

Linzer biol. Beitr.	51/1	127-170	26.07.2019
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**Classification, Natural History, and Evolution  
of the Subfamily Peloniinae OPITZ  
(Coleoptera, Cleroidea, Cleridae). Part XIII.  
The New World genera of checkered beetles  
of the *Labasiella* complex**

Weston OPITZ

**A b s t r a c t :** Until recently, most of the species treated in this work were classified under *Exochonotus* BARR, which is now considered a junior synonym of *Labasiella* SPINOLA. The species listed herein form a monophyletic group within Peloniinae. They are as follows: *Amphilissus goniodus* OPITZ nov.sp., *Amphilissus meieri* (SCHENKLING), *Inconnexus lunarus* OPITZ, *Labasiella bimaculata* (SOLERVICENS), *Labasiella boyaca* OPITZ nov.sp., *Labasiella cochabamba* OPITZ nov.sp., *Labasiella eugeniae* (SOLERVICENS), *Labasiella lata* (SOLERVICENS), *Labasiella lobaticollis* (PIC), *Labasiella machupicchu* OPITZ nov.sp., *Labasiella mcclarini* OPITZ nov.sp., *Labasiella robles* OPITZ nov.sp., *Labasiella santa* OPITZ nov.sp., *Labasiella solervicensi* OPITZ nov.sp., *Labasiella stangei* OPITZ nov.sp., *Labasiella transversalis* (SOLERVICENS), *Labasiella tucumanensis* OPITZ nov.sp., *Labasiella varipennis* SPINOLA, *Macilentus micidus* OPITZ, *Oncochelyna barrigai* (SOLERVICENS), *Oncochelyna tuberculata* (PIC), *Pelmatus barri* (SOLERVICENS), *Pelmatus bicolor* (SOLERVICENS), *Silvanoclerus beechi* (SOLERVICENS), and *Silvanoclerus dilatus* OPITZ. A brief discussion of zoogeography is provided as are a key to species, 56 line drawings, 12 electron micrographs, 2 phylogenetic trees, 2 species-distribution maps, 25 color habitus illustrations, and 11 photographs of male genitalia.

**K e y w o r d s :** Checkered beetles, classification, zoogeography, phylogeny, new species.

### Introduction

This treatise deals with the genera *Amphilissus*, *Inconnexus*, *Macilentus*, *Oncochelyna*, *Pelmatus*, and *Silvanoclerus*; all described in OPITZ (2017a). It also deals with the genus *Labasiella* SPINOLA (1849). Together, these genera form a monophyletic group within Peloniinae. Until recently, most of the species treated in this work were classified under *Exochonotus* BARR (BARR 1980), which is now considered a junior synonym of *Labasiella* SPINOLA (OPITZ 2017a). The available specimens of this assemblage of species present extensive morphological diversity, as expressed in the shape of the terminal maxillary and labial palpi, form of the epipleuron, prominence of 2° elytral setae, structure of the ungues, and differences in the form of the elytral posterior slope. The importance of some of these structures for interpretation of generic level discontinuities was previously discussed by OPITZ (2010). In another work OPITZ (2017b) discussed generalities about his criteria for the delimitation of genera. The purpose of this study is to make known new species of the

*Labasiella* complex of genera and contribute to the knowledge of species diversity within Peloniinae.

The legitimacy and availability of the generic name *Labasiella* needs clarification. CORPORAAL (1950: 307) notes "err. script.?" adjacent to the name *Labasiella*, which he places in synonymy with *Lebasiella* SPINOLA 1844. My assessment is that *Labasiella* does not represent a misspelling of *Lebasiella*. First, *Labasiella* SPINOLA is made available by virtue of the Code Article 56.2, which states that a single letter difference in a generic name renders that name available. Second, SPINOLA (1849) used the name *Labasiella* three times in his 1849 publication. Third, SPINOLA (1949) provided a generic description of *Labasiella* and described *Labasiella varipennis* as its type species. Fourth, the type species of *Lebasiella* Spinola, *L. erythrodera*, is not congeneric with *Labasiella varipennis* SPINOLA.

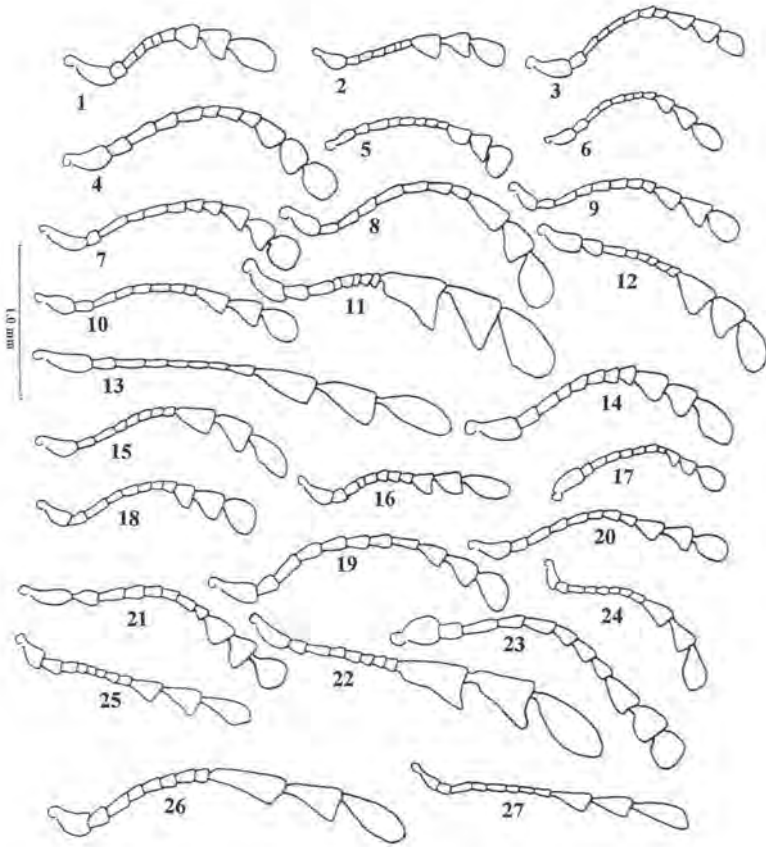
### Materials and Methods

This study is based on the morphology of 109 adult specimens, many of which were dissected to determine sex and to investigate aedeagal structure. Aedeagal differences were minimally useful for species recognition, and illustrations of them are not included in this work. The generalities of the aedeagus was illustrated and discussed by SOLERVICENS (1998; 2001; 2003; 2004). Although morphological criteria are used to determine specific level discontinuities, I adhere to the biological species concepts as presented by STANDFUSS (1896), DOBZHANSKY (1937), and MAYR (1963). The operational criteria for the delimitation of species involve morphologic structure and any other available criteria that suggest reproductive isolation among members of metapopulation lineages (DE QUEIROZ 2007). Comprehensive experience with differences in morphological structure is, generally, a reasonable measure with which to hypothesize reproductive isolation. In this study, consideration for species status involves: Presence or absence, or numbers, of pronotal knobs (Fig. 52), shape of the terminal palpomere (Fig. 58), organization of elytral punctures (Figs 55, 56), extent of serrulation of the epipleural margin, shape of the elytral fasciae, presence or absence of a denticle on the ungues (Fig. 64), and characteristics of the aedeagus.

In some genera of the Cleridae, such as *Aphelocerus* KIRSCH and *Madoniella* PIC, features of the elytral disc, and in particular details in color patterns, are remarkably consistent at species level. In *Aphelocerus* (OPITZ 2005) the important character is the configuration of the elytral white setal patch and in *Madoniella* (OPITZ 2011) it is the configuration of the elytral insignia. Interspecific variations of these elytral characters are congruous with male genitalic differences. The point being made is that when only females are available inter-population differences in these characters provide a basis for predicting species-level discontinuities. This has particular relevancies among several species of the *Labasiella* complex included in this treatise; some of the descriptions of which are based only on one or few specimens. In species of *Labasiella*, the presence or absence, or configuration, of the midelytral fascia, and the presence or absence, and number, of pronotal knobs are good indicator of species status.

The principles of HENNIG (1966) were followed for estimations of supraspecific 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.

Methods involving dissections, measurements, and morphological terminology follow those described in OPITZ (2010: 35). BROWN (1956) was used to coin scientific names. Abbreviations used in this treatise are defined as follows: EW/FW = eye width/frons width (measured at 500 x from the front of the head); CL/FL= capitular length/funicle length. Line drawings were made with an 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 Syncroscopy 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.



**Figs 1-27:** Antennae. (1) *Amphelissus goniodus*, female. (2) *A. meieri*, female. (3) *Inconnexus lunarus*, male. (4) *Labasiella lata*, female. (5) *L. labaticollis*, female. (6) *L. machupicchu*, male. 7. *L. santa*, female. (8) *L. stangei*, male. (9) *L. tucumanensis*, male. (10) *L. varipennis*, male. (11) *Pelmatus barri*, male. (12) *P. barri*, female. (13) *P. bicolor*, female. (14) *Macilentus micidus*, female. (15) *Oncochelyna barrigai*, female. (16) *O. tuberculata*, female. (17) *Silvanoclerus dilatus*, female. (18) *S. beechi*, male. (19) *Labasiella bimaculata*, female. (20) *L. boyaca*, male. (21) *L. cochabamba*, male. (22) *L. eugeniae*, male. (23) *L. mcclarini*, female. (24) *L. solervicensi*, female. (25) *L. robes*, female. (26) *L. transversalis*, male. (27) *L. transversalis*, female.

### Assessments of Evolutionary States of Characters

Eighteen-character states were organized into a matrix (Table 1), which was then analyzed with NONA (GOLOBOFF 2003) in combination with WINCLADA version 100.80 (NIXON 2002); to find the most parsimonious phylogenetic tree. These programs produced 1 tree via heuristic analysis (Fig. 96a) [Maximum trees (hold) = 100, number of replications 1 (mult) = 100, and multiple TBR = TBR (mult max) were used]. The nexus file prepared with Mesquite v.3.5 (Build 888) and PAUP v.4.0a (build 161) was used to perform 1000 parsimony bootstrap replicates using heuristic searches, each based on 10 random addition sequences using TBR as the branch-swapping algorithm, with all characters equally weighed (Fig. 96b). Character states given the value of "0" are assessed plesiotypic whereas those judged a value of "1" are assessed apotypic. The genera *Pelonium* SPINOLA, *Muisca* SPINOLA, and my general knowledge of other Peloniinae genera, are used as outgroups to assist in character state assessments and to predict the evolutionary states of characteristics. I relied on the methods of character-state analysis employed by EKIS (now OPITZ) (1977), WATROUS and WHEELER (1981), and NIXON and CARPENTER (1993).

