorax: Pronotum oblong (PW/PL 63/75), side margin with small tubercle, disc coarsely punctate; elytral asetiferous punctuation subseriate, punctuation does not extend to posterior black macula (EL/EW 240/55); protibial anterior margin spinose. Abdomen: Pygidium scutiform; aedeagus (Fig. 270) slightly sclerotized ventrally, phallic apex digitiform.

V a r i a t i o n: Size: Length 5.0-11.0 mm; width 1.5-3.7 mm. The male 9th and 10th antennomeres have a short collateral branch, which is not the case in female antennae.

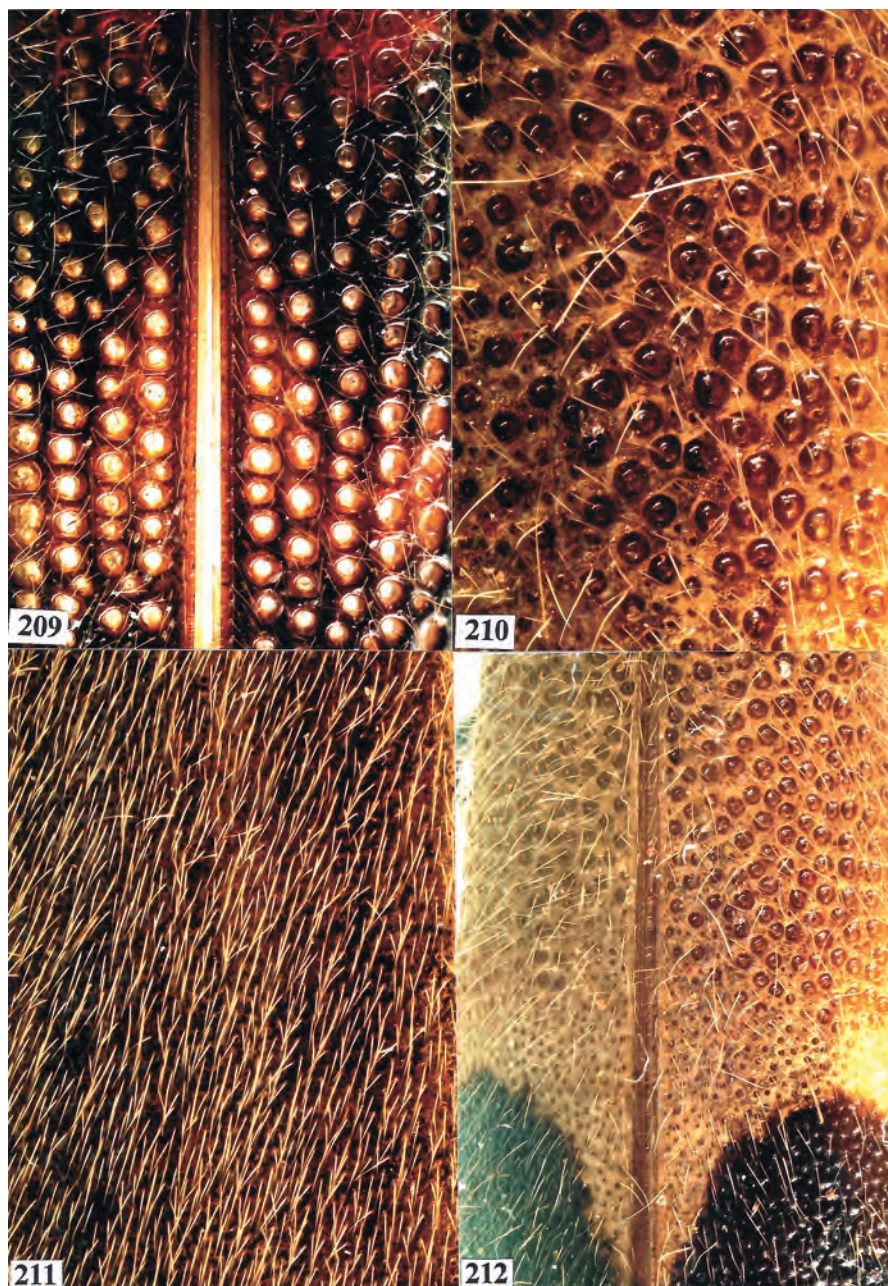
Natural history: Specimens have been collected throughout the year at altitudes ranging from 2 to 960 m; two in a tropical latifoliated semideciduous fragment in transition with cerrado, one with an ethanol-baited FIT.

Distribution (Fig. 318): In addition to the lectotype, I examined 182 specimens from: Trinidad: County of Saint George, Mount El Tucuche, April 1929, Darlington. French Guiana: Subdivision of Saül, ex. larva, 20.IX.2008, P. H. Dalens. Bolivia: Departamento de Santa Cruz, 4-5 km SE Terevinto, 21-XI-2013, roadside slash, Skillman & Wappes; 4km SSE Buena Vista, Hotel Flora & Fauna, 17°29'S 63°49'W, 22-25-XI-2013, 350-400 m, Wappes & Skillman; Buena Vista vic., Flora & Fauna Hotel, 17-X-2011, Skillman & Wappes; idem, 23-25-X-2000, R. Morris; idem, 19-22-X-2004, Morris & Wappes; 3.7 km SSE Buena Vista, Hotel Flora & Fauna, 17°29.949'S 63°33.152'W, 5-15-XI-2001, 405 m, tropical transitional forest, M. C. Thomas & B. K. Dozier; 4 km N Bermejo, Refugio los Vocanes, 18°06'S 63°36'W, 11-17-XII-2012, Wappes & Skillman; idem, 28-X, 2011, Skillman & Wappes; idem, 25-29-X-2001, 100-1200 m, Wappes & Skillman; 5 km ESE Warnes Hotel, Rio Selva, 20-21 Oct. 2000, Wappes & Morris; Huaico, nr. Potrerillo, 17°40'S 35°S 63°26'59"W, 1 December, 2012, 1270 ft, J. E. Wappes; Prov. Andres Babiñes Reserva Natural, Potrerillos del Guenda, 17°40'S 63°27'W, 16-22 Oct 2006, 370 m, Wappes, Nearn & Eya. Brazil: Estado Mato Grosso do Sul, Selviris, UNESP, 20°22'5767S 51°24'4176W, tropical latifoliated semideciduous fragment in transition with cerrado, 23/XI/2013, 2 m height ethanol-baited FIT, Leonel F. L. L.; idem, 26/X/2013, tropical latifoliated semideciduous fragment in transition with cerrado, 23/XI/2013, 2 m height, ethanol-baited FIT, Leonel F. L. L.; Estado do São Paulo, Parque Jabaquara, XII-43; Barueri, XI-1966, K. Lenko; Murundy, Nov., B. Pohl; Sao Paulo, Val. Du Rio Parado, 12-98, E. Gounelle; Estado do Bahia, Villa Victoria, 1890, Pujol; idem, Cachimbo, 1890, Pujol; idem, S. Antonio da Barra, 1890, Pujol; Bahia, Encruzilhada, XI-1974, 960 m, M. Alvarenga; Estado do Santa Catarina, Salto do Pirahy, Pres Jaragua, 1915, E. Gounelle; Nova Teutonia, 27°11'S 52°23'W, X-1973, 300-500 m, F. Plaumann; idem, 27°11'S 52°23'W, XI-1973, 300-500 m, F. Plaumann; idem, II-1974, F. Plaumann; idem, IX-1972, F. Plaumann; idem, XII-1973, F. Plaumann; Estado do Goiás, Jataí, 1902; idem, Rio Verde; idem, X-1972, F. M. Oliveira; Estado do Rio de Janeiro, Trindade, Pujol; Guanabara, III-1964, M. Alvarenga; Estado do Paraná, Heinstal; Estado do Piauí, Susupara, Pujol; Estado do Mato Grosso, Sinop, X-1976, M. Alvarenga. Argentina: Provincia de Misiones, Iguazu, 3-XI-1986, R. Foerster; Provincia de Catamarca, Coneta, 16 km S Catamarca, 25-X-12-XI-2003, 554 m, Malaise trap, M. E. Irwin & F. D. Parker. Paraguay: Departamento de Guairá, Colonia, Independencia, XI-1951. Specimens are deposited in ACMT, MCZC, RFMC, RGCG, SDEI, UGCA, UEPB, and WOPC

***Pelonium spinulum* OPITZ nov.sp. (Figs 192, 193, 272, 318, 384)**

H o l o t y p e : ♂. Argentina, La Rioja, XII-1923 (FSCA).

P a r a t y p e s : Six. Argentina: Provincia de Santiago del Estero, Environs D'Icano, Mistol Paso, E. R. Wagner, 1912 (FSCA, 1); Pr. Santiago d. Estero, C. Bruch (SDEI, 1); Provincia de Salta, Rio Salado (FMNH, 1); Provincia Chaco de Santiago del Estero, Bords du Rio Salado, Environs D'Icano, E. R. Wagner, 1910 (MNHN, 1); Chaco, Depto. Gral. Guemes, Pozo La Gringa, 23.11-13.12.95 (JNRC, 1; RGCG, 1); Environs D'Icano, Mistol Paso, E. R. Wagner, 1912 (WOPC, 1).



Figs 209-212: Elytral surface sculpture. (209) *Pelonium turnbowi*. (210) *P. atrahumeratum*. (211) *P. fucogonium*. (212) *P. posticum*.

D i a g n o s i s : Within the *P. semirufum*-group, distinct yellow elytral fascia is found only in specimens of *P. spinulum*.

R e d e s c r i p t i o n : Size: Length 7.5 mm; width 2.0 mm. Form: As in Fig. 284. Color: Red-testaceous, except elytra with yellow fascia that extends from epipleural margin to sutural margin, front and hind margin of fascia bordered by brief castaneous regions. Head: Antennomeres 5-8 slightly serrate, female capitular antennomeres 9 and 10 without short collateral branch (Fig. 193), male capitular antennomeres 9 and 10 with short collateral branch (Fig. 192), antennomere 11 subtruncate; frons narrow (EW/FW 22/15). Thorax: Pronotum oblong (PW/PL 58/65), side margin without tubercle, anterior margin very slightly spinose, disc coarsely punctate, except disc near base with two glabrous spots; elytral asetiferous punctation extended to apical 4/5, punctures become smaller towards elytral apex (EL/EW 180/50); protibial anterior margin spinose, protibial apical spine very large. Abdomen: Pygidial body scutiform; aedeagus (Fig. 272) very short, with very long digitiform phallic apex, phallic plates broad.

V a r i a t i o n : Size: Length 7.0-10.0 mm; width 2.3-3.0 mm. Other than body size, the available specimens are quite homogeneous.

N a t u r a l h i s t o r y : Two specimens were collected in December.

D i s t r i b u t i o n (Fig. 318): This species is known only from Argentina.

E t y m o l o g y : The specific epithet, *spinulum*, is a Latin noun that stems from *spina* (= thorn). I refer to the unusually large spine at the apex of the protibiae.

The *bipunctatum* species group

There are 4 species in this species group. They are characterized by having black punctiform markings on an otherwise testaceous elytral disc. The combined geographic distribution of these species involve Colombia, Bolivia, and Brazil.

***Pelonium bipunctatum* GORHAM (Figs 37, 38, 273, 319, 386)**

Pelonium bipunctatum GORHAM, 1877: 421. Lectotype. ♀. Here designated. (Brazil, Santa Catarina, (BMNH). CORPORAAL, 1950: 286 (*Corinthiscus*).⁺ GORHAM (1877: 421) identifies "Santa Catharina" as the type locality, whereas "Parana" is noted on the specimen label. I have non-type specimens from Mafra, Santa Catarina. Therefore, I use this circumstantial evidence to list Santa Catarina, as the type locality. Also, Gorham did not specify the number of specimens that formed the basis of his description. Therefore, I invoke Recommendation 73F of the ICZN (1999) and designate a lectotype for this nominal species.

Pelonium unipunctatum PIC, 1935a: 9. **nov.syn.** Lectotype. ♀. Here designated. (Brazil) Brésil. (MNHN). CORPORAAL 1950: 290 (*Corinthiscus*). Pic did not specify in his description whether his variety name is based on more than one specimen. Therefore, I invoke Article 45.6.4 and Recommendation 73F of the ICZN (1999) and designate a lectotype for this variety name which is now deemed to represent a junior synonym.

D i a g n o s i s : The two black spots on the flavotestaceous elytra will distinguish the members of this species from congeners.

R e d e s c r i p t i o n : Size: Length 8.0 mm; width 2.5 mm. Form: As in Fig. 386. Color: Mostly flavotestaceous, maxillary and labial terminal palpomeres brown, mandibles black; antenna brown except scape flavotestaceous; elytron with a yellow spot in discal posterior 1/3; legs bicolored, femora mostly flavotestaceous, infuscated distally, tibiae mostly flavotestaceous, briefly infuscated at base, then flavotestaceous, then brown

distally, tarsi brown. Head: Male capitular antennomeres 9 and 10 oblong, with short collateral branch (Fig. 37), female capitular antennomeres 9 and 10 triangular (Fig. 38); frons as wide as width of eye (EW/FW 38/23). Thorax: Pronotum slightly quadrate (PW/PL 48/48), side margin with very small tubercle, disc with minute setiferous punctation; elytral asetiferous punctation extend to midelytron, become diminutive near sutural margin (EL/EW 165/50); protibial anterior margin not spinose. Abdomen: Pygidium truncate; aedeagus (Fig. 273) slightly sclerotized ventrally, phallobasic lobes acuminate, phallic apex truncate, phallic plates spinose.

V a r i a t i o n : Size: Length 7.0-9.0 mm; width 2.3-2.8 mm. Other than body size, the available specimens are quite homogeneous.

D i s t r i b u t i o n (Fig. 319): In addition to the lectotype, I examined 4 specimens from: Brazil: Estado do Santa Catarina, Mafrá. Specimens are deposited in BMNH, FMNH, MNHN, and WOPC.

***Pelonium buqueti* SPINOLA**

Pelonium buqueti SPINOLA, 1844b: 152. Lectotype. ♂. Colombia (MRSN). CORPORAAL, 1950: 286 (*Corinthiscus*). EKIS (now OPITZ), 1975: 56.

D e s c r i p t i o n : In 1975 (EKIS, 1975: 56) I expressed some doubt regarding the generic placement of this species indicating a possible affinity with the genus *Muisca* Spinola. However, I have since recognized that a significant difference between *Muisca* and *Pelonium* involves the development of the unguis. In *Muisca* the unguis has a denticle, which is not the case in *Pelonium*. As I have no specimens of *P. buqueti*, the decision to keep this species in *Pelonium* is based on a comment in SPINOLA (1844b: 153) regarding the form of the unguis, "onglets (= nails, = unguis), comme dans le *Trifasciatum*" [= *Lasiodera trifasciatum* (LAPORTE)]. The unguis is devoid of a denticle in species of *Lasiodera* GRAY. A habitus photograph of this species is published in EKIS (now OPITZ), 1975: 45, Fig. 41.

***Pelonium placidum* SCHENKLING (Figs 163, 183, 274, 319, 385)**

Pelonium placidum SCHENKLING, 1900: 405. Lectotype ♀. Here designated. (Brazil) Goyas (Bras), Toni Kier (Jatai Goias) (SDEI). CORPORAAL 1950: 289 (*Corinthiscus*). Paralectotypes: Three. Brazil: Jatai Goias, Toni Kier (SDEI, 1); September-November 1897 (SDEI, 1); (MNHN, 1). In his description Schenklings indicates that there were more than one specimen available to him, but he did not tag one of these to be the name bearer of this nominal species. Therefore, I invoke Recommendation 73F of the ICZN (1999) and designate a lectotype.

D i a g n o s i s : The four black spots on the flavotestaceous elytra will distinguish the members of this species from congeners.

R e d e s c r i p t i o n : Size: Length 12.0 mm; width 3.8 mm. Form: As in Fig. 385. Color: Mouthparts testaceous, except mandibles brown; antenna mostly black, scape and pedicel testaceous, cranium and pronotum testaceous; femoral apex, tibial base, tibial apex, and tarsus black, remainder of legs testaceous; pterothorax testaceous; elytron testaceous, except with two black spots at elytral posterior 2/3; abdomen testaceous. Head: Capitular antennomeres 9 and 10 with short or longer collateral branch (Figs 163, 183), antennomere 11 oblong-subtruncate; frons much narrower than width of eye (EW/FW 30/15). Thorax: Pronotum oblong (PW/PL 68/80), side margin with well-developed tubercle, discal sides coarsely punctate, central disc sparsely punctate; elytral asetiferous

punctuation subseriate extending to slightly beyond middle of disc, extending posteriorly for a shorter distance near sutural margin (EL/EW 250/63); protibial anterior margin spinose. Abdomen: Pygidium scutiform; aedeagus (Fig. 274) slightly sclerotized ventrally, phallic apex narrowly triangular.

V a r i a t i o n : Size: Length 7.0-12.0 mm; width 2.3- 4.0 mm. Except for body size, the available specimens are quite homogeneous.

N a t u r a l h i s t o r y : Specimens were collected during a period from September to November, at altitudes ranging from 350-1350 m.

D i s t r i b u t i o n (Fig. 319): In addition to the lectotype I examined 34 specimens from: Bolivia: Departamento de Santa Cruz, 4 km SSE B. Vista, Hotel Flora & Fauna, 17°29'S 63°49'W, 22-25 November 2013, 350-400 m, Wappes & Skillman; idem, 14-16 Oct. 2000, Wappes & Morris; 14-19-X-2000, 430 m, tropical transition forest, M. C. Thomas; 4 km N of Bermejo Refugio los Volcanes, 18°06'S 63°36'W, 8-11 December 2011, 1350 m, Wappes, Lingafelter, Morris & Woodley; idem, 12-XII-2015, 1000-1200 m, Skillman, Wappes, Kuckartz; idem, 20-X-2011, Skillman & Wappes; idem, 28-X-2011, Skillman & Wappes; idem, 15-22-XI-2001, tropical transitional forest, blacklight trap, B. K. Dozier; Porterillos del Guenda, 40 km NW Santa Cruz de la Sierra, 12-18/X/2014, Morris & Wappes. Brazil: Estado do Mato Grosso, Diamantino, fazenda Rio Arinos, ?-X-1983, Eurides Furtado; Sinop, X-1974, M. Alvarenga; Estado do São Paulo, Vila Vera, X-73, M. Alvarenga; Estado do Goiás, Jatahy (Jatai), 1898, Pujol; idem, Rio Verde, G. A. Baer, 1908; Specimens are deposited in ACMT, BMNH, CMNH, FWSC, MNHN, RFMC, SDEI, and WOPC.

***Pelonium xanthorum* OPITZ nov.sp. (Figs 184, 185, 275, 319, 387)**

H o l o t y p e : ♂. BOLIVIA, Santa Cruz, 4-6 k SSE Buena Vista, F & F Hotel, 27-29-Oct. 2000, Wappes & Morris (MNKM).

P a r a t y p e s : Eight. Bolivia: Departamento de Santa Cruz, 3.7 km SSE Buena Vista, Hotel Flora & Fauna, 27-29 Oct. 2000, Wappes & Morris (ACMT, 2); Santa Cruz, 4-6 k SSE Buena Vista vic. Flora & Fauna Hotel, 23-25/X/ 2000, R. Morris (RFMC, 1); idem, 23-26 Oct. 2000, Wappes & Morris (ACMT, 1); idem, 17-20-X-2000, R. Morris (RFMC, 1); Potrerillo del Guenda, Snake Farm, 17°40' 26"S 63°27' 27"S, 16-22 Oct.2006, 370 m, Wappes, Neams, & Eya (WOPC, 1). Brazil: Estado do Mato Grosso, Diamantino, Fazenda Rio Arenos, ?-IX-1983, Eurides Furtado (CMNH, 1); Chapada (CMNH, 1).

D i a g n o s i s : The six black spots on the flavotestaceous elytral disc will distinguish the members of this species from congeners.

D e s c r i p t i o n : Size: Length 7.0 mm; width 2.0 mm. Form: As in Fig. 387. Color: Body mostly yellow-testaceous, elytral disc with six black spots, two at basal margin, two at middle, and two behind middle; legs yellow-testaceous. Head: Capitular antennomeres 9 and 10 triangular (Figs 184, 185), those in males slightly longer than those in females, antennomere 11 obovate; frons narrow (EW/FW 17/15). Thorax: Pronotum slightly oblong (PW/PL 49/57), side margin with well-developed tubercle, disc coarsely punctate at sides, sparsely punctate at middle; elytral asetiferous punctuation subseriate, as group punctures narrow beyond middle (EL/EW 150/35); protibial anterior margin not spinose. Abdomen: Pygidial body scutiform; aedeagus (Fig. 275) with short digitiform apex, apex anterior margin narrowly expanded posteriorly, large triangular phallic apex.



Figs 213-216: Elytral surface sculpture. (213) *Pelonium semirufum*. (214) *P. alcicorne*. (215) *P. notabile*. (216) *P. nigroclavatum*.

V a r i a t i o n : Size: Length 5.0-7.0 mm; width 1.5-2.0 mm. Other than body size, the available specimens are quite homogeneous.

N a t u r a l h i s t o r y : All of the available specimens were collected in October, one at 370 m.

D i s t r i b u t i o n : This species is known only from Bolivia.

E t y m o l o g y : The specific epithet, *xanthorum*, is a Greek adjective that stems from *xanthos* (= yellow). I refer to the predominant yellow body color of this beetle.

The *P. alcicornis* species group

The members of this species group are united in that they possess the following color pattern on the posterior half of the elytral disc. The elytral apical region is testaceous, which is immediately preceded by a large black macula (Fig. 214). This macula may be rounded, linear, or irregular at its anterior and anterior margins. The basal 2/3 of the elytral disc may be completely testaceous or infuscated with dark markings. There are 11 species in this species group, whose geographical

D i s t r i b u t i o n includes Argentina, Brazil, French Guiana, Guatemala, México, Panamá, Peru, Tobago, and Venezuela.

***Pelonium abruptum* OPITZ nov.sp. (Figs 40, 319, 388)**

H o l o t y p e : ♀. 40 Mi. E. of Abancay, PERU, III-5-51. A second label reads: Ross and Michelbacher Collectors (CASC).

D i a g n o s i s : The abrupt ending of large asetiferous punctures on the distal 2/3 of the elytral disc will distinguish the members of this species from others in the *P. alcicorne* species group

D e s c r i p t i o n : Size: Length 7.0 mm; width 2.2 mm. Form: As in Fig. 388. Color: Mouthparts testaceous, except mandibles black; cranium castaneous; antenna testaceous; pronotum castaneous; elytra mostly brown, with a yellow fascia behind middle, elytral disc with large brown macula in front of testaceous apical region; legs mostly testaceous, femora infuscated at apex. Head: Capitular antennomeres 9 and 10 triangular (Fig. 40), antennomere 11 oblong; frons much wider than width of eye (EW/FW 22/15), cranium coarsely punctate. Thorax: Pronotum slightly oblong (PW/PL 50/52), side margin with pronounced tubercle, disc coarsely copiously punctate; elytral asetiferous punctation large, arranged into 10 striae, punctures end abruptly at elytral distal 3/4, distal 1/4 of disc glabrous (EL/EW 160/38); protibial anterior margin briefly ridged. Abdomen: Pygidium scutiform.

D i s t r i b u t i o n (Fig. 319): This species is known from Peru.

E t y m o l o g y : The specific epithet, *abruptum*, is a Latin adjective that stems from *abruptus* (= broken off). The name refers to the abrupt termination of the asetiferous punctation on the elytral disc.

***Pelonium alcicorne* (KLUG) (Figs 26, 27, 214, 276, 319, 389)**

Enoplium alcicorne KLUG, 1842: 361.

H o l o t y p e : ♂. (Brazil) Brasilien. (ZMHB). Corporaal 1950: 285 (*Corinthiscus*).

D i a g n o s i s : Within the *P. alcorni*-group the elytral humeral angle is infuscated in specimens of *P. alcorni*, *P. junctum*, *P. lithum*, and in those of *P. quadriplagiatum*. *Pelonium alcorni*

specimens differ by having a small round black macula distal of the elytral apex. Also, the males of *P. alcorni* have very long collateral branches stemming from antennomeres 9 & 10.

R e d e s c r i p t i o n : Size: Length 12.0 mm; width 4.0 mm. Form: As in Fig. 389. Color: Mouthparts testaceous, except mandibles brown; antenna mostly black, scape, pedicel, and funicular antennomeres castaneous, capitulum brown, cranium and thorax castaneous; femora testaceous at base, brown distally, tibial light brown at base, testaceous distally, tarsus testaceous; elytron mostly testaceous, humeral angle and basal region of epipleuron brown, elytral disc with large brown macula in front of testaceous apical region, asetiferous punctations brown; abdomen testaceous. Head: Capitular antennomeres 9 and 10 with short or long collateral branch (Fig. 26, 27), antennomere 11 oblong-short; frons much narrower than width of eye (EW/FW 35/10). Thorax: Pronotum oblong (PW/PL 65/80), side margin with angular tubercle, discal sides coarsely punctate, central disc more sparsely punctate; elytral asetiferous punctation subseriate and extends to middle of disc (EL/EW 235/65); protibial anterior margin spinose. Abdomen: Male pygidium broadly incised; aedeagus (Fig. 276) slightly sclerotized ventrally, phallic apex uncinat.

V a r i a t i o n : Size: Length 8.0-14.0 mm; width 2.8- 4.5 mm. The black macula on the elytral disc may be reduced to a narrow angular fascia and the antenna is strongly sex dimorphic.

N a t u r a l h i s t o r y : Specimens were collected during May, June, and October through December, at altitudes ranging from 300 to 960 m.

D i s t r i b u t i o n (Fig. 319): In addition to the lectotype, I examined 103 specimens from: Brazil: Estado do São Paulo, Val. Do Rio Pardo, 12-1998, E. Gounelle; Villa Victoria, 1890, Ch. Pujol; Estado do Bahia, Cachimbo, 1890, Ch. Pujol; Bahia, VI-1972, 960 m, M. Alvarenga; Itapetinga, XI-1969, collector not noted; S. Antonio da Barra, 1890, Ch. Pujol; Estado do Rio Grande do Sul, Encruzilhada, XI-1974, 960 m, M. Alvarenga; Santo Augusto, IV-1966, O. Roppa; Estado do Espírito Santo, Santa Teresa, 22/11/1967, C. T. & C. Elias; Pedra Azul, XI-1974, 800 m, Moacir Alvarenga; Estado do Minas Gerais, Caraca, 12.1885, E. Gounelle; Estado do Pernambuco, Pery-Pery, 11.12.1892; Estado do Rio de Janeiro, Bom Jesus de Itabapoaná; Rio de Janeiro, ?-X-?, collector not noted; Estado do Santa Catarina, Nova Teutonia, X-1972, 300-500 m, F. Plaumann. Specimens are deposited in AMNH, DZUP, FMNH, MNHN, and WOPC.

N o t e s : This redescription is based on a homotype specimen whose identity was further corroborated by its comparison with a photograph of the holotype.

***Pelonium badeni* (GORHAM) (Figs 33, 34, 277, 319, 390)**

Corinthiscus badeni GORHAM, 1877: 420. Lectotype. ♀. Here designated. Brazil, Rio de Janeiro. (BMNH). Paralectotypes. Three. Brazil: Estado do Rio de Janeiro (BMNH, 1; MNHN, 2). CORPORAAL 1950: 286. In Gorham's description there is information (size range) that indicates that there was more than one specimen available to him, but he did not tag one of these to be the name bearer of this nominal species. Therefore, I invoke Recommendation 73F of the ICZN (1999) and designate a lectotype.

Pelonium corporaali PIC, 1950: 12. nov. syn. Lectotype, ♀. Here designated. Brésil, Goyaz (MNHN). Paralectotype, One. Brésil: Goyaz (MNHN). The characteristics upon which this nominal species is based fall into the range of variation of *Pelonium badeni* GORHAM.

D i a g n o s i s : The basal 1/2 of the elytral disc is reddish. This trait will distinguish the members of this species from others in the *P. semirufum*-group.

R e d e s c r i p t i o n : Size: Length 9.0 mm; width 2.5 mm. Form: As in Fig. 390. Color: Maxillae and labium testaceous, labrum and mandibles brown; antenna testaceous; pronotum black, prosternum partly testaceous, partly brown; elytra tricolored, basal half testaceous and with faint transverse marking, yellow fascia behind middle, elytral disc with large brown macula in front of testaceous apical region; legs, pterothorax, and abdomen testaceous. Head:. Antennomeres 6-8 slightly serrate, capitular antennomeres 9 and 10 with short or long collateral branch (Figs 33, 34), antennomere 11 oblong-subtruncate; frons particularly narrow (EW/FW 23/10). Thorax: Pronotum oblong (PW/PL 58/68), side margin with well-developed tubercle, disc coarsely punctate, disc center with narrow glabrous vertical line; elytral asetiferous punctation subseriate, punctures become smaller towards apex and as they approach sutural margin (EL/EW 190/45); protibial anterior margin spinose. Abdomen: Pygidial body subquadrate, notched in middle of anterior margin; aedeagus (Fig. 277) slightly sclerotized ventrally, phallic apex triangular.

V a r i a t i o n : Size: Length 7.0-11.0 mm; width 2.0- 4.0 mm. Other than body size, the available specimens are quite homogeneous.

N a t u r a l h i s t o r y : Specimens were collected during February, March, October, and November.

D i s t r i b u t i o n (Fig. 319): In addition to the lectotype I examined 56 specimens from: Brazil: Estado do São Paulo, Parelheiros, II-4-1974, V. N. Alin; Estado do Goiás, Jatai; Goyaz (Goiás), 1915, E. Gounelle; idem, Rio Verde, 1939, A. Sicard; idem, Mineiro, 1912, H. Donkier; Estado do Rio do Janeiro, Guanabara, II-1964, M. Alvarenga; Estado do Bahia, Villa Victoria, 1890, Ch. Pujol; Estado do Paraná, N. Paraná, Heinstal; Estado do Roraima, Terra Boa, 10-XI-74; Estado do Pernambuco, Serra de Communitat, 12.3.1893, Gounelle; Estado do Minas Gerais, Caraca (Minas Geraes), 1.2.1885, E. Gounelle; Estado do Santa Catarina, Nova Teutonia, X-1973, 300-500 m, F. Plaumann; idem, XII-1977, F. Plaumann; idem, XI-1973, F. Plaumann. Specimens are deposited in ACMT, BMNH, FMNH, NCBN, MNHN, SDEI, and WOPC.

***Pelonium disjunctum* OPITZ nov.sp. (Figs 80, 81, 278, 319, 391)**

H o l o t y p e : ♂. BRAZIL: Minas Gerais, Pirapora, XI-1975 (FSCA).

P a r a t y p e s : Two. Brazil: Goiás, Jatai (SDEI, 1; WOPC, 1).

D i a g n o s i s : Specimens of this species resemble superficially those of *P. ocellatum*, from which they differ by showing a bipartite macula on the preapical region of the elytral disc.

D e s c r i p t i o n : Size: Length 10.0 mm; width 3.5 mm. Form: As in Fig. 391. Color: Mouthparts testaceous, except mandibles brown; antenna bicolourous, scape and pedicel testaceous, funicular antennomeres and capitulum brown, except apex of antennomere 11 narrowly testaceous; cranium, pronotum, and mesothorax mostly castaneous, lower frons

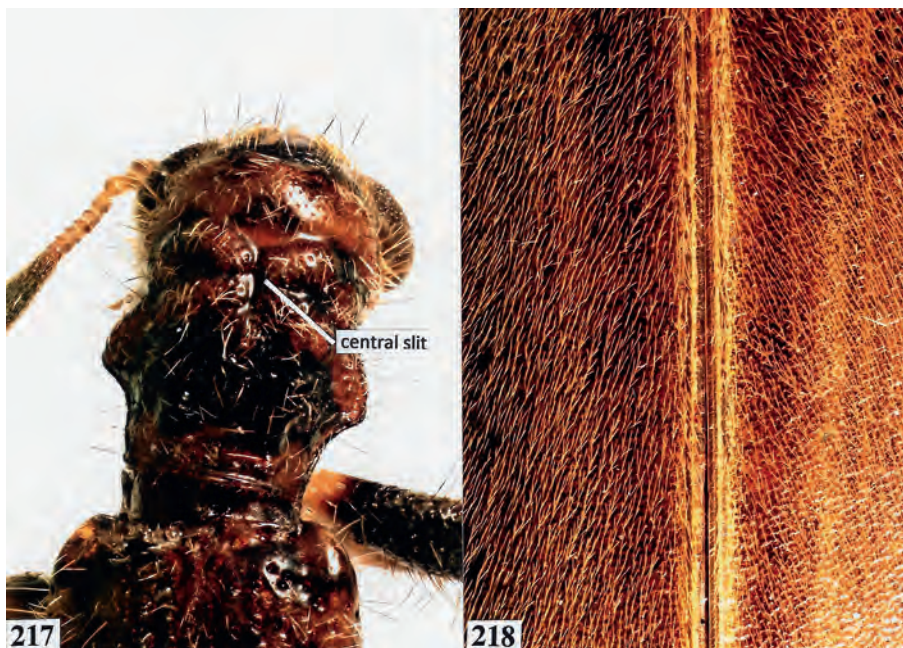
with black oblong spot, pronotal arch black; elytra bicolored, basal half with brown subquadrate marking, interior of subquadrate marking testaceous, elytral distal half mostly testaceous, elytral disc with large brown macula in front of testaceous apical region; legs mostly black, femora testaceous in basal half; venter of metathorax and abdomen testaceous. Head: Capitular antennomeres 9 and 10 triangular (Figs 80, 81), antennomere 11 oblong-subtruncate; lower frons with centrally located spheroid tumescence, frons narrower than width of eyes (EW/FW 28/18). Thorax: Pronotum oblong (PW/PL 65/75), side margin with shallow tubercle, disc coarsely punctate at sides, slightly punctated at middle; elytral asetiferous punctation subseriate, large punctures extend to discal middle then become diminutive to elytral apex (EL/EW 220/55); protibial anterior margin minutely spinose. Abdomen: Pygidial body scutiform; aedeagus (Fig. 278), phallic apex triangular.

V a r i a t i o n : Size: Length 9.0-10.0 mm; width 3.2-3.5 mm. The brown subquadrate marking near the humeral angle may be dimly expressed or absent.