- Character 0.....Pronotal arch: (0) not cribrate; (1) cribrate  
 Character 1.....Pronotal sides: (0) not reticulate; (1) reticulate  
 Character 2.....Punctures adjacent to sutural margin: (0) more than 20 (Fig. 94); (1) less than 20 (Fig. 76).  
 Character 3.....Pronotal shape: (0) not oblong; (1) oblong  
 Character 4.....Pronotal tubercle: (0) not angular; (1) angular (Fig. 61)  
 Character 5.....Elytral punctures: (0) not binodal; (1) binodal (Figs, 67, 68)  
 Character 6.....Elytral slope: (0) not sharply bent (Fig. 78) (1) sharply bent (Fig. 72)  
 Character 7.....Epipleural angle: (0) absent; (1) present (Fig. 66)  
 Character 8.....Epipleural margin: (0) not serrulate; (1) serrulate  
 Character 9.....Elytral disc: (0) not fasciate; (1) fasciate (Fig. 82)  
 Character 10.....Palpomeres: (0) not securiform; (1) securiform (Fig. 58)  
 Character 11.....Funicular antennomeres: (0) much longer than wide (Fig. 13); (1) subquadrate (Fig. 60)  
 Character 12.....Unguis: (0) with denticle; (1) without denticle (Fig. 64)  
 Character 13.....Eyes: (0) less than 0.5 mm (1) more than 0,5 mm (Fig. 57)  
 Character 14.....Number of antennomeres: (0) 11; (1) 10  
 Character 15.....Elytral 2° setae: (0) present on elytral disc (Fig. 66); (1) not present on elytral disc  
 Character 16.....Elytral fascia shape: (0) not angular; (1) angular  
 Character 17.....Elytral fascia size: (0) large, subquadrate (Fig. 79); (1) small, narrow (Fig. 76)

### Repository of Specimens

To maintain consistency with my previous works, I rely on collection codens as listed in ARNETT Jr. et al. (1993) with modifications to accommodate changes in institutional names. New codons have been implemented for collections not noted in the aforementioned publication.

- ACMT ..... American Coleoptera Museum, 8734 Paisano Pass, San Antonio, Texas 78255, United States of America (James E. Wappes).
- CASC..... California Academy of Sciences, Department of Entomology, Golden Gate Park, San Francisco, California 94118, United States of America (Christopher Grinter).
- CNCI ..... Agriculture-Food Canada, K.W. Neatby Building, 960 Carling Avenue, Ottawa, K1A 0C6, Canada (Serge Laplante).
- 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).
- FSCA ..... Florida State Collection of Arthropods, Division of Plant Industry, Florida Department of Agriculture, P.O. Box 147100, Gainesville, Florida 32614-7100. United States of America (Paul E. Skelley).
- IAVH..... Instituto de Investigación de Recursos Biológicos Alexander von Humbolt, Carrera 7 No. 35-20, Bogotá D.C., Colombia (Claudia Alejandra Medina).
- IMLA..... Fundación Miguel Lillo, Instituto de Entomología, Miguel Lillo 251, Entomología, 4000 San Miguel de Tucumán, Argentina (Emilia Constanza Perez).
- JEBC..... Juan Enrique Barriga Collection, Curico, Chile.
- MLPA ..... Universidad Nacional de la Plata, Facultad de Ciencias Naturales Y Museo, Division Entomología, 1900 Paseo del Bosque, La Plata, Argentina (Liliana A. Fernández).
- MNHN..... Museum d'Histoire Naturelle, Entomologie, 45 bis, Rue de Buffon, Paris (Ve), France (Antoine Mantilleri).
- MNKM ..... Museo Historia Natural, Noel Kempff Mercado, Santa Cruz de la Sierra, Bolivia (Julieta Ledezma).
- MNNC ..... Museo Nacional de Historia Natural, Área de Entomología, Casilla 787, Santiago (correo central), Chile (Mario Enrique Elgueta Donoso).
- NHMB ..... Naturhistorisches Museum Basel, Augustinergasse 2, Postfach 1048, CH 4001 Basel, Switzerland (Michel Brancucci).
- QCAZ ..... Pontificia Universidad Católica del Ecuador, Departamento de Biología, Avenida 12 de Octubre, entre Patria y Beintilla, Apartado 17-01-2184, Quito, Ecuador (Cliffort Keil).
- RGCG ..... Roland Gerstmeier Collection, Technische Universität München, Lehrstuhl für Zoologie AG Entomologie, Hans-Carl-von-Carlowitz-Platz 2 85354 Freising, Germany.

- SDEI.....Deutsches Entomologisches Institute, Leibniz-Zentrum für Agrarland-  
schafts- und Landnutzungsforschung e. V. Ebersvalde Str. 84, D-15374  
Müncheberg, Germany (Kostiantyn Nadein).
- UMCE .....Universidad Metropolitana de Ciencias de la Educación, Instituto de la  
Entomología, Avenida José Pedro Alessandri 774, Ñuñoa, Santiago, Chile  
(Jaime Solervicens A).
- USNM .....United States National Museum of Natural History, Smithsonian  
Institution, Department of Entomology Laboratory, National Museum of  
Natural History MRC 165, PO Box 37012, Washington, D.C. 20013-7012,  
United States of America (Floyd W. Shockley).
- 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).
- WOPC .....Weston Opitz Collection, Florida State Collection of Arthropods, Division  
of Plant Industry/Entomology, Florida Department of Agriculture  
Consumer Services, Gainesville, Florida 32614-7100, United States of  
America.

### Natural History

Morphological observations involving mouthparts and general body structure suggest that these checkered beetles are predatory. Moreover, data from collection labels indicate that several specimens were reared from twigs of a hardwood species, which invites the speculation that they are lignicolous species, as are other Cleridae with similar morphology. Checkered beetles of *Amphelissus meieri* were collected among beetle specimens of *Xylothea meieri* REITT (Anobiidae) found on a tree of *Caesalpinia coriaria* (JACQ.) WILLD. (Fabaceae). Rearing records are as follows: Specimens of *Labasiella eugenia* were reared from dry stems of a Chilean plant called "lechero" [*Euphorbia lactiflua* PHIL. (Euphorbiaceae)] and those of *L. transversalis* from the stems of the turquoise puya [*Puya terteroniana* MAZ. (Bromeliaceae)]. Specimens of *L. bimaculata* were captured beneath a cut trunk of a species of *Nothofagus* BLUME (Nothofagaceae) and Jim McClerin collected two specimens of *Labasiella macclerini* by beating foliage of a species of bamboo (Poaceae). Most specimens were collected during the late and early months, at altitudes that range from 5 to 2,000 m.

### Key to genera of the *Labasiella* complex

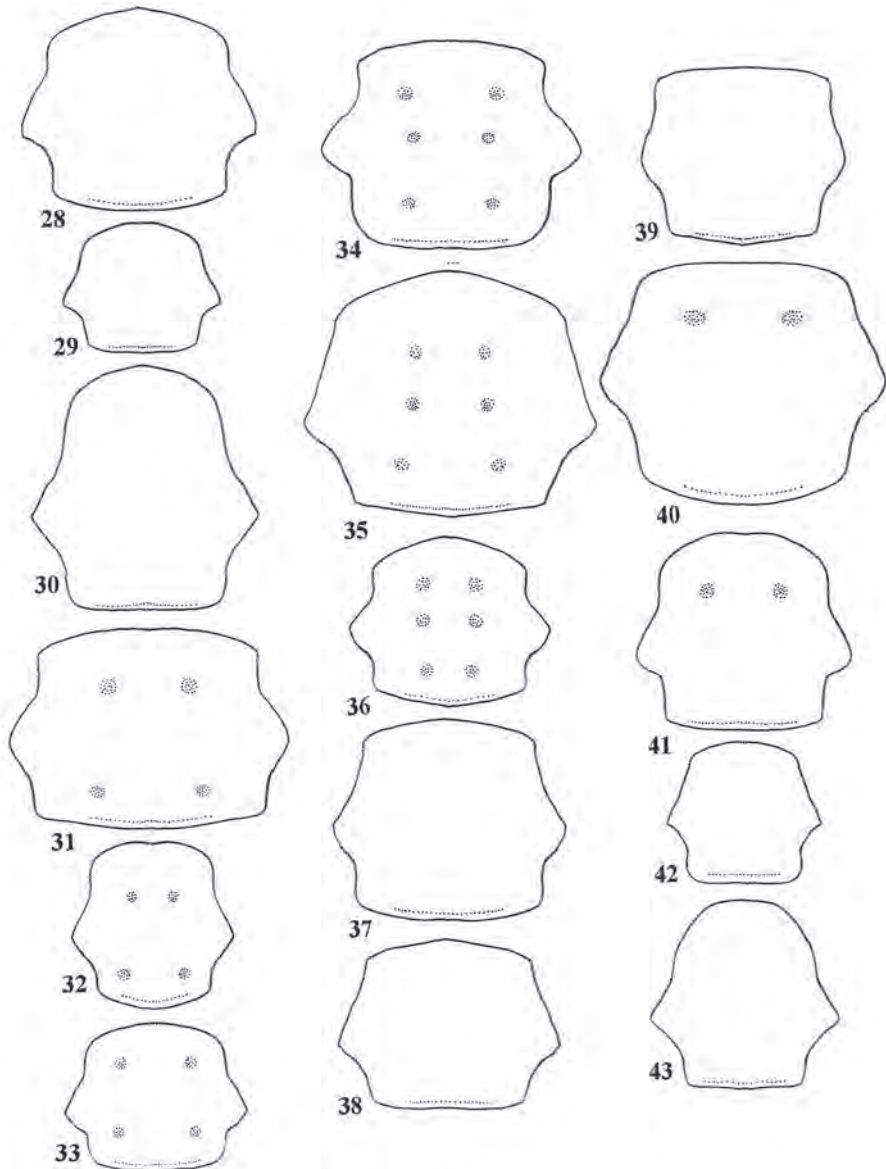
- 1 Antenna comprised of 10 antennomeres.....*Amphelissus* OPITZ
- Antenna comprised of 11 antennomeres.....2
- 2 Epipleuron with epipleural angle (Fig. 66).....3
- Epipleuron without epipleural angle.....4
- 3 Terminal maxillary and labial palpomeres triangular ..... *Oncochelyna* OPITZ
- Terminal maxillary and labial palpomeres rectangular .....*Macilentus* OPITZ
- 4 Pronotal sides coarsely sculptured.....5

- Pronotal sides not coarsely sculptured.....6
- 5 Coarse sculpturing on pronotal sides round..... *Inconnexus* OPITZ
- Coarse sculpturing on pronotal sides oblong.....*Silvanoclerus* OPITZ
- 6 Ungues with denticles .....*Pelmatus* OPITZ
- Ungues without denticles ..... *Labasiella* SPINOLA

**Table 1.** Character matrix of 18 adult morphological characters of *Pelonium*, *Muisca* (outgroups), *Amphelissus*, *Inconnexus*, *Macilentus*, *Oncochelyna*, *Silvanoclerus*, *Pelmatus*, *Labasiella eugeniae* group, *L. boyaca* group, and *L. varipennis* group.

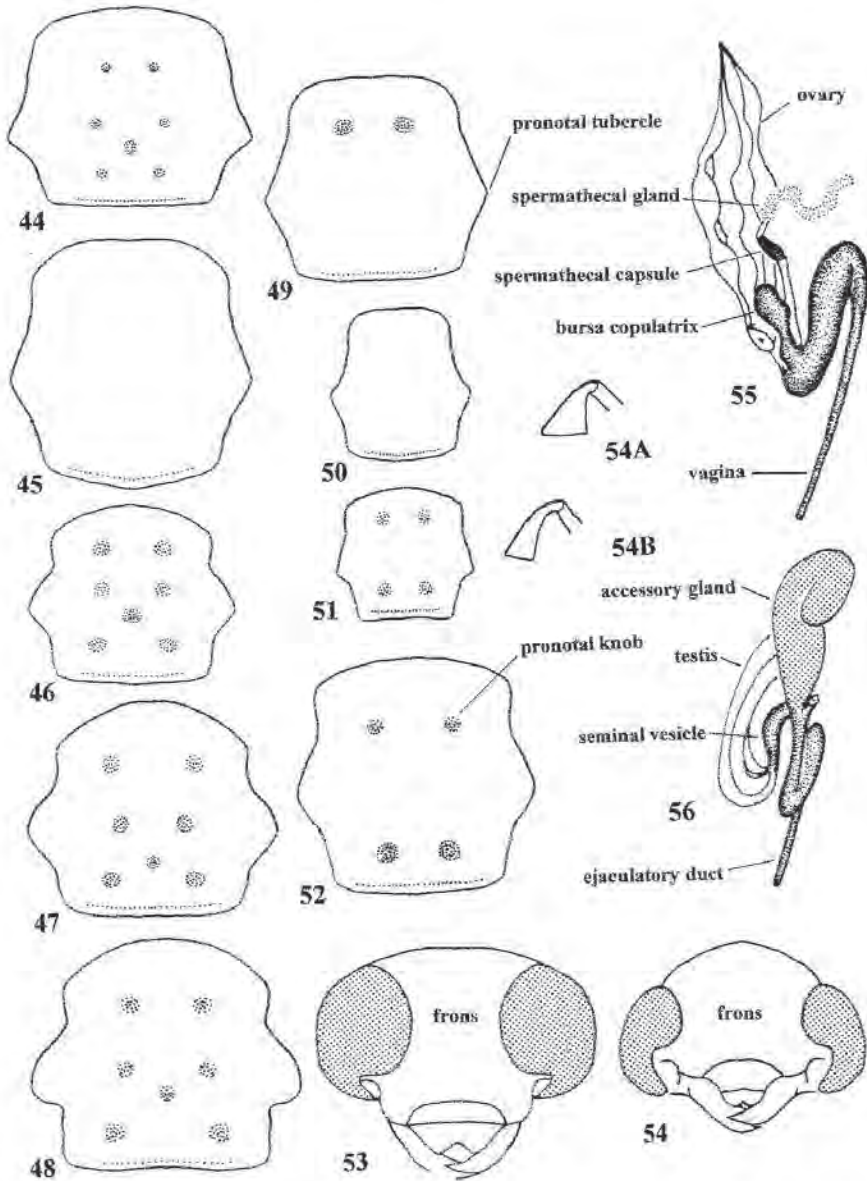
Taxa	Characters																	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
<i>Pelonium</i>	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
<i>Muisca</i>	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Amphelissus</i>	0	1	0	0	1	1	1	1	1	0	0	0	1	1	1	0	0	0
<i>Inconnexus</i>	0	1	0	0	1	1	1	1	1	0	1	0	0	1	0	0	0	0
<i>Macilentus</i>	0	1	0	0	1	1	1	1	1	0	0	0	1	0	0	0	0	0
<i>Oncochelyna</i>	0	1	0	0	1	1	1	1	1	0	1	0	1	0	0	0	0	0
<i>Silvanoclerus</i>	0	1	0	0	1	1	1	1	1	0	1	0	0	0	0	0	0	0
<i>Pelmatus</i>	0	1	0	0	1	1	0	0	0	1	0	1	0	0	0	0	0	0
<i>L. eugeniae</i> group	0	1	0	0	1	1	0	0	0	1	0	0	1	0	0	1	0	0
<i>L. boyaca</i> group	0	1	0	0	1	1	0	0	0	1	0	0	1	0	0	0	1	1
<i>L. varipennis</i> group	0	1	0	0	1	1	0	0	0	1	0	0	1	0	0	0	1	0





**Figs 28-43:** Pronota. (28) *Amphelissus goniodus*. (29) *A. meieri*. (30) *Inconnexus lunarus*. (31) *Labasiella lata*. (32) *L. labaticollis*. (33) *L. machupicchu*. (34) *L. santa*. (35) *L. stangei*. (36) *L. tucumanensis*. (37) *L. varipennis*. (38) *Pelmatus barri*. (39) *P. bicolor*. (40) *Macilentus micidus*. (41) *Oncochelyna barrigai*. (42) *O. tuberculata*. (43) *Silvanoclerus dilatus*.





**Figs 44-56:** Various organs. 44-52 Pronota. (44) *Silvanoclerus beechi*. (45) *Labasiella bimaculate*. (46) *L. boyaca*. (47) *L. Cochabamba*. (48) *L. mcclarini*. (49) *L. eugeniae*. (50) *L. robles*. (51) *L. solervicensi*. (52) *L. transversalis*. 53-54 Heads. (53) *Inconnexus lunarus*. (54) *Silvanoclerus dilatus*. 54A-54B Generalized shape of the last maxillary palpomeres. (54A) Securiform. (54B) subsecuriform. 55-56 Mesodermal reproductive organs of *Amphelissus meieri*. (55) Female. (56) Male.

## Taxonomy

### Genus *Amphelissus* OPITZ 2017a

**Type species:** *Pelonium meieri* SCHENKLING 1900: 408. By original designation.

**Diagnosis:** Within the *Labasiella* complex, only members of *Amphelissus* have the antenna comprised of 10 antennomeres.

**Description:** This genus was adequately described in OPITZ (2017a). Additional characteristics are: Pronotal sides with reticulated sculpturing, epipleural angle present, epipleural margin serrulate, elytral 2° setae prominent, and elytral posterior slope acute (Fig. 65).

### Key to species of *Amphelissus* OPITZ

- 1 Elytral disc castaneous, with two faint infuscations (Colombia).....  
.....*Amphelissus meieri* (SCHENKLING) (Fig. 73)
- Elytral disc castaneous, without infuscations (Brazil).....  
.....*Amphelissus goniodus* OPITZ nov.sp. (Fig. 72)

### *Amphelissus goniodus* OPITZ nov.sp. (Figs 1, 28, 70, 72)

**Holotype:** ♂. BRAZIL: Amazonas, Reserva Ducke, 26 km NE Manaus, 18-IV-1978, J. Arias & N. Penny. A second label reads: C. D. C. Light trap (CASC).

**Diagnosis:** Members of this species do not have the elytral disc infuscated as is the case in members of *A. meieri*.

**Description:** Size: Length 4.5 mm; width 1.5 mm. Form: As in Fig. 72. Integument: Cranium and thorax dark castaneous; elytra and other integumental parts castaneous. Head: Cranium coarsely punctate, antennal funicular antennomeres subquadrate (Fig. 1), capitulum lax, antennomeres 8 and 9 triangular, antennomere 10 oblong; eyes large, frons as wide as width of eyes (EW/FW 22/22); last maxillary and labial palpomere securiform (Fig. 54A). Thorax: Pronotum (Fig. 28) with angular tubercle at sides, disc coarsely punctate, without discal knobs; elytral asetiferous punctures striate, punctures extend to elytral apex, epipleural margin serrate near elytral apex. Abdomen: Pygidium scutiform.

**Distribution** (Fig. 70): This species is known from Brazil.

**Etymology:** The trivial name, goniodus, is Greek noun that stems from gonia (= angle). I refer to the epipleural angle (Fig. 66) present in the members of this species.

### *Amphelissus meieri* (SCHENKLING 1900) (Figs 2, 29, 55-58, 61, 62, 65-68, 70, 73, 97)

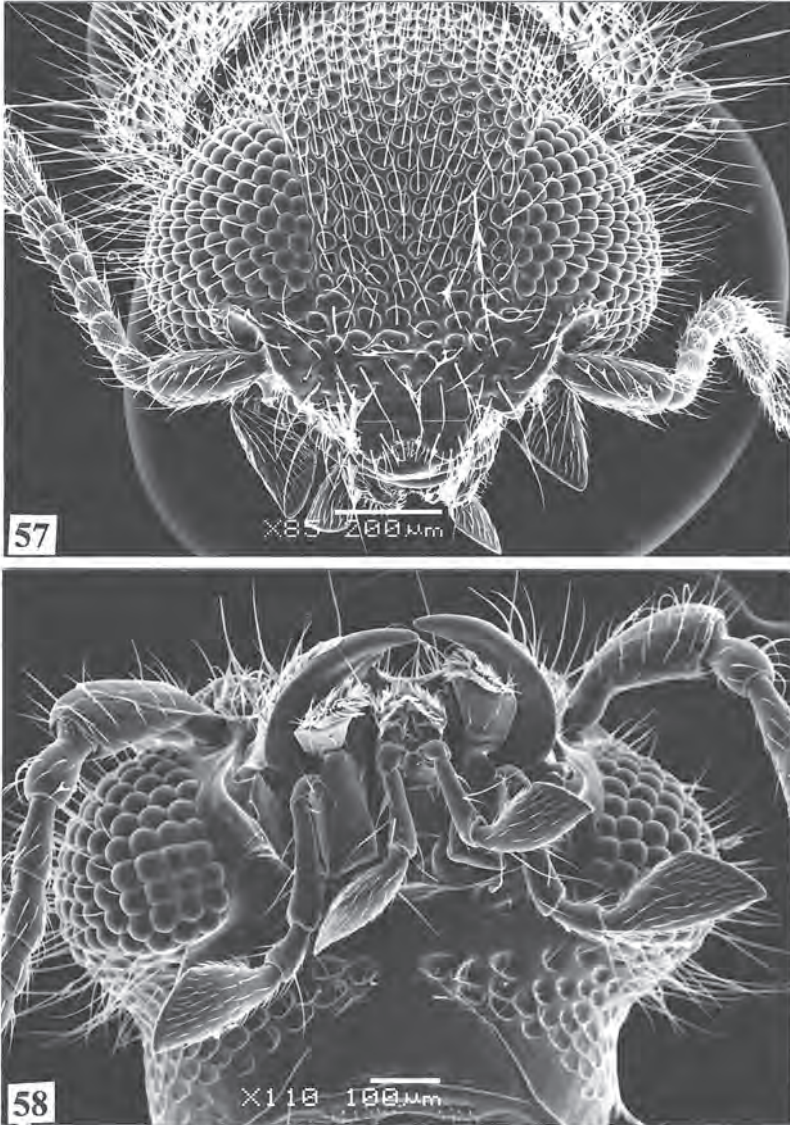
*Amphelissus meieri* (SCHENKLING) 1900: 408.

**Type material:** Holotype. ♀. Herein restricted to Colombia, Departamento de Magdalena (SDEI).

SCHENKLING 1910: 128 (*Galeruclerus*). CORPORAAL 1941: 361 (*Galeruclerus*); 1950: 282 (*Cregya*). OPITZ 2017a: 35.

**Diagnosis:** This is the only species within the *Labasiella* complex that has the castaneous elytral disc slightly infuscated at the middle, just anterior the elytral apex.