N a t u r a l h i s t o r y : The *H o l o t y p e* was collected during November.

D i s t r i b u t i o n (Fig. 319): This species is known only from Brazil.

E t y m o l o g y : The specific epithet *disjunctum* (= separation) is a Latin name. The name refers to the separation of the two black oblong maculae on the distal portion of the elytral disc.



Figs 217-218: Pronotal and elytral surface sculpture. (217) *Pelonium notabile*. (218) *P. fucogonium*.

***Pelonium junctum* PIC (Figs 96, 97, 283, 319, 392)**

Pelonium junctum PIC, 1935b, 101. Lectotype. ♀. Here designated. Argentina, Chaco de Santiago del Estero, Rio Salado. On a second label: Décembre (MNHN). CORPORAAL 1950: 286 (*Corinthiscus*). SOLERVICENS, 2008: 593. Pic did not specify in his description whether his nominal species is based on one specimen. Therefore, I invoke Recommendation 73F of the ICZN (1999) and designate a lectotype for this nominal species.

Pelonium separatum PIC, 1935b, 101. nov. syn. Lectotype. ♀. Here designated. Argentina, Chaco de Santiago del Estero (MNHN). Corporaal 1950: 296. Solervicens, 2008: 593. Pic did not specify in his description whether his nominal species variety is based on one specimen. Therefore, I invoke Recommendation 73F of the ICZN (1999) and designate a lectotype for this nominal species.

D i a g n o s i s : Within the *P. alcornae*-group the elytral humeral angle is infuscated in specimens of *P. alcornae*, *P. junctum*, *P. lithum*, and in those of *P. quadriplagiatum*. *Pelonium junctum* specimens differ by showing a large dark macula on the anterior 1/2 of the elytral disc.

R e d e s c r i p t i o n : Size: Length 13.0 mm; width 4.5 mm. Form: As in Fig. 392. Color: Mouthparts castaneous, mandibles black; antenna dark brown; cranium and prothorax black; mesosternum and metasternum castaneous, mesepisternum and metepisternum black; distal region of femora and proximal region of tibiae black, rest of legs light castaneous; elytra, black marking on humeral angle narrowly extended posteriorly to large black subquadrate discal macula, elytral disc with large brown macula in front of testaceous apical region, remainder of disc light castaneous; abdomen testaceous. Head: Capitular antennomeres 9 and 10 with short or longer collateral branch (Fig. 96, 97), antennomere 11 oblong-ovoid; frons narrower than width of eye (EW/FW 30/23). Thorax: Pronotum slightly oblong (PW/PL 98/105), side margin with well-developed tubercle, disc coarsely punctate; elytral asetiferous punctation subseriate, they diminish in size slightly behind elytral middle, and terminate just before posterior black macula (EL/EW 285/80); protibial anterior margin spinose. Abdomen: Pygidium scutiform; aedeagus (Fig. 282) slightly sclerotized ventrally, phallic apex small and triangular, with very long linear medial backward extension, phallobasic apodeme long and wide.

V a r i a t i o n : Size: length 8.0-16.0 mm; width 2.5-5.5 mm. The dark macula on the anterior half of the elytral disc varies in size as does the testaceous macula on the elytral apex.

N a t u r a l h i s t o r y : Specimens were collected in February, May, September, October, November, and December, at altitudes ranging from 1650-1950 m; one in a Malaise trap.

D i s t r i b u t i o n (Fig. 319): In addition to the lectotype I examined 48 specimens. Argentina: Provincia de Catamarca, Coneta 16 km S Catamarca, 25-X-12-IX, 2003, 554 m, Malaise trap, M. E. Irwin & F. D. Parker; Provincia La Rioja, Santa Vera Cruz, 2867S 6696W, 15-XI-2004, L. Stange, P. Fidalgo; Provincia de Buenos Aires, Maqueta, X-XI-1933, W. C. Harrington; Provincia Salta, Tablillas, G. L. Harrington; Salta, Cafayate, 21-X-1972, 1650 m, J. Heyward; Salta, Yacuchuya (Cafayate), 16-31-XII-1969, Malaise, 1950 m, William, Terán, Stange; El Carcadero, XII-1985; Salta, X-23-1968, at light, L. & C. W. O'Brien; Provincia de Santiago del Estero, Bords du Dpto. Rio Salado, Env. D' Icaño Mistol Paso, Janvier, 1909, E. R. Wagner; Provincia de Catamarca, La Rioja, El Duranzillo, 10-XI-2002, Malaise trap, L. Stange; Provovincia Entre Ríos, Dept. Colon, II-

1989, Liebig; idem, XII-1971; Provincia de Tucumán, 11 km cerca de Las Cajas, 24.IX.17.X, L. Stange; Tucumán, Parque Aconguija, 9-I-1946, R. Golbach; Tucumán, San Pedro de Colalas, 8-10-XI-1967, A. Terán, L. Stange; Dpto. Cruz Alta, Tucumán Ciudad, 27.XI. 1949, R. Golbach; idem, Parque Aconguija, 9-I-1946, R. Golbach; idem, La Soledad (Cañete), 16-XI-1965, E. Bucher; Tucumán, 8-IV-1948, Wygodzinsky; Provincia de Misiones, Dos de Mayo, 4-V-1967, J. Foerster; Specimens are deposited in FMNH, FSCA, IMLA, JNRC, RGCG, WFBM, and WOPC.

***Pelonium litum* OPITZ nov.sp. (Figs 105, 106, 319, 393)**

H o l o t y p e : ♀. Trinidad: St. Augustine, Mt. St. Benedict Abby, 23.V.1996. A second label reads: B. K. Dozier Collector (FSCA). **Paratype.** Four. Panamá, Provincia de Panamá, Cerro Campana, I-VI-1982, F. Hovore (WOPC, 1). Colombia, Departamento de Magdalena, Aracataca, collection date not noted (MCZC, 1). Venezuela: Estado de Aragua, 8.1988, 1650 m, Aguacatal (RGCG, 1). Tobago: 13-15-VII-1952, J. Maldonado C. (WOPC, 1).

D i a g n o s i s : Within the *P. alcicorne*-group the elytral humeral angle is infuscated in specimens of *P. alcicorne*, *P. junctum*, *P. litum*, and in those of *P. quadriplagiatum*. *Pelonium litum* differs by showing a large round macula in the subapical region of the elytral disc.

D e s c r i p t i o n : Size: Length 11.0 mm; width 4.0 mm. Form: As in Fig. 393. Color: Maxillae, labium, labrum testaceous, mandibles black; antenna brown; cranium and pronotum castaneous; femora testaceous in basal 2/3, black in remainder, tibiae black at base, testaceous in remainder, tarsi testaceous; mesoscutellum castaneous; elytra mostly reddish-testaceous, humeral angle black, elytral disc with large brown macula in front of testaceous apical region; pterothorax castaneous; abdomen testaceous. Head: Capitular antennomeres 9 and 10 with very short collateral branch (Figs 105, 106), antennomere 11 oblong-oval; frons narrower than width of eye (EW/FW 28/21). Thorax: Pronotum slightly oblong (PW/PL 80/88), side margin with well-developed tubercle, disc mostly coarsely punctate, anterior disc with two glabrous spots, basal region of disc slightly glabrous; elytral asetiferous punctation subseriate, punctation region extends to posterior black macula (EL/EW 250/70); protibial anterior margin spinose. Abdomen: Pygidium scutiform.

N a t u r a l h i s t o r y : Specimens were collected in May and August; one at 1650 m.

D i s t r i b u t i o n (Fig. 319): This species is known from Trinidad and Venezuela.

E t y m o l o g y : The specific epithet, *litum*, is a Latin noun that stems from *litus* (= smear). I refer to the two black maculae on the elytral disc.

***Pelonium maculoangulum* OPITZ nov.sp. (Figs 113, 324, 394)**

H o l o t y p e : ♀. MEX., 16 mi. E. Teopisca, Chis., V-14-1969, J. M. Campbell (CNCC).

P a r a t y p e : One. Guatemala: Departamento de Guatemala, Sn. Lorenzo Rd, 10 June 1991, 5-600', J. E. Wappes (ACMT).

D i a g n o s i s : The narrow brown angular fascia at elytral middle will distinguish the members of this species from others in the *P. alcicorne* species group.

R e d e s c r i p t i o n : Size: Length 10.0 mm; width 3.8 mm. Form: As in Fig. 394. Color: Mouthparts testaceous, except mandibles black; antennomeres 1-8 castaneous,

capitular antennomeres dark brown; cranium, prothorax, and pterothorax castaneous; abdomen testaceous; elytra bicolored, periphery of basal half of disc mostly brown, angular brown region extends obliquely towards sutural margin, elytral disc with large brown macula in front of testaceous apical region; asetiferous punctures brown; legs bicolored, femoral basal half and tibial bases brown, tibial apex infuscated. Head: Capitular antennomeres 9 and 10 with short collateral branch (Fig. 113), antennomere 11 oblong, subtruncate; frons narrower than width of eye (EW/FW 22/17). Thorax: Pronotum oblong (PW/PL 58/66), side margin with well-developed tubercle, disc coarsely punctate and with the three glabrous swellings, two spheroid behind pronotal arch and one narrow at middle base; elytral asetiferous punctations randomly distributed, punctures extended to elytral apex (EL/EW 215/50); protibial anterior margin roughened. Abdomen: Pygidium scutiform.

V a r i a t i o n : Size: Length 8.0-10.0 mm; width 2.5-3.8 mm. Other than body size, the available specimens are quite homogeneous.

N a t u r a l h i s t o r y : Specimens were collected during May and June, the paratype at an altitude between 1524-1829 m.

D i s t r i b u t i o n (Fig. 324): This species is known from México and Guatemala.

E t y m o l o g y : The trivial name, *maculoangulum*, is a Latin compound name that stems from *macula* (= spot) and *angle* (= corner). The name refers to the brown angular fasciae on the middle of the elytral disc.

***Pelonium nigrosignatum* PIC (Fig. 427)**

Pelonium nigrosignatum PIC, 1940: 10.

H o l o t y p e : Gender not known. Brazil (MNHN).

D e s c r i p t i o n : No specimens were available, but I studied a photograph of the holotype. The elytral disc color pattern, as depicted in Fig. 427, will distinguish the members of this species from those of the *P. allicorne*-group.

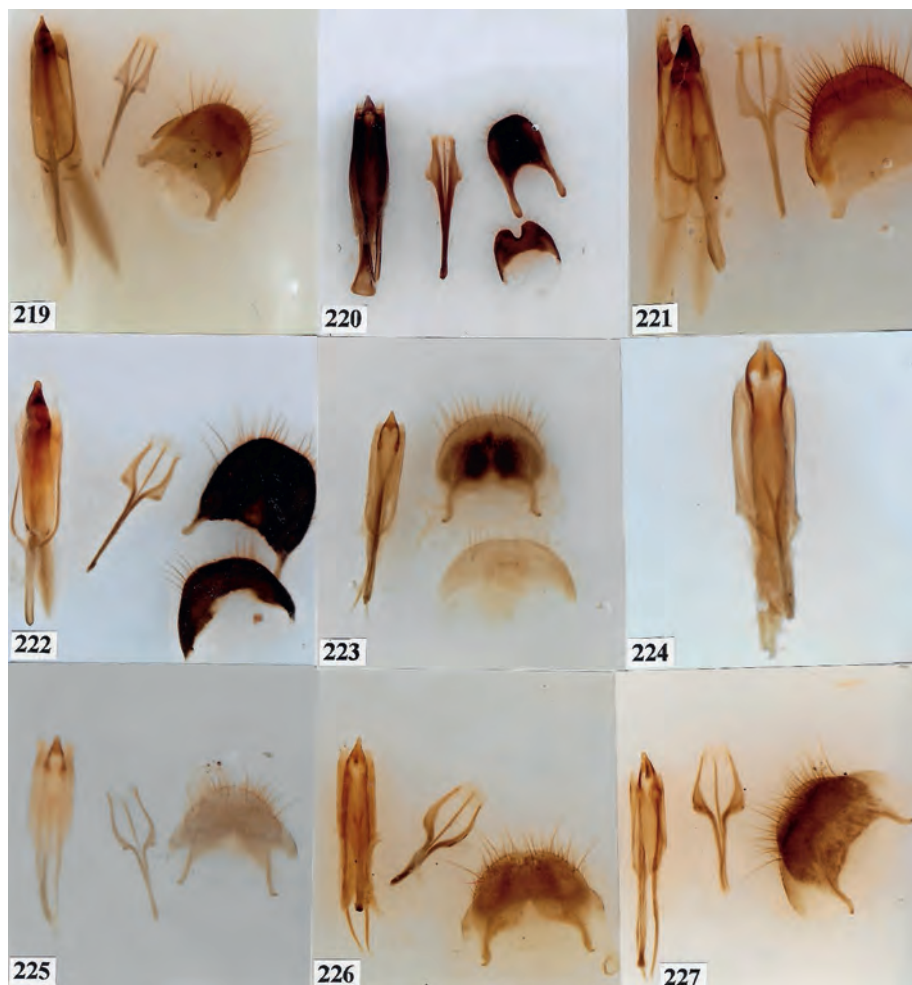
***Pelonium ocellatum* OPITZ nov.sp. (Figs 139, 140, 280, 319, 395)**

H o l o t y p e : ♂. BOLIVIA: Santa Cruz Dpt., 4-5 km N. Achira, Rd. to Floripondo: 12 w UV light, S18°09' W63°47', 6350 ft., 15-IX-2012, Skelley, Hamel (MNKM). Paratypes: Six. **Bolivia**: Departamento de Santa Cruz, 4 km N Bermejo, Refugio los Volcanes, 18°06'S 63°36'W, Oct 31-Nov 3, 2013, 1045-1350 m, Wappes & Kuckartz (ACMT, 1); idem, October 17-24, 2014, Wappes & Morris (WOPC, 1); Amboro Rd. above Achira Campo, 9-11/X/2004, 5-5800', Morris & Wappes (RFMC, 1); 4-5 km N Achira, Rd. to Floripondo, S18°09' W63°47', 15-Sept-2012, 6350 ft, light, Wappes, Skelley, Bonaso, Hamel (ACMT, 2); Amboro Rd. above Achira Campo 5-5, 800', 9-11 Oct 2004, Wappes & Morris (WOPC, 1).

D i a g n o s i s : The black spots on a red-brown pronotum will distinguish the members of this species within the *P. allicorne*-group.

D e s c r i p t i o n : **Size**: Length 9.0 mm; width 3.0 mm. **Form**: As in Fig. 395. **Color**: Mouthparts testaceous, except mandibles brown; antenna testaceous, capitular antennomeres infuscated; cranium mostly castaneous, frons black, epicranium with black markings; pronotum bicolored, upper sides black, lower sides and base with black markings; elytra bicolored, with six irregular black maculae, remainder of elytral disc testaceous, except asetiferous punctures black, elytral disc with large brown macula in

front of testaceous apical region; legs mostly dark testaceous, femora infuscated at apex, tibiae infuscated in basal half; venter of mesothorax and metathorax mostly dark brown, abdomen brown. Head: Capitular antennomeres 9 and 10 triangular (Figs 139, 140), antennomere 11 oblong-subtruncate; frons narrower than width of eyes (EW/FW 23/19). Thorax: Pronotum quadrate (PW/PL 60/60), side margin with very prominent tubercle, disc coarsely punctate at sides, slightly punctated at middle, disc with shallow elevations; elytral asetiferous punctation subseriate, punctures small and widely separated, punctures extend to discal posterior 3/4 (EL/EW 210/50); protibial anterior margin spinose.



Figs 219-227: Abdominal terminalia. (219) *Pelonium effusum*. (220) *P. lustratum*. (221) *P. rossi*. (222) *P. viridipenne*. (223) *P. abacum*. (224) *P. bibullum*. (225) *P. buenavista*. (226) *P. divericoatum*. (227) *P. divisum*.

Abdomen: Pygidial body scutiform; aedeagus (Fig. 280), phallic apex narrowly triangular, phallic plates broad.

Variation: Size: Length 8.0-12.0 mm; width 2.3-5.0 mm. Other than body size, the available specimens are quite homogeneous.

Natural history: The available specimen was collected during periods from September through November, at altitudes ranging from 211 to 1921 m; some with a UV light.

Distribution (Fig. 319): This species is known only in Bolivia.

Etymology: The specific epithet, *ocellatum*, stems from the Latin *ocellatus* (= having eyelike spots). I refer to the dark-colored asetiferous punctures on the elytral disc.

***Pelonium plicatum* OPITZ nov.sp. (Figs 148, 319, 396)**

Holotype: ♀. GUYANE (French Guiana) (Régina), Montague de Kaw PK, 32.2 + 2.5, 5.X.2005.

A second label reads: piège lumineux, G. Moragues (FSCA).

Paratype: One. Brazil: Estado do Mato Grosso, 1886, P. Germain (MNHN).

Diagnosis: The anterior 2/3 of the elytral disc is red-brown. This feature will distinguish the members of this species within the *P. alcorni*-group.

Description: Size: Length 12.0 mm; width 3.5 mm. Form: As in Fig. 396. Color: Maxillae, labium, labrum testaceous, mandibles black; antenna black, cranium and pronotum black; profemur testaceous in basal half, black in remainder, middle and hind legs testaceous, tarsus testaceous; elytra mostly reddish-testaceous, elytral disc with large brown macula in front of testaceous apical region; pterothorax testaceous, except mesepisternum black; abdomen testaceous. Head: Capitular antennomeres 9 and 10 with short collateral branch (Fig. 148), antennomere 11 oblong-oval; frons narrower than width of eye (EW/FW 35/17). Thorax: Pronotum slightly oblong (PW/PL 93/98), side margin with well-developed tubercle, anterior half of disc transversely wrinkled, disc coarsely punctate in remainder, posterior central region narrowly glabrous; elytral asetiferous punctation subseriate, punctation region of disc narrows to posterior black macula (EL/EW 230/60); protibial anterior margin spinose. Abdomen: Pygidium scutiform.

Variation: Size: Length 12.0-13.0 mm; width 3.5-4.5 mm. Other than body size the two available specimens are quite homogeneous

Natural history: The holotype was collected in October, with a black light.

Distribution (Fig. 319): This species is known from French Guiana and Brazil.

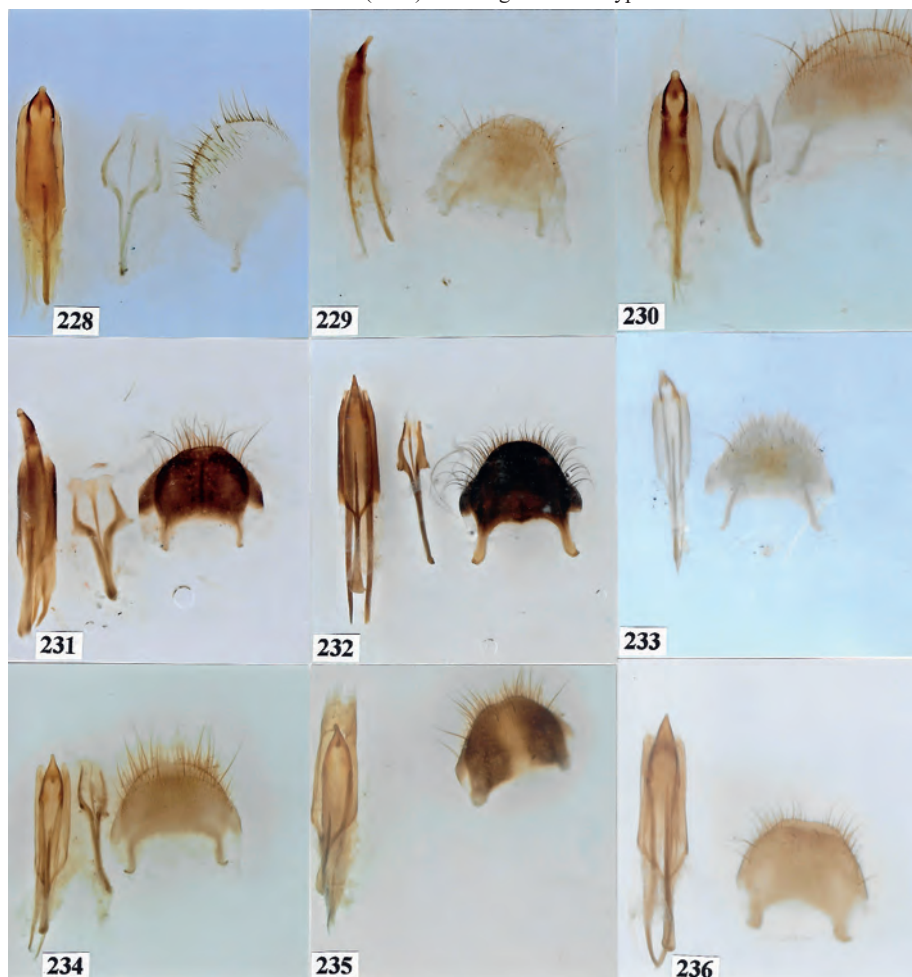
Etymology: The specific epithet, *plicatum*, is a Latin adjective that stems from *plico* (= fold). I refer to the transverse wrinkles on the anterior portion of the pronotal disc

***Pelonium quadriplagiatum* KUWERT (Figs 20, 151, 152, 281, 319, 397)**

Pelonium quadriplagiatum KUWERT, 1894: 13.

Holotype: ♂. (Brazil) St. Paolo (= São Paulo) (MNHN). CORPORAAL 1950: 289 (*Corinthiscus*). Solervicens, 2008: 593.

Pelonium atronotatum PIC, 1935b: 100. nov. syn. Lectotype. ♂. Here designated. (Brazil) Goyas (= Jatai Goyas) (MNHN). CORPORAAL. 1950: 286. Solervicens, 2008: 593. Pic did not specify in his description whether his nominal species is based on one specimen. Therefore, I invoke Recommendation 73F of the ICZN (1999) and designate a lectotype for this nominal.



Figs. 228-236: Abdominal terminalia. (228) *Pelonium granosum*. (229) *P. latusculum*. (230) *P. leucotaxium*. (231) *P. photinoides*. (232) *P. atraliculum*. (233) *P. careoitum*. (234) *P. caudiculum*. (235) *P. circum*. (236) *P. cribellum*.

Diagnosis: The asetiferous punctures at elytral basal 1/2 are encircled in brown. This trait will distinguish the specimens of this species within the *P. alcicorne*-group.

Redescription: Size: Length 13.0 mm; width 4.5 mm. Form: As in Fig. 397. Color: Maxillae, labium, labrum castaneous, mandibles black; antennomeres 1-8 castaneous, capitular antennomeres dark brown; cranium and prothorax dark castaneous; pterothorax black; elytra mostly testaceous, tricolored, humeral angle black, basal half of

disc with central brown macula, elytral disc with large brown macula in front of testaceous apical region, asetiferous punctation circled in brown; legs, basal region of femora and distal region of tibiae testaceous, femoral distal region and tibial proximal region brown; abdomen testaceous. Head: Capitular antennomeres 9 and 10 with short or long collateral branch (Figs 151, 152), antennomere 11 oblong; frons much narrower than width of eye (EW/FW 35/15). Thorax: Pronotum oblong (PW/PL 80/85), side margin with broad tubercle, disc coarsely punctate, disc with five glabrous spots, three basal, two more anterior; elytral asetiferous punctation subseriate, punctures extend from elytral base to elytral middle, posterior region shallowly asperous (EL/EW 260/70); protibial anterior margin spinose. Abdomen: Pygidium slightly incised at middle of anterior margin; aedeagus (Fig. 281) slightly sclerotized ventrally, phallic apex broadly triangular.

V a r i a t i o n : Size: Length 8.0-16.0 mm; width 2.5-5.5 mm. The testaceous macula near the elytral apex varies in size, and the incision on the distal margin of the pygidium varies in expression.

N a t u r a l h i s t o r y : Specimens were collected during a period from May, September-December, at altitudes ranging from 300-800 m; some in a burned area, on slash and logs, some with a blacklight. F. L. L. Leonel captured two specimens with a 4-m ethanol-baited FIT in a tropical latifoliated semideciduous fragment in transition with cerradao.

D i s t r i b u t i o n (Fig. 319): In addition to the lectotype, I examined 397 specimens from: Bolivia: Departamento de Cochabamba, Limbo, IV-1953, Martinez; Departamento de Santa Cruz, 83 km N Camiri, Road to Itai, 6-8 km E B09, 19°19'S 63°25'W, 4-5-XI-2012, Skillman, Wappes & Boneso; 20 km N Camen, Road to Eyti, 19°52'S 63°29'W, 5-6-XII-2012, Skillman, Wappes & Boneso; Huaico, 17°40'S 63°24'W, 21-X-2013, Skillman & Wappes; idem, 21-X-2013, Skillman & Wappes; 15 km NE Terebento, Xavier chaco, I-XII-2012, Skillman & Wappes; Potrerillo de Guenda, Snake Farm, 17°40'S 63°27'W, idem, 21-24-X-2011, 370-400 m, Skillman & Wappes; idem, 30-XI-3-12-XII-2012, 370-400 m, Skillman & Wappes; 20-23-X-2011, 370-400 m, Skillman & Wappes; idem, 2-3-XII-2012, 370-400 m, Skillman & Wappes; Florida, 4 km N Bermejo, Refugio Los Volcanes, 18°06'S 63°36'W, 1000-1200 m, 15'W, 28-X-2011, Skillman & Wappes; idem, 6-XII-2015, Skillman, Wappes, & Kuckartz; idem, 6-8-XII-2015, 1000-1200 m, Skillman, Wappes & Kuckartz; idem, 11-17-XII-2012, 1000-1200 m, Skillman & Wappes; idem, 28-X-2011, 1000-1200 m, Skillman & Wappes; idem, 29-X-2011, 1000-1200 m, Skillman & Wappes; Buena Vista, Flora & Fauna Hotel, 21-24 November 2003, Wappes, Morris, & Nearn; idem, 23-XI-2013, 300-400 m, Skillman & Wappes; idem, 25-XI-2013, 300-400 m, Skillman & Wappes; idem, 17-X-2011, 300-400 m, Skillman & Wappes; idem, 22-XI-2013, 300-400 m, Skillman & Wappes; idem, 20-X-2011, 300-400 m, Skillman & Wappes; idem, 4-6 km SSE Buena Vista, 17°29.95'S 63°33.15'W, 3-14 November 2003, blacklight, 400-500 m, S. W. Lingafelter; Melancias, 10-11-1902, E. Gounelle, Morris & Wappes; Yoay, XII-1932, W. C. Harrington. Santa Cruz, 4-6 km SSE Buena Vista, F&F Hotel, 14-16-Oct. 2000, Wappes & Morris; Santa Cruz, 20 km N Camiri, Road to Eyti, 6-8 km E. Hwy 9, 19°52'S 63°29'W, 5,6,10 December 2012, Wappes, Bonaso, Skillman; 5 km ESE Warmes, Hotel Rio Selva, 11/25/2003, Nearn, Morris & Wappes; El Refugio, Los Volcanes, 18-24/X/2014, 3363', Morris & Wappes; Santa Cruz, Potrerillos del Guenda, 40 km NW Santa Cruz, 17°40.3'S-63°27.4'W, 22-XI-10 to 12-XII-2005, B. K. Dozier; Potr. del Guenda, October 13-17, 2014, Wappes & Morris;

Departamento de Tarija, Huayco Potrerillo, October 27-29, 2013, Wappes & Kuckartz; idem, 21 November 2013, Wappes & Skillman; idem, nr. Potrerillo, 1 December 2012, J. E. Wappes. Brazil: Estado do Bahia, Chapada; Bahia, Encruzilhada, 11-1972, M. Alvarenda; idem, S. Antonio, 1890, Ch. Pujol; San Antonio da Barra, 11-12-1888, Gounelle; Sertão de Diamantina, Faz. Das São Paulo, Ilha Solteira, UNESP, 05/XI/2002, campus hand collection, R. L. Marciano; Estado do Minas Gerais, Pedra Azul, XI- 1974, 800 m; Estado do Mato Grosso do Sul, Selviria, UNESP Farm, 20°22'57.67"S 51°24'41.76"W, 26/X/213, tropical latifoliated semideciduous fragment in transition with cerrado, 4-m ethanol-baited FIT height, Leonel, F. L L; Estado do Mato Grosso, Mato Grosso, 1886, P. Germain; Estado do Goiás, Jatai, Rio Verde; Jatai, 1898, Ch. Pujol; Estado do Santa Catarina, Nova Teutonia, 27°11'S 52°23'W, XI-1965, 300-500 m, Fritz Plaumann; idem, X-1971, F. Plaumann; Santa Catarina, Nova Teutonia, 37°11'S 52°23'W, XII-1973, 300-500 m, F. Plaumann; idem, XI-1965, F. Plaumann. Paraguay: Departamento de Caazapá, Outside of Parque Nacional Caaguazu, 26°07'47"S 55°43'48", 27.XII.1995, logs and slash at night, blacklight, B. Eierl and Barchet; Colonia Neufeld, 26°28'S 55°55'W, 24-X-02-XI-2008, U. Drechsel; outside Parque Nacional, Caaguazu, 26°07'47"S 55°43'48"W, 27.XII.1995, burned area, on logs and slash, flashlight and blacklight, Beierl, Barchet; Departamento de Guairá, Calle Florida, 14-18-IX.1992; Cerro Acati, 26-X-1993, 750 m, U. Drechsel; Sapucay, 1-5.XI. 1992; idem, Salto Cristal, 16-9-1991, U. Drechsel. Specimens are deposited ACMT, CMNH, DZUP, FWSC, JNRC, MNHN, RGCG, UEPB, WFBM, and WOPC.

***Pelonium riveti* LESNE (Figs 164, 165, 283, 319, 398)**

Enoplium riveti LESNE, 1909: 520. Lectotype. ♀. Here designated. (Peru) Pérou, Paita et Tallazzo de Parra (Reg. Desertique), Bord de la Mer, 1906, 60-80 m, P. Rivet (MNHN). CORPORAAL 1950: 289 (*Corinthiscus*). Paralectotypes. Two. (Peru) Pérou, Paita et Tallazzo de Parra (Reg. Desertique), Bord de la Mer, 1906, 60-80 m, P. Rivet (MNHN). Lesne did not specify in his description which of the three available specimens is to be the name bearer of this nominal species. Therefore, I invoke Recommendation 73F of the ICZN (1999) and designate a lectotype for this nominal species.

D i a g n o s i s : Specimens of this species are similar to those of *P. junctum* from which they differ by showing infuscated legs.

R e d e s c r i p t i o n : Size: Length 7.5 mm; width 2.3 mm. Form: As in Fig. 398. Color: Maxillae, labium, and antennae testaceous, mandibles brown; cranium and pronotum castaneous; legs testaceous; elytra bicolorous, mostly flavotestaceous, with brown patches, elytral disc with large brown macula in front of testaceous apical region; abdomen flavotestaceous. Head: Capitular antennomeres 9 and 10 with short collateral branch (Figs 164, 165), antennomere 11 oblong- ovoid; frons narrower than width of eye (EW/FW 15/28). Thorax: Pronotum oblong (PW/PL 45/55), side margin with shallow, rounded tubercle, disc coarsely punctate; elytral disc with subseriate punctuation to elytral apex (EL/EW 150/35); protibial anterior margin not plane. Abdomen: Pygidium scutiform; aedeagus (Fig. 283) slightly sclerotized ventrally, phallic apex oblong triangular, phallobasic lobes highly setiferous.

V a r i a t i o n : Size: length 6.2- 8.0 mm; width 2.0-2.5 mm. Other than body size, the available specimens are quite homogeneous.

N a t u r a l h i s t o r y : The three types were collected at an altitude that ranges from 60 to 80 m.

Distribution (Fig. 319): In addition to the types, I examined one specimen from: Peru: Provincia de Casma, 22 mi N of Casma, 24-III-1951, Ross & Michelbacher. Specimens are deposited in MNHN and WOPC.

The *P. nigroclavatum* species group

The distinguishing trait of this group of species is that the marking of the preapical region of the elytral disc is in the form of a dark brown angular fascia (Fig. 216). The fascia is usually narrow, but can be quite broadened. When broadened, the anterior and anterior margins of the fascia retain the angular configuration. There are 12 species in this group, whose geographic distribution includes Belize, Cayman Islands, Costa Rica, Dominican Republic, Honduras, México, Puerto Rico, and the United States of America.

***Pelonium aliciae* BARR (Figs 30, 31, 284, 320, 399)**

Pelonium aliciae BARR, 2005: 56.

H o l o t y p e : ♂. Estación Biologica Chamela, Jalisco, Mex., 9-Julio-98, Col. M. A. Morales (CNIN).

Paratypes: Sixty two specimens from localities and current depositions in institutions as noted in Barr, 2005: 58.

D i a g n o s i s : The elytral disc is heavily marked with large dark maculae and the femora are dark brown in distal half. Within the *P. nigroclavatum*-group these traits are found in *P. aliciae*, *P. caymanensis*, and in *P. spinolai*. From this group, specimens of *P. aliciae* may be distinguished by the black coloration along the entire region of the epipleural margin.

R e d e s c r i p t i o n : Size: Length 13.0 mm; width 5.8 mm. Form: As in Fig. 399. Color: Mouthparts testaceous, except mandibles black; antennomeres 1-8 castaneous, capitular antennomeres dark brown; cranium, prothorax, and mesosternum castaneous; metasternum and abdomen testaceous; elytra bicolored, periphery of disc mostly brown, brown coloration extends narrowly posteriorly in anterior portion of sutural margin, marking of preapical region of elytral disc in form of broad dark brown angular fascia; legs bicolorous, femoral apices and tibial bases brown. Head: Capitular antennomeres 9 and 10 with short or long collateral branch (Figs 30, 31), antennomere 11 oblong, narrowing to apex; frons narrower than width of eye (EW/FW 15/13). Thorax: Pronotum oblong (PW/PL 85/110), side margin without tubercle, disc coarsely punctate and with glabrous narrow line at middle; elytral asetiferous punctation subseriate, basal puncture adjacent to epipleural margin narrowly oblong, punctures extended to posterior 3/4 at sides, not present near posterior 3/4 of sutural margin (EL/EW 300/80); protibial anterior margin spinose. Abdomen: Pygidium scutiform; aedeagus (Fig. 284) slightly sclerotized ventrally, phallic apex triangular.