**Redescription:** Size: Length 4.0 mm; width 1.5 mm. Form: As in Fig. 73.



**Figs 57-58:** Head and mouthparts of *Amphilissus meieri*. (57) Head, frontal view. (58) Mouthparts.

**Integument:** Castaneous, except elytral disc with infuscation at middle and just in front of elytral apex. **Head:** Cranium (Figs 57, 59) coarsely punctate, antennal funicular antennomeres subfiliform (Figs 2, 60), capitulum lax, antennomeres 8 and 9 triangular, antennomere 10 ovate; eyes slightly narrower than width of frons (EW/FW 15/20); last maxillary and labial palpomere securiform. **Thorax:** Pronotum (Fig. 29) with angular tubercle at sides, disc coarsely punctate, without discal knobs; elytral asetiferous punctures arranged

into 10 punctiform striae (Figs 63, 65-68), punctation binodal, punctation extends to elytral apex, epipleural margin serrulate in posterior fourth; legs, ungues as in Fig. 64. **Abdomen:** Aedeagus (Fig. 97), distal region of phallobase slightly lobed, tegmen very reduced, submembranous, phallobasic struts confluent with phallobasic apodeme, phallobasic rod spatulate, bifid distally; phallic plates broad, phallic apex small triangular. **Male Mesodermal Reproductive Organs:** Testes comprised of 4 follicles; one pair of accessory glands (Fig. 56). **Female Mesodermal Reproductive Organs:** Spermathecal capsule slightly sclerotized, spermathecal gland attached to apex of spermatheca; with saccular bursa copulatrix (Fig. 55).

**Variation:** The available specimens are quite homogeneous.

**Natural history:** Specimens were collected from February to May; from 5 to 30 m. According to label data, these checkered beetles have been associated with the plant *Caesalpinia coriaria* (JACQ.) WILLD. (Fabaceae) and the beetle *Xylothea meieri* REITT. (Anobiidae).

**Distribution** (Fig. 70): In addition to the holotype, I examined 16 specimens from: **Colombia:** Departamento de Magdalena, 12 miles W Santa Marta, 28-IV-1973, Campbell & Howden; Departamento de Magdalena, Tayrona Palangana, 11°20'N 74°2'W, 21-III-5-IV-2001, 30 m, Malaise, R. Henriquez; Departamento de Magdalena, PNN Tayrona Gairaca, 5-21-III-2001, 5 m, Malaise, R. Henriquez; Departamento de Magdalena, 12 mi W Santa Marta, 16-V-1973, Campbell & Howden. **Venezuela:** No other information available. Specimens are deposited in CNCI; IAVH, SDEI, and WOPC.

### **Genus *Inconnexus* OPITZ, 2017a**

**Type species:** *Inconnexus lunarus* OPITZ 2017a: 58. By original designation.

**Diagnosis:** Specimens of this genus resemble superficially those of *Silvanoclerus* OPITZ, but *Inconnexus* specimens differ by having much larger eyes (compare Figs 53, 54).

**Description:** This genus was adequately described and illustrated by OPITZ (2017a). Additional characteristics are: Pronotal sides with reticular sculpturing, epipleural angle reduced, elytral 2° setae prominent, and elytral posterior slope acute.

### ***Inconnexus lunarus* OPITZ, 2017a (Figs 3, 30, 53, 70, 74)**

*Inconnexus lunarus* OPITZ 2017a: 59.

**Holotype:** ♂. (Brazil), BRÉSIL (Minas), Sertão de Diamantina, FAZ. DAS MELANCIAS, E. GOUNELLE, 10 11 1902 (MNHN). **Paratypes:** Thirteen. **Brazil:** Estado do Minas Gerais, Sertão de Diamantina, Faz. Das Malancias, E. Gounelle, 10-11-1902 (MNHN, 5; WOPC, 3); Sierra de Diamantina (MNHN, 2); Estado do Pernambuco, Serra de Comunati, E. Gounelle, 12-3-1893 (WOPC, 1); Estado do Minas Gerais, Matusinhos, E. Gounelle, 3-4-1885 (MNHN, 1); Mineiro Goyaz (MNHN, 1).

**Diagnosis:** The larger eyes and more prominent posterior curvature (OPITZ, 2006: 32) will conveniently separate the members of this species from the superficially similar specimens of *Silvanoclerus dilatatus*.

**Description:** This species was adequately described and illustrated by OPITZ (2017a)

Additional characteristics involve: Antenna as in Fig. 3, pronotum as in Fig. 30, eyes large,

elytral asetiferous punctures striate, epipleural margin serrulate along posterior 1/4<sup>th</sup> of epipleural margin and habitus as in Fig. 74, and aedeagus as in Fig. 98.

Variation: Size: Length 4.0-6.0 mm; width 1.8-2.0 mm.

Distribution (Fig. 70): This species is known only from Brazil.

### Genus *Labasiella* SPINOLA, 1849

CORPORAAL 1950: 307 (Cregya). OPITZ 2017a: 62.

Type species: *Labasiella varipennis* SPINOLA 1849: 409. By original designation.

Junior synonym: *Exochonotus* BARR 1980: 179. Type species: *Labasiella varipennis* SPINOLA, nov.syn.

Diagnosis: The tubercles on the pronotal disc are found in *Labasiella* SPINOLA and *Oncochelyna* OPITZ. *Labasiella* specimens show a subsecuriform (Fig. 54B) terminal maxillary and labial palpomere. These structures are strongly securiform in *Oncochelyna*.

Description: This genus was adequately described in OPITZ (2017a: 62). Additional characteristics are: Pronotal sides reticulated and elytral posterior slope gradual (OPITZ 2017: 111).

### Key to the species of *Labasiella* SPINOLA

- 1 Elytral disc without angular fascia .....2
- Elytral disc with angular fascia .....6
- 2 Elytra bicolorous .....3
- Elytra tricolorous.....5
- 3 Elytral posterior 1/2 completely dark brown (Chile).....4
- .....*Labasiella robles* OPITZ, nov.sp. (Fig. 80)
- Elytral posterior 1/2 not completely dark brown .....4
- 4 Elytral anterior dark fascia reaches sutural margin (Chile) .....4
- .....*Labasiella eugeniae* (SOLERVICENS) (Fig. 79)
- Elytral anterior dark fascia does not reach sutural margin (Chile) .....4
- .....*Labasiella bimaculata* (SOLERVICENS) (Fig. 75)
- 5 Epipleural margin near elytral apex serrulate (Chile).....5
- .....*Labasiella solervicensi* OPITZ, nov.sp. (Fig. 81)
- Epipleural margin near elytral apex not serrulate (Chile).....5
- .....*Labasiella transversalis* (SOLERVICENS) (Fig. 82)
- 6 Elytral asetiferous punctures not striate.....7
- Elytral asetiferous punctures striate.....9
- 7 Elytral apical 1/5<sup>th</sup> devoid of asetiferous punctation (Colombia).....7
- .....*Labasiella boyaca* OPITZ, nov.sp. (Fig. 76)
- Elytral apical 1/5<sup>th</sup> with asetiferous punctation.....8
- 8 Capitular length equal to combined length of funicular antennomeres; elytral testaceous angular fasciae not contiguous near sutural margin (Bolivia) .....7
- .....*Labasiella cochabamba* OPITZ, nov.sp. (Fig. 77)
- Capitular length shorter than combined length of funicular antennomeres elytral testaceous angular fasciae contiguous near sutural margin (Ecuador).....7
- .....*Labasiella mcclarini* OPITZ, nov.sp. (Fig. 78)
- 9 Color of elytral disc unicolorous, dark brown (Chile).....8
- .....*Labasiella varipennis* SPINOLA (Fig. 89)



- Color of elytral disc bicolored.....10
- 10 Elytral antemedial angular fascia fragmented .....11
- Elytral antemedial angular fascia not fragmented .....12
- 11 Funicular antennomeres 3-5 black (Peru).....*Labasiella machupicchu* OPITZ, nov.sp. (Fig. 85)
- Funicular antennomeres 3-5 not black (Peru).....*Labasiella lobaticollis* (PIC) (Fig. 84)
- 12 Antemedial angular fascia broadly contiguous with humeral infuscation (Peru) .....*Labasiella stangei* OPITZ, nov.sp. (Fig. 87)
- Antemedial angular fascia not broadly contiguous with humeral infuscation .....13
- 13 Ten elytral striae (Argentina) .....*Labasiella tucumanensis* OPITZ, nov.sp. (Fig. 88)
- Eleven elytral striae .....14
- 14 Pronotum with 4 knobs; length ratio capitulum/funicle (40/55) (Argentina) .....*Labasiella lata* (SOLERVICENS) (Fig. 83)
- Pronotum with 6 knobs; length ratio capitulum/funicle not as above (Bolivia).....*Labasiella santa* OPITZ, nov.sp. (Fig. 86)

### ***Labasiella boyaca* species group**

The *boyaca* species group is characterized by having irregular striae of asetiferous punctures on the elytral disc; there are many punctures that are linearly misaligned. Also, there are a few interstitial spaces that are wider than the width of the punctures and the elytral 2° setae are prominent. There are 4 species in this *Labasiella* species group. Geographically, they are found in Colombia, Ecuador, Bolivia, and Chile.

### ***Labasiella bimaculata* (SOLERVICENS, 2003) (Figs 19, 45, 71, 75)**

*Exochonotus bimaculatus* SOLERVICENS 2003: 48.

H o l o t y p e : ♀. Chile, Talca, Altos de Vilches, 4/2/1997, F. Ramirez (MNNC). A second label reads: 1600 m. A third label reads: bajo corteza tronco *Nothofagus*. Holotype examined.

D i a g n o s i s : The punctiform brown spots on the basal half of the elytral disc will distinguish the members of this species from congeners.

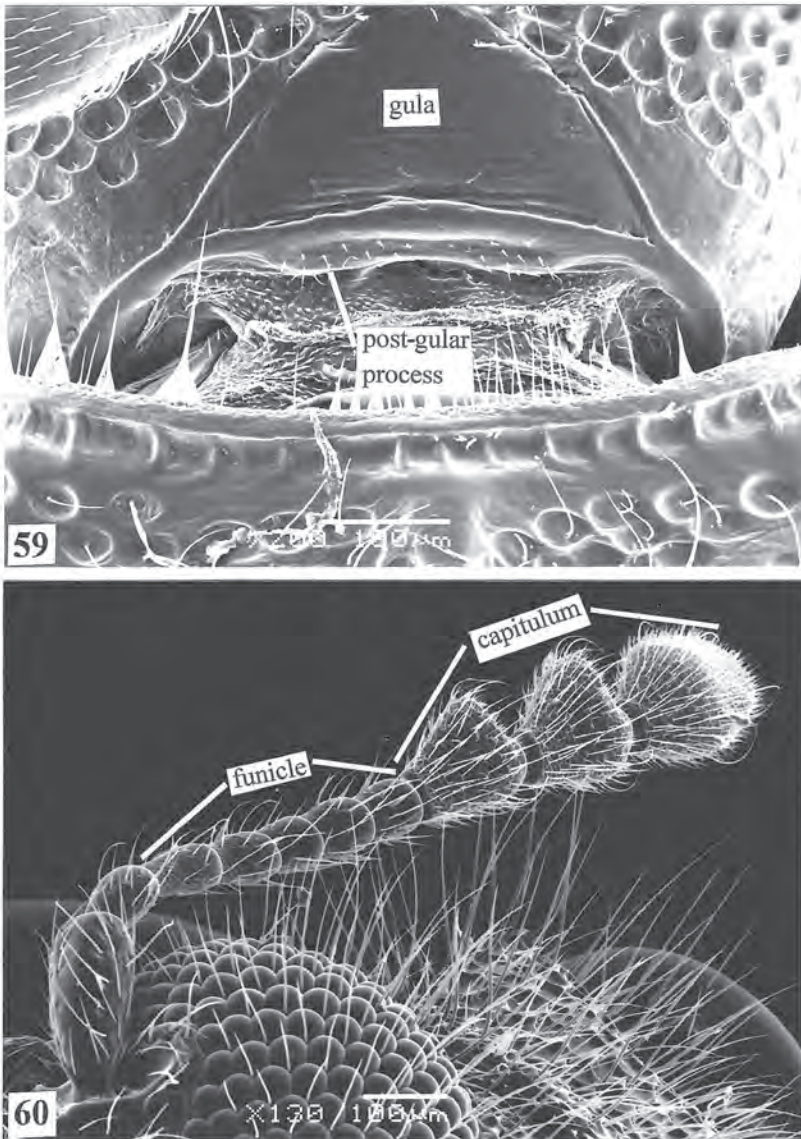
D e s c r i p t i o n : This species was adequately described and illustrated by SOLERVICENS (2003: 48). Additional characteristics involve: Antenna as in Fig. 19, pronotum as in Fig. 45, elytral asetiferous punctuation substriate, epipleural margin not serrulate near elytral apex, and habitus as in Fig. 75.