V a r i a t i o n : Size: Length 9.0-17.0 mm; width 3.5-6.0 mm. The brown, narrow, posterior extension at the base of the sutural margin may not be present and is variable in length.

N a t u r a l h i s t o r y : Specimens were collected during a period from July to August, some at UV&MV lights.

D i s t r i b u t i o n (Fig. 320): In addition to paratypes, I examined 40 specimens from: México: Estado de Chiapas, El Aguacero, 16 km W Ocazacoautla, June 28-July 8, 1986, E. Giesbert; Estado de Jalisco, Estación Biologica Chamela, July 10-20-1985, E. Giesbert;

idem, 9-14-VII-1993, Morris, Huether, Wappes. Guatemala: Departamento de Zacapa, 12-14 km S San Lorenzo, June 3-6, 1989, 1000-2000', E. Giesbert. Specimens are deposited ACMT, FSCA, JNRC, JPHC, SDEI, RFMC, WFBM, and WOPC.

***Pelonium caymanensis* OPITZ nov.sp. (Figs 67, 68, 385, 320, 400)**

H o l o t y p e : ♀. CAYMAN ISLANDS: Cayman Brac, Bight Rd. Brac Parrot Pres. 24-V-2009, Thomas, Turnbow & Ball, blacklight trap (FSCA). Paratypes: Seven. Cayman Islands: Cayman Brac Island, Hemmington Rd. 19°42.639'N 79°48.907'W, 8-VI-2008, blacklight trap, M. C. Thomas, R. H. Turnbow, B. K. Dozier (FSCA, 2; WOPC, 1); Grand Cayman Island, Mastic Trail, 28 May 2009, R. H. Turnbow (FSCA, 1); Little Cayman Island, 2.4 km E Blossom Village, 26 May 2009, R. H. Turnbow (FSCA, 1); idem, Coot Marsh area, 26-V-2009, M. C. Thomas (FSCA, 1); idem, 3.6 mi W Coot Marsh, blacklight trap, 6 July 20013, R. Turnbow (WOPC, 1).

D i a g n o s i s : The elytral disc is heavily marked with large dark maculae and the femora are dark brown in distal half. Within the *P. nigroclavatum*-group these traits are found in *P. aliciae*, *P. caymanensis*, and in *P. spinolai*. From this group, specimens of *P. caymanensis* may be distinguished by having testaceous antennae. The antennae are dark brown in the other aforementioned species.

D e s c r i p t i o n : Size: Length 9.0 mm; width 3.0 mm. Form: As in Fig. 400. Color: Mouthparts testaceous, except mandibles black; antenna testaceous; cranium and pronotum castaneous; elytral disc with admixture of brown and testaceous markings, marking of preapical region of elytral disc in form of dark brown angular fascia; distal region of femora and proximal region of tibiae black, rest of legs testaceous; abdomen testaceous. Head: Male and female capitular antennomeres 9 and 10 triangular (Figs 67, 68), antennomere 11 oblong; frons much narrower than width of eye (EW/FW 30/15); cranium coarsely punctate. Thorax: Pronotum slightly quadrate (PW/PL 67/67), side margin with shallow tubercle, disc coarsely punctate; elytral asetiferous punctation arranged into 11 striae (EL/EW 200/50); protibial anterior margin roughened. Abdomen: Pygidium scutiform; aedeagus (Fig. 285) slightly sclerotized ventrally, phallic apex acuminate/triangular.

V a r i a t i o n : Size: Length 5.5- 9.0 mm; width 2.0-3.0 mm. The brown and testaceous regions on the elytral disc vary in size.

N a t u r a l h i s t o r y : Specimens were collected during periods from May to July, most with a blacklight.

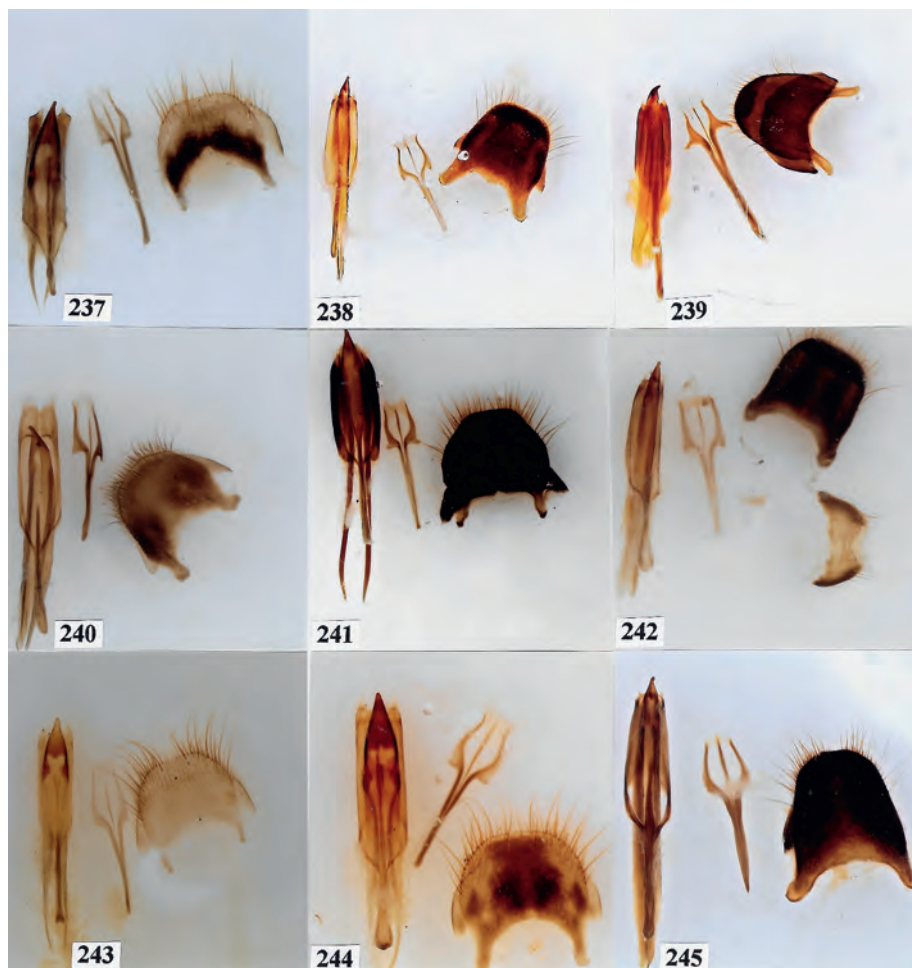
D i s t r i b u t i o n (Fig. 320): This species is known from the Cayman Islands.

E t y m o l o g y : The trivial name *caymanensis* is a compound name that stems from the name of the type locality and the suffix *-ensis* (= place for).

***Pelonium condylum* OPITZ NOV.SP. (Figs 56, 57, 286, 323, 401)**

H o l o t y p e : ♂. DOMINICAN REPUBLIC: Pedernales, 26 km N Cabo Rojo, 18°06'N 71°38'W, 730 m, 13 July 1990, J. Rawlins, C. Young, S. Thompson (CMNH). A second label reads: Carnegie Museum Specimen Number-355.565. Paratypes: Three. Dominican Republic: Provincia de La Altagracia, Parque del Este, Caseta Guaraguo, 4.4 km SE Bayahibe, 18°19'59"N 71°68'42"W, 26-27-V- 2004, 3 m, semihumid forest near sea, UV light, C. Young, J. Rawlins, J. Fetzner, C. Nunez (CMNH, 1; WOPC, 1); Provincia de Santo Domingo, Boca Chica, 29-V-1971, J. & S. Klapperrich (WOPC, 1).

D i a g n o s i s : The binodal condition of the elytral asetiferous punctures will distinguish the members of this species from congeners.



Figs 237-245: Abdominal terminalia. (237) *Pelonium lampyroides*. (238) *P. morrissi*. (239) *P. nictuatum*. (240) *P. optabile*. (241) *P. posticum*. (242) *P. ramosum*. (243) *P. regina*. (244) *P. scapulare*. (245) *P. suturale*.

Description: Size: Length 4.7 mm; width 1.5 mm. Form: As in Fig. 401. Color: Mouthparts testaceous, except mandibles black; antenna bicolorous, scape, pedicel, and funicle testaceous, capitulum brown; cranium and pronotum castaneous; elytra mostly testaceous, with dark brown marking near basal margin, narrow angular fascia near middle, marking of preapical region of elytral disc in form of dark brown angular fascia; legs flavotestaceous, distal limit of femora and proximal limit of tibiae infuscated; abdomen light brown. Head: Capitular antennomeres 9 and 10 triangular (Figs); antennomere 11 oblong; frons narrower than width of eye (EW/FW 11/7); cranium coarsely punctate. Thorax: Pronotum quadrate (PW/PL 34/34), side margin with slight tubercle, disc coarsely punctate; elytral asetiferous punctures randomly arranged to elytral

apex, punctures binodal (EL/EW 98/25); protibial anterior margin slightly ridged. Abdomen: Pygidium scutiform; aedeagus (Fig. 286) slightly sclerotized ventrally, phallic apex broad/triangular.

Variation: Size: Length 4.0-5.5 mm; width 1.3-1.8 mm. The preapical brown transverse fascia may be fragmented.

Natural history: Specimens were collected during May and July; two with a UV light, at 3 m.

Distribution (Fig.): This species is known from the Dominican Republic.

Etymology: The trivial name, *condylum*, is a Latin noun that stems from *condylus* (= knob of a joint). I refer to the knob-like, binodal, condition of the elytral punctures.

***Pelonium dapsilum* OPITZ nov.sp. (Figs 69, 325, 402)**

Holotype: ♀. Belize, VI-1997, Chiquibul Forest. Res. Las Cuevas field station, 88°59'W; 16°44'N, 500-700 m, D. Inward (BMNH).

Diagnosis: Within the *P. nigroclavatum*-group, a reddish-brown pronotum with black punctiform markings is characteristic of specimens of *P. dapsilum*, *P. maculicollis*, and of *P. woodruffi*. *Pelonium dapsilum* specimens differ from those of the other aforementioned species by showing a very narrow angular fascia in the preapical region of the elytra.

Description: Size: Length 7.3 mm; width 2.8 mm. Form: As in Fig. 402. Color: Mouthparts testaceous, except mandible brown; antenna bicolored, scape pedicel and funicular antennomeres testaceous, capitulum black; pronotum bicolored, mostly testaceous, with 4 maculae on each side and small punctiform infuscation near basal middle; elytra bicolored, mostly testaceous, with a slender large black irregular macula behind anterior margin, black irregular macula near middle of disc, and with broad black angular fascia that extends from epipleural margin to sutural margin, marking of preapical region of elytral disc in form of dark brown angular fascia; legs mostly testaceous, femora and tibiae of prothoracic legs infuscated, abdomen testaceous. Head: Female capitular antennomeres 9 and 10 triangular (Fig. 69), antennomere 11 oblong; frons narrower than width of eye (EW/FW 20/10). Thorax: Pronotum slightly oblong (PW/PL 50/60), side margin with well-developed tubercle, coarsely punctate, disc with shallow small slit at middle; elytral asetiferous punctation subseriate, punctures extend to elytral 1/2, (EL/EW 155/40); protibial anterior minutely spinose. Abdomen: Pygidial body scutiform.

Natural history: The type was collected in June, at an altitude range that extends from 500 to 700 m.

Distribution (Fig. 325): Known from the Middle American Nation of Belize.

Etymology: The trivial name, *dapsilum*, is a Latin adjective that stems from *dapsilis* (= abundant). I refer to the many makings on the dorsum of this beetle.

***Pelonium denotatum* OPITZ nov.sp. (Figs 70, 287, 320, 403)**

Holotype: ♂. DOMINICAN REPUBLIC: Pedernales Prov. PN Sierra de Baoruco, Las Abejas, 18°09.11'N 71°37.342'W, 1150 meters, 17 July 2006, S. W. Lingafelter, night collecting (FSCA). Paratype: One. Dominican Republic: Provincia de Pedernales, 26 km N Cabo Rojo, 18° 06' N 71° 30' W, 19-25-VII-1990, 370 m, wet deciduous forest, intercept trap, L. Masner, J. Rawlins, C. Young (CMNH).

D i a g n o s i s: Within the *P. nigroclavatum*-group completely testaceous legs are found in specimens of *P. denotatum*, *P. rallum*, and of *P. woodruffi*. From specimens of the other aforementioned species, *P. denotatum* specimens differ by showing a bicolored pronotum, with the disc testaceous and the pronotal sides castaneous.

D e s c r i p t i o n: Size: Length 8.5 mm; width 2.8 mm. Form: As in Fig. 403. Color: Mouthparts testaceous, except labrum and mandibles black; antenna testaceous; cranium bicolored, frons black, rest of cranium castaneous; pronotum black at sides, testaceous in remainder, thoracic sternum dark castaneous; elytral basal margin black, disc mostly testaceous, with short oblique black maculae near middle and crescentic dark brown maculae conjoined with dark marking of preapical angular fascia; legs testaceous; abdomen testaceous. Head: Capitular antennomeres 9 and 10 long triangular (Fig. 70), antennomere 11 oblong-subtruncate; frons much narrower than width of eye (EW/FW 20/12); cranium coarsely punctate. Thorax: Pronotum quadrate (PW/PL 60/60), side margin with shallow tubercle, disc coarsely punctate; elytral asetiferous punctation subseriate, punctures extend to elytral apex (EL/EW 185/45); protibial anterior margin roughened. Abdomen: Pygidium scutiform; aedeagus (Fig. 287) slightly sclerotized ventrally, phallic apex acuminate/triangular.

N a t u r a l h i s t o r y: The holotype was collected during July, during night at 1150 m.

D i s t r i b u t i o n (Fig. 320): This species is known from the Dominican Republic.

E t y m o l o g y: The trivial name *denotatum* is a Latin noun that stems from *nota* (= mark). I refer to the brown angular macula near the apical region of the elytral disc.

***Pelonium maculicolle* SCHAEFFER (Figs 111, 112, 288, 312, 404)**

Pelonium maculicolle SCHAEFFER. Lectotype. ♂. Esper. Rch., Brownsville, VI. TEX (USNM). Paralectotypes: 4 specimens from the same locality as the lectotype. CORPORAAL 1950: 289 (*Corinthiscus*).

D i a g n o s i s: Within the *P. nigroclavatum*-group, a reddish-brown pronotum with black punctiform markings is characteristic of specimens of *P. dapsilum*, *P. maculicolle*, and of *P. woodruffi*. *Pelonium maculicolle* specimens differ from those of the other aforementioned species by showing a broad angular macula on the preapical region of the elytra.

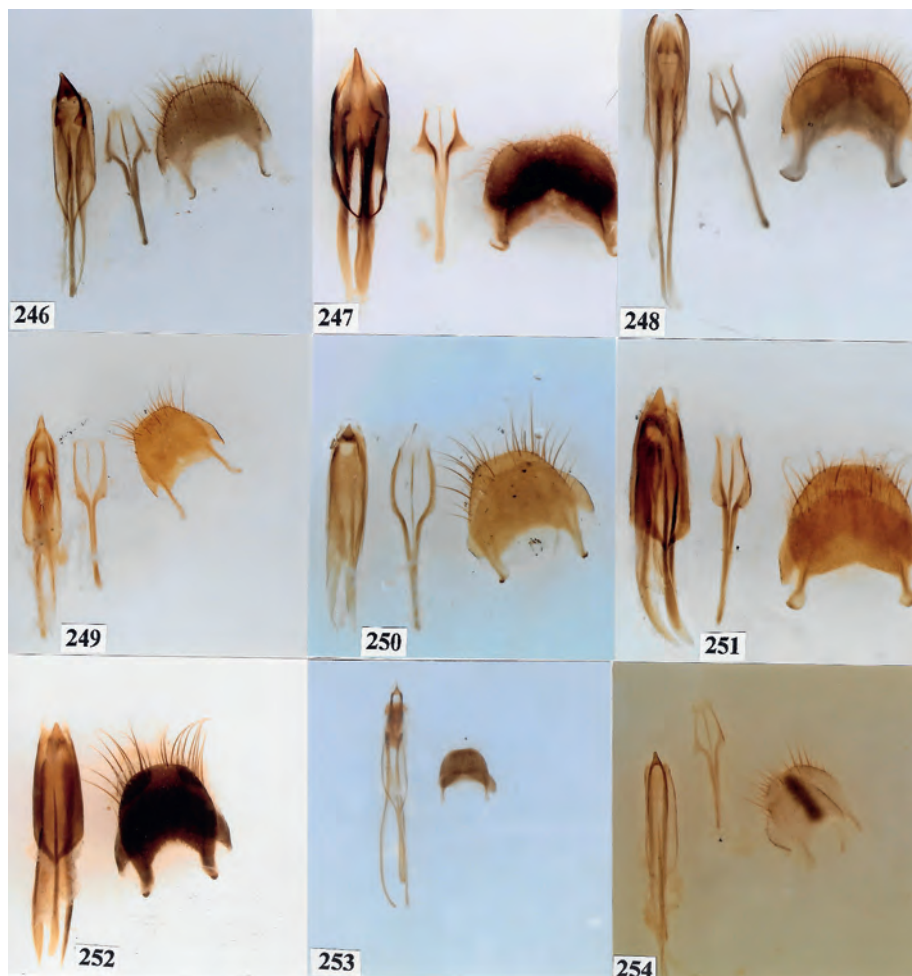
R e d e s c r i p t i o n: Size: Length 11.0 mm; width 3.5 mm. Form: As in Fig. 404. Color: Mouthparts testaceous except labrum, mandibles dark brown; scape, pedicel, and funicular antennomeres testaceous, capitular antennomeres dark brown; cranium castaneous; prothorax light castaneous, disc with irregularly shaped black maculae; venter of mesothorax mostly light castaneous, black in anterior margin, venter of metathorax dark brown; mesoscutellum castaneous; elytra tricolored, anterior 1/2 mostly light castaneous, with irregularly shaped black maculations, posterior 1/2 mostly yellow, marking of preapical region of elytral disc in form of broad dark brown angular fascia; prothoracic legs bicolored, proximal 1/2 of femur and distal 1/2 of tibia yellow, dark brown in remainder, mesothoracic legs mostly yellow, femora slightly infuscated, metathoracic legs yellow; abdomen testaceous. Head: Capitular antennomeres 9 and 10 with very short collateral branch (Fig. 112) or with very short collateral branch (Fig. 111), antennomere

11 oblong- subovoid; frons narrower than width of eye (EW/FW 25/17). Thorax: Pronotum oblong (PW/PL 75/85); elytral disc with punctation that extends to elytral apex except for a brief interruption of asetiferous punctation just behind middle, interstitial spaces at anterior 1/2 elevated (EL/EW 245/55); protibial anterior margin roughened in basal 4/5, with three spines in distal 1/5. Abdomen: Pygidium scutiform; aedeagus (Fig. 288) slightly sclerotized ventrally, phallic apex long-triangular, phallic plates broad.

Variation: Size: Length 5.0-12.0 mm; width 1.8-4.0 mm. There is some variation in the size of dark maculae on the pronotal disc. In some specimens there are no elytral asetiferous punctations near the elytral apex.

Natural history: Specimens were collected within a time frame of March to June; some at altitudes ranging from 600-1646 m. In several cases collectors obtained dead wood from which beetles emerged; wood species include *Sapindus saponaria* L. var. *drummondii* (HOOK. & ARN.) (Sapindaceae), *Celtis* L (Cannabaceae), and *Ebenopsis ebano* (BERLAND) BARNEBY & J. W. GRIMES (Fabaceae). Specimens were also collected by beating vegetation and at a black light.

Distribution (Fig. 312): I examined 192 specimens from: United States of America: Texas, Cameron County, Brownsville, 6-VI-?, J. N. Knull; idem, 15-V-?, J. N. Knull; idem, 5-VI-1932, J. O. Martin; Cameron County, Sabal Palm grove, 26-V-1979, J. E. Wappes; Cameron County, 4 mi W Boca Chica, road Ebony, 6-16-VI-2003, J. E. Wappes; Cameron County, Sabal Palm Grove, V-1994, reared from *Celtis* ?-X-1993, D. J. Heffern; Palm Jungle, Brownsville, 30-IX-1954, reared from branch, H. F. Howden; Hidalgo County, Bentsen Rio Grande, 8-IV-1984, Dan Heffern; idem, 21-IV-1955, reared from hackberry, H. F. Howden; Hidalgo County, Santa Ana NWR (site 3), Wildlife Drive, 26.07526°N 98.13880°W, 15-III-2009, from *Sapindus drummondii*, E. G. Riley; Hidalgo County, La Coma (site 1), 26.05302°N 98.04665°W, 15-V-2010, beating, J. King & E. Riley; Hidalgo County, Rio Grande State Park, 13-19-V-1972; Hidalgo County, Santa Ana Wildlife Refuge, reared from wood of *Pithecolobium flexicaule* (= *Ebenopsis ebano*), 27-VI-1968, G. H. Nelson; Hidalgo County, 20-III-1952, D. J. & J. N. Knull; idem, 1-IV-1964, J. N. Knull. México: Estado de Veracruz, Estación Biologica Los Tuxtlas, 30 km NE Catemaco, 19/20-IV-2007; Estado de Jalisco, Estación Biologica Chamela, Eje Central, 2-VII-1996, R. L. Wescott; Estado de Nuevo León, 5 mi SE Monterrey, 12-VI-1962, 3000', J. M. Campbell; idem, Chipinque Mesa, 23-VII-1963, 5400', H. Howden; Cola de Caballo, 23-VI-1976, at light, H. V. Weems, Jr.; Estado de Sinaloa, 5 mi S Mazatlan, 25-31-VII-1973; idem, 1-VIII-1983, E. Giesbert; Estado de Tamaulipas, 36 mi N Aldama, 3-V-?, E. Giesbert; Tamaulipas, Altas Cumbres, 12 mi SW Ciudad Victoria, 19-III-1986, J. C. Schaffner; Tamaulipas, 24 mi N Gonzales, 21-VI-1986, 600 m, tropical forest, R. Jones & R. Trevino. Specimens are deposited in ACMT, CASC, CMNC, CNCC, FMNH, FSCA, TAMU, WFBM, and WOPC.



Figs 246-254: Abdominal terminalia. (246) *Pelonium taino*. (247) *P. venabulum*. (248) *P. wappesi*. (249) *P. niveum*. (250) *P. leucophaeum*. (251) *P. peninsulare*. (252) *P. notabile*. (253) *P. caraguata*. (254) *P. spectabile*.

***Pelonium nigroclavatum* CHEVROLAT (Figs 130, 131, 292, 320, 405)**

Pelonium nigroclavatum CHEVROLAT, 1874: 326. Lectotype. ♀. Mexico, Teapa (MNHN). Here designated. CORPORAAL 1950: 289 (*Corinthiscus*). RIFKIND 1996: 9. Chevrolat did not indicate the number of specimens that formed the basis of his description. Therefore, I invoke Recommendation 73F of the ICZN (1999) and designate a lectotype.

Pelonium crurale BARR, 2005: 59. nov. syn. H o l o t y p e . ♀. Costa Rica, Turrialba, IX-29, F. NEVERMANN (FMNH). Paratypes: Eleven specimens from localities and current depositions in institutions as noted in BARR, 2005: 59.

D i a g n o s i s : Distinguishable from the superficially similar specimens of *P.*

popliteum OPITZ nov.sp., by the coloration of the legs. In *P. nigroclavatum* the femora are marked with a preapical dark mark that does not extend onto the tibial base. In *P. popliteum* specimens the dark marking is at the apex of the femora and extends onto the base of the tibiae.

Redescription: Size: Length 10.0 mm; width 3.5 mm. Form: As in Fig. 405. Color: Mouthparts testaceous, except mandible brown; antenna bicolored, scape, pedicel, and funicular antennomeres testaceous, capitulum black except distal half of 11th antennomere testaceous; pronotum, pterothorax castaneous, pronotal arch with reddish aggregate of setae; elytra bicolored, mostly testaceous, with a castaneous fascia across elytral basal margin, with six dark spots across middle, marking of preapical region of elytral disc in form of dark brown angular fascia; abdomen testaceous at sides, light brown at middle. Head: Female capitular antennomeres 9 and 10 triangular (Fig. 131), male capitular antennomeres 9 and 10 with a slight collateral branch (Fig. 130), antennomere 11 oblong-subtruncate; frons narrower than width of eye (EW/FW 28/20). Thorax: Pronotum slightly oblong (PW/PL 72/80), side margin with well-developed tubercle, coarsely punctate, disc with small slit at middle; elytral aseteriferous punctation subseriate, punctures extend to elytral distal 3/4, punctures absent near sutural margin in discal posterior half (EL/EW 190/60); protibial anterior minutely spinose. Abdomen: Pygidial body scutiform; aedeagus (Fig. 292) slightly sclerotized ventrally, phallic apex triangular. Variation: Size: Length 7.0-11.5 mm; width 2.5-3.8 mm. The black angular transverse fascia near the elytral apex varies in thickness.

Natural history: Specimens were collected during April, June, and July, one at 1175 m.

Distribution (Fig. 320): I examined 9 specimens from: México: Estado de Chiapas, Tapachula, Höge; Estado de Campeche, Campeche, 186-near Pital, 11-VI-1992, beaten burned slash, F. M. Skillman, Jr.; Estado de Veracruz, 5 km S Fortin, 17-VII-1990, 1175 m, J. Doyen; Estado de Quintana Roo, 20 km N Carillo Puerto, June 12-14, 1983, E. Giesbert; Estado de Oaxaca, 3 km S Temascal, July 25-31-1976, E. Giesbert. Honduras: Departamento de Cortéz, Santa Cruz de Yajoa, Azul Meámbat, 20-V-1995, R. Morris; Isla de Roatán, West End of Isla Roatán, June 24-30 1978, E. Giesbert. Costa Rica: Provincia de Cartago, 12 km N Pavones, 27-XII-1989, F. Hovore; Provincia de Guanacaste, Fca. Jenny, 80 km N Liberia, P. N. Guanacaste, 1990, Malaise. Panamá: Provincia de Chiriquí, vicinity Caldera, 17-18-IV-1993, J. E. Wappes. Specimens are deposited in ACMT, BMNH, EMEC, FSAC, FWSC, UMRM, WFBM, and WOPC.

***Pelonium popliteum* OPITZ nov.sp. (Figs 149, 150, 290, 320, 406)**

Holotype: ♀. PANAMÁ, Panamá Pr., Cerro Campana, 2700', June 3-5-1981, E. Giesbert coll. (FSAC). **Paratypes**: Thirty-five. México: Estado de Guerrero, Hwy 200, 41 km NE Ixtapa, 17-20-VII-1985, J. E. Wappes; Estado de Quintana Roo, 66 km E Xpujil, 19-VI-1990, M. C. Thomas (FSAC, 1). Panamá: Barro Colorado Island, Canal Zone, 24-VI-1980, Henk Wolda (UCDC, 1; WOPC, 1); idem, 7-V-1980, Henk Wolda (UCDC, 5; WOPC, 4); idem, 8-V-1980, Henk Wolda (UCDC, 1; WOPC, 2); idem, 9-VII-1980, Henk Wolda (WOPC, 1); idem, 23-VII-1980, Henk Wolda (WOPC, 1); idem, ?-III-1980, H. Wolda (UCDC, 1, WOPC, 2); idem, 27-XII-1979-3-I-1980, H. Wolda (WOPC, 1); idem, 11-VI-1980, Henk Wolda (WOPC, 1); 29-V-1977, Lloyd R. Davis, Jr. (SDEL, 1); idem, 10-17-V-1980, canopy blacklight, Henk Wolda (WOPC, 7); idem, 20-27-XII-1980, canopy blacklight, Henk Wolda (WOPC, 1); idem, 8-V-1977, blacklight, Silberglied/Aiello (WOPC, 1); Provincia de Panamá, El Llano, Carti Road, 8-11-24-V-2-VI-1922, 1100', J. E. Wappes

(ACMT, 1); 8.5-13 km N El Llano, 21/22-V-1994, F. T. Hovore (WFBM, 1); Gamboa, 10-15-V-1995, F. Øedegaard (WOPC, 1).

D i a g n o s i s : Distinguishable from the superficially similar specimens of *P. nigroclavatum* by the coloration of the legs. In *P. popliteum* specimens there is a dark marking on the apex of the femora, which extends onto the base of the tibiae. In *P. nigroclavatum* the femoral dark marking is preapical; the tibiae are entirely testaceous.

D e s c r i p t i o n : Size: Length 9.0 mm; width 3.0 mm. Form: As in Fig. 406. Color: Mouthparts testaceous, except labrum and mandible castaneous; cranium and prothorax castaneous; antenna bicolored, scape, pedicel, and funicular antennomeres castaneous, capitulum dark brown; elytra bicolored, mostly testaceous, humeral angle and anterior margin of elytra with brown macula, middle of elytral disc with 4 dark maculae, marking of preapical region of elytral disc in form of fragmented angular fascia. Head: Female capitular antennomeres 9 and 10 triangular (Fig. 150), male capitular antennomeres 9 and 10 with slight collateral branch (Fig. 149), antennomere 11 oblong-subtruncate; frons narrower than width of eye (EW/FW 21/15). Thorax: Pronotum slightly oblong (PW/PL 60/70), side margin with well-developed tubercle, coarsely punctate, disc with small slit at middle; elytral asetiferous punctation subseriate, punctures extend to elytral distal 3/4, punctures absent near sutural margin in discal posterior half (EL/EW 190/60); protibial anterior minutely spinose. Abdomen: Pygidial body scutiform; aedeagus (Fig. 290) slightly sclerotized ventrally, phallic apex triangular.

V a r i a t i o n : Size: Length 7.0- 11.0 mm; width 2.5-3.8 mm. The dark macula on the preapical region of the elytral disc may be contiguous.

N a t u r a l h i s t o r y : Specimens were collected during December, January, March, and from May to July, at altitudes ranging from 335 to 823 m; some in a canopy blacklight.

D i s t r i b u t i o n (Fig. 320): This species is known from México and Panamá.

E t y m o l o g y : The trivial name *popliteum* is a Latin noun that stems from *poples* (= knee). I refer to the characteristic coloration of the femoral apex and tibial base.

***Pelonium rallum* OPITZ nov.sp. (Figs 172, 173, 289, 320, 407)**

H o l o t y p e : ♂. DOMINICAN REPUBLIC: Baoruco, 5.8 km SW Neiba, eastern playa of Lago Enriquillo, 18°25'17"N 71°26'38"W. A second label reads: 5 m, 3 Apr 2004, J. Rawlins, R. Davidson, C. Young, salt scrub on sandy playa, hand collected (CMNH). Paratypes: Sixteen. Dominican Republic: Provincia de Baoruco, 5.8 km SW Neiba, eastern playa of Lago Enriquillo, 18°25'17"N 71°26'38"W, 3 Apr 2004, 5 m, salt scrub on sandy playa, hand collected, J. Rawlins, R. Davidson, C. Young, (CMNH, 8; WOPC, 3); Provincia de La Altagracia, Parque del Este, Caseta guaragao, 4.4 km SE Bayahibe, 18°19'59"N 68°48'42"W, 26-27 May 2004, 3 m, semihumid forest near sea, limestone, UV light, C. Young, J. Rawlins, J. Fetzner, C. Nunez (WOPC, 1); Provincia de Pedernales, Cabo Rojo, 17°55'N 71°39'W, 26-27 September 1991, 10 m, coastal desert, C. Young, S. Thompson, R. Davidson, J. Rawlins (CMNH, 1; WOPC, 1); idem, 21 Oct. 1991, edge of salt marsh, J. Rawlins, R. Davidson, C. Young, S. Thompson (CMNH, 1); idem, 21-V-1992, M. C. Thomas (FSCA, 1).

D i a g n o s i s : Large asetiferous punctures arranged in striae on the elytral disc. This trait, characteristic of *P. rallum* specimens will distinguish such specimens from others in the *P. nigroclavatum*-group.

D e s c r i p t i o n : Size: Length 8.0 mm; width 2.7 mm. Form: As in Fig. 407. Color: Mouthparts testaceous, except mandibles black; antenna testaceous; cranium and

pronotum castaneous; elytral basal margin black, disc with 10 black maculae, marking of preapical region of elytral disc in form of brown angular fascia; legs testaceous; abdomen testaceous. Head: Male capitular antennomeres 9 and 10 with long collateral branch (Fig. 172), female capitular antennomeres 9 and 10 triangular (Fig. 173); antennomere 11 oblong; frons much narrower than width of eye (EW/FW 22/12); cranium coarsely punctate. Thorax: Pronotum slightly oblong (PW/PL 63/65), side margin with tubercle, disc coarsely punctate; elytral asetiferous punctation arranged into 11 striae (EL/EW 180/42); protibial anterior margin roughened. Abdomen: Pygidium scutiform; aedeagus (Fig. 289) slightly sclerotized ventrally, phallic apex acuminate/ triangular.

V a r i a t i o n : Size: Length 6.0-10.0 mm; width 1.8-3.2 mm. The shape of the dark maculae on the elytral disc varies, and the dark maculae on the subapical region of the elytral disc may coalesce.

N a t u r a l h i s t o r y : Specimens were collected during April, May, and October; some with a UV light. Habitats from which these beetles were captured include edge of salt march, semihumid forest near the sea, and salt scrub on a sandy beach. Altitudinally, they were collected from sea level to 10 m.

D i s t r i b u t i o n (Fig. 320): This species is known from the Dominican Republic.

E t y m o l o g y : The trivial name, *rallum*, is a Latin adjective that stems from *rallus* (= thin). I refer to the narrow frons of these beetles.

***Pelonium rico* OPITZ nov.sp. (Figs 200, 311, 408)**

H o l o t y p e : ♂. R. R. (Puerto Rico), No. 117-55, Guanica Forest, July/1955 (collector not noted) (CMNH). Paratypes: Three. **Puerto Rico**: Municipality de Guayanilla, Verracos, Punta Ventana, 4-IX-2004, ultraviolet light, O. H. Garrido & A. P. Asso (MAIC, 2); Municipality de Guánica, Guánica Forest, 29-VII-1969, H. & A. Howden (CNCI).