N a t u r a l h i s t o r y : The holotype was collected beneath a cut trunk of a species of *Nothofagus* BLUME (Nothofagaceae), during February, at 1,600 m.

D i s t r i b u t i o n (Fig. 71): Known only from Chile.

### ***Labasiella boyaca* OPITZ nov.sp. (Figs 20, 46, 71, 76, 99)**

H o l o t y p e : ♂. Colombia: Boyaca, SFF Iguaque, Qda. Los Mudos, Malaise, 22-I-8-II-2003, P. Reina (FSCA). P a r a t y p e s : 3 specimens. Colombia: Departamento de Boyacá, SFF Iguaque, Cabaña Mamarramos, 5°25'N 73°27'W, 23-V-2000, P. Reina (WOPC, 1); Departamento de Cundinamarca, Bogotá, Chico, 2-I-1959, J. F. G. Clarke (USNM, 1). Venezuela: Estado de Merida, Tabay La Mucuy, Send. Lag. Suero, 17-VI-31-VII-1989, Malaise trap, S. & J. Peck (CMNC, 1).



**Figs 59-60:** Head and antenna of *Amphilissus meieri*. (59) Head, ventral view. (60) Antenna.

**Diagnosis:** The members of this species superficially resemble those of *L. cochabamba*, but in *L. boyaca* specimens the elytral punctures do not extend to the elytral apex.

**Description:** Size: Length 5.0 mm; width 1.7 mm. Form: As in Fig. 76. Integument: Cranium and thorax dark castaneous; antenna brown; mouthparts mostly testaceous, terminal maxillary and labial palpomeres and mandibles brown; legs mostly



brown, proximal region of prothoracic femur testaceous, distal region of profemur, remaining femora and all tibiae brown, tarsi testaceous; pterothorax brown; elytra mostly castaneous, with posthumeral and postmedial angular fasciae. Head: Cranium coarsely punctate, antennal funicular antennomeres subfiliform (Fig. 20), capitulum lax, antennomeres 9 and 10 triangular, antennomere 11 suboval; eyes small, frons wide (EW/FW 14/35); last maxillary and labial palpomere subsecuriform (Fig. 54B). Thorax: Pronotum (Fig. 46) with angular tubercle at sides, disc coarsely punctate, with 7 small knobs; elytral asetiferous punctures substriate, punctures end at posterior 3/4<sup>th</sup>, epipleural margin not serrate near elytral apex. Abdomen: Aedeagus (Fig. 99), distal region of phallobase slightly lobed, tegmen very reduced, submembranous, phallobasic struts confluent with phallobasic apodeme, phallobasic rod long; phallic plates broad, phallic apex large triangular.

**V a r i a t i o n** : Size: Length 4.0-5.0 mm; width 1.5-1.7 mm. The paratype has a testaceous elytral apex.

**D i s t r i b u t i o n** (Fig. 71): This species is known from Colombia and Venezuela.

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

***Labasiella cochabamba* OPITZ nov.sp. (Figs 21, 47, 71, 77)**

**H o l o t y p e** : ♀. Bolivia, Cochabamba, Germain (MNHN). **P a r a t y p e s** : 3 specimens.

**B o l i v i a** : Departamento de Cochabamba, Cochabamba (MNHN, 1; WOPC, 1). **P e r u** : Departamento de Amazonas, 5 km N Pomacocha, on road to Rioja, 7-8-X-1964, 2,000 m, P. C. Hutchison & J. K. Wright (CASC, 1).

**D i a g n o s i s** : The members of this species superficially resemble those of *L. boyaca*, but in *L. cochabamba* specimens the elytral punctures extend to the elytral apex.

**D e s c r i p t i o n** : Size: Length 5.0 mm; width 2.0 mm. Form: As in Fig. 77. Integument: Cranium and thorax dark castaneous; antenna brown; mouthparts mostly testaceous, terminal maxillary and labial palpomeres and mandibles brown; legs mostly brown, proximal region of prothoracic femur testaceous, distal region of profemur, remaining femora and all tibiae brown, tarsi testaceous; pterothorax brown; elytra mostly castaneous, with posthumeral and postmedial angular fasciae, apex testaceous. Head: Cranium coarsely punctate, antennal funicular antennomeres subfiliform (Fig. 21), capitulum lax, antennomeres 9 and 10 triangular, antennomere 11 globose; eyes small, frons wide (EW/FW 15/40); last maxillary and labial palpomere subsecuriform. Thorax: Pronotum (Fig. 47) with angular tubercle at sides, disc coarsely punctate, with 7 small knobs; elytral asetiferous punctures substriate, punctures extend sparsely to elytral apex, epipleural margin not serrulate near elytral apex. Abdomen: Pygidium scutiform.

**V a r i a t i o n** : Size: Length 3.8-6.0 mm; width 1.3-2.3 mm. Except for body size the available specimens are quite homogeneous.

**D i s t r i b u t i o n** (Fig. 71): This species is known from Peru and Bolivia.

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

***Labasiella mcclarini* OPITZ nov.sp. (Figs 23, 48, 71, 78, 100)**

**H o l o t y p e :** ♀. Ecuador: Provincia de Pichincha, Pichincha, 10-XII-2016, Jim McClarin (QCAZ). **P a r a t y p e s :** 3 specimens. One beetle from the same locality as the holotype (CSCA, 1). **Ecuador:** Provincia de Cotapaxi, La Otanga, near San Francisco de las Pampas, 6,500 feet, 17-V-1993, at light, J. J. Morrone (WOPC, 1). **Bolivia:** Departamento de Santa Cruz, El Abra, S-18.11848/W63.80085, Dec. 9, 2009, A. J. Gilbert, N. J. Smith & J. Aramajo Bejarano (WOPC, 1).

**D i a g n o s i s :** The members of this species resemble superficially those of *L. cochabamba*, but in *L. mcclarini* specimens the 2 white angular fascia connect along the sutural margin. Also, the capitulum is proportionally shorter in the members of *L. mcclarini*, and there are very few asetiferous punctures that extend to the elytral apex.

**D e s c r i p t i o n :** Size: Length 6.5 mm; width 3.2 mm. Form: As in Fig. 78. Integument: Cranium and thorax dark castaneous; antenna brown; mouthparts mostly testaceous, terminal maxillary and labial palpomeres and mandibles brown; legs mostly brown, proximal region of prothoracic femur testaceous, distal region of profemur, other femora and all tibiae and tarsi brown; pterothorax brown; elytra mostly castaneous, with basal and medial angular yellow fasciae contiguous along sutural margin, apex testaceous. Head: Cranium coarsely punctate, antennal funicular antennomeres subfiliform (Fig. 23), capitulum lax, antennomeres 9 and 10 triangular, antennomere 11 globose; eyes small, frons wide (EW/FW 15/40); last maxillary and labial palpomere subsecuriform. Thorax: Pronotum (Fig. 48) with angular tubercle at sides, disc coarsely punctate, with 7 small knobs; elytral asetiferous punctures substrate, sparse punctures extends to elytral apex, epipleural margin not serrulate near elytral apex. Abdomen: Pygidium scutiform; aedeagus as in Fig. 100.

**V a r i a t i o n :** Size: Length 4.0-6.5 mm; width 1.5-3.2 mm.

**N a t u r a l h i s t o r y :** Jim McClarin collected the holotype and one paratype by beating bamboo foliage at an altitude between 2,050 to 2,230 m. The beetle from Bolivia was collected at 2,040 m.

**D i s t r i b u t i o n** (Fig. 71): This species is known from Bolivia and Ecuador.

**E t y m o l o g y :** The specific epithet, mcclarini, is a dedicative patronymic. It honors Jim McClarin for his dedication to the collection of insects.

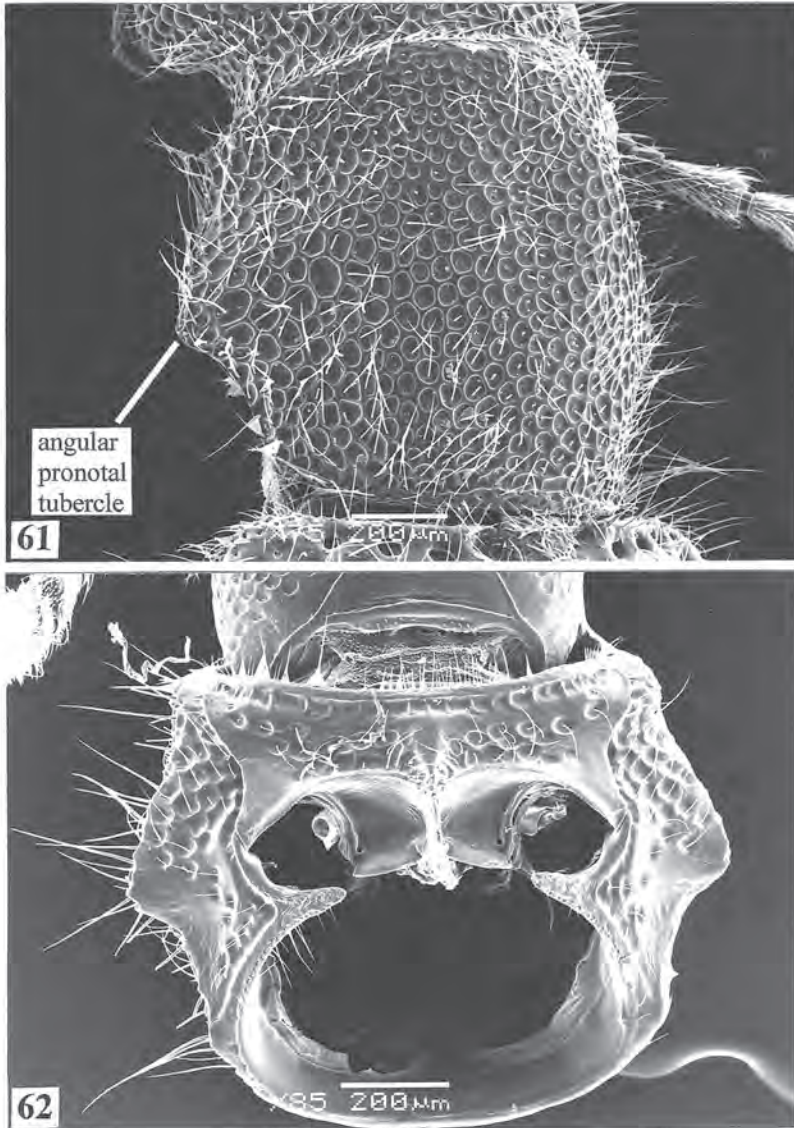
***Labasiella eugenia* species group**

Specimens of this *Labasiella* species group tend to show a more slender hindbody, and elytral coloration is organized into rectangulate markings. At mid-elytron there is a broad linear testaceous fascia that may or may not traverse the sutural margins. Also, the elytral 2° setae are not prominent. There are 4 species in this species group that to date are known only from Chile.

***Labasiella eugeniae* (SOLERVICENS, 1998) (Figs 22, 49, 71, 79, 103)**

*Exochonotus eugeniae* SOLERVICENS 1998: 82.

**H o l o t y p e :** ♂. Parque Nacional Pan de Azúcar, Provincia de Chañaral, III Región, Chile (MNNC). A second label reads: En troncos secos de *Euphorbia lactiflua*. A third label reads: Nacen en laboratorio Nov. 1997. Allotype and 15 paratypes from the same locality as the holotype (MNNC). SOLERVICENS, 2000: 37 (*Exochonotus*); 2005: 51 (*Exochonotus*).



**Figs 61-62:** Pronotum and prothoracic venter of *Amphelissus meieri*. (61) Pronotum. (62) Prothoracic venter.

**Diagnosis:** The large capitulum (Fig. 22) will distinguish the members of this species from congeners. Additional characteristics involve: Elytral asetiferous punctures striate, epipleural margin serrulate near elytral apex.

**Description:** This species was adequately described and illustrated by SOLERVICENS (1998: 82). Additional information involves: Antenna as in Fig 22,

pronotum as in Fig. 49 habitus as in Fig. 79, and aedeagus as in Fig. 103.

**Natural history:** The type series was reared in the laboratory from a dry stem of a Chilean plant called "lechero" [*Euphorbia lactiflua* PHIL. (Euphorbiaceae)].

**Distribution** (Fig. 71): Known only from Chile.

***Labasiella robles* OPITZ nov.sp. (Figs 25, 50, 71, 80)**

**Holotype:** ♀. CHILE: Saddle Cerro Robles, P. Santiago, 6300', XII-24-1967. A second label reads: Collectors: L. & C. W. O'Brien (FSCA).

**Diagnosis:** Specimens of this species superficially resemble those of *L. transversalis*, from which they differ by absence of pronotal knobs and by presence of serrations on the posterior 1/3<sup>rd</sup> of the epipleural margin.

**Description:** Size: Length 4.0 mm; width 1.4 mm. Form: As in Fig. 80. Integument: Mostly testaceous; cranium and pronotum very light castaneous; elytral disc tricolorous, basal 1/3<sup>rd</sup> testaceous, then with dark brown triangular patch, followed by broad testaceous transverse fascia, distal 1/3<sup>rd</sup> dark brown; abdomen brown. Head: Cranium coarsely punctate, antennal funicular antennomeres subfiliform (Fig. 25), capitulum lax, longer than length of funicular antennomeres, antennomeres 9 and 10 long/triangular, antennomere 11 ovate; eyes small, frons wide (EW/FW 10/35); last maxillary and labial palpomere subsecuriform. Thorax: Pronotum (Fig. 50) with angular tubercle at sides, disc coarsely punctate, without knobs; elytral asetiferous punctation arranged into 11 punctiform striae, punctation binodal, punctation extends to elytral apex, epipleural margin serrulate near elytral apex. Abdomen: Pygidium scutiform.

**Distribution** (Fig. 71): This species is known from Chile.

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

**Remarks:** The color pattern, on the elytral disc, involving rectangulate elytral fasciae, places this species near *Labasiella transversalis* (SOLERVICENS). But, the holotype of *L. robles* lacks knobs on the pronotal disc (Fig. 50), four of which are present in *L. transversalis* (Fig. 52). Also, in the *L. robles* specimen there are serrations in the posterior region of the epipleural margin, which is not the case in *L. transversalis* specimens. Differences in the presence or absence of pronotal knobs and epipleural serrations are good indicators for distinguishing species within *Labasiella*.

***Labasiella solervicensi* OPITZ nov.sp. Figs 24, 51, 71, 81.**

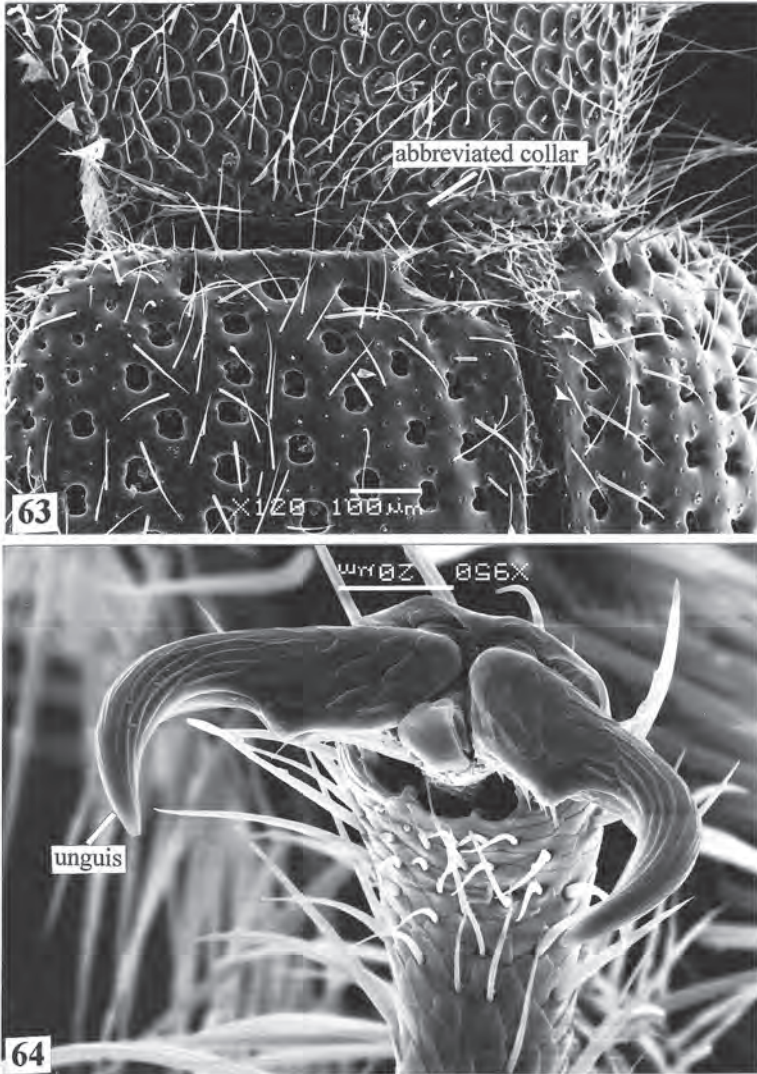
**Holotype:** ♀. Chile, Valparaiso. Prov. Los Perales at Rio Marga, 330 m, II-3-1967, M. E. Erwin, 33°08'S-71°18'W (WFBM). Paratype: 1 specimen with the same locality as the holotype.

**Diagnosis:** Within *Labasiella* only specimens of *L. robles*, *L. solervicensi* and *L. transversalis* have the capitulum substantially longer than the combined length of the funicular antennomeres. Specimens of *L. solervicensi* differ by their small size and by having the posterior 1/3<sup>rd</sup> of the elytral disc light brown.

**Description:** Size: Length 3.0 mm; width 1.0 mm. Form: As in Fig. 81. Integument: Mostly testaceous; cranium and pronotum very light castaneous; elytral disc tricolourous, basal 1/3<sup>rd</sup> testaceous, then with very light brown triangular patch, followed by broad yellow transverse fascia, distal 1/3<sup>rd</sup> light brown; abdomen brown. Head:



Cranium coarsely punctate, antennal funicular antennomeres subfiliform (Fig. 24), capitulum lax, longer than length of funicular antennomeres, antennomeres 9 and 10 long/triangular, antennomere 11 ovate; eyes small, frons wide (EW/FW 7/26); last maxillary and labial palpomere subsecuriform. Thorax: Pronotum (Fig. 51) with angular tubercle at sides, disc coarsely punctate, with 4 small knobs; elytral asetiferous punctures arranged into 9 punctiform striae, punctures not binodal, punctures extend to elytral posterior  $3/4^{\text{th}}$ , epipleural margin serrulate near elytral apex. Abdomen: Pygidium scutiform.



**Figs 63-64:** Base of elytra and unguis of *Amphelissus meieri*. (63) Base of elytra. (64) Unguis.

**V a r i a t i o n :** The two specimens examined are quite homogeneous.

**D i s t r i b u t i o n** (Fig. 71): This species is known from Chile.

**E t y m o l o g y :** The trivial name, *solervicensi*, is a dedicative patronymic. It honors Jaime Solervicens A. for his excellent contributions to Cleridae Taxonomy.

***Labasiella transversalis* (SOLERVICENS, 2001) (Figs 26, 27, 52, 71, 82, 101)**

*Exochonotus transversalis* SOLERVICENS 2001: 27.

**H o l o t y p e :** ♂. Chile, Prov. Los Andes, Salto del Soldado, 32°55'S y 70°23'W, 2300 msnm, 23 km SE de Los Andes, V Region, J. Solervicens (MNNC). Allotype and 10 paratypes. Allotype and 9 paratypes from the same locality as the holotype. 1 paratype from: Chile, P. N. La Campana, sector Ocoa, V Región, en bosque quemado, 5-XI-1986, C. Vivar. Allotype and 5 paratypes in MNNC. 5 paratypes in UMCE.

**D i a g n o s i s :** The elytral white transverse fascia, bordered by intensely black markings, will conveniently diagnose the members of this species.

**D e s c r i p t i o n :** This species was adequately described and illustrated by SOLERVICENS (1998: 82). Additional characteristics involve: Antenna as in Figs 26, 27, pronotum as in Fig. 52, elytral asetiferous punctation striate, epipleural margin not serrulate near elytral apex, habitus as in Fig. 82, and aedeagus as in Fig. 101.

**N a t u r a l h i s t o r y :** Specimens were reared from the stems of the turquoise puya [*Puya berteroniana* MAZ. (Bromeliaceae)].

**D i s t r i b u t i o n** (Fig. 71): Known only from Chile.

***Labasiella varipennis* species group**

The outstanding characteristic of the members of this *Labasiella* species group is the zigzag shape of the angular testaceous fascia that is located slightly basal to the elytral middle. The shape of this fascia is variable, but remarkably constant within species. In two species the angular fascia is slightly discontinuous. The elytral 2° setae are prominent. There are 7 species in this group, whose members are found in Bolivia, Peru, Chile, and Argentina.