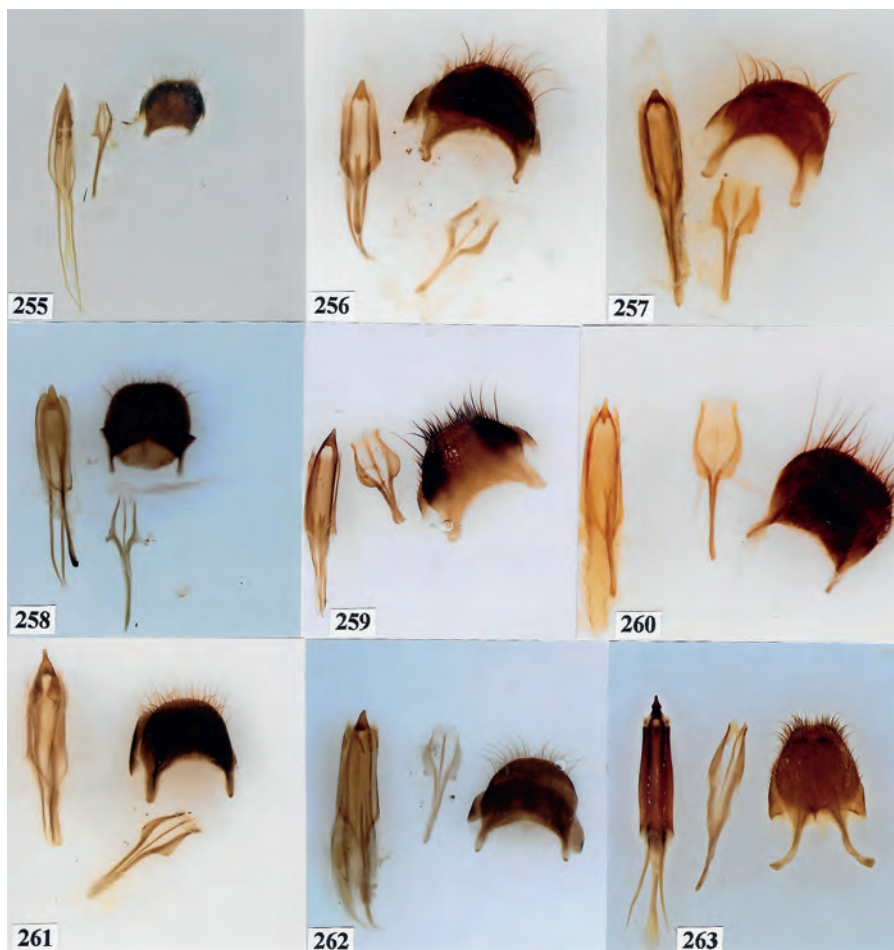
D i a g n o s i s : The elytral asetiferous punctures are outlined in brown and are randomly distributed throughout the elytral disc. This trait, present in *P. rico* specimens, is diagnostic within the *P. nigroclavatun*-group.

D e s c r i p t i o n : Size: Length 11.0 mm; width 4.0 mm. Form: As in Fig. 408. Color: Mouthparts testaceous, except labrum and mandibles dark brown; antenna bicolorous, scape, pedicel and funicle light castaneous, capitular antennomeres brown except apices testaceous; cranium, thorax, and abdomen castaneous; elytra mostly testaceous, with short brown line extending backwards from anterior margin, and with brown angular markings anterior and posterior to middle, marking of preapical region of elytral disc in form of brown fragmented angular fascia. Head: Capitular antennomeres 9 and 10 triangular (Fig. 200), antennomere 11 oblong; frons narrower than width of eye (EW/FW 30/15); cranium coarsely punctate. Thorax: Pronotum quadrate (PW/PL 58/58), side margin with shallow tubercle, disc coarsely punctate; elytral asetiferous punctation small, profusely distributed throughout disc, punctures extend to elytral apex (EL/EW 240/60); protibial anterior margin roughened near tibial apex. Abdomen: Pygidium scutiform.

N a t u r a l h i s t o r y : The types were collected during July and September, two with an ultraviolet light.

D i s t r i b u t i o n (Fig. 311): This species is known from the Dominican Republic.

E t y m o l o g y : The trivial name, *rico*, constitutes a noun in apposition and refers to the type locality.



Figs 255-263: Abdominal terminalia. (255) *Pelonium cavei*. (256) *P. fasciculatum*. (257) *P. fugax*. (258) *P. infusum*. (259) *P. metalloideum*. (260) *P. scoparium*. (261) *P. erymanthoides*. (262) *P. inaequalicolle*. (263) *P. inagua*.

***Pelonium spinolai* (CHAPIN) (Figs 168, 169, 291, 323, 409)**

Corinthiscus spinolae CHAPIN, 1920: 54.

H o l o t y p e : ♀. Venodio, Sin, Mex., '18, VI-18, Kusche (Type No. 22558) (USNM).

P a r a t y p e s : Three females from the same locality as the holotype (USNM). CORPORAAL 1950: 290 (*Corinthiscus*).

D i a g n o s i s : The elytral disc is heavily marked with large dark maculae and the femora are dark brown in distal half. Within the *P. nigroclavatum*-group these traits are found in *P. aliciae*, *P. caymanensis*, and in *P. spinolai*. From this group, specimens of *P. spinolai* may be distinguished by showing a more constricted black angular fascia on the preapical region of the elytral disc.

Redescription: Size: Length 11.0 mm; width 4.0 mm. Form: As in Fig. 409. Color: Mouthparts testaceous, except mandibles black; antennomeres 1-8 castaneous, capitular antennomeres dark brown; cranium, prothorax, and mesosternum castaneous; metasternum black; abdomen testaceous; elytra bicolored, mostly testaceous, small black extensions from humeral angle and elytral anterior margin, three black flecks at middle of disc, marking of preapical region of elytral disc in form of brown fragmented angular fascia; legs bicolorous, femoral apices and tibial bases brown, tarsi testaceous. Head: Capitular antennomeres 9 and 10 with short collateral branch (Figs 168, 169), antennomere 11 oblong-subtruncate; frons narrower than width of eye (EW/FW 25/22). Thorax: Pronotum oblong (PW/PL 80/95), side margin with well-developed tubercle, disc coarsely punctate and with glabrous narrow line at middle; elytral asetiferous punctation subseriate, basal punctures adjacent to epipleural margin narrowly oblong, punctures extended to posterior 3/4 at middle of disc, not present near posterior 3/4 of epipleural and sutural margins (EL/EW 260/65); protibial anterior margin spinose. Abdomen: Pygidium scutiform; aedeagus (Fig. 291) slightly sclerotized ventrally, phallic apex triangular.

Variation: Size: Length 9.0-12.5 mm; width 3.5-4.5 mm. Other than body length the available specimens are quite homogeneous

Natural history: Specimens were collected during a period from July to August, some at UV&MV lights.

Distribution (Fig. 223): In addition to the 4 types, I examined 18 specimens from: México: Estado de Guerrero, Hwy. 200, 41 km NE Ixtapa, VII-17, 20-1985, J. E. Wappes; 43.7 km NW Ixtapa, 17-VII-1985, mv + bl, R. Turnbow; Estado de Oaxaca, Hwy. 190, 16 km NE Tehuantepec, 13-VII-1992, G. H. Nelson; Estado de Quintana Roo, 6 km S Tulum, 3-VI-2002, Cope; Quintana Roo, 20 km N Carillo Pto, June 12-14, 1983, J. E. Wappes; Quintana Roo, 10 km N Puerto Morelos, June 15-16-1983, E. Giesbert; Quintana Roo, 18 km N CarilloPuerto, 31-May-1984, at light, R. Turnbow; Quintana Roo, 10.9 km E playa del Carmen, 1-VII-1990, R. Turnbow; Estado de Yucatán, 12 km N Piste, 24 May 1984, R. Turnbow; Yucatán, Tamanché, 11 km N Merida, V-27-30-1996, at light, Chemsak; Estado de Michoacan, 9 Mi S Cuatro Caminos, 13-VII-1972, G. H. Nelson; Estado de Jalisco, 1.2 km S El Cumbre, 29 July 2011, R. Turnbow. Guatemala: Departamento de Izabal, 23 km SE Morales, May 23-27.1995, Giesbert, Monzón. Specimens are deposited ACMT, EMEC, RHTC, WFBM, and WOPC.

***Pelonium woodruffi* OPITZ nov.sp. (Figs 181, 182, 293, 323, 410)**

Holotype: ♂. DOMINICAN REPUBLIC, Prov. Dajabón, 5 km N Dejabón, and 3 km E of Cañongo, 25-IV-2000, 200 ft, blacklight trap, R. E. Woodruff, T. J. Henry (FSCA). **Paratypes**: Six. Dominican Republic: Provincia de Dajabón, 5 km N Dejabón, and 3 km E of Cañongo, 25-IV-2000, 200 ft, blacklight trap, R. E. Woodruff, T. J. Henry (WOPC, 1); Provincia de Azua, East side of crest, Sierra Martin Garcia, 7 km WW Barrero, 18°21'N70°58'W, 25-26 July 1992, 860 m, cloud forest adjacent to disturbed forest, C. Young, R. Davidson, S. Thompson, J. Rawlins (CMNH, 2; WOPC, 1); Provincia de Barahona, 4.5 km S Barahona, 17 may 1992, R. Turnbow (RHTC, 1; WOPC 1).

Diagnosis: Within the *P. nigroclavatum*-group, a reddish-brown pronotum with black punctiform markings is characteristic of specimens of *P. dapsilum*, *P. maculicollis*, and of *P. woodruffi*. *Pelonium woodruffi* specimens differ from those of the other aforementioned species by showing an antenna that is completely flavotestaceous.

Description: Size: Length 11.0 mm; width 4.0 mm. Form: As in Fig. 410. Color: Testaceous, except mandibles black; pronotal disc with 6 punctiform maculae, thoracic venter brown; elytral basal margin black, disc with 4 punctiform black macula, marking of preapical region of elytral disc in form of narrow brown angular fascia; III-V sternites infuscated at middle. Head: Male capitular antennomeres 9 and 10 with short collateral branch (Fig. 181), female capitular antennomeres 9 and 10 triangular (Fig. 182); antennomere 11 oblong; frons much narrower than width of eye (EW/FW 31/15) Thorax: Pronotum slightly oblong (PW/PL 83/89), side margin with tubercle, disc coarsely punctate; elytral asetiferous punctation subseriate, diminutive towards elytral apex, (EL/EW 250/62); protibial anterior margin roughened. Abdomen: Pygidium scutiform; aedeagus (Fig. 293) slightly sclerotized ventrally, phallic apex acuminate/ triangular.

Variation: Size: Length 6.0-11.0 mm; width 2.2-3.5 mm. Other than body size, the available specimens are quite homogeneous.

Natural history: Specimens were collected in April, May, and July, two with a black light, at 61 m, and two at 860 m in a cloud forest adjacent to a disturbed forest.

Distribution (Fig. 323): This species is known from the Dominican Republic.

Etymology: The trivial name, *woodruffi*, is a dedicative patronymic to honor R. E. Woodruff for his many contributions to Coleopterology.

The *P. biliturum* species group

The elytral disc of specimens of this species group is devoid of any dark maculae or fasciae; there are 7 species in this group. Geographically, the species are distributed in Brazil, Ecuador, Montserrat, Panamá, Peru and The Galapagos Islands.

***Pelonium adunatum* OPITZ nov.sp. (Figs 24, 25, 294, 321, 411)**

Holotype: ♀. PERU, Lima, 14.II.1959, Col. W. Weyrauch (IMLA).

Paratypes: Two. Peru: Provincia de Lima, Lima, 14.II.1959, W. Weyrauch (WOPC, 1). Ecuador: Provincia de Manabí, La Pila, 27-II-2006, F. T. Hovore (JNRC).

Diagnosis: Within the *P. biliturum*-group, a mostly testaceous pronotum is marked by black marks in specimens of *P. adunatum*, *P. anteguttatum*, *P. biliturum*, and in those of *P. stolonum*. From specimens of the aforementioned species those of *P. adunatum* differ by showing two narrow black lines on the pronotum.

Description: Size: Length 12.0 mm; width 3.2 mm. Form: As in Fig. 411. Color: Mouthparts testaceous, except mandibles black; cranium mostly castaneous, clypeus and frons black, except lower frons with very small castaneous spot; antenna mostly brown, scape testaceous; pronotum mostly light castaneous, disc with two oblong castaneous maculae; mesosternum testaceous, mesepisternum, metasternum, and metepisternum brown; elytra testaceous legs mostly testaceous, distal limits femora and proximal and distal limits of tibiae dark brown; tarsi dark brown; abdominal venter brown except lateral portions of sternites with lateral testaceous spots. Head: Capitular antennomeres 9 and 10 with short or long collateral branch (Figs 411), antennomere 11 oblong-subtruncate; frons much narrower than width of eye (EW/FW 30/15). Thorax: Pronotum slightly oblong (PW/PL 80/85), side margin with pronounced tubercle, disc coarsely copiously punctate at sides, sparsely punctate at disc center; elytral asetiferous punctation large, center of disc

punctures extend to elytral posterior 4/5, at sides, at about elytral 1/2 asetiferous punctures absent near sutural margins (EL/EW 265/70); protibial anterior margin spinose. Abdomen: Pygidium scutiform; aedeagus (Fig. 294) slightly sclerotized ventrally, phallic apex large, triangular, phallic lobes densely fimbriate.

Variation: Size: Length 11.0-12.3 mm; width 3.6-3.4 mm. The pronotal oblong castaneous maculae are medially constricted in the paratype.

Natural history: The available specimens were collected in February.

Distribution (Fig. 321): This species is known only from Peru.

Etymology: The specific epithet, *adunatum* (= united), is a Latin adjective. The name refers to the presumed union of castaneous spots to form the oblong maculae on the pronotal disc.

***Pelonium anteguttatum* OPITZ nov.sp. (Figs 49, 50, 295, 321, 412)**

Holotype: ♀. PERU Sullana, Had. Mallares, 2-II-1956, W. MARKL (FSCA).

Paratypes: Nine. Amerique Méridionale, Castelnau, 1845 (MNHN, 1). Ecuador: Provincia de Bolívar, Chimbo, 1er Semestre, M. de Mathan (MNHN, 1). Brazil: Estado do Minas Gerais, 1819, J. De Gaulle (MNHN, 1); Minas Gerais, Caraca, 1894, P. Germain (SDEI, 1; WOPC, 2); idem, 12-1885, E. Gounelle (MNHN, 2); Estado do Rio de Janeiro, Rio de Janeiro, Fry (BMNH, 1).

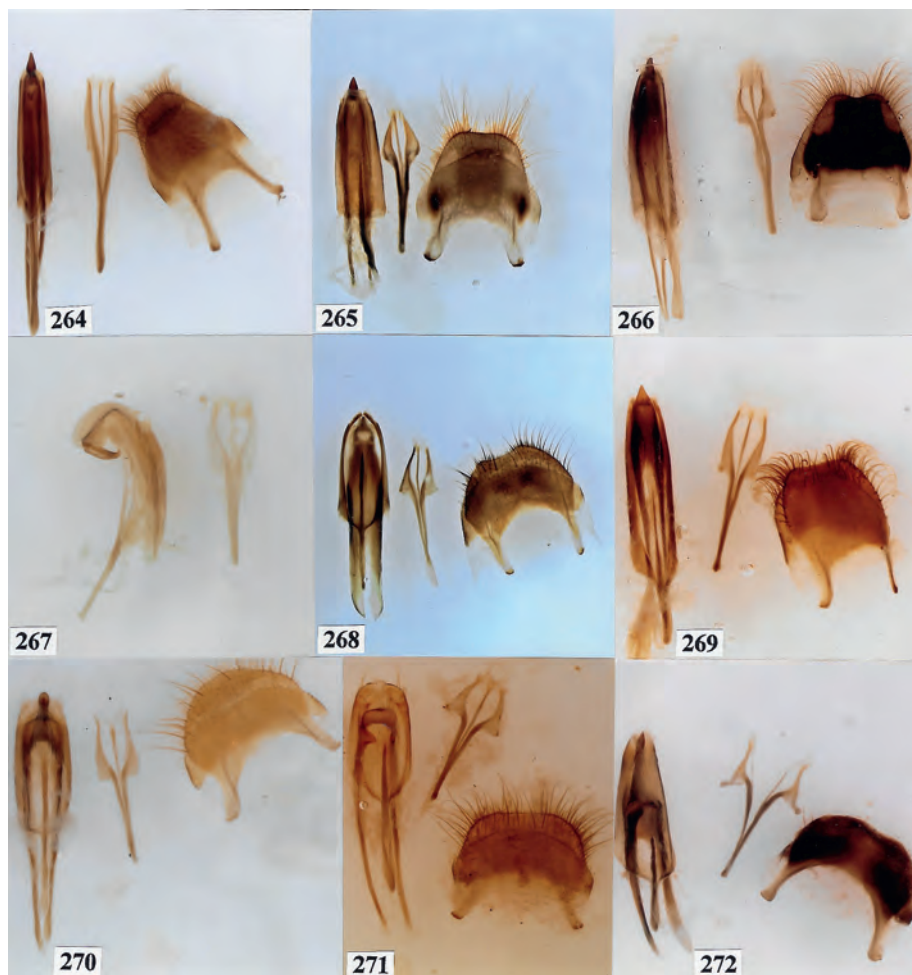
Diagnosis: Within the *P. biliturum*-group, a mostly testaceous pronotum is marked by black marks in specimens of *P. adunatum*, *P. anteguttatum*, *P. biliturum*, and in those of *P. stolonum*. From specimens of the aforementioned species those of *P. anteguttatum* differ by showing four punctiform spots on the pronotum.

Description: Size: Length 13.0 mm; width 4.0 mm. Form: As in Fig. 412. Color: Mouthparts testaceous, except mandibles black; cranium testaceous, except lower frons black; antenna brown, except disc of 11th antennomere black, and scape testaceous; pronotum testaceous, except disc of pronotal proper with 4 small black spots; elytra testaceous. Head: Capitular antennomeres 9 and 10 with short collateral branch (Figs 49, 50), antennomere 11 oblong; frons much narrower than width of eye (EW/FW 35/15). Thorax: Pronotum slightly oblong (PW/PL 90/97), side margin with pronounced tubercle, disc coarsely copiously punctate at sides, sparsely punctate at disc center; elytral asetiferous punctation large, center of disc punctures extend to elytral posterior 4/5 at sides, at about elytral 1/2 asetiferous punctures absent near epipleural and sutural margins (EL/EW 260/70); protibial anterior margin spinose. Abdomen: Pygidium scutiform; aedeagus (Fig. 295) slightly sclerotized ventrally, phallic apex large, triangular, and with an extended apical lobe.

Variation: The available specimens are quite homogeneous.

Distribution (Fig. 321): This species is known only from South America, Ecuador, Peru, and Brazil.

Etymology: The specific epithet, *anteguttatum*, is a Latin compound name that stems from *ante* (= before) and the noun *gutta* (= spot). The name refers to the four small black spots on the pronotum proper.



Figs 264-272: Abdominal terminalia. (264) *Pelonium turnbowi*. (265) *P. gigantum*. (266) *P. megaclerus*. (267) *P. atrahumeratum*. (268) *P. geniculatum*. (269) *P. russulentum*. (270) *P. semirufum*. (271) *P. schenklingi*. (272) *P. spinulum*.

***Pelonium biliturum* OPITZ nov.sp. (Figs 35, 36, 296, 321, 413)**

H o l o t y p e : ♀. 22 Mi. N. of Casma, PERU. A second label reads: Ross and Michelbacher Collectors (CASC).

P a r a t y p e s : Two. Peru: Provincia de Trujillo, 47 km S of Trujillo, 23-III-1951, Ross and Michelbacher (WOPC). Ecuador: Provincia de Loja, 18.5 km N of Gonzanama, 23-II-2006, F. T. Hovore (JNRC).

D i a g n o s i s : Within the *P. biliturum*-group, a mostly testaceous pronotum is marked by black marks in specimens of *P. adunatum*, *P. anteguttatum*, *P. biliturum*, and *P.*

stolonum. From specimens of the aforementioned species those of *P. biliturum* differ by showing two large/broad black markings on the pronotum.

Description: Size: Length 11.0 mm; width 3.8 mm. Form: As in Fig. 413. Color: Mouthparts testaceous, except mandibles black; cranium bicolorous, mostly black, upper frons with a castaneous macula; antenna brown, except scape testaceous at base; pronotum bicolorous, mostly castaneous, with two large oblong black maculae; elytra light brown. Head: Capitular antennomeres 9 and 10 with short or long collateral branch (Figs 35, 36), antennomere 11 oblong; frons much narrower than width of eye (EW/FW 30/15), cranium coarsely punctate. Thorax: Pronotum slightly oblong (PW/PL 78/82), side margin with pronounced tubercle, disc coarsely copiously punctate at sides; elytral asetiferous punctation large, center of disc punctures extend to elytral posterior 4/5, at sides, at about elytral 1/2 asetiferous punctures absent near epipleural and sutural margins (EL/EW 260/65); protibial anterior margin spinose. Abdomen: Pygidium scutiform, anterior margin incised in male, not incised in female; aedeagus (Fig. 296) slightly sclerotized ventrally, phallic apex large, triangular, phallic lobed extensively fimbriate.

Variation: Size: Length 8.0-9.0 mm; width 2.3-2.8 mm. Other than body size, the available specimens are quite homogeneous.

Natural history: The the available specimens were collected in February and March.

Distribution (Fig. 321): This species is known from Peru and Ecuador.

Etymology: The specific epithet, *biliturum*, is a Latin compound name that stems from *litura* (= blot) and the prefix *bi-* (= two). The name refers to the two large maculae on the pronotum proper.

***Pelonium fuscum* OPITZ nov.sp. (Figs 90, 297, 314, 322, 414)**

Holotype: ♂, GUADELOUPE: Basse Terre, La Trace du Petit-Malendure, 21 May 20012, R. Turnbow (FSCA).

Paratypes: Twenty-five. Montserrat: Cassava Ghaut, Beattie House, 16°45.91'N 62°12.95'W, 14-21-VI-2002, 632 feet, light trap, A. Krakower (MAIC, 2); idem, 11-23-III-2002, 632 ft., ultraviolet light, A. Krakower (MAIC, 1); idem, 15-30-VI-2002, at light, M. A. Ivie & K. A. Marske (MAIC, 1); idem, 21-30-VI-2002, ultraviolet light, H. A. Ivie (MAIC, 1); idem, 21-I-15-II-2002, 632 ft., ultraviolet light, A. Krakower (MAIC, 1); idem, 3-V-6-VI-2002, 632 ft., ultraviolet light, A. Krakower (MAIC, 3); idem, 4-11-III-2002, ultraviolet light, A. Krakower (MAIC, 3); idem, 17-30-V-2002, Malise trap, A. Krakower (MAIC, 1); idem, 4-11-III-2002, ultraviolet light, A. Krakower (WOPC, 1); idem, 8-17-IV-2002, 632 ft, Malaise trap, A. Krakower (MAIC, 1); idem, 11-18-II-2002, ultraviolet light, A. Krakower (MAIC, 1); idem, 24-30-V-2002, K. Marske (MAIC, 1); idem, 25-30-V-2003, house lights, K. Marske (WOPC, 1); idem, 10-17-VI-2003, at light, K. Marske (MAIC, 1); Woodlands, Nancy's House, 16°45.99'N 62°13.344'W, 20-24-VI-2003, H. A. & L. L. Ivie (MAIC, 1); idem, Riverside House, 17-28-VII-2005, Malaise trap, WIBF group; idem, Duryea's Parr, 16-29-VI-2000, 420 ft, in pool, M. A. Ivie & K. A. Guerrero (MAIC, 1); idem, Riverside house, 31-VII-2005, ultraviolet light, I. A. Foley (MAIC, 1). Guadeloupe: les Saintes, Terre-de-Bas, 28-IV-2003, larva in wood with Solenoptera larva, J. Touroult (MAIC, 1).

Diagnosis: The combination of mostly black body and yellow epipleural margin will separate the members of this species from congeners.

Description: Size: Length 7.0 mm; width 2.3 mm. Form: As in Fig. 414. Color: Black, except posterior ½ of epipleural margin yellow. Head: Capitular antennomeres 9 and 10 with very short collateral branch (Fig. 90), antennomere 11 oblong; frons narrower

than width of eye (EW/FW 15/10); cranium coarsely punctate. Thorax: Pronotum slightly oblong (PW/PL 50/55), side margin with shallow tubercle, disc coarsely punctate; elytral asetiferous punctation scattered, punctures extend to elytral apex (EL/EW 160/40); protibial anterior margin spinose. Abdomen: Pygidium scutiform; aedeagus (Fig. 297) slightly sclerotized ventrally, phallic apex broad-triangular, acuminate.

V a r i a t i o n : Size: Length 8.0-14.0 mm; width 3.0-5.5 mm. Other than body size, the available specimens are quite homogeneous.

N a t u r a l h i s t o r y : Specimens were collected from February through July, at altitudes that range from 128 to 284 m.

D i s t r i b u t i o n (Figs 314, 322): This species is known from the Guadeloupe and Montserrat.

E t y m o l o g y : The trivial name, *fuscum* (= dark), is a Latin adjective. I refer to the body color of this beetle.

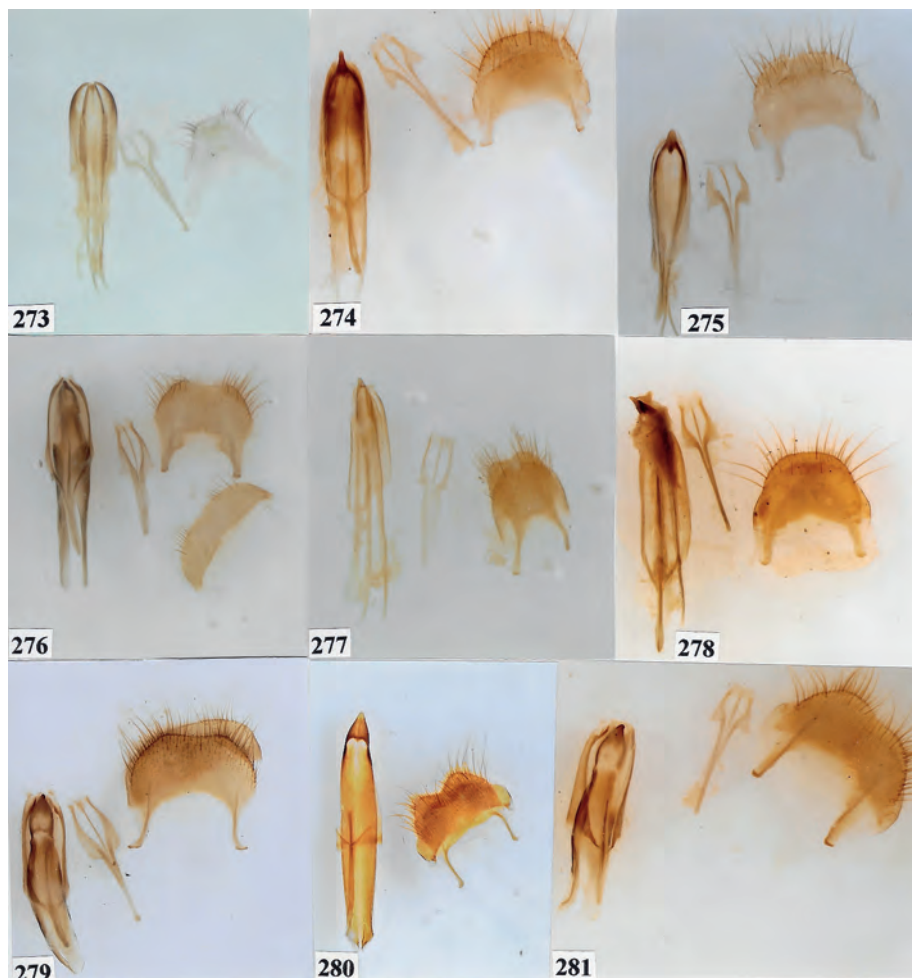
***Pelonium longfieldae* BLAIR (Figs 109, 110, 298, 415)**

Pelonium longfieldae BLAIR

H o l o t y p e. ♂. Galapagos, Charles Island, sea level, July 1926, St. George Expedn., C. L. Collenette. A small label reads "at light" (BMNH). CORPORAAL, 1950: 288 (*Corinthiscus*). There are 9 syntypes. Blair noted the word "type" on the label of one of these syntypes. I have acknowledged the holotype status of this specimen. Paratypes: Eight. Galapagos, James Island, 26.7.24, at light, St. George Expedn., C. L. Collenette (BMNH, 1); idem, 28.7.24, sea level, St. George Expedn., C. L. Collenette (BMNH, 1); idem, 4.VIII.1924, 150 ft. St. George Expedn., C. L. Collenette (BMNH, 2); idem, VII.1924, Sea level, St. George Expedn., C. L. Collenette (BMNH, 4).

In addition to nine types, I examined 211 specimens from: Ecuador: Galapagos, James Island, XII-1905, F. X. Williams Santa Cruz Island, Station Darwin (lumi re), basse altitude, IX.1964, N. & J. Leleun; Galapagos Arch. Isla Santa Cruz, Academy Bay, Darwin Research Sta. 21-I-1964, R. O. Schuster; idem, IX.1964, N. & J. Leleup; idem, XII-1968, R. D. Sievers; idem, II-24-1964, at light P. D. Ashlock; idem, 4 March 1970, 5 m, R. Silberglied; Floreana Island, Floreana Bahia Las Cuevas, 15.IV.96, 2 m, littoral-arid zone, S. Peck; Floreana Cerro Pajas, 27.III.22.IV.1996, 325 m, Malaise, forest interior, S. Peck; Floreana, Finca Cruz, 27.III.16.IV.1996, arid zone forest, Malaise, S. Peck; Seymore Island, 23.I.1989, 10 m, arid zone, beating or on ground, S. Peck; San Crist bal Island, Cerro Pelado, 22.II.1989, 400 m, *Scalesia* Forest, light, S. Peck; 2 km N Wreck Bay, 17.III.1996, arid zone, UV light, S. Peck; Bahia Rosa Blanca, 12.III.1996, arid zone, beating & hand collecting, S. Peck; Isabela Island, 3 km NE Tagus Cave, V. Darwin mv, 15 & 20.V.1992, 300 m, arid zone, J. Cook & S. Peck; Champion Island, 15.IV.1996, 30 m, arid zone, uv light, S. Peck; Pinta Island, *Zanthoxylum*-lichen forest, 180 m, 20.III.1992, S. Peck; Charles Island, II-1906, F. X. Williams; Albemarle Island, 28-IV-1932; Specimens are deposited in BMNH, CMNC, CNCI, EMEC, FSAC, JNRC, SDEI, and WOPC.

D i a g n o s i s : Elytral disc predominately dark brown. Within the *P. biliturum*-group this trait is found in specimens of *P. longfieldae* and in those of *P. fuscum*. Specimens of *P. longfieldae* differ from those of *P. fuscum* by showing a pale coloration along the sutural margin. In *P. fuscum* specimens the sutural margin is black.



Figs 273-281: Abdominal terminalia. (273) *Pelonium bipunctatum*. (274) *P. placidum*. (275) *P. xanthorum*. (276) *P. alcicorne*. (277) *P. badeni*. (278) *P. disjunctum*. (279) *P. litum*. (280) *P. ocellatum*. (281) *P. quadriplagiatum*.

Redescription: Size: Length 9.5 mm; width 3.5 mm. Form: As in Fig. 415. Color: Mouthparts testaceous, except mandible black; antenna brown; cranium mostly black, upper frons castaneous, cranial venter testaceous; pronotum mostly castaneous, disc with two large paralaralateral spheroid maculae; elytral disc mostly castaneous, broadly testaceous along epipleural margin; legs bicolored, femora testaceous basally, black distally, tibiae black basally, testaceous distally, tarsi black; pterothorax brown; abdomen mostly dark brown anterior margins of ventrites testaceous. Head: Capitular antennomeres 9 and 10 with short or long collateral branch (Figs 109, 110), antennomere 11 oblong; frons very narrow (EW/FW 30/15). Thorax: Pronotum slightly oblong (PW/PL 75/80), side margin with well-developed tubercle, disc coarsely punctate; elytral asetiferous

punctuation subseriate, punctures become smaller towards apex and as they approach sutural margin (EL/EW 240/60); protibial anterior margin spinose. Abdomen: Pygidial body scutiform; aedeagus (Fig. 298) slightly sclerotized ventrally, phallic apex triangular.

V a r i a t i o n : Size: Length 8.0-17.0 mm; width 2.8-5.5 mm. The black marking on the pronotal disc varies in shape.

N a t u r a l h i s t o r y : Specimens were collected throughout the year, from sea level to 400 m; in a Malaise trap, UV light, or by beating. Several specimens were captured in a forest laden with *Scalesia* Am. (Asteracia). Others were taken in a lichen rich forest of *Zanthoxylum* L. (Rutaceae).

***Pelonium luridum* GORHAM, 1886 (Figs 114, 115, 299, 310, 416)**

Pelonium luridum GORHAM, 1886: 346. Lectotype. ♂. Here designated. Tolé, Panama, Champion. (BMNH). CORPORAAL 1950: 288 (*Corinthiscus*). Paralectotypes. Five, but only one has been located. Panamá: Provincia de Colón, San Lorenzo, Champion (MNHN, 1). In his description Gorham indicates that there were five specimens available to him, but he did not tag one of these to be the name bearer of this nominal species. Therefore, I invoke Recommendation 73F of the ICZN (1999) and designate a lectotype.

D i a g n o s i s : Elytral apex infuscated and epipleural margin broadly yellow distally. These attributes will distinguish *P. luridum* specimens from those of other species in the *P. biliturum*-group.

R e d e s c r i p t i o n : Size: Length 8.0 mm; width 3.5. mm. Form: As in Fig. 416. Color: Maxillae and labium testaceous, except terminal palpomeres brown, labrum and mandibles brown; antenna brown; pronotum testaceous, disc infuscated paraterally; elytra mostly testaceous, with a yellow lunate mark contiguous with epipleural margin at elytral posterior 1/3; legs femora, tibiae testaceous, tarsi dark brown. Head: Capitular antennomeres 9 and 10 with short or long (Figs 114, 115) collateral branch, antennomere 11 oblong-subtruncate; frons particularly narrow (EW/FW 30/10). Thorax: Pronotum slightly oblong (PW/PL 70/74), side margin with well-developed tubercle, disc with shallow setiferous punctation; elytral asetiferous punctation scattered throughout disc, punctures becoming smaller towards apex and as they approach sutural margin, pubescence densely distributed (EL/EW 210/60); protibial anterior margin distinctly spinose. Abdomen: Pygidium scutiform; aedeagus (Fig. 299) slightly sclerotized ventrally, phallic apex narrowly triangular.

V a r i a t i o n : Size: Length 9.0-13.0 mm; width 3.5-4.5 mm.

N a t u r a l h i s t o r y : Specimens have been collected during January, February, May, and June, at altitudes ranging from 10-2200 m; some in a Malaise trap. Gorham (1886: 346) writes, "Five specimens of this fine and apparently rare *Pelonium* were obtained by beating withered leaves of fallen forest trees. Mr. Champion observed that it is much paler when alive, and mimicked some species of Lampyridae."

D i s t r i b u t i o n (Fig. 310): In addition to the lectotype, I examined 51 specimens from: Panamá: San Lorenzo, Champion; Provincia de Colón, Ft. Sherman, May 31-June 1, 1981, E. Giesbert; idem, vic Palenque, 17 Feb 1999, J.E. Wappes; Colon, V-20-1990, F. Hovore; Barro Colorado Island, Canal Zone. 9°9'N79°51'W, 15-I-1997, Pickering-Windsor; Canal Zone, Fort Gulick, 14-16-V-1965, at light, collector not noted; Provincia de Panamá, La Chorrera, 19-V-1912, Aug. Busck; Cerro Azul, Jefé, 17/18 May 1987, F.

T. Hovore; Serrania de Majé, 20/21 V 1994, F. T. Hovore; Panamá Province, 7-10 km N El Llano, May 14-22, 1993, E. Giesbert; Cerro Azul/Jefe, I-14/25-1993, F. Hovore; 0.3 km. W El Llano, 24 May 1996, R. Turnbow; Fort Kobbe, 23 May 1981, F. T. Hovore; idem, Cerro Campana, Jan 19-20-1996, 2700', E. Giesbert, F. Hovore; idem, May 26-June 3 1981, 2100', E. Giesbert; Bayano Distr., 15 km W Ipeti, May 8 1984, E. Giesbert; idem, 27-IV-4-V-1992, E. Giesbert; idem, 2 km W Ipeti, 22 May 1991, R. Turnbow; 29 km E. Cañita, V-16-1989, F. Hovore; Provincia de Coclé, El Valle, V-16, 20-1981, 400', J. E. Wappes; Coclé Pr., 4 km S El Valle, May 28 1981, E. Giesbert. **Colombia:** Departamento de Norte de Santander, Norte de Santiago,, 13-V-1974, 700 m, H. & A. Howden; Santiago, May 13, 1974, 700 m, H. & H. Howden; N de Santiago, May 13, 1974, 700 m. H. & A. Howden; Departamento de Vichada, Tuparro, Bosque, 22-31-I-2001, 100 m, Malaise, W. Villalba; Vichada, Tuparro, Rio Tomo, 5°21'N 67°51'W, 12-22.V.2001, 250 m, Malaise, I. Gil; Departamento de Bolívar, Bolívar SFF Los Colorados, La Yaya, 9°54'N 75°07'W, 22.V-7,VI.2001, 280 m, Malaise, E. Deulufeut; Departamento de Magdalena, Magdalena PNN, Tayrona, Neguanje, 11°20'N 74°2'W, 4-23.V.2001, 10 m, Malaise, R. Henriquez; Magdalena, Tayrona, Zaino, 11°20'N 74°2'W, 28-VI-17-VII-2001, 10 m, Malaise, R. Henriquez; Magdalena, PNN Tayrona, Cerro San Lucas, 11°19'N 73°59'W, 6-11.I.2003, 600 m, Malaise, C. Sarmiento; Magdalena, PNN Tayrona, Neguanje, 11°20'N 74°2'W, 17-27.IX.2001, 10 m, Malaise, R. Henriquez; Magdalena, SN de Santa Marta, San Lorenzo, 19°48'N 73°39'W, 2200 m, J. Cantillo; Magdalena, PNN Tayrona, Palangana, 11°20'N 74°2'W, 15-30.XI.-2001, 30 m, Malaise, R. Henriquez. **Venezuela:** Estado de Falcón, San Esteban, March, 1888, E. Simon San Esteban, March 1888, E. Simon. Specimens are deposited in ACMT, CMNC, FSCA, MNHN, RHTC, USNM, WFBM, and WOPC.

***Pelonium stolonum* OPITZ nov.sp. (Figs 174, 300, 321, 417)**

H o l o t y p e . ♂. ECU (Ecuador): Guayas, 20 km N Playas, 22-24.vii.76, S. Peck, xeric forest (CMNC).

D i a g n o s i s : Within the *P. biliturum*-group, a mostly testaceous pronotum is marked by black marks in specimens of *P. adunatum*, *P. anteguttatum*, *P. biliturum*, and *P. stolonum*. From specimens of the aforementioned species those of *P. stolonum* differ by showing two conjoined punctiform brown markings.

D e s c r i p t i o n : Size: Length 10.0 mm; width 2.8 mm. Form: As in Fig. 417. Color: Mouthparts testaceous, except labrum and mandibles dark brown; cranium bicolorous, mostly testaceous, clypeus, lower frons, and cranial region near eyes black; antenna mostly brown, except scape testaceous; pronotum mostly castaneous, disc with paralateral crescentic maculations; elytra testaceous; legs, femora black distally, tibiae black proximally, tarsi brown, remainder of legs and abdomen testaceous. Head: Funicular antennomeres 5-8 serrate, capitulum longer than combined length of funicular antennomeres, caputular antennomeres 9 and 10 with long collateral branch (Fig. 174), antennomere 11 oblong-subtruncate; frons much narrower than width of eye (EW/FW 27/10). Thorax: Pronotum slightly oblong (PW/PL 65/75), side margin with shallow tubercle, disc finely punctate; elytral asetiferous punctation small, punctures diminutive towards elytral apex (EL/EW 200/50); protibial anterior margin minutely spinose. Abdomen: Pygidium scutiform; aedeagal apex large triangular, phallobasic lobes highly fimbriate.

N a t u r a l h i s t o r y : Specimens have been collected during July.

D i s t r i b u t i o n (Fig. 321): This species is known from Ecuador.

E t y m o l o g y : The specific epithet, *stolonum*, is a Latin noun that stems from *stolo* (= branch). The name refers to the branching of the 9th and 10th antennomeres.

The *P. amabile* species group

The species of this group do not share any unique characteristic, but are brought together for convenience. There are 11 species in this group, whose specimens have a variety of elytral markings. Geographically, this group exists in Bolivia, Brazil, Colombia, Cuba, Dominican Republic, Panamá, Puerto Rico, and The Bahamas Islands.

***Pelonium amabile* SPINOLA (Figs 28, 29, 301, 321, 323, 418)**

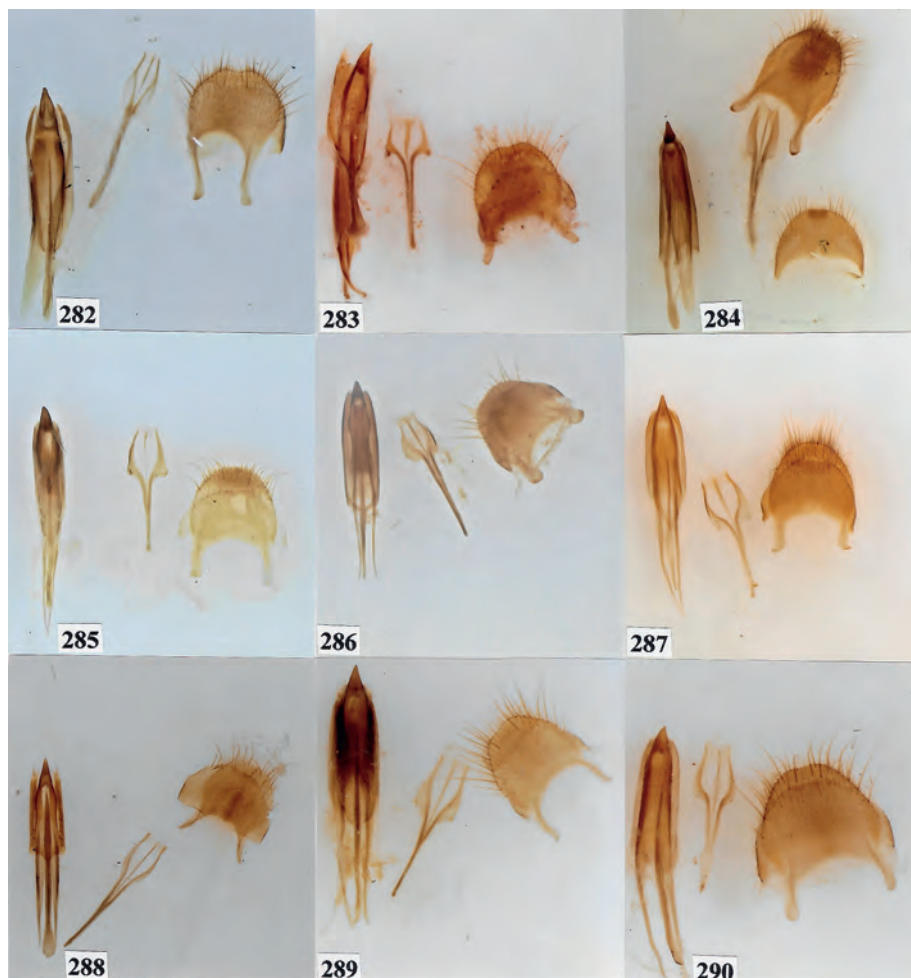
Pelonium amabile SPINOLA, 1844a: 362. Lectotype. Gender not known. Designated by Ginter EKIS (now Weston OPITZ) (1975: 56). (Colombia), "Le Colombie" (MRSN). CORPORAAL 1950: 285 (*Corinthiscus*). EKIS 1975: 56 (*Corinthiscus*).

D i a g n o s i s : Subapical region of the elytral disc with a large castaneous macula. This trait is found in specimens of *P. amabile*, *P. disconotatum*, and *P. percumptum*. Specimens of *P. amabile* differ by showing the posterior castaneous maculae subglobose and contiguous across the sutural margin.

R e d e s c r i p t i o n : Size: Length 7.0 mm; width 3.0 mm. Form: As in Fig. 418. Color: Maxillae, labium, and antennae testaceous, mandibles brown; antenna mostly testaceous, capitular antennomeres dark brown except 11th antennomere testaceous at apex; cranium bicolored, frons and epicranium with angular black markings; pronotum testaceous, but infuscated at middle of disc, pterothorax black, mesoscutellum black; elytra mostly testaceous, with a large subglobose castaneous patch at elytral disc apical 1/3 that is contiguous with sutural margin, a few small asetiferous punctures outlined in black; legs testaceous; abdomen testaceous. Head: Capitular antennomeres 9 and 10 triangular (Figs 28, 29), antennomere ovoid; frons narrower than width of eye (EW/FW 20/12). Thorax: Pronotum slightly oblong (PW/PL 55/57), side margin with well-developed tubercle, disc coarsely punctate; elytral asetiferous punctation subseriate, diminishing in size at elytral middle, and terminating at elytral patch (EL/EW 155/50); protibial anterior margin with one apical spine. Abdomen: Pygidium scutiform; aedeagus (Fig. 301) slightly sclerotized ventrally, phallic apex small and triangular, with very long linear medial backward extension, phallobasic apodeme long and wide.

V a r i a t i o n : Size: Length 5.5-7.0 mm; width 2.0-3.0 mm. Except for body size, the available specimens are quite homogeneous.

N a t u r a l h i s t o r y : Specimens have been collected throughout the year, at altitudes ranging from 300 to 1200 m. Collecting methods used to capture specimens include a Malaise trap, hand collected under bark, beating cut branches, and mercury vapor lights.



Figs 282-290: Abdominal terminalia. (282) *Pelonium junctum*. (283) *P. riveti*. (284) *P. aliciae*. (285) *P. caymanensis*. (286) *P. condylum*. (287) *P. denotatum*. (288) *P. maculicolle*. (289) *P. rallum*. (290) *P. popliteum*.

Distribution (Figs 321, 323): In addition to the lectotype, I examined 94 specimens from: México: Estado de Veracruz, Estación Biol. Las Tuxlas, IV-20/30-1991, F. Hovore. Nicaragua: Departamento de Granada, Granada, Volcán Mombacho, El Progreso, 16-II-98, # 3 malaise trap, J. M. Maes. Costa Rica: Provincia de Alajuela, Arenal Volcano (Observatory lodge), 10°26'39N 84°42'62W, 7-17 April 1991, M. Spencer; Provincia de Guanacaste, Tierras Morenas, Abr. 1964, 685 m, G. Rodriguez. Panamá: Provincia de Panamá, La Chorrera, 19.5.12, Aug. Busck; Perl Island, San Jose, 17-VII- 1944, at light, Morrison; Cerro Azul, May 15-22 1987, E. Giesbert. Provincia de Chiriquí, Volcan de Chiriquí, 2-3000 ft., Champion; Bugaba, Champion; Canal Zone, Ft.

Gulik, 4-1979, under bark, H. J. Harlan; Ft. Clayton, January 1952, F. Blanton; Provincia de Coclé, El Valle, VI-26-1990, on cut branches, F. Hovore; 5-8 km S El Valle, V-17-1991, 1200 m, F. Hovore; Provincia de Colón, Colón, V-22/23-1989, on dead wood, F. Hovore. Colón Pr., 9°17'N 79°59'W, 3-I-2002, on *Carapa guianensis*, F. Øedegaard; idem, base Santa Rita Ridge, 21 May 1991, R. Turnbow; 4.5 km NE Palenque, Feb 25-Mar. 4-1992, E. Giesbert; 16 km E Portobello, April 22 1993, E. Giesbert; Trinidad, County of Saint Patrick, Balandra Bay, 12-17-VIII-1969. Venezuela: Estado de Cojedes, El Piñero, 19-V-1967, J. & B. Bechyné; Estado de Aragua, Aragua, El Limon, 12-V-1976, 450 m, Mercury vapor light, J. Clavijo. Suriname: District Marowijne, Langanan Kondre, 15-30-VIII-1965, B. Malkin. French Guiana: Subdivision Cayenne, Bolivia: Departamento de Santa Cruz, Potrerillos del Guenda, Preserva Natural, 40 km NW Santa Cruz, 17°40'S 63°27'W, 30 Sept. -3 Oct. 2007, 370 m, Wappes & Morris; idem, 40 km NW Santa Cruz de la Sierra, 17°40'S 63°27'W, 7-9-IX-2012, 350-400 m, P. E. Skelley; 3.7 km SSE Buena Vista, Hotel Flora & Fauna, 14-28-X-2000, 430 m, B. K. Dozier; idem, 4-6 km SSE Buena Vista, Hotel F & F, 27-29-Oct. 2000, Wappes & Morris; 3.7 km SSE Buena Vista, Hotel Fauna & Flora; 17°29'.949S 63°33.152'W, 5-15-XI-2001, M. C. Thomas & B. K. Dozier. Brazil: Estado do Amazonas, Teffé (Ega), M de Mathan, 1st trimester, 1879; Amazonas, Fonteboa, Dr. Hahnel; Estado do Pará, Itaituba; Marco da Legua, 3. 1895, Gounelle; Estado do Rondonia, 62 km SW Ariquemes, nr Fzda. Rancho Grande, 20-VIII-1993, black light trap, U. Schmitz; Estado do São Paulo, Marília, XI-1945; Sinop, X-1974, M. Alvarenga; 24-XII-1918, Saude; Estado do Goiás, Jataí, Rio Verde, 1908, G.A. Baer; Mato Grosso, 1886, P. Germain; Estado do Mato Grosso do Sul, Corumbá; Estado do Santa Catarina, Nova Teutonia, II-74, Fritz Plaumann; idem, 27°11'S 52° 23'W, XII-1973, 300-500 m, Fritz Plaumann; idem, 27°11'S 52° 23'W, X-1973, 300-500 m, Fritz Plaumann; idem, 27°11'S 52° 23'W, XI-1973, 300-500 m, Fritz Plaumann. Specimens are deposited in ACMT, BMNH, FMNH, FSCA, MNHN, NCBN, TAMU, WFBM, and WOPC.

***Pelonium caborajo* OPITZ nov.sp. (Figs 58, 302, 323, 420)**

H o l o t y p e : ♂. Dominican Republic: Pedernales, Cabo Rojo, 10 m, 17°55'N 71°39'W, 1 October 1991, R. Davidson, C. Young, S. Thompson, J. Rawlins, Coastal desert (CMNH).

D i a g n o s i s : Pronotum unicolorous, dark castaneous. This characteristic will distinguish the members of this species from those of other species of the *P. amabile*-group.

D e s c r i p t i o n : Size: Length 7.2 mm; width 2.1 mm. Form: As in Fig. 420. Color: Mouthparts testaceous, except labrum and mandibles brown; antenna testaceous; cranium and thorax castaneous; elytral basal margin with brown markings, disc mostly testaceous, with small crescentic brown macula near middle, and fractured dark brown maculae near elytral apex; legs testaceous; abdomen testaceous. Head: Capitular antennomeres 9 and 10 with short collateral branch (Fig. 58), antennomere 11 oblong; frons narrower than width of eye (EW/FW 20/10); cranium coarsely punctate. Thorax: Pronotum quadrate (PW/PL 58/58), side margin with shallow tubercle, disc coarsely punctate; elytral asetiferous punctation subseriate, punctures extend to elytral apex (EL/EW 160/35); protibial anterior margin with 3 spines near tibial apex. Abdomen: Pygidium scutiform; aedeagus (Fig. 302) slightly sclerotized ventrally, phallic apex acuminate, narrow/triangular.

N a t u r a l h i s t o r y : The holotype was collected during October, at 10 m.

Distribution (Fig. 323): This species is known from the Dominican Republic.

Etymology: The trivial name, *caborajo*, constitutes a noun in apposition and refers to the type locality.

***Pelonium cyanicollis* (PERACCHI) (Fig. 429)**

Corinthiscus cyanicollis PERACCHI, 1962: 300.

Holotype. ♀. Brasil, Estado do São Paulo (CSCB).

Description: I have not studied specimens of this species, but a photograph of a holotype was examined. The tuberosities on the elytral disc are diagnostic for this species.

***Pelonium disconotatum* PIC (Figs 71, 72, 303, 321, 421)**

Pelonium disconotatum PIC, 1940: 10. Lectotype. Gender not known. Here designated (Brazil), Rio de Janeiro (MNHN). The forebody of the lectotype is severely damaged. CORPORAAL, 1950: 286 (*Corinthiscus*). Pic did not specify in his description whether his nominal species is based on one specimen. Therefore, I invoke Recommendation 73F of the ICZN (1999) and designate a lectotype for this nominal species.

Diagnosis: Subapical region of the elytral disc with a large castaneous macula. This trait is found in specimens of *P. amabile*, *P. disconotatum*, and in those of *P. percumptum*. Specimens of *P. disconotatum* differ by showing the posterior castaneous maculae not contiguous.

Redescription: Size: Length 8.5.0 mm; width 2.7 mm. Form: As in Fig. 421. Color: Maxillae, labium, and antennae testaceous, mandibles brown; cranium bicolored, frons and epicranium with angular black markings; pronotum testaceous, but infuscated at lower sides and at middle of disc; pterothorax black; mesoscutellum black; legs mostly testaceous, femora infuscated; elytra mostly testaceous, with large angular castaneous patch at elytral disc apical 1/3 that is not contiguous with sutural margin, a few small asetiferous punctures outlined in black; abdomen testaceous at base, brown in remainder. Head: Caputular antennomeres 9 and 10 triangular (Figs 71, 72), antennomere ovoid; frons narrower than width of eye (EW/FW 20/12). Thorax: Pronotum slightly oblong (PW/PL 52/56), side margin with well-developed tubercle, disc coarsely punctate; elytral asetiferous punctation subseriate, diminishing in size at elytral middle, and terminating at elytral patch (EL/EW 185/48); apex of protibial anterior margin flared into broad spine. Abdomen: Pygidium scutiform; aedeagus (Fig. 303) slightly sclerotized ventrally, phallic apex small and triangular, with short linear medial backward extension, phallobasic apodeme long and broad.

Variation: Size: Length 7.0-8.0 mm; width 2.5-3.0 mm. Other than differences in body size, the available specimens are quite homogeneous.

Natural history: Specimens were collected during periods framed from February to September, at altitudes that ranges from 300-960 m.

Distribution (Fig. 321): In addition to the lectotype I examined 25 specimens from: Brazil: Estado do Rio de Janeiro, Guanabara, Rio de Janeiro, XII-1972, M. Alvarenga; idem, Represario, I-1972, F. M. Oliveira; Estado do Bahia, Encruzilhada, XI-1974, 960 m, M. Alvarenga; Estado do São Paulo, Cidade, II-1946; Caraca, 2º Semestre 1894, P. Germaine; Estado do Santa Catarina, Nova Teutonia, X-1972, 300-500 m, F.

Plaumann; idem, Salto do Pirany, Pred Jaragua, 1815, E. Gounelle; idem, Joinville, Jan., S. Pohl; Estado do Paraná, Rondon, 24°36'S 54°07'W, 8.X.52, Fritz Plaumann; idem, IX-10.52, Fritz Plaumann; idem, 24°38'S 54°07'W, 25: XI.52, Fritz Plaumann. Specimens are deposited in MNHN, WFBM, and WOPC.

***Pelonium leblanci* OPITZ nov.sp. (Figs 198, 199, 304, 311, 422)**

H o l o t y p e : ♂. Puerto Rico, Rd. 10 km 24, V-22-1977, UV light. A second label reads: J. Micheli collector (WFBM). Paratypes: Twenty-two. Puerto Rico: Rd. 10 km 24, VIII-20-1977, UV light, J. Micheli (WOPC, 1); idem, VII-17-1977, J. Micheli (WOPC, 1); idem, V-6-1978, J. Micheli (WOPC, 1); idem, 14/21-V-17-1978, J. Micheli (WOPC, 1); idem, VIII-24-1977, J. Micheli (WFBM, 1); idem, VII-14-1977, J. Micheli (WFBM, 1); idem, V-8-1978, J. Micheli (MAIC, 2; WFBM, 1); idem, VII-20-1977, J. Micheli (WFBM, 1); idem, V-30-1978, J. Micheli (WFBM, 1); idem, VIII-6-1977, J. Micheli (WFBM, 1); idem, VIII-20-1977, J. Micheli (WFBM, 1); idem, V-28-1978, J. Micheli (WFBM, 1); idem, 2-IX-1977, J. Micheli (WFBM, 1); idem, XII-6-1977, black light, J. Micheli (WFBM, 1); idem, II-3-1976, reared dead log, J. Micheli (WFBM, 1); Coamo, idem, 14-IX-1976, reared from dead log, J. Micheli (WFBM, 1); Bosque Estatal de Guánica, 17°84'N 66°86'W, 3 July 1996, light trap, M Canals (WOPC, 1); idem, 17 July 1996, light trap, M. Canals (LACM, 1); Isabela, Bosque Estatal de Guajataca, montañas Aymamon, 18°25'06"N 66°57'55"W, 14-15 June 1996, forest, 210 m, J. Rawlins, W. Zanol, M. Klinger, S. Thompson (CMNH, 1).

D i a g n o s i s : Pronotal disc bicolorous, disc castaneous, sides black. This characteristic is found in *P. leblanci* and in those of *P. piciventre*. Specimens of *P. leblanci* differ by showing only one large black macula at elytral distal 2/3.

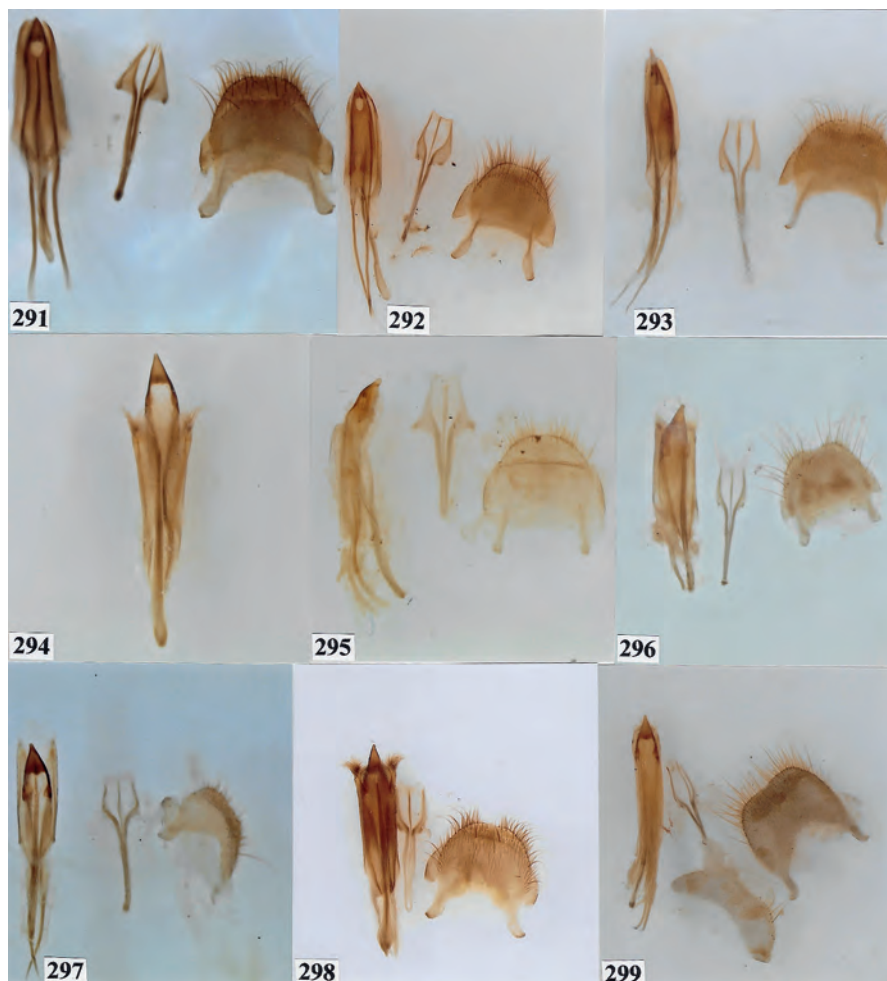
R e d e s c r i p t i o n : Size: Length 8.0 mm; width 2.5 mm. Form: As in Fig. 422. Color: Mouthparts testaceous, except mandibles dark brown; cranium and pronotum castaneous except pronotum with darker sides; pterothorax brown; elytra mostly yellow fascia, with brown markings near basal margin, at base of epipleural margin, and near elytral apex; femora yellow in basal half brown in remainder, tibiae mostly yellow, protibia and mesotibiae infuscated. Head: Male capitular antennomeres 9 and 10 elongate-triangular (Fig. 198), female capitular antennomeres 9 and 10 short-triangular (Fig. 199), antennomere 11 subtruncate; frons narrow (EW/FW 20/10). Thorax: Pronotum slightly oblong (PW/PL 50/55), side margin with well-developed tubercle, disc coarsely punctate; elytral asetiferous randomly distributed throughout disc (EL/EW 180/43); protibial anterior margin spinose. Abdomen: Pygidial body scutiform; aedeagus (Fig. 304) with large triangular apex.

V a r i a t i o n : Size: Length 8.0-9.0 mm; width 2.5-3.0 mm. The black markings near the elytral apex vary in shape.

N a t u r a l h i s t o r y : Specimens were collected during May, July, August, and September; some with a UV light and some were reared from dead logs.

D i s t r i b u t i o n (Fig. 311): This species is known only from Puerto Rico.

E t y m o l o g y : The specific epithet, *leblanci*, is a patronymic that honors Luc Leblanc for his outstanding efforts in the curation of the beetle collections of the William F. Barr Museum, University of Idaho.



Figs 291-299: Abdominal terminalia. (291) *Pelonium spinolai*. (292) *P. nigroclavatum*. (293) *P. woodruffi*. (294) *P. adunatum*. (295) *P. anteguttatum*. (296) *P. biliturum*. (297) *P. fuscum*. (298) *P. longfieldae*. (299) *P. luridum*.

***Pelonium lituratum* (KIRBY) (Figs 116, 117, 305, 322, 423)**

Enoplium lituratum KIRBY, 1818: 393. Lectotype. ♀. Brasilia (Brazil) (BMNH). CORPORAAL 1950: 288 (*Corinthiscus*). REBORDÕES et al. 1976: 107 (*Corinthiscus*). Kirby did not specify in his description whether his nominal species is based on one specimen. Therefore, I invoke Recommendation 73F of the ICZN (1999) and designate a lectotype for this nominal species.

Enoplium liberatum LAPORTE, 1840: 289.

D i a g n o s i s : In specimens of this species there is a black line along the sides of the pronotum that lines up with a similar line on the elytral disc. This characteristic is diagnostic with the *P. amabile*-group.

Redescription: Size: Length 12.0 mm; width 4.0mm. Form: As in Fig. 423. Color: Mouthparts testaceous except mandibles black; antenna black except scape testaceous; cranium testaceous, prothorax mostly testaceous, with lateral curvate black line; elytra mostly testaceous, with a curvate lateral black line that extends from humeral angle to elytral apical 2/3 at epipleural margin, elytral apex slightly black; legs mostly testaceous, only profemora infuscated distally and protibia infuscated proximally, tarsi; abdomen testaceous. Head: Capitular antennomeres 9 and 10 with short collateral branch (Figs 116, 117), antennomere 11 ovoid; frons narrower than width of eye (EW/FW 30/19). Thorax: Pronotum oblong (PW/PL 73/93), side margin with well-developed tubercle, disc coarsely punctate, punctation less coarse near middle of pronotal base; elytral asetiferous punctation subseriate, punctures become diminutive towards elytral apex (EL/EW270/65); protibial anterior margin spinose. Abdomen: Pygidium scutiform; aedeagus (Fig. 305) slightly sclerotized ventrally, phallic apex minute, phallobasic lobes not defined.

Variation: Size: Length 8.0-16.5 mm; width 2.5-5.0 mm. In one specimen from Brazil the elytral curvate black line is interrupted at middle.

Natural history: Specimens have been collected throughout the year at altitudes ranging from 300-800 m; some in a Malaise trap.

Distribution (Fig. 322): In addition to the lectotype, I examined 320 specimens from: Brazil: Estado do Paraná; Estado do São Paulo, Constançia; Teodoro Sampaio, Nov. 1985, Malaise, F. M. Oliveira; Estado do Goiás, Jataí, XI-1972, F. M. Oliveira; Sasuapara, Ch. Pujol; Marília, XI-1945, collector not noted; Teodoro Sampaio, Nov 1985, Malaise, F. M. Oliveira; Estado do Bahia, Villa Victoria, 1890, Ch. Pujol; Encruzilhada, VI-1972, M. Alvarenga; S. Antonio da Barra, 11.12.1888, Gounelle; Estado do Ceará, Serra de Baturite, 1895, Gounelle; Estado do Pará, Cachimbo, 1890, Ch. Pujol; Estado do Rio de Janeiro, Trindade, Ch. Pujol; Rio Tijuca, 12.1884, E. Gounelle; Guanabara, III-1964, M. Alvarenga; Corcovado, X-1964, M. Alvarenga; Estado do Pernambuco, Serra de Communaty, 12.3.1893, Gounelle; 1.23.1893, Gounelle; Estado do Minas Gerais, Caraca, 2nd Semestre, 1884, P. Germain; Rio Piracicaba, Feb. 1885, P. Germain; Pedra Azul, XI-1972, 800 m, M. Alvarenga; Estado do Paraíba, Rive Gauche du Parahyba, Sept. 1884, P. Germain; Estado do Rio de Janeiro, 1883, P. Germain; Estado do Espírito Santo, IX-1972, M. Alvarenga; Estado do Rondônia, Rondon, 24°38'S 54°07'W, 11-X-1952, F. Plaumann; Estado do Santa Catarina, Nova Teutonia, 27°11'S 52°23'W, X-1973, 300-500 m. F. Plaumann; Hansa Humboldt, Ant. Maller, 1934. Paraguay, Departamento de Guairá, Independencia, XI-1951. Argentina: Provincia Misiones, Parque Nacional, Iguazu Cantera, 8-XII-1990-6-I-1991, Malaise trap in forest edge, S. & J. Peck. Specimens are deposited in CASC, CMNC, EMEC, FMNH, IMLA, JNRC, MLPA, MNHN, NCBN, RGCG, WFBM, and WOPC.

***Pelonium lividum* ERICHSON (Fig. 426)**

Enoplium lividum ERICHSON, 1847: 85. Several syntypes. Type locality: Peru (SDEI)

Description: I have not studied specimens of this species, but a photograph of a syntype was examined. The combination of mostly dark pronotum and testaceous elytral disc will distinguish the members of this species from congeners.

***Pelonium percumptum* GORHAM (Figs 122, 322, 419)**

Pelonium percumptum GORHAM, 1883: 189.

H o l o t y p e : ♀. (Panamá), V. (Volcán) de Chiriquí, 2-3000 ft. Champion (BMNH). CORPORAAL 1950: 289 (*Corinthiscus*). Gorham specified in his description that his nominal species is based on only one specimen.

D i a g n o s i s : Subapical region of the elytral disc with a large castaneous macula. This trait is found in specimens of *P. amabile*, *P. disconotatum*, and *P. percumptum*. Specimens of *P. percumptum* differ by showing the posterior castaneous maculae angular and contiguous across the sutural margin.

R e d e s c r i p t i o n : Size: Length 9.0 mm; width 2.7 mm. Form: As in Fig. 419. Color: Maxillae and labium testaceous, labrum and mandibles brown; antenna testaceous, except apical region of capitular antennomeres brown; cranium testaceous, except upper frons and epicranium behind eyes with brown patch; pronotum testaceous, except with dark brown paralateral patches at base; legs testaceous, except tibiae infuscated basally and apically; elytral disc with admixture of yellow, light brown and dark brown, with angular large castaneous patches, patches outlined in dark brown, humeral region infuscated; abdomen testaceous. Head: Capitular antennomeres 9 and 10 oblong triangular (Fig. 122), antennomere 11 oblong-subtruncate; frons much narrower than width of eye (EW/FW 47/20). Thorax: Pronotum oblong (PW/PL 50/60), side margin with well-developed tubercle, disc with small setiferous punctation; elytral basal half sculptured with 10 striae of asetiferous punctation, punctures become smaller and less organized in discal apical half (EL/EW 185/47); protibial anterior margin with one broad apical spine. Abdomen: Pygidium scutiform.