***Labasiella lata* (SOLERVICENS, 2004) (Figs 4, 31, 70, 83)**

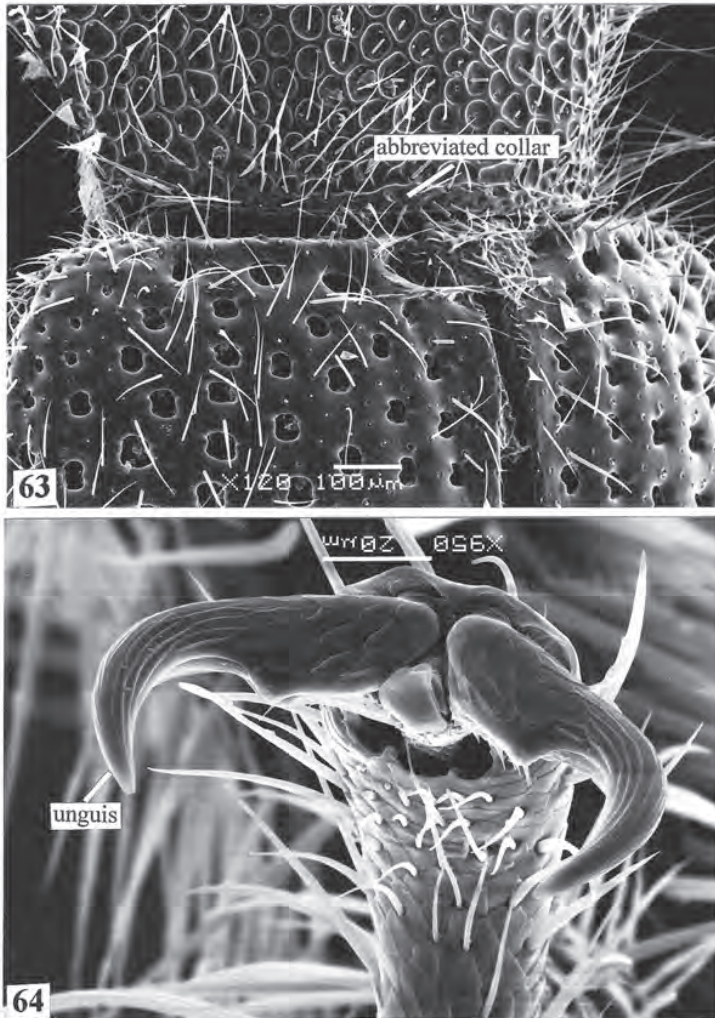
*Exochonotus latus* SOLERVICENS 2004: 34.

**H o l o t y p e :** ♀. Argentina, prov. Catamarca, Catamarca, 9 feb 1936, leg. M. Viana (MNNC).

**D i a g n o s i s :** This species is very similar to *L. santa*, but in specimens of *L. lata* the elytral posterior brown fascia does not reach the epipleural margin. Also, the antenna is more proportionally longer in members of *L. lata* (compare Figs 4, 7).

**D e s c r i p t i o n :** This species was adequately described and illustrated by SOLERVICENS (2004: 34). Additional characteristics involve: Antenna as in Fig. 4, pronotum as in Fig. 31, elytral asetiferous punctation striate, epipleural margin serrulate near elytral apex, and habitus as in Fig. 83.

**D i s t r i b u t i o n** (Fig. 70): Known only from Argentina.



**Figs 65-66:** Elytra and epipleural margin of *Amphelissus meieri*. (65) Elytra. (66) Epipleuron.

***Labasiella lobaticollis* (LESNE, 1909) (Figs 5, 32, 70, 84)**

*Pelonium lobaticolle* LESNE 1909: 521.

**Lectotype:** ♀. PÉROU, Paita et Tallazo de Paita (Reg. Desetique, bord de la mer) (30-80 m d' alt), P. Rivet, 1906. (MNHN). Lesne 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. CORPORAAL 1950: 288 (*Pelonium*). SOLERVICENS 1998: 79 (*Exochonotus*); 2004: 31 (*Exochonotus*) 2006: 23 (*Exochonotus*).

**D i a g n o s i s :** The holotype of this species resembles superficially the holotype of *L. machupicchu*, from which it is distinguished by elytral punctation. The punctures are larger



and the interstitial spaces smaller. In the available specimen of *L. lobaticollis* the interstitial spaces are narrower than the width of the punctures. The opposite is true in the holotype of *L. machupicchu*. Also, in *L. machupicchu* specimens the funicular antennomeres are bicolorous, which is not the case in *L. lobaticollis* specimens.

**Redescription:** Size: Length 3.5 mm; width 1.3 mm. Form: As in Fig. 84. Integument: Cranium and thorax dark castaneous, pronotum midline broadly light castaneous; antenna testaceous; mouthparts testaceous, mandibles brown; legs mostly testaceous, femora infuscated distally; pterothorax brown; elytra mostly testaceous, basal margin, basal half of epipleural margin, and 2 angular fascia brown, posterior fascia broader than more anterior fascia, 2 short lines just behind anterior margin. Head: Cranium coarsely punctate, antennal funicular antennomeres subfiliform (Fig. 5), capitulum lax, antennomeres 9 and 10 triangular, antennomere 11 globose; eyes small, frons wide (EW/FW 10/27); last maxillary and labial palpomere subsecuriform. Thorax: Pronotum (Fig. 32) with angular tubercle at sides, disc coarsely punctate, with 4 small knobs; elytral asetiferous punctation arranged into 10 punctiform striae, punctation binodal, punctation extends to elytral apex, epipleural margin serrulate near elytral apex. Abdomen: Pygidium scutiform.

**Distribution** (Fig. 70): This species is known from Peru.

***Labasiella machupicchu* OPITZ nov.sp (Figs 6, 33, 70, 85, 102)**

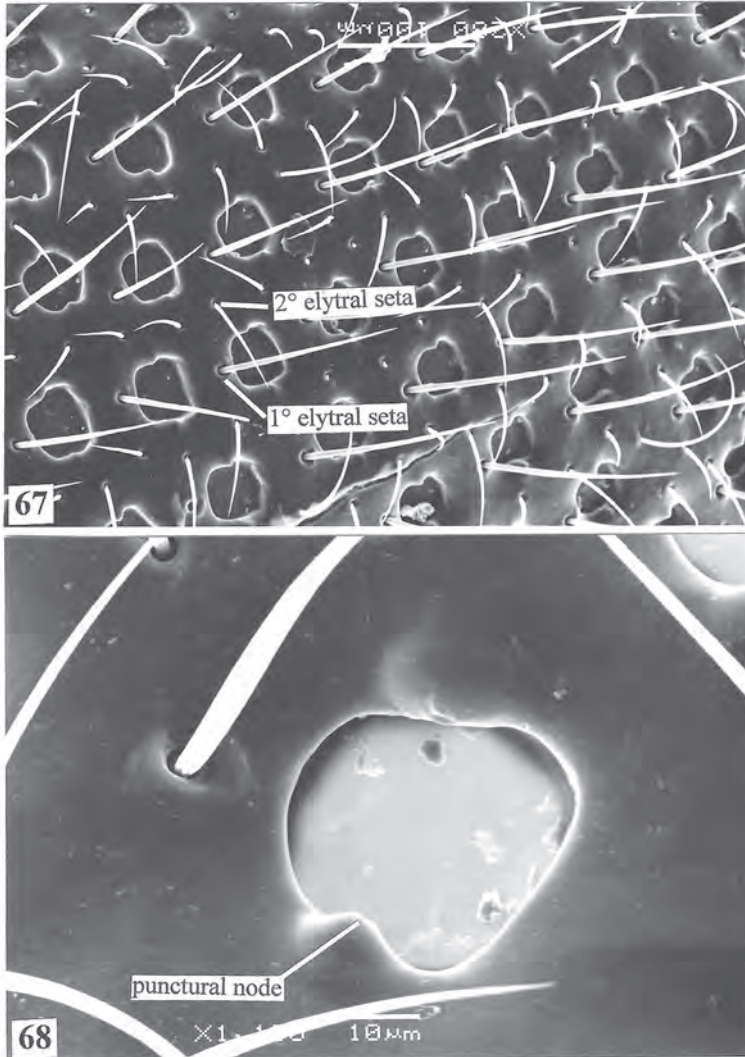
**Holotype:** ♂. Peru, 1985, W. Wittmer. A second label reads: Machu Picchu, 2000-2400 M, 15-XII (NHMB).

**Diagnosis:** This little checkered beetle (3 mm) has a short and thick body. Also, it is the only member of the genus in which the funicular antennomeres are bicolorous.

**Description:** Size: Length 3.8 mm; width 1.5 mm. Form: As in Fig. 85. Integument: Cranium and thorax dark castaneous, pronotum midline broadly light castaneous; antenna mostly testaceous, funicular antennomeres 3-5 black; mouthparts mostly testaceous, terminal maxillary and labial palpomeres and mandibles brown; legs mostly testaceous, femora infuscated distally, tarsi slightly infuscated; pterothorax brown; elytra mostly testaceous, basal margin, and 2 partially angular fasciae brown, posterior fascia broader than more anterior fascia. Head: Cranium coarsely punctate, antennal funicular antennomeres subfiliform (Fig. 6), capitulum lax, antennomeres 9 and 10 triangular, antennomere 11 globose; eyes small, frons wide (EW/FW 10/30); last maxillary and labial palpomere subsecuriform. Thorax: Pronotum (Fig. 33) with angular tubercle at sides, disc coarsely punctate, with 4 small knobs; elytral asetiferous punctation arranged into 9 punctiform striae, punctation binodal, punctation extends to elytral apex, epipleural margin serrulate near elytral apex. Abdomen: Aedeagus (Fig. 102) very short, distal region of phallobase slightly lobed, tegmen very reduced, submembranous, phallobasic struts confluent with phallobasic apodeme, phallobasic rod long; phallic plates broad, phallic apex short triangular.

**Distribution** (Fig. 70): This species is known from Peru.

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



**Figs 67-68:** Elytral surface and elytral asetiferous puncture. (67) Elytral surface. (68) Elytral asetiferous puncture.

***Labasiella santa* OPITZ nov.sp. (Figs 7, 34, 70, 86)**

**H o l o t y p e :** ♂. BOLIVIA, Santa Cruz, Above Achira, Rd. to Floripondo 1900 m, 10 December, 2011. A second label reads: 18°09'S 63°47'W, Wappes, Bonaso & R. Morris (MNKM).

**Paratype:** 1 specimen from the same locality as the holotype (ACMT).

**D i a g n o s i s :** Within *Labasiella* a narrow angular midelytral fascia is found in *L. latus*, *L. santa*, *L. tocumanensis*, and *L. varipennis*, but *L. santa* specimens differ by having very small elytral punctures.

**Description:** Size: Length 6.0 mm; width 2.0 mm. Form: As in Fig. 86. Integument: Cranium and thorax dark castaneous, lower frons and gula light castaneous; antenna and mouthparts testaceous, except mandibles brown; legs mostly testaceous, femora with brown annula at distal limit, basal half of tibiae brown; elytra bicolored, black basal margin and black basal half of epipleural margin contiguous with black narrow angular fascia, two small black streaks near basal margin, a broad black angular fascia behind elytral middle, remainder of elytral disc yellow. Head: Cranium coarsely punctate, antennal funicular antennomeres subfiliform (Fig. 7), capitulum lax, antennomeres 9 and 10 triangular, antennomere 11 globose; eyes small, frons wide (EW/FW 15/40); last maxillary and labial palpomere subsecuriform. Thorax: Pronotum (Fig. 34) with angular tubercle at sides, disc coarsely punctate, with 6 small knobs; elytral asetiferous punctures arranged into 10 punctiform striae, punctures binodal, punctures extends to elytral apex, epipleural margin serrulate near elytral apex. Abdomen: Pygidium scutiform.