V a r i a t i o n : Size: Length 7.0-7.5 mm; width 1.9-2.0 mm. The available specimens did not vary significantly.

N a t u r a l h i s t o r y : Specimens were collected during July and October; one by beating withered leaves of fallen trees at an altitude between 244-473 m and one in a Malaise trap.

D i s t r i b u t i o n (Fig. 322): In addition to the lectotype, I examined 6 specimens from: Panamá: Provincia de Chiriquí, Bugaba, 800-1,500 ft., beaten from withered leaves of fallen forest trees, Champion. Colombia: Departamento de Cauca, Cauca PNN, Gorgona, El Helechal, 2°58'N 78°11'W, 22.X-6.XI.2001, 30 m, Malaise, H.Torres; idem, Isla Gorgona, El Helechal, 2°58'N 78°11'W, 15.VII-9.VIII.2001, 30 m, Malaise, H. Torres. Specimens are deposited in BMNH and WOPC.

***Pelonium piciventre* CHEVROLAT (Figs 143, 144, 306, 323, 425)**

Pelonium piciventre CHEVROLAT, 1874: 325. Lectotype. ♀. Here designated. Cuba, Havana (MNHN). CORPORAAL 1950: 286 (*Corinthiscus*). Chevrolat did not indicate the number of specimens that formed the basis of his description. Therefore, I invoke Recommendation 73F of the ICZN (1999) and designate a lectotype.

D i a g n o s i s : Pronotal disc bicolorous, disc castaneous sides black. Within the *P. amabile*-group, this characteristic is found in *P. leblanci* and in those of *P. piciventre*. Specimens of *P. piciventre* differ by showing two black macula on each elytral disc.

R e d e s c r i p t i o n : Size: Length 10.0 mm; width 3.0 mm. Form: As in Fig. 425. Color: Maxillae and labium testaceous, labrum and mandibles brown; antenna testaceous;

pronotum light castaneous at middle and dark castaneous at sides, prosternum dark castaneous, partly; elytra bicolored, mostly testaceous, with dark brown marking at anterior margin, angular dark marking at middle, and three dark markings at about elytral distal 2/3, two of these punctiform, one near and one on sutural margin; legs testaceous; prothorax and abdomen dark brown. Head: Capitular antennomeres 9 and 10 triangular (Fig. 143, 144), antennomere 11 oblong-subtruncate; frons narrow (EW/FW 28/17). Thorax: Pronotum slightly oblong (PW/PL 70/75), side margin with well-developed tubercle, disc slightly corrugated and coarsely punctate; elytral asetiferous punctation subseriate, punctures become smaller towards apex and as they approach sutural margin (EL/EW 205/60); protibial anterior margin spinose. Abdomen: Pygidial body scutiform; aedeagus (Fig. 306) slightly sclerotized ventrally, phallic apex triangular.

V a r i a t i o n : Size: Length 8.0-11 mm; width 2.5-3.8 mm. The four dark spots near the elytral apex vary in expression.

N a t u r a l h i s t o r y : Specimens were collected from April through July, one at a UV light in an interior coppice.

D i s t r i b u t i o n (Fig. 323): In addition to the lectotype I examined 6 specimens from: Cuba: Provincia Santiago de Cuba, Coast below Pico Turquino, June 26-30-1936, Darlington; Provincia Cienfuegos, Mina Carlota, Trinidad Mts., VII.'39, Parsons; Provincia Ciego de Ávila, Baraguá, V-7-28, at light, L. C. Scaramuzza. Bahama Islands: Andros Island, Fresh Creek, April 23, 1953, E. B. Hayden; Maidenhair Coppice, 24-28.VII-2006, UV trap in interior coppice, M. C. Thomas, T.R. Smith; Fresh Creek, April 23, 1953, E. B. Hayden. Specimens are deposited in AMNH, FSCA, MCZC, MNHN, WFBM, and WOPC.

***Pelonium spectabile* (PERACCHI) (Figs 174, 175, 254, 322, 365)**

Corinthiscus spectabilis PERACCHI, 1960: 65.

H o l o t y p e : ♀. Peru (Pucallpa) (CSCB).

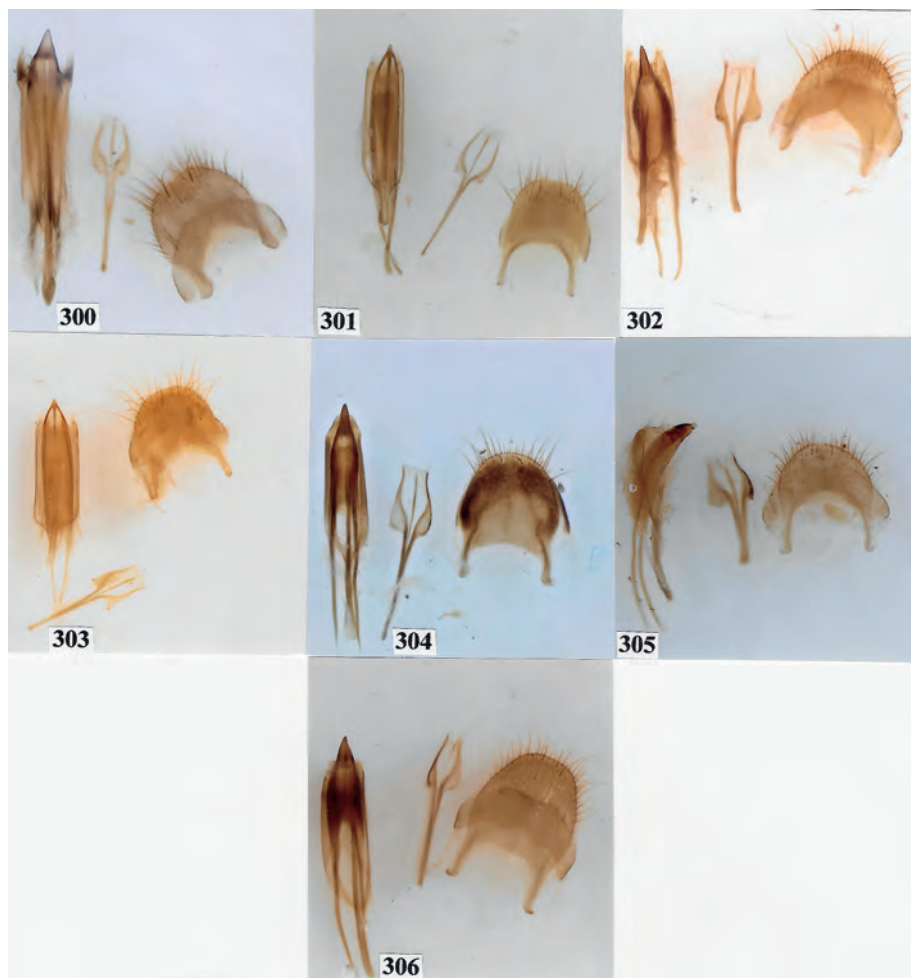
D i a g n o s i s : Three black streaks on the elytral disc will distinguish the members of this species from those of other species within the *P. amabile*-group.

D e s c r i p t i o n : Size: Length 7.0 mm; width 1.8 mm. Form: As in Fig. 365. Color: Mostly testaceous, mandibles black, cranium castaneous, except gula testaceous, prothorax mostly testaceous, pronotal disc infuscated, elytra tricolored, mostly testaceous, with six dark brown streaks, two at base of sutural margin, two obliquely positioned behind humeral angle, two near sutural margin behind elytral middle, disc with two reddish rotund maculae near elytral apex; legs mostly testaceous, femoral dorsal margin with dark streak, tibiae dark brown, tarsi testaceous. Head: Antennomeres 5-8 slightly serrate, capitular antennomeres 9 and 10 with short collateral branch (Fig. 174, 175), antennomere 11 oblong; frons very narrow (EW/FW 20/06). Thorax: Pronotum slightly oblong (PW/PL 44/49), side margin with well-developed tubercle, disc coarsely punctate; elytral asetiferous punctation subseriate, punctures become smaller towards elytral apex (EL/EW 140/25); protibial anterior margin spinose. Abdomen: Pygidial body scutiform; aedeagus (Fig. 254) with large triangular phallic apex.

V a r i a t i o n : Size: Length 6.0-8.0 mm; width 2.0-2.2 mm. The infuscation on the pronotal disc may be separated into two paralateral markings.

Natural history: Specimens were collected in April, October, and November; five at 405 m with a blacklight trap located in a tropical transitional forest

Distribution (Fig. 322): I examined 6 specimens from: Brazil: Estado do Mato Grosso: Sinop, X-1977, M. Alvarenga (FSCA). Bolivia: Departamento de Santa Cruz, 3.7 km SSE Buena Vista, Hotel Flora & Fauna, 405 m, 5-15-XI-2001, 17°29',949"S; 63°33'152"W, M. C. Thomas & B. K. Dozier, tropical transition forest (FSCA, 2; MNKM, 2; WOPC, 1). French Guiana: Subdivision Saül, IV.2008, ex larva, P. H. Dalens (WOPC, 1). Specimens are deposited in: FSCA and WOPC.



Figs 300-306: Abdominal terminalia. (300) *Pelonium stolonum*. (301) *P. amabile*. (302) *P. caborojo*. (303) *P. disconotatum*. (304) *P. leblanci*. (305) *P. lituratum*. (306) *P. piciventre*.

***Pelonium tricinatum* (PERACCHI) (Figs 179, 322, 424)**

Corinthiscus tricinatus PERACCHI, 1962: 303.

H o l o t y p e : ♂. Brasil, Estado do São Paulo, 10-XII-1940, Zellibor (CSCB). **Allotype:** Brasil, Estado de São Paulo, 7-XI-1943, Zellibor (CSCB). Paratypes: 3 specimens. **Brazil,** Estado do Rio de Janeiro, Itatiaia, 6-20-I-1958, J. H. Guimarães (CSCB, 1). Brazil, Estado do Rio de Janeiro, Itatiaia, 18-XI-1947, J. F. Zikán (IOCC); Estado do São Paulo, Jabaquara, 20-XI-1941, Zellibor (CSCB).

D i a g n o s i s : The elytral base black, elytral disc with two black fasciae, and elytral apex black. These characteristics will distinguish the members of this species from those of other species in the *P. amabile*-group.

R e d e s c r i p t i o n : **Size:** Length 11.0 mm; width 4.0 mm. **Form:** As in Fig. 424. **Color:** Cranium black except gena and gula testaceous; mouthparts, antenna, thorax, legs and abdomen testaceous, except mandibles and clypeus black; elytra mostly testaceous, with anterior margin and two discal fascia black, elytral apex narrowly black. **Head:** Capitular antennomeres 9 and 10 triangular (Fig. 179), antennomere 11 ovoid; frons as wide as width of eye (EW/FW 20/20). **Thorax:** Pronotum slightly oblong (PW/PL 72/77), side margin with well-developed tubercle, disc coarsely punctate; elytral asetiferous punctation subseriate, punctures become scanty near posterior region near sutural margin, punctation absent in elytral apical 1/3 towards elytral apex (EL/EW 230/55); protibial anterior margin roughened. **Abdomen:** Pygidium scutiform.

D i s t r i b u t i o n (Fig. 322): I examined one specimen from **Brazil:** Estado do São Paulo, Horto Flor, (TC), 11-XII-1959. Specimens are deposited in: IOCC, CSCB, and WOPC.

Evolutionary Considerations

There are 105 known species in *Pelonium*, and yet I could extract only 20 character states usable for phylogenetic analysis. With the exception of integumental color, configuration of the aedeagus, and antennomeres of the capitulum, *Pelonium* species are, as a group, quite homogeneous morphologically. Unfortunately, the structural variations that were observed are not useful for species-level phylogenetic analysis. Thus, the phylogenetic analysis proposed herein involves the species-group level.

It is not surprising that there is minimal integumental variation within *Pelonium*. Their life habits are similar; they are all likely predators, mostly on lignicolous insects. Elsewhere, I alluded to the positive correlation between similar morphology and similarity of life habits (OPITZ 2010b: 3). In short, selection pressures towards predation will produce a commonality of structural organization to maximize predatory efficacy.

Of the variation observed, that which involves the form and color of the elytra, is most interesting from the biological perspective. I posit that some of the observed variation involving body form and elytral color involves mimicry. GORHAN (1886: 346) writes, "Mr. Champion observed that it (a specimen of *Pelonium luridum*) was much paler when alive, and mimicked some species of Lampyridae". The cryptic coloration of many *Pelonium* species is documented by MAWDSLEY (1994: 122), and it is not fortuitous that *Pelonium* specific epithets, of presumed mimetic models, were used by SPINOLA (*lampyroides*) and CHEVROLAT (*photinoides*).

Phylogenetic Interpretations

Despite the paucity of morphological diversity, 15 lines of evolution are apparent in *Pelonium*, which correspond to the species groups established herein. The relationships among these lines are depicted in a phylogenetic tree (Fig. 307) that was computer generated (Winclada/Nona). The tree conveys the following confidence indices: L = 20; Ci = 100; and Ri = 100.

At present *Pelonium* comprises 105 species with continental distributions as follows: North America 2 species, Middle America 27 species, and South America 76 species. The geographical orismology sources from OPITZ (2005: 105). The Greater Antillean species are grouped with Middle American species whereas the Lesser Antillean species are grouped with South American species. On the basis of extant species distribution, I postulate that ancestral *Pelonium* inhabited a forest biome of South America, where the more primitive taxa of the genus currently exist.

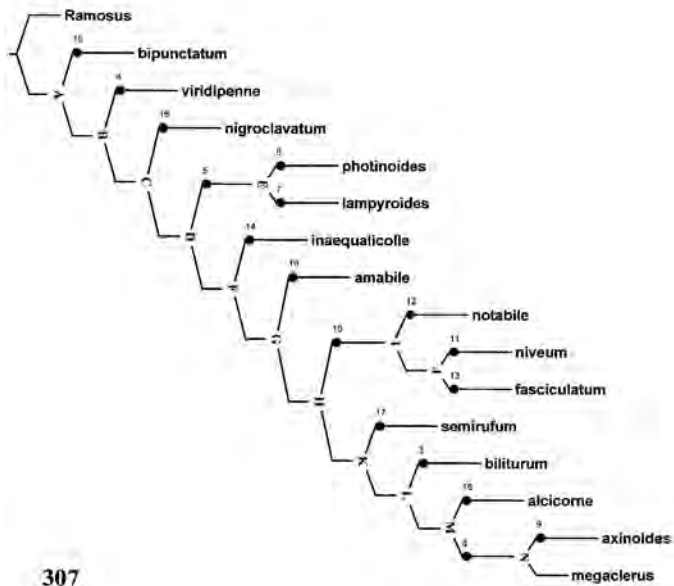


Fig. 307: Computer generated phylogeny of *Pelonium* species groups.

The ancestor of *Pelonium* (ancestor A, Fig. 307) would have been characterized as follows: Eyes with large ommatidia, capitular antennomeres 9 and 10 with a collateral branch, pronotal sides with tubercle, anterior margin of protibia strongly spinose, elytral disc with large asetiferous punctures, and body form rectangular. This ancestral stock produced the *P. bipunctatum*-group in which the testaceous elytral disc evolved a punctiform character. Ancestral species A also produced progenitor B, which led to the *P. viridipenne*-group, characterized by metallic elytra, and ancestor C. The latter produces the *P. nigroclavatum*-group, whose elytra show an angular fascia. Ancestor C also evolved ancestral species D. One line from this ancestor, which led to ancestor E, developed a lampyroid mimetic life style, which eventually led to the *P. photinoides*- and *P. lampyroides*-groups. A second line from ancestor D produced progenitor F, which eventually generated the *P.*

inaequalicolle-group whose species show a profuse distribution of white integumental setae. Ancestor F also evolved progenitor G that generated the *P. amabile*-group in which the sutural margins became broadly castaneous. Then, ancestor G evolved progenitor H who generated an evolutionary line in which the dorsum became cryptic in bark niches. This cryptic ancestor (progenitor I) generated the *P. notabile*-group and ancestor J. The latter produced the *P. niveum*- and *P. fasciculatum*-groups. Ancestral species H also produces progenitor K, which generated the *P. semirufum*-group, whose posterior elytral half became black. Ancestor K also generated ancestor L who produced a line of species (*P. biliturum*-group) in which the elytral disc became unicolorous. From stem species L there also evolved ancestor M, who generated the *alcicorne* group and ancestor N. The latter progenitor produced two species groups (*P. axinoides* and *P. megaclerus*) whose species attained extraordinary body size.

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Author's address:

Weston OPITZ

Research Associate: Florida State Collection of Arthropods

Division of Plant Industry/Entomology

Florida Department of Agriculture and Consumer Services

1911 SW 34th Street, Gainesville, Florida 32614-7100, USA.

E-mail: opitz@kwu.edu

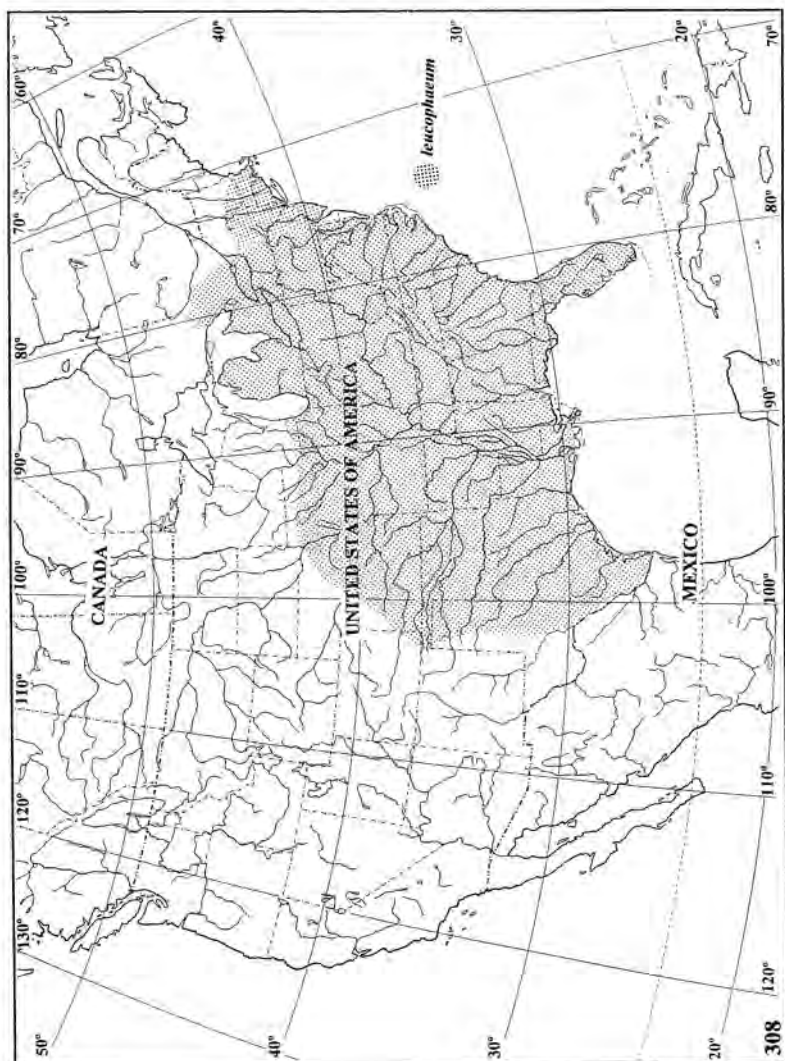


Fig. 308: Geographic distribution of *Pelonium leucophaeum*.

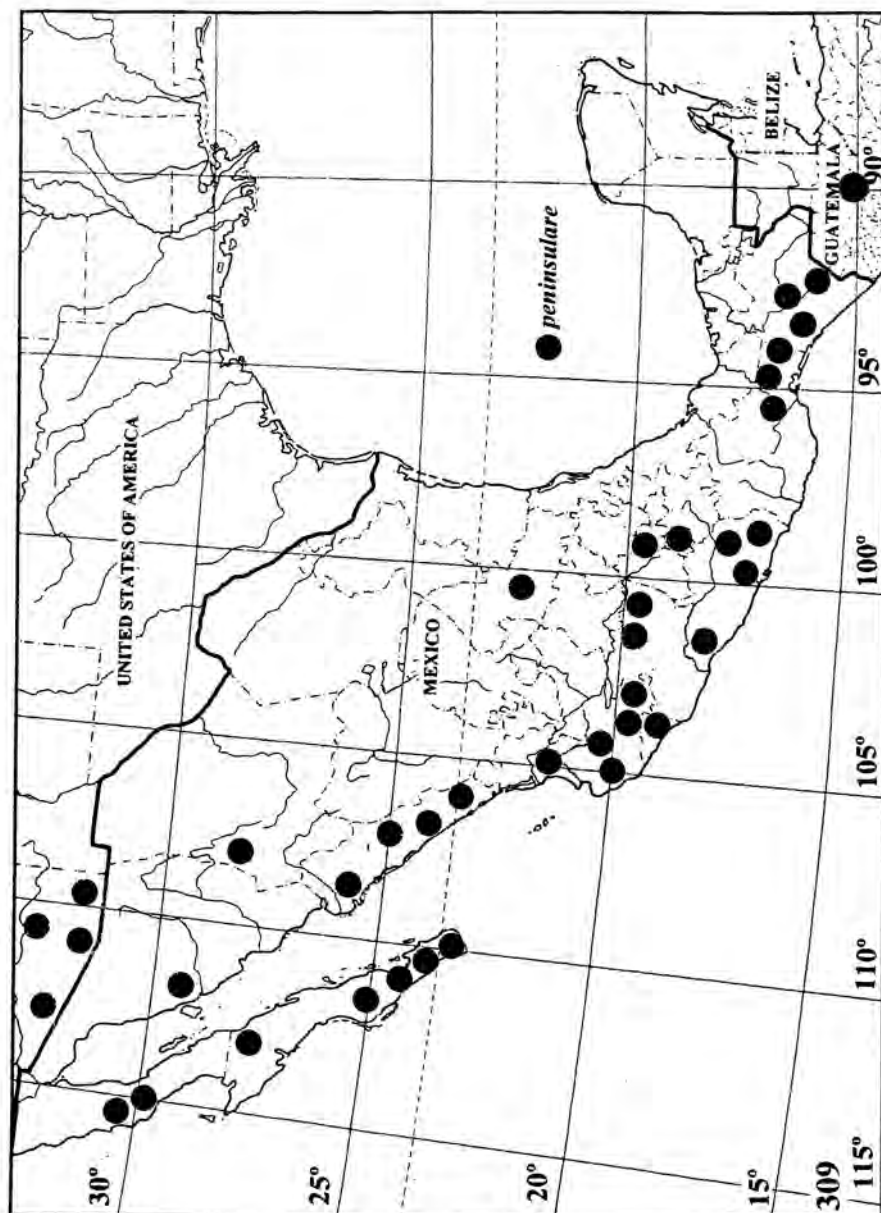


Fig. 309: Geographic distribution of *Pelonium peninsulare*.

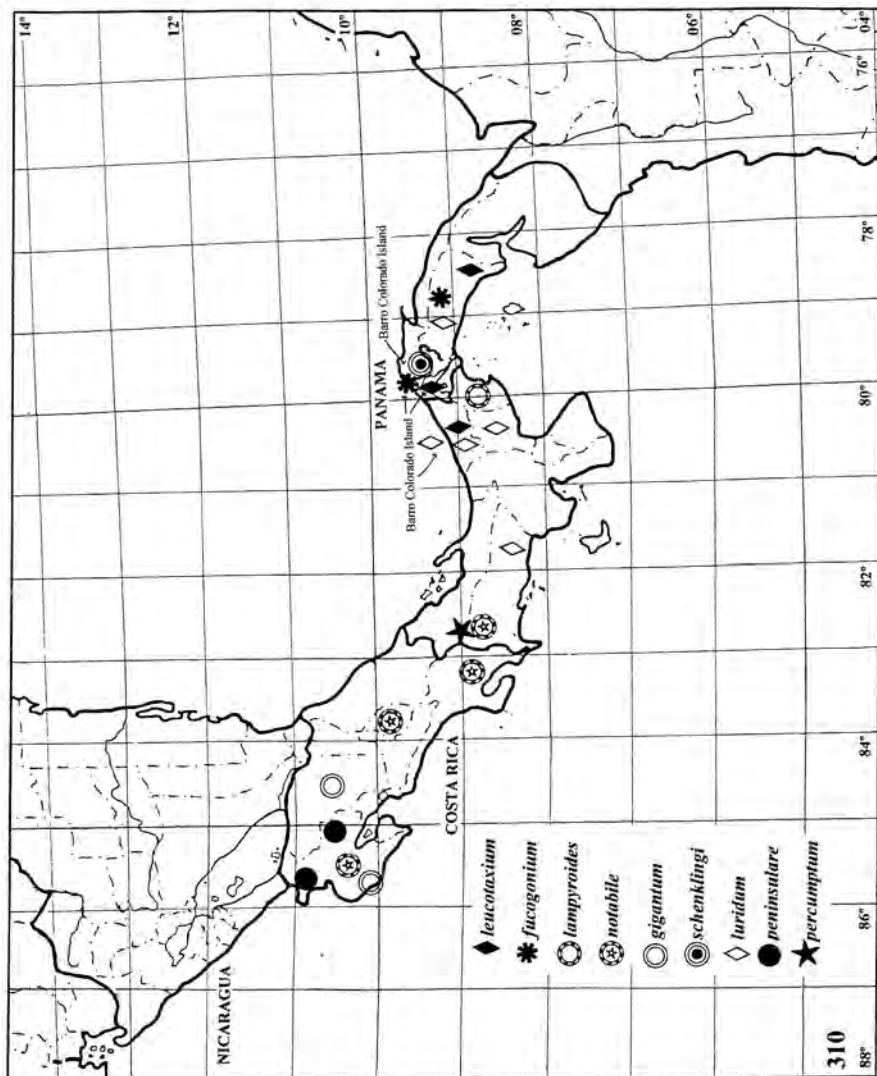
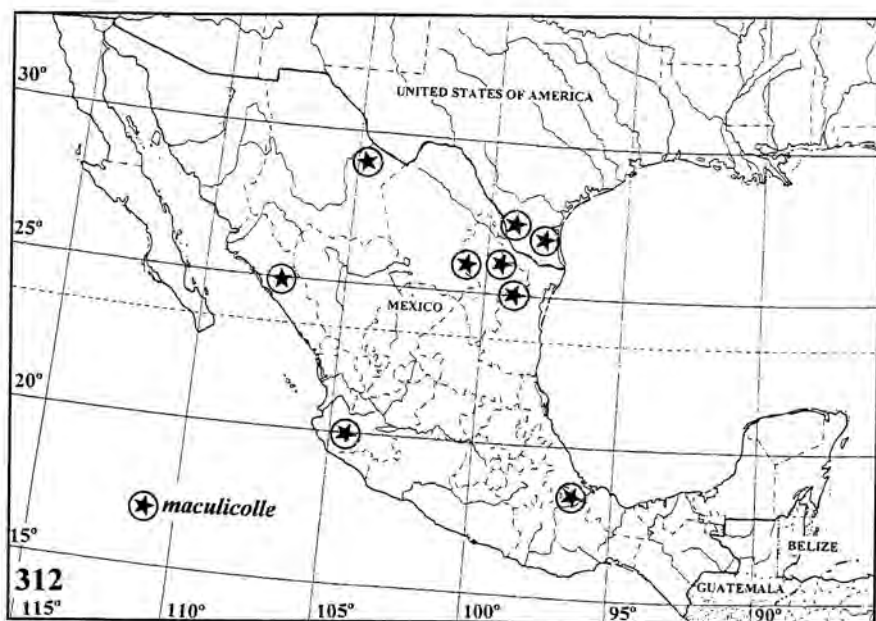
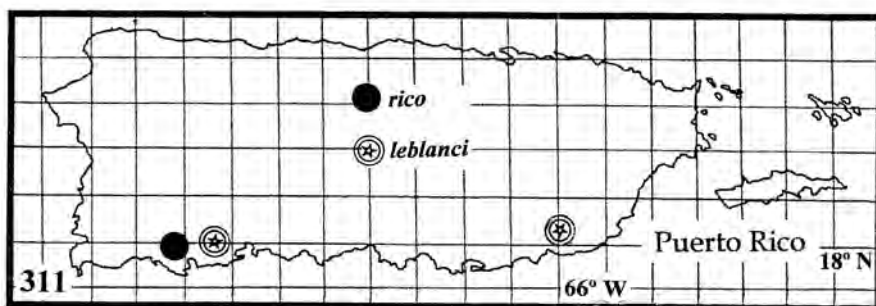


Fig. 310: Geographic distribution of *Pelonium* species as listed.



Figs 311-312: Geographic distribution of *Pelonium* species as listed.

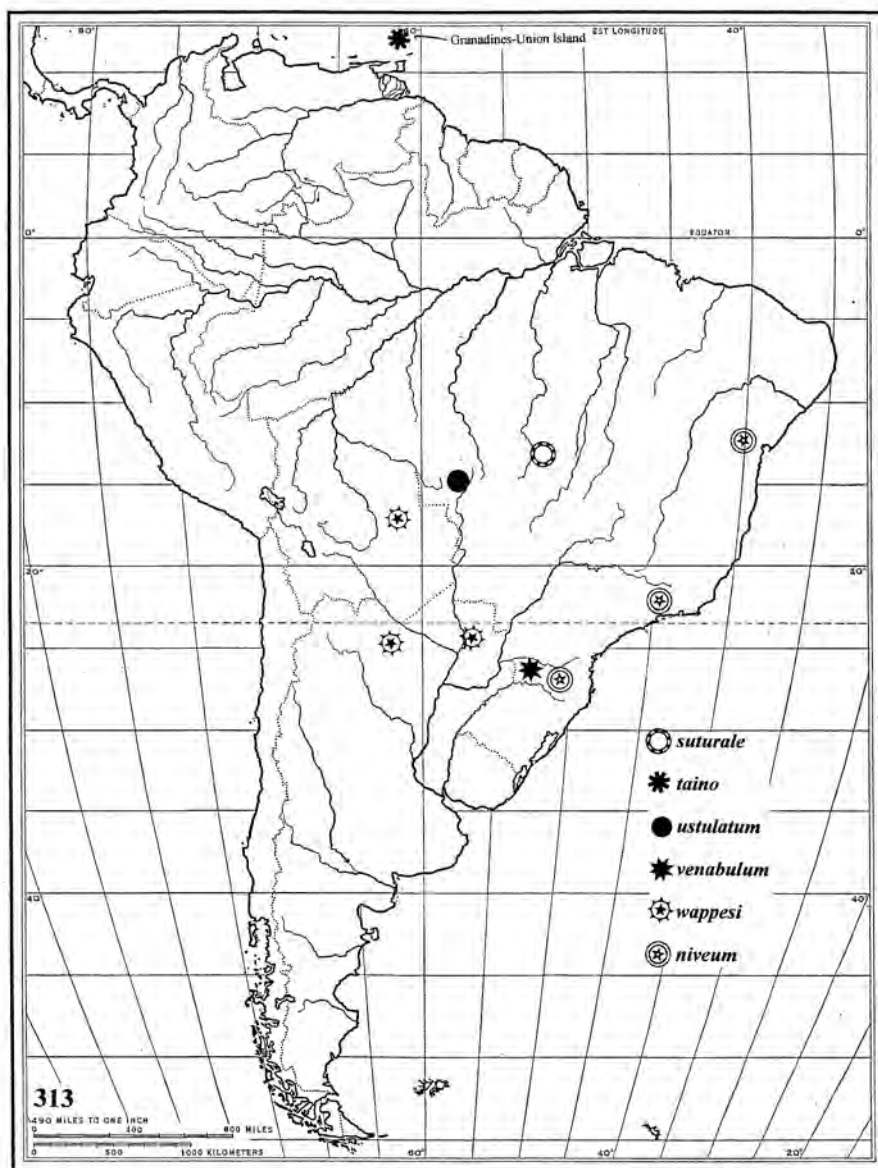


Fig. 313: Geographic distribution of *Pelonium* species as listed.

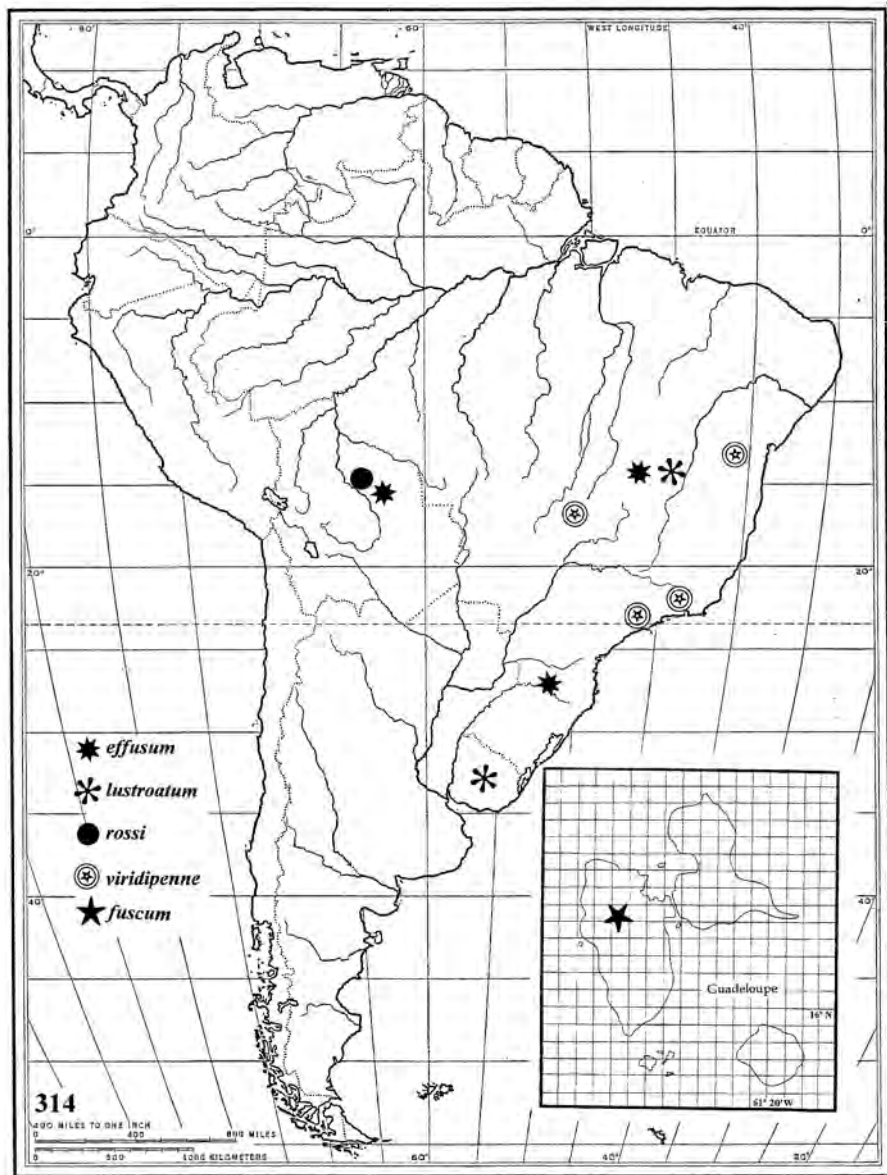


Fig. 314: Geographic distribution of *Pelonium* species as listed.

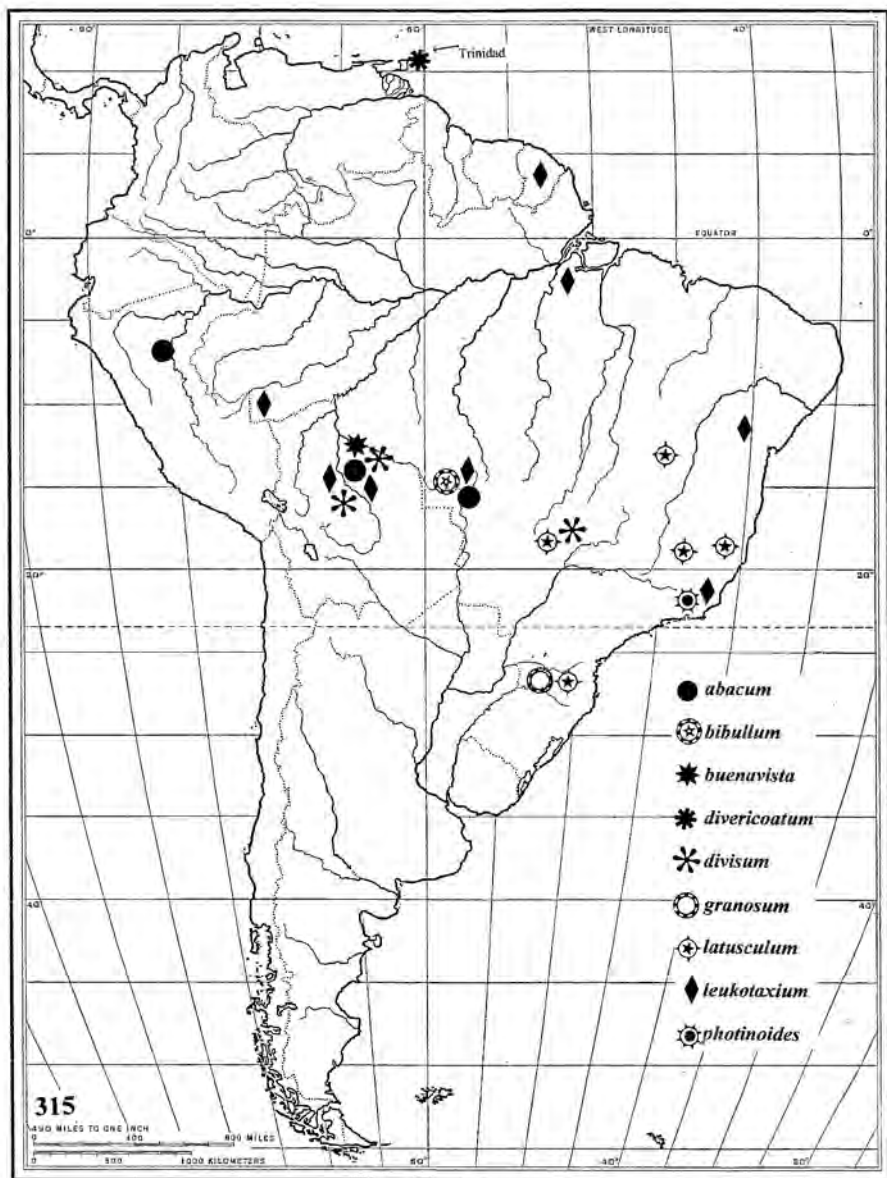


Fig. 315: Geographic distribution of *Pelonium* species as listed.

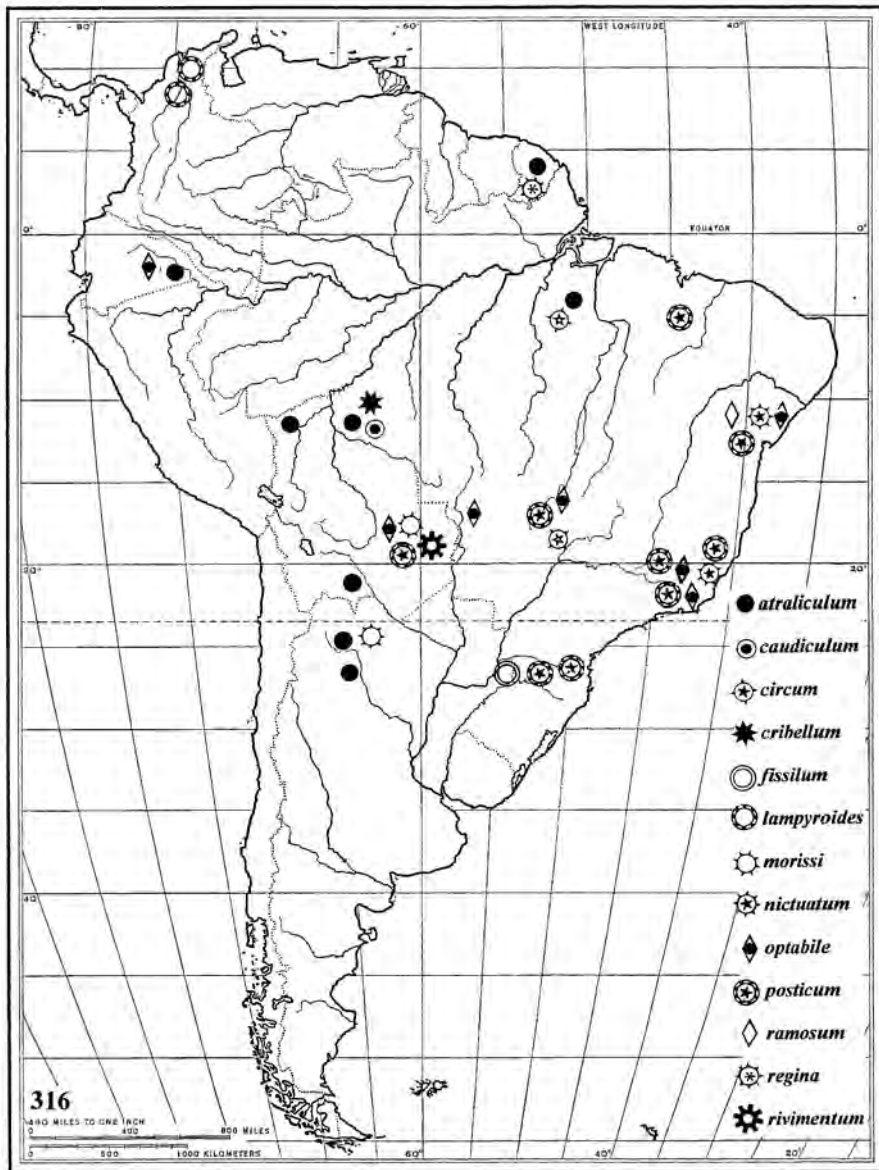


Fig. 316: Geographic distribution of *Pelonium* species as listed.

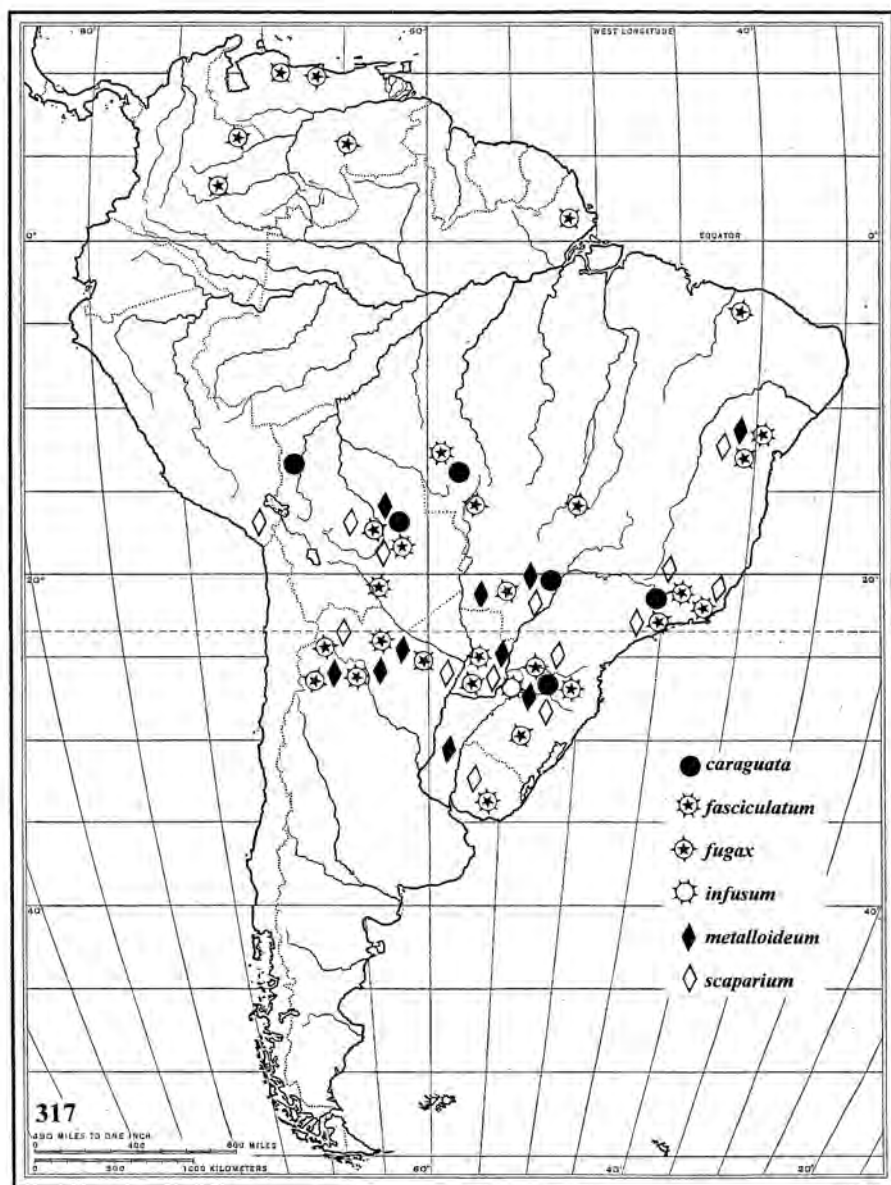


Fig. 317: Geographic distribution of *Pelonium* species as listed.

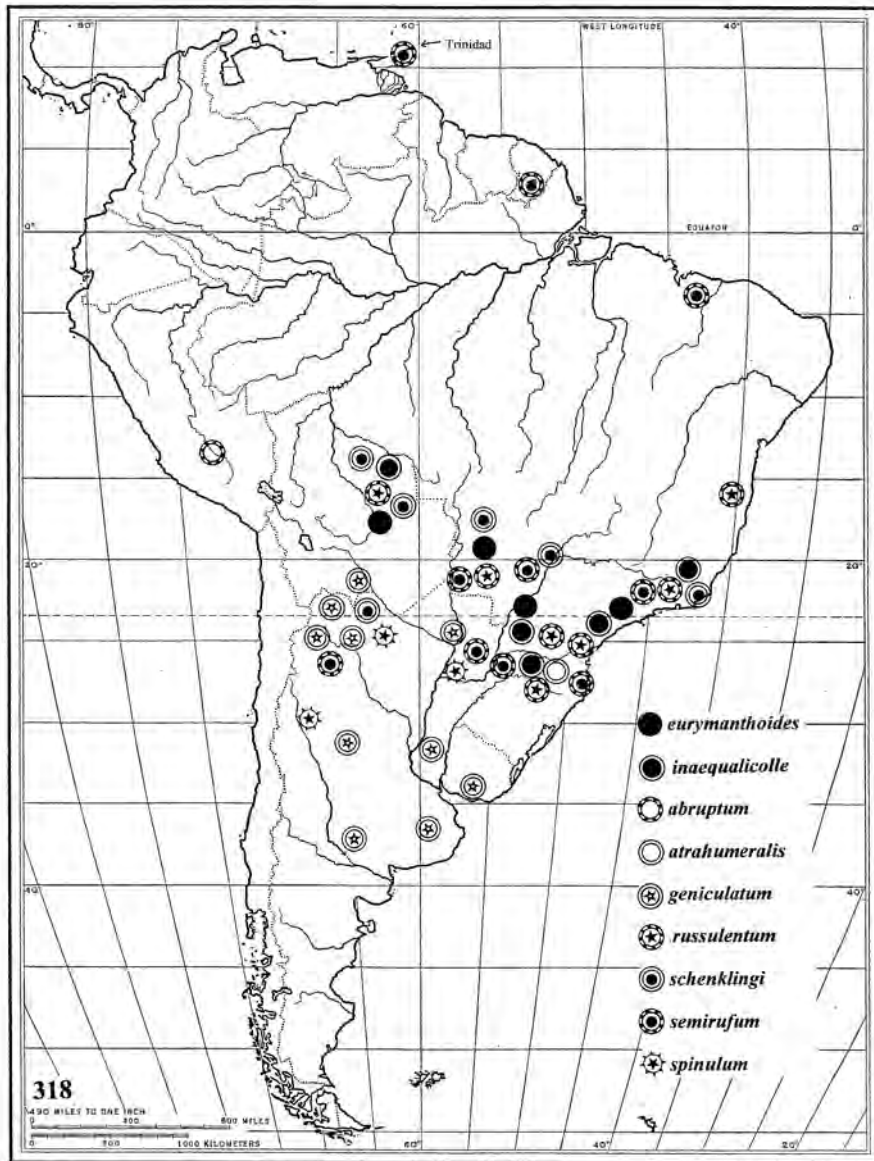


Fig. 318: Geographic distribution of *Pelonium* species as listed.

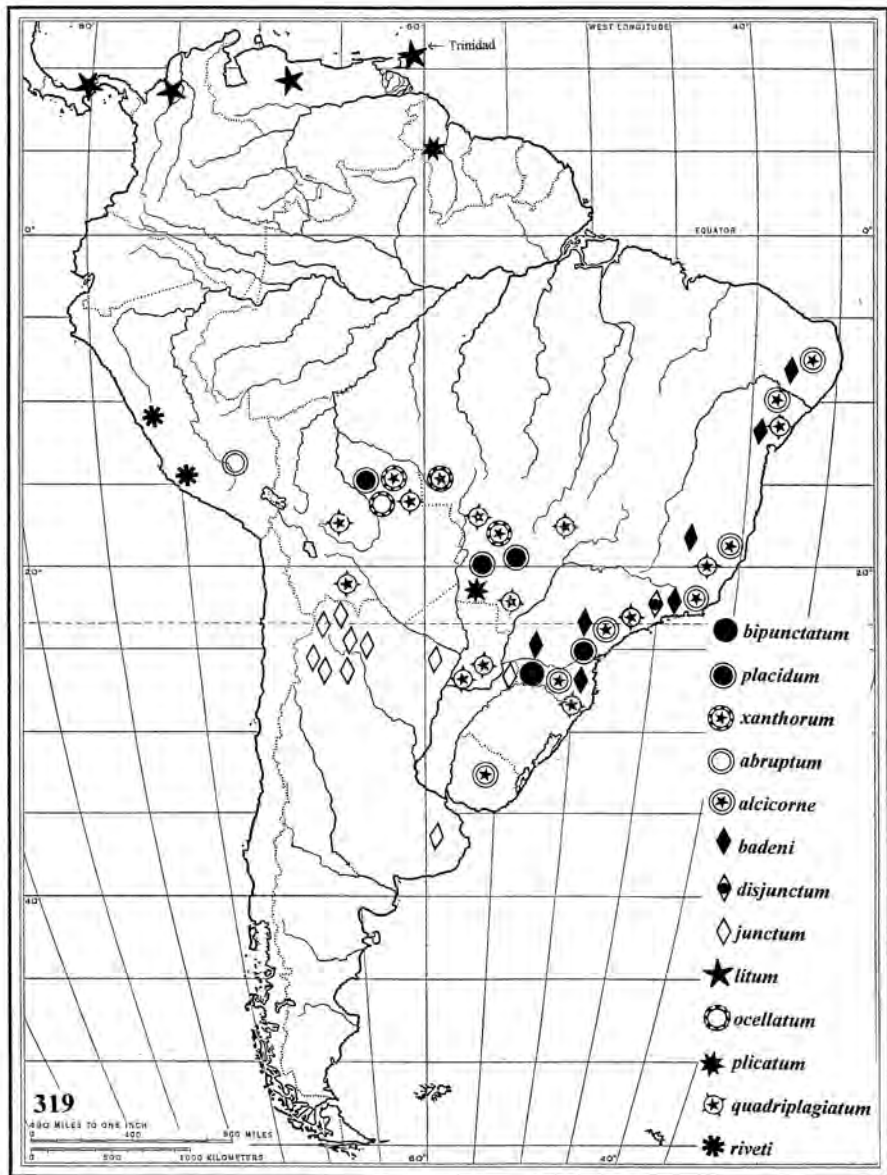


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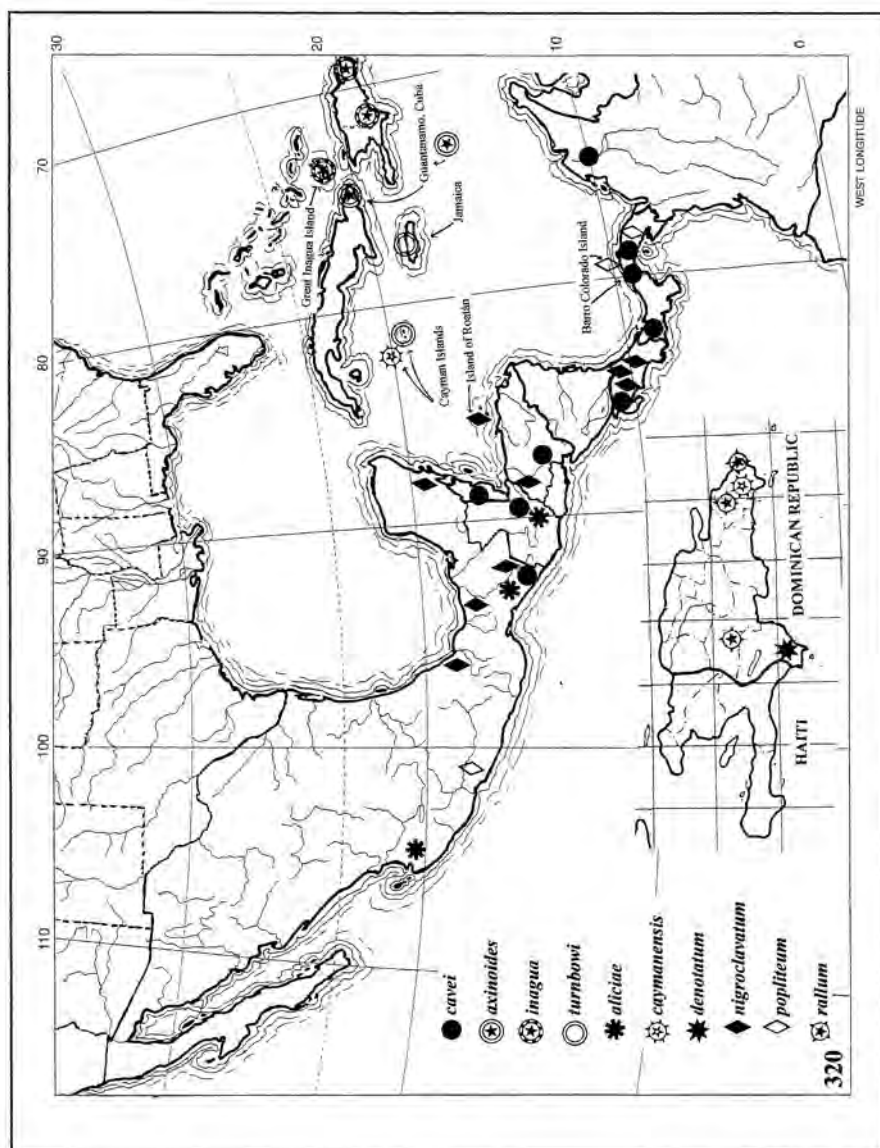


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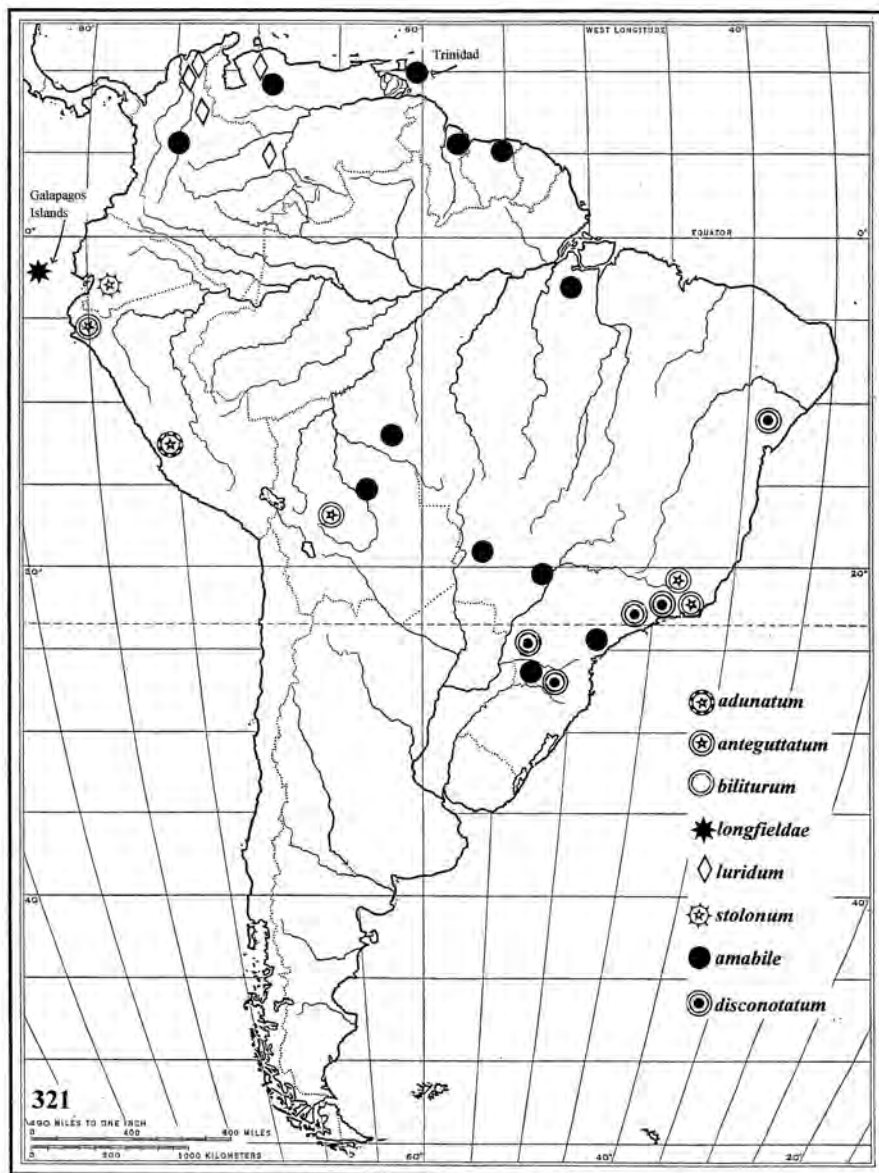


Fig. 321: Geographic distribution of *Pelonium* species as listed.

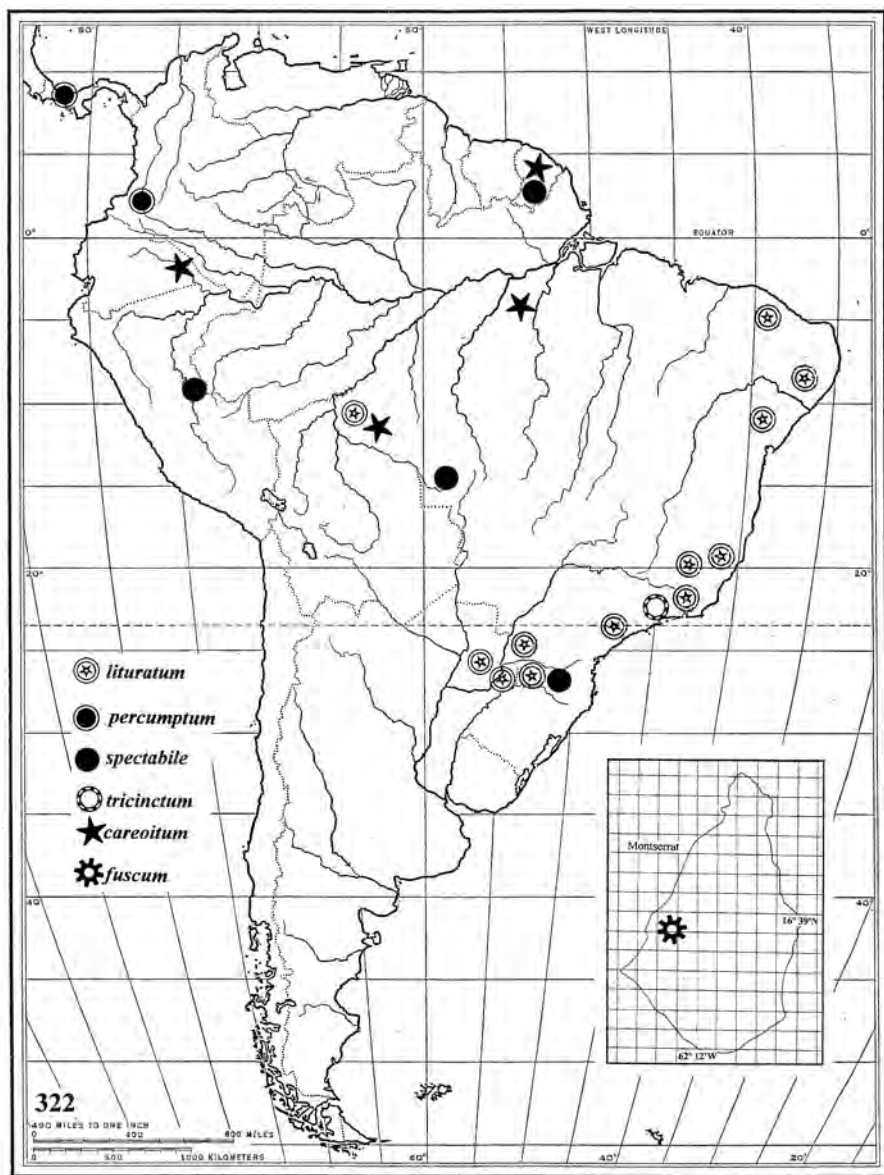


Fig. 322: Geographic distribution of *Pelonium* species as listed.

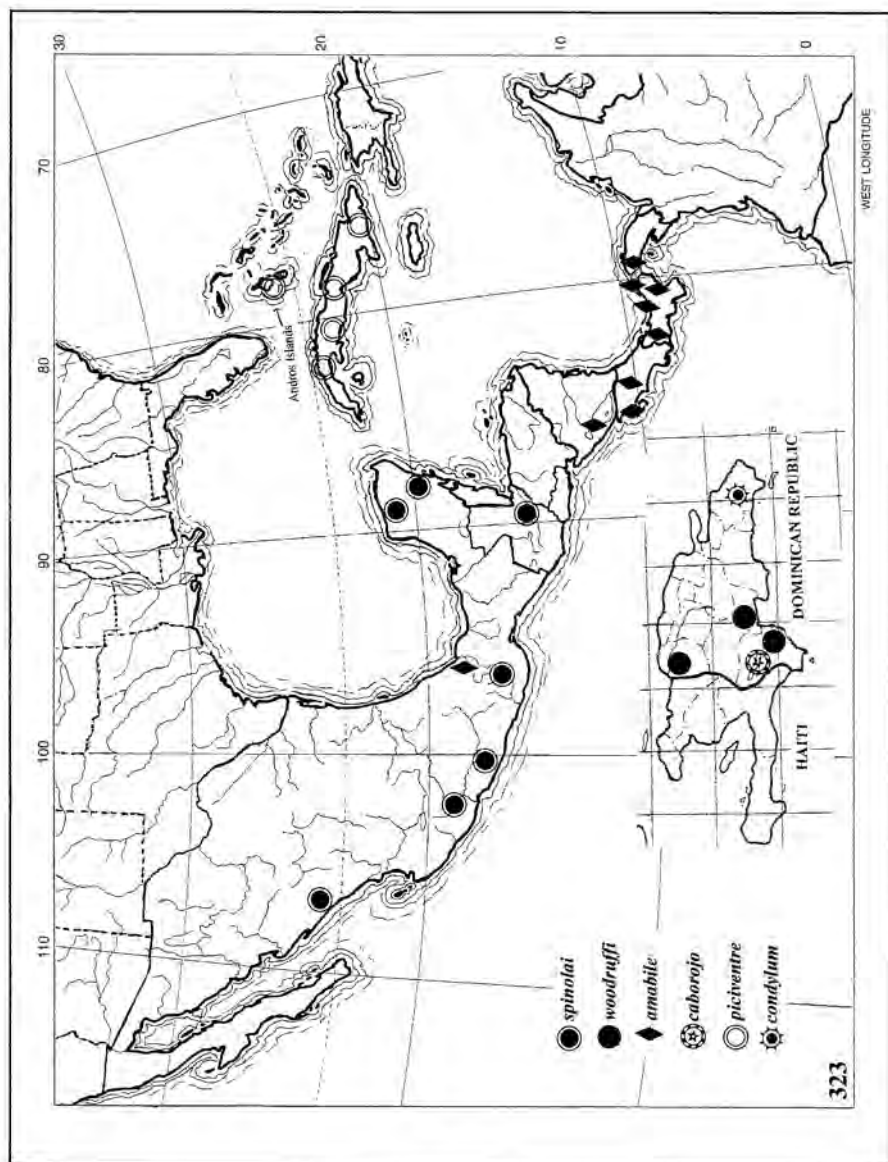


Fig. 323: Geographic distribution of *Pelonium* species as listed.

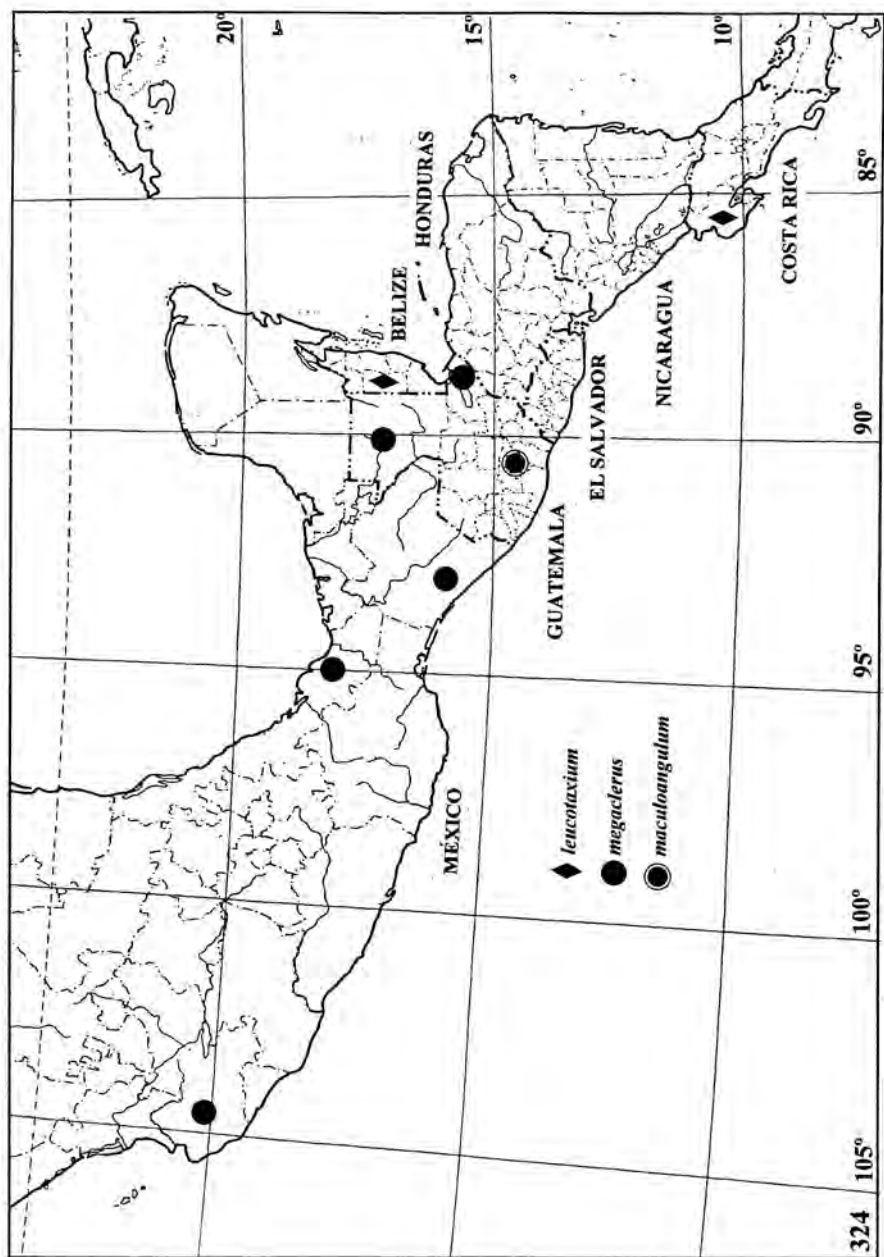


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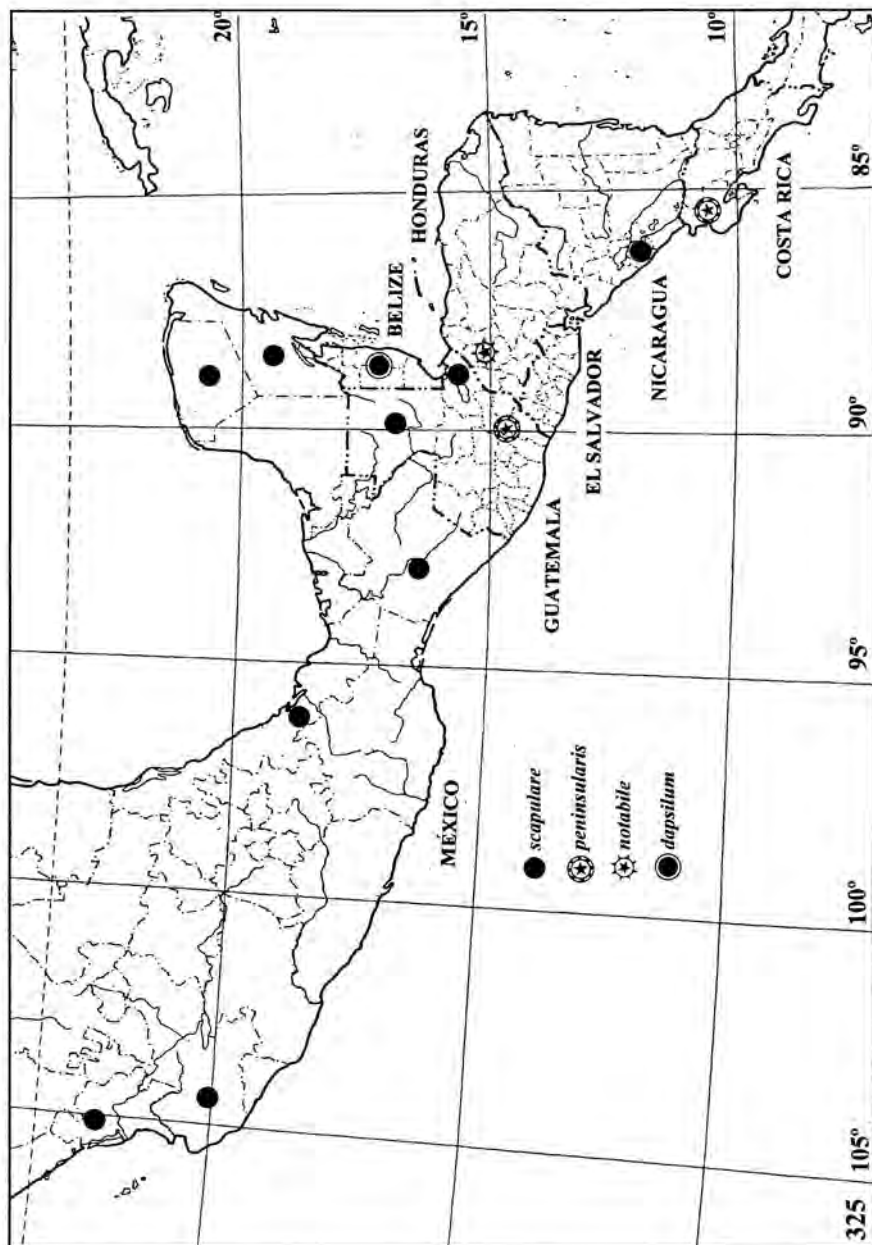
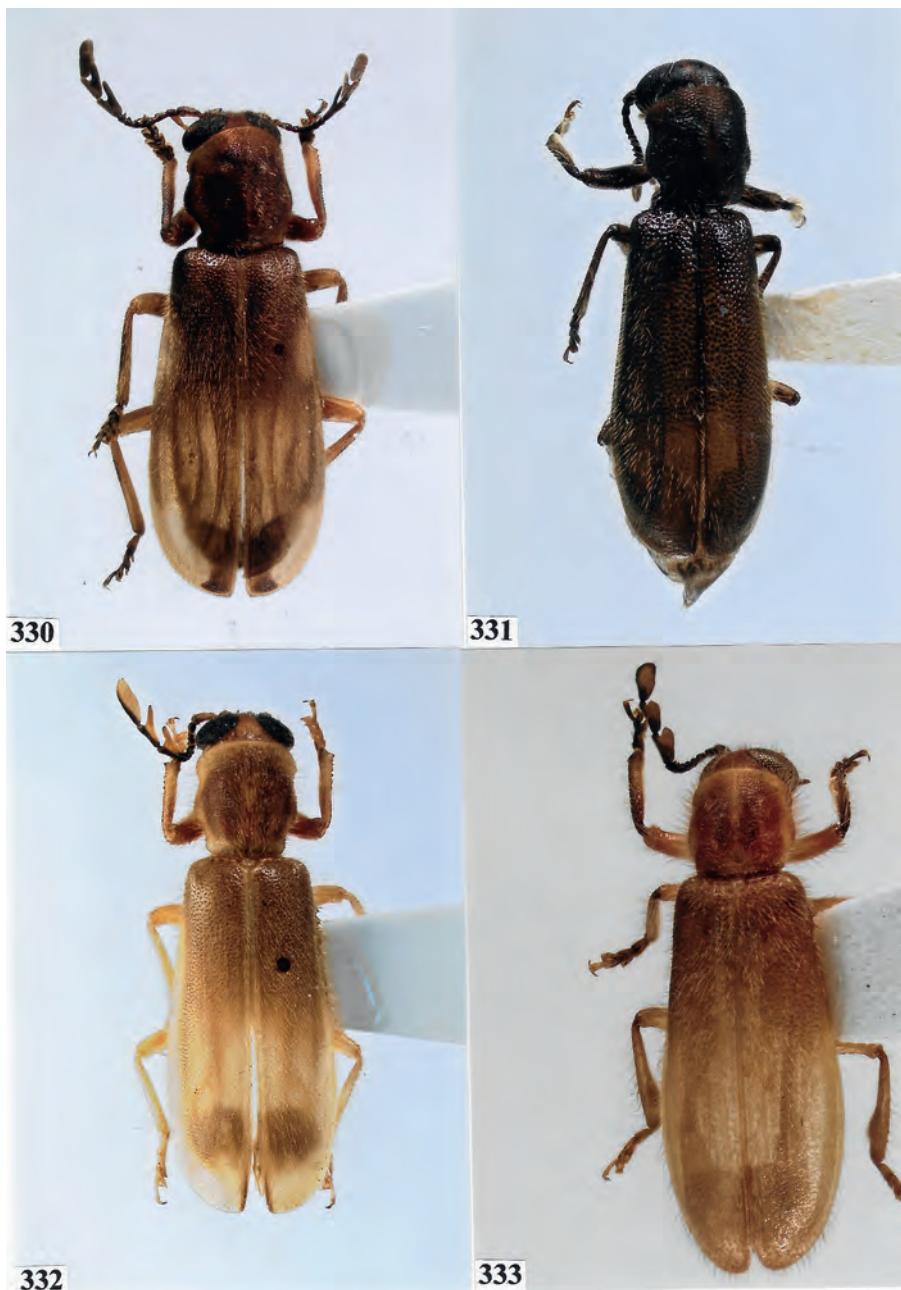


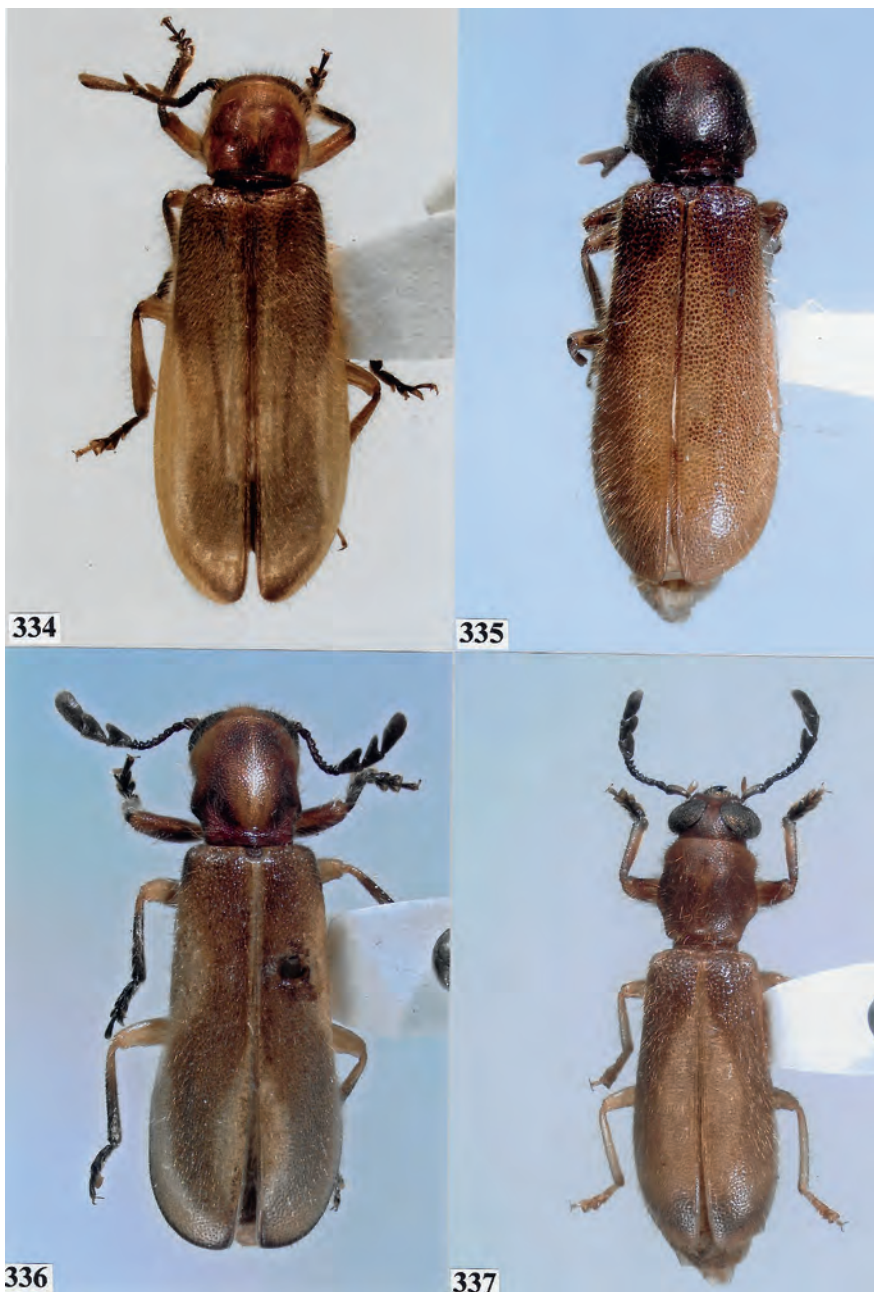
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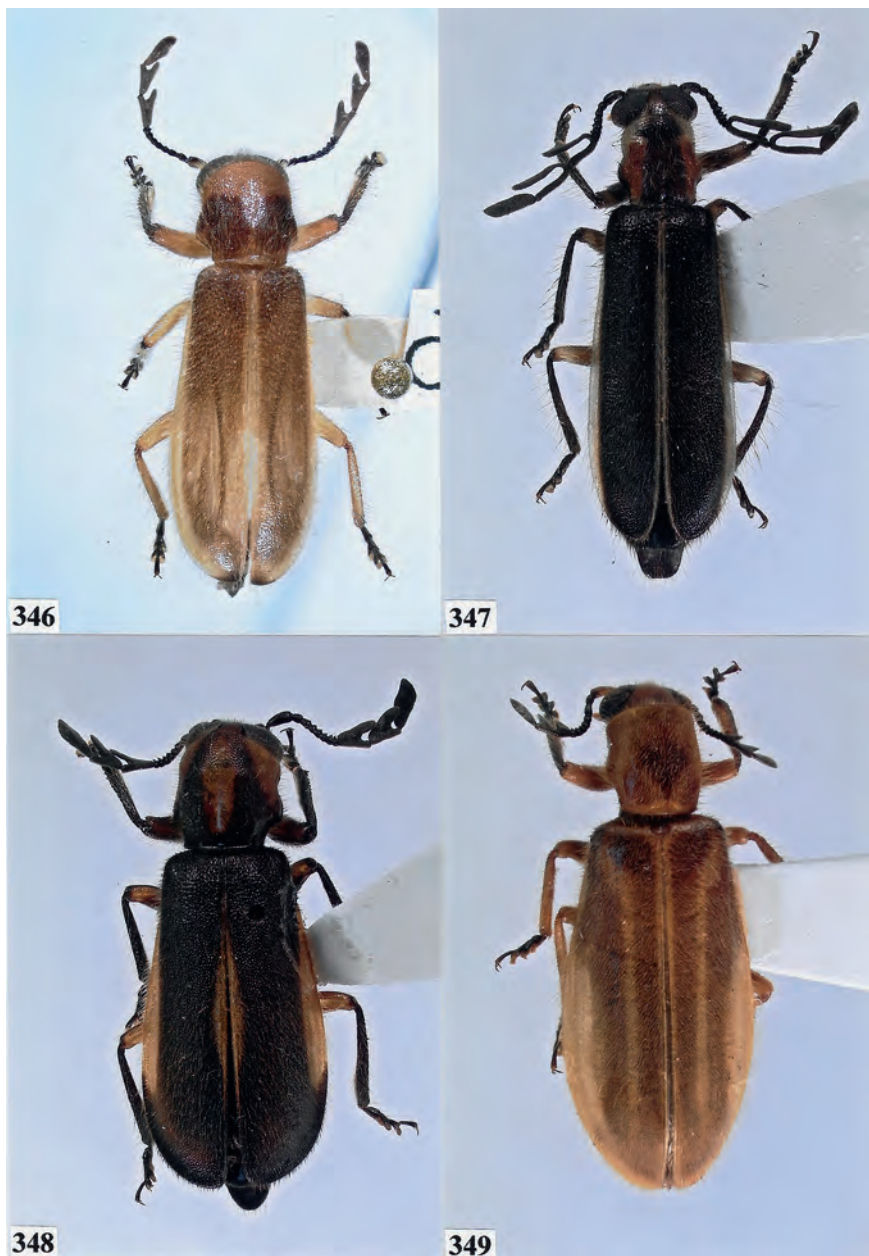


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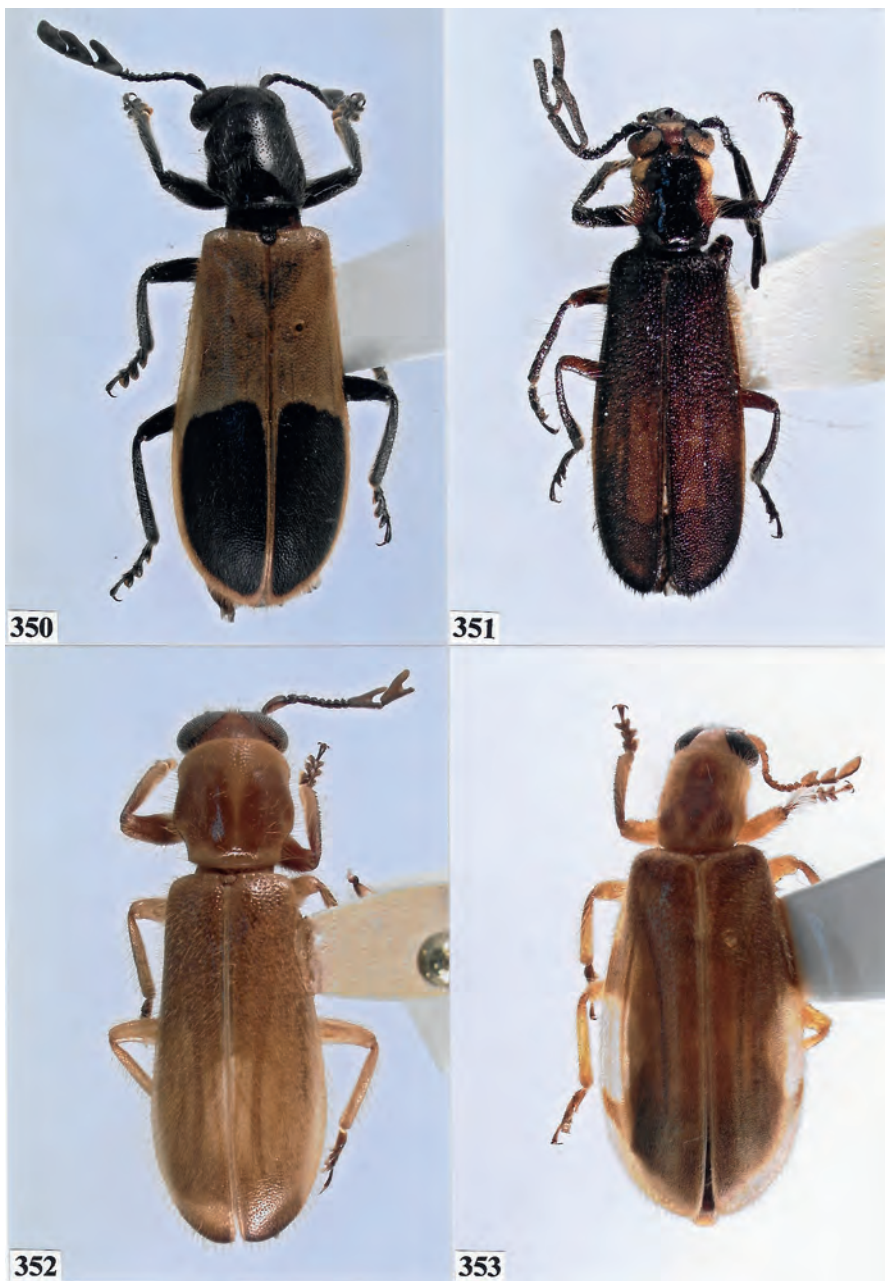


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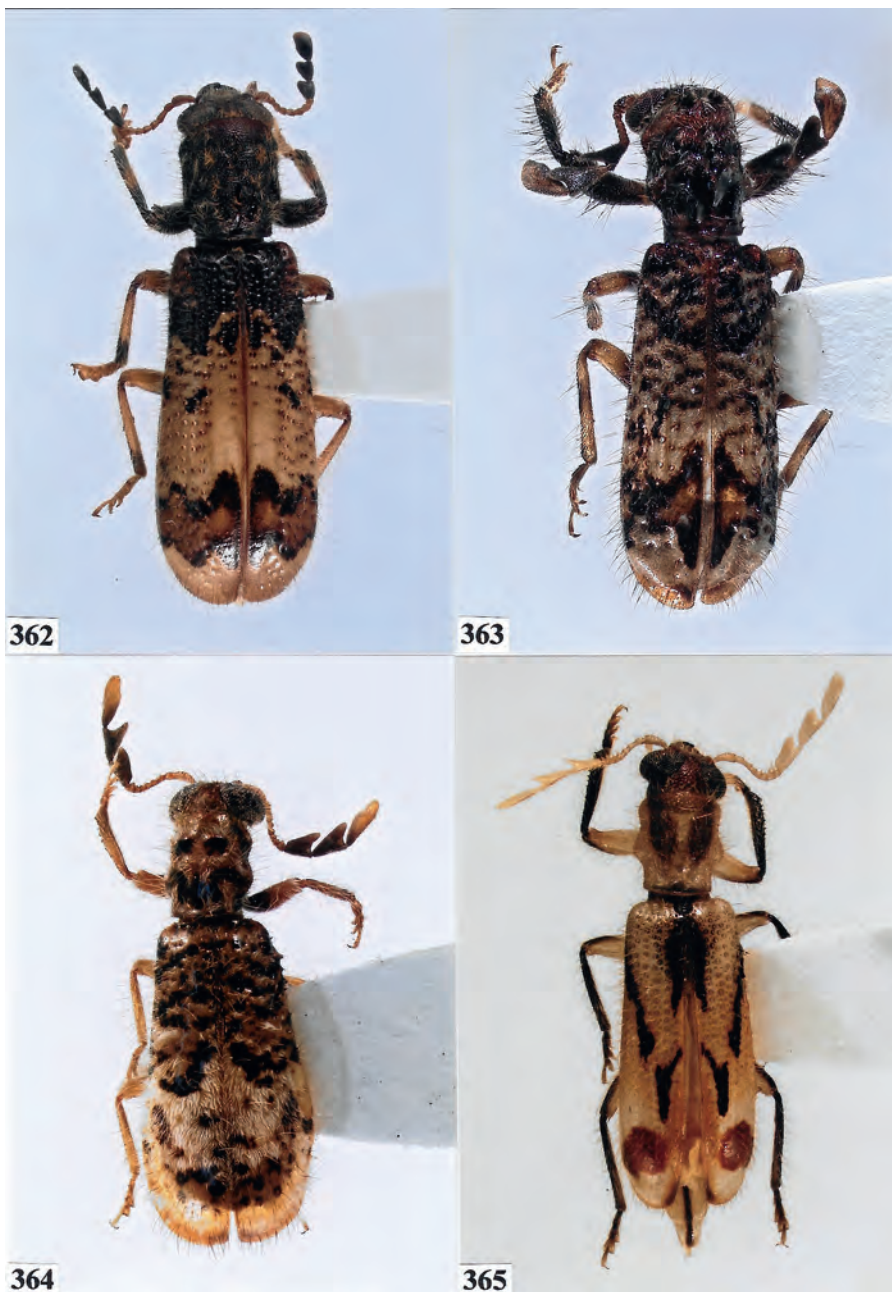


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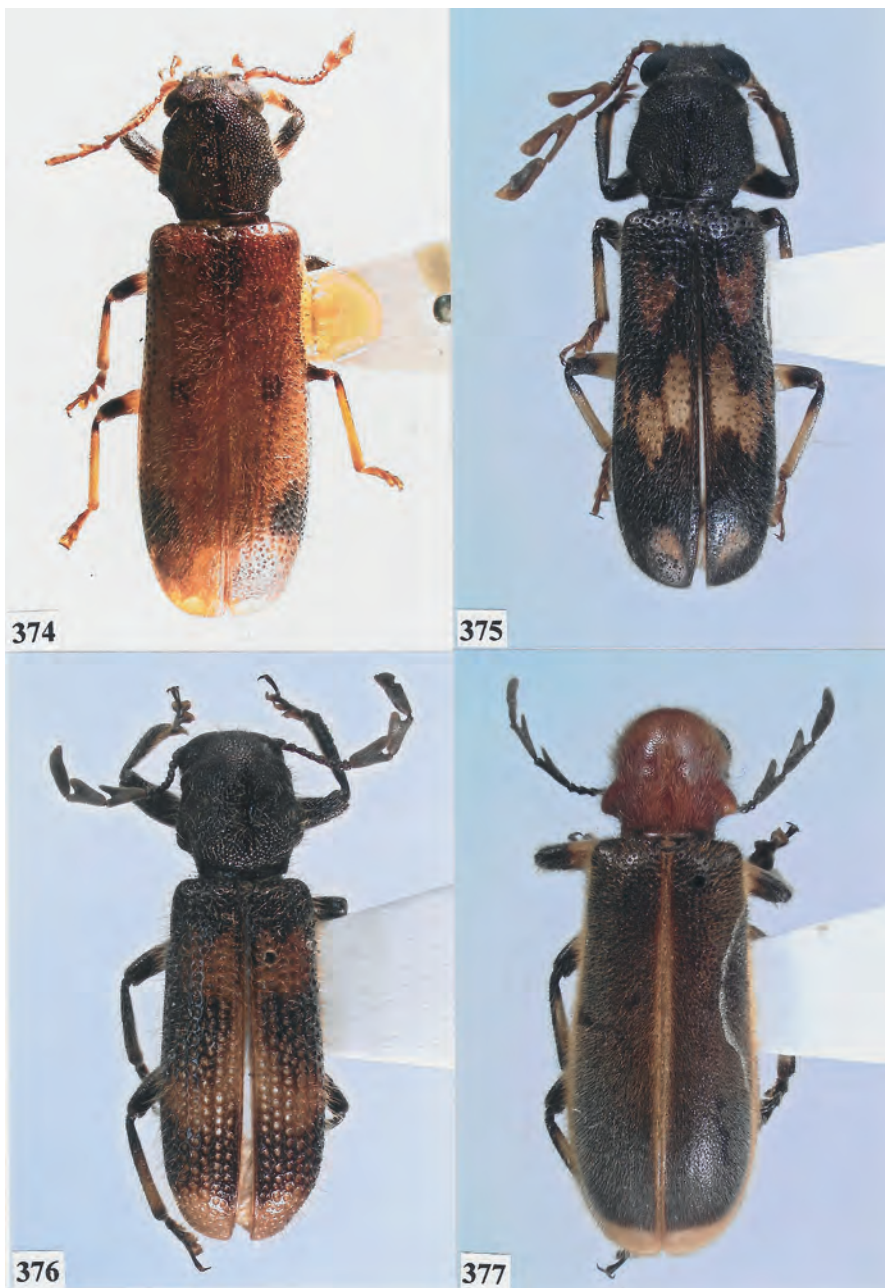
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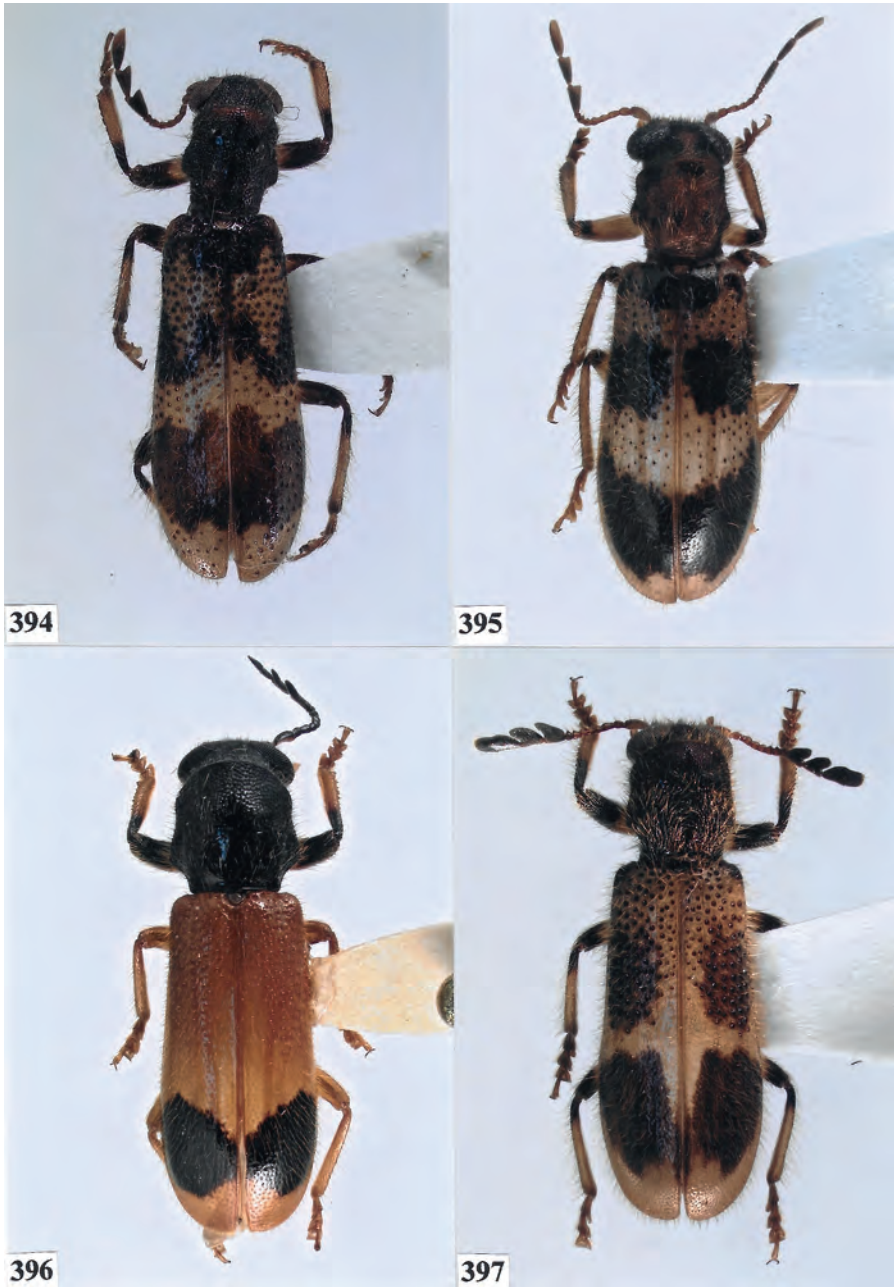


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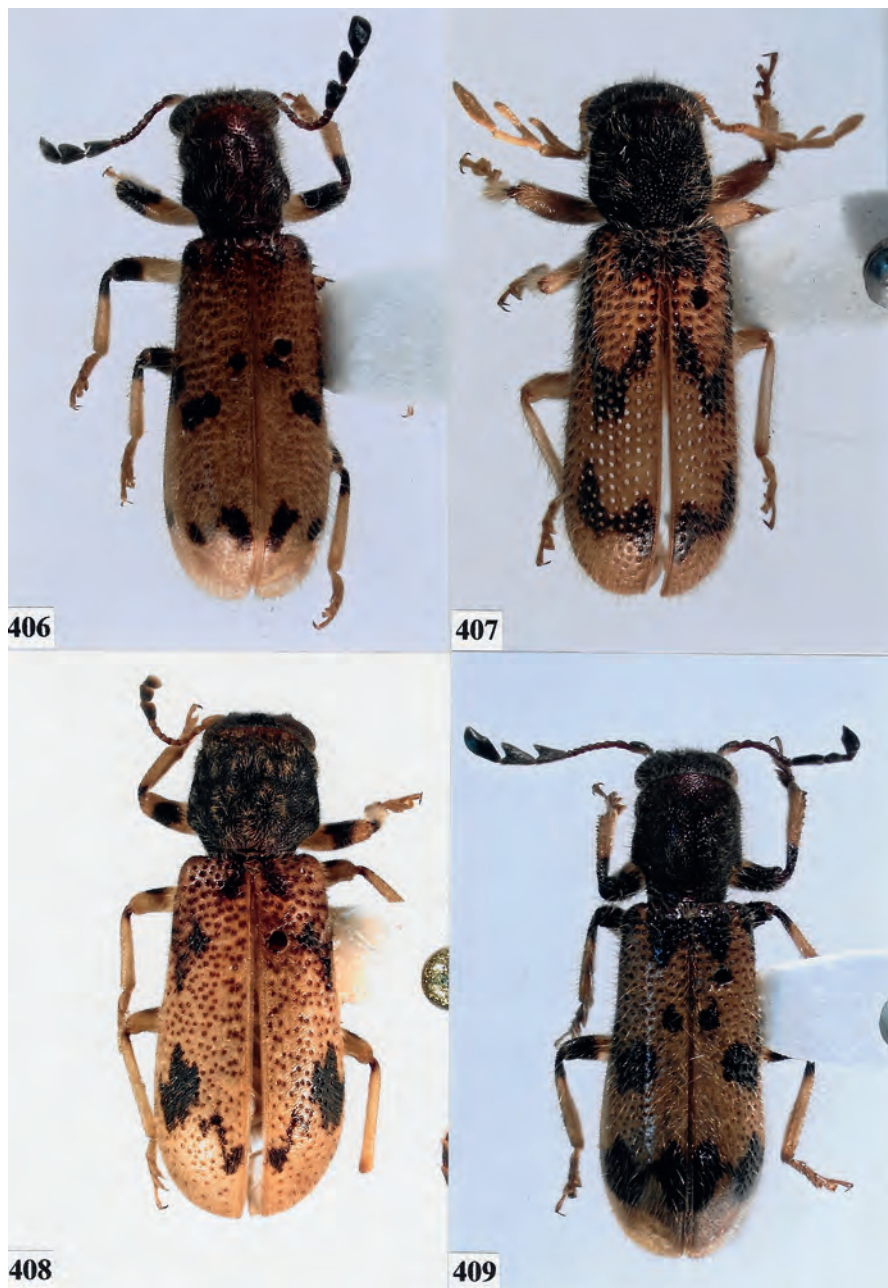
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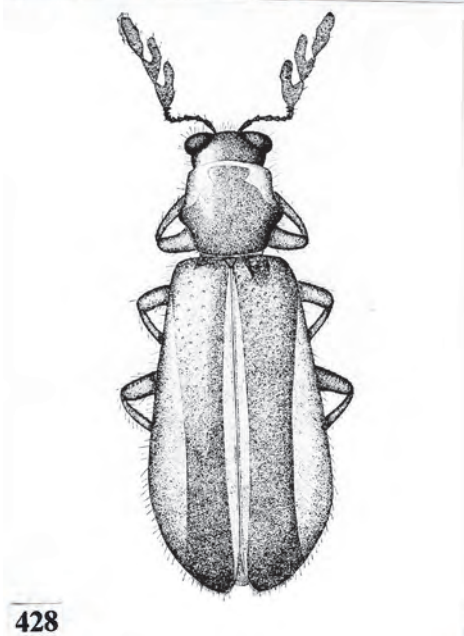
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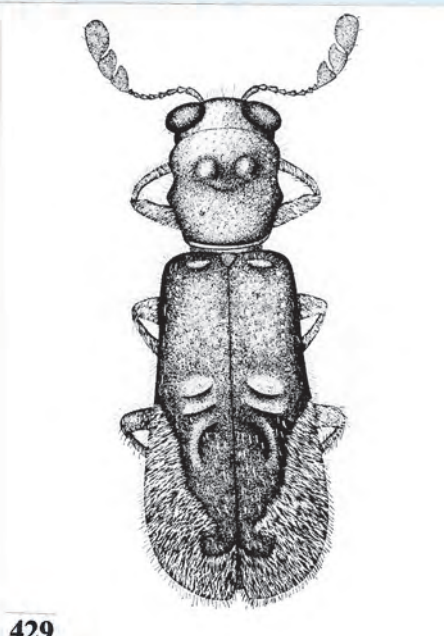
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