**Variation:** The paratype has a broad central light castaneous line on the pronotal disc.

**Distribution** (Fig. 70): This species is known from Bolivia.

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

***Labasiella stangei* OPITZ nov.sp. (Figs 8, 35, 70, 87, 106)**

**Holotype:** ♂. PERU, La Libertad, Samne, 1500 m-13.VII-1975, Porter, Stange (IMLA).

**Diagnosis:** Within its species group, only in specimens of this species is the narrow angular fascia contiguous with the elytral anterior margin.

**Description:** Size: Length 5.5 mm; width 2.2 mm. Form: As in Fig. 87. Integument: Cranium and thorax castaneous; antenna and mouthparts testaceous, except mandibles brown, capitular antennomeres infuscated; legs mostly testaceous, femora with brown annula at distal limit, basal half of tibiae infuscated; elytra bicolored, black basal margin contiguous with premedial angular fascia, a broad black angular fascia behind elytral middle, remainder of elytral disc testaceous. Head: Cranium coarsely punctate, antennal funicular antennomeres subfiliform (Fig. 8), capitulum lax, antennomeres 9 and 10 triangular, antennomere 11 ovate; eyes small, frons wide (EW/FW 15/45); last maxillary and labial palpomere subsecuriform. Thorax: Pronotum (Fig. 35) with angular tubercle at sides, disc coarsely punctate, with 6 small knobs; elytral asetiferous punctures arranged into 10 punctiform striae, punctures binodal, punctures extends to elytral apex, epipleural margin serrulate near elytral apex. Abdomen: Aedeagus (Fig. 106) moderately long, distal region of phallobase slightly lobed, tegmen very reduced, submembranous, phallobasic struts confluent with phallobasic apodeme, phallobasic rod long; phallic plates broad, phallic apex broad triangular.

**Distribution** (Fig. 70): This species is known from Peru.

**Etymology:** The trivial name, *stangei*, honors Lionel A. Stange who collected the holotype. In addition to his many contribution to Neuropterology, he brings much humor to DPI, Florida State Collection of Arthropods.

***Labasiella tucumanensis* OPITZ nov.sp. (Figs 9, 36, 70, 88, 104)**

**H o l o t y p e :** ♂. ARGENTINA, TUCUMAN, Horco Molle, XII-1968 (IMLA). **Paratype:** 1 specimen. Argentina: Provincia de Salta, 4 km S Campo Quijano, 9-II-1982, H. & A. Howden (CMNC).

**D i a g n o s i s :** The holotype is similar in elytral coloration to the holotype of *L. lata*, from which it differs by the composition of the antenna. The combined length of the funicular antennomeres is proportionally shorter in the male of *L. tucumanensis*, than in the female of *L. lata* (compare Figs 4, 9). Also, the pronotum of *L. tucumanensis* has a deep depression along the midline of the disc.

**D e s c r i p t i o n :** **Size:** Length 4.0 mm; width 1.7 mm. **Form:** As in Fig. 88. **Integument:** Cranium and thorax dark castaneous; antennae and mouthparts testaceous, except mandibles brown; legs mostly testaceous, femora with brown annula at distal limit, basal half of tibiae brown; elytra bicolored, black basal margin and black basal half of epipleural margin contiguous with black narrow angular fascia, two small black streaks near basal margin, a broad black angular fascia behind elytral middle, remainder of elytral testaceous. **Head:** Cranium coarsely punctate, antennal funicular antennomeres subfiliform (Fig. 9), capitulum lax, antennomeres 9 and 10 triangular, antennomere 11 ovate; eyes small, frons wide (EW/FW 10/35); last maxillary and labial palpomere subsecuriform. **Thorax:** Pronotum (Fig. 36) with angular tubercle at sides, disc coarsely punctate, deeply depressed at middle near anterior pronotal margin, with 6 small knobs; elytral asetiferous punctures arranged into 10 punctiform striae, punctures binodal, punctures extend to elytral apex, epipleural margin serrulate near elytral apex. **Abdomen:** Aedeagus (Fig. 104) short, distal region of phallobase slightly lobed, tegmen very reduced, submembranous, phallobasic struts confluent with phallobasic apodeme, phallobasic rod long; phallic plates broad, phallic apex broad triangular.

**D i s t r i b u t i o n** (Fig. 70): This species is known from Argentina.

**E t y m o l o g y :** The trivial name, tucumanensis, is a Latinized version of the type locality.

***Labasiella varipennis* SPINOLA, 1849 (Figs 10, 37, 70, 89, 105)**

*Labasiella varipennis* SPINOLA 1849: 409.

**Lectotype:** Sex not known. Chile, Gay, 1849. A second label reads: S. Rosa (= Santa Rosa de los Andes) (MNHN). Paralectotype. One specimen. Chile, Santa Rosa de los Andes, Gay, 1849 (MNHN). LACORDAIRE 1857: 489. SCHENKLING 1903: 16 (*Pelonium*). LESNE 1909: 522 (*Pelonium*). CORPORAAAL 1948: 245 (*Labasiella*); 1950: 284 (*Cregya*). EKIS (now OPITZ), 1975: 61 (*Cregya*). SOLERVICENS 1989: 198 (*Labasiella*); 1998: 79 (*Exochonotus*); 2005a: 51; 2006: 23 (*Exochonotus*).

**D i a g n o s i s :** The paralectotype is similar in elytral color to the holotype of *L. lata*, and *L. tucumanensis*. *Labasiella varipennis* differs by being the only species in the genus that has a serrulate condition along the entire length of the epipleural margin. Also, only in this species does the elytral disc show 11 striae of punctures.

**R e d e s c r i p t i o n :** **Size:** Length 4.5 mm; width 2.0 mm. **Form:** As in Fig. 89. **Integument:** Cranium and thorax dark castaneous; antenna and mouthparts testaceous, except mandibles brown; legs mostly testaceous, femora infuscated distally; elytra bicolored, black basal half of epipleural margin contiguous with black narrow angular fascia, two small black streaks extend backwards from basal margin, a broad black angular fascia behind elytral middle, remainder of elytral testaceous. **Head:** Cranium coarsely

punctate, antennal funicular antennomeres subfiliform (Fig. 10), capitulum lax, antennomeres 9 and 10 triangular, antennomere 11 ovate; eyes small, frons wide (EW/FW 15/32); last maxillary and labial palpomere subsecuriform. Thorax: Pronotum (Fig. 37) with angular tubercle at sides, disc coarsely punctate, with 6 small knobs; elytral asetiferous punctures arranged into 11 punctiform striae, punctures binodal, punctures extend to elytral apex, entire length of epipleural margin serrulate. Abdomen: Aedeagus (Fig. 105) short, distal region of phallobase slightly lobed, tegmen very reduced, submembranous, phallobasic struts confluent with phallobasic apodeme, phallobasic rod long; phallic plates broad, phallic apex small triangular.

**Distribution** (Fig. 70): In addition to the paralectotype I examined 11 specimens from Chile: Región Coquimbo, 5 miles N of Illapel, 30-XI-1950, Ross & Michelbacher; Región Bío Bío, VIII. Termas de Chilean Road, South Las Trancas, 36°53'67S 71°28.811W, 29-XI-2001, 4375', Fred G. Andrews; Región Santiago, Quilicura, ?-XII-1986, collector not noted; El Portezuelo, 7 km N. Santiago, 22-25-X-1981, 500 m, D. & M. Davis; Santiago, La Cistena, ?-XII-1948. Specimens are deposited in CSCA, FSCA, MLPA, MNHN, RGCG, SDEI, and WOPC.

**Notes**: According to SOLERVICENS (1998: 79), there are two "types" of this species in MNHN. He designated one of them as the lectotype and the other paralectotype. The lectotype is without head and prothorax. I did not find the lectotype in MNHN. This redescription of *Labasiella varipennis* is based on the paralectotype.

### **Genus *Macilentus* OPITZ, 2017a**

**Type species**: *Macilentus micidus* OPITZ 2017a: 67. By original designation.

**Diagnosis**: Among the genera that have the epipleural angle, *Oncochelina* and *Macilentus*, specimens of *Macilentus* are distinguished by the subsecuriform terminal maxillary and labial palpomeres.

**Description**: This genus was adequately described and illustrated by OPITZ (2017a: 66). Additional characteristics are: Pronotal sides reticulated, epipleural angle present, epipleural margin serrulate, elytral 2° setae prominent, and elytral posterior slope acute.

### ***Macilentus micidus* OPITZ, 2017a (Figs 14, 40, 71, 90, 107)**

*Macilentus micidus* OPITZ 2017a: 67.

**Holotype**: ♀. Argentina, Santiago del Estero, Lago Muyo, 29.III.22.IV.1957, col. R. Golbach (IMLA). **Paratypes**: 1 specimen. Argentina: Santiago del Estero, Lago Muyo, 29.III.22.IV.1957, col. R. Golbach (WOPC).

**Diagnosis**: From superficially similar specimens of *Oncochelyna barrigai*, *Macilentus micidus* specimens are distinguishable by their subsecuriform terminal maxillary and labial palpomeres.

**Description**: This species was adequately described and illustrated by OPITZ (2017a: 67).

Additional characteristics involve: Antenna as in Fig. 14, pronotum as in Fig. 40, elytral asetiferous punctation striate, epipleural margin serrulate along its entire length, habitus as in Fig. 90, and aedeagus as in Fig. 107.

**Variation**: Size: Length 5.0-6.0 mm; width 2.0-2.3 mm.

**Distribution** (Fig. 71): This species is known only from Argentina.

**Genus *Oncochelyna* OPITZ, 2017a**

**Type species:** *Exochonotus barrigai* SOLERVICENS 2004: 32. By original designation.

**Diagnosis:** Specimens of *Oncochelyna* superficially resemble those of *Macilentus* OPITZ, from which they differ by having securiform maxillary and labial terminal palpi; *Macilentus* terminal palpi are subsecuriform.

**Description:** This genus was adequately described and illustrated by OPITZ (2017: 72). Additional characteristics are: Pronotal sides reticulated, epipleuron with angle (OPITZ 2017: 89), epipleural margin serrulate, and elytral posterior slope acute.

**Key to species of *Oncochelyna* OPITZ**

- 1 Elytral disc dark castaneous, without dark markings (Argentina) ..... *Oncochelyna barrigai* (SOLERVICENS) (Fig. 91)
- Elytral disc light castaneous, with dark markings (Argentina, Paraguay) ..... *Oncochelyna tuberculata* (PIC) (Fig. 92)

***Oncochelyna barrigai* (SOLERVICENS, 2004) (Figs 15, 41, 71, 91)**

*Exochonotus barrigai* SOLERVICENS 2004: 31.

**Holotype:** ♂. ARGENTINA, Prov. Córdoba, Cruz del Eje, 1 feb 1998, leg. J. E. Barriga (MNNC). **Allotype:** Same locality as the holotype (MNNC). Paratype: one specimen from Argentina, Provincia de Santiago del Estero, Añatuya (JEBEC). OPITZ 2017a: 73.

**Diagnosis:** The unicolorous characteristic (castaneous) of the elytral disc will distinguish these beetles from *O. tuberculata*.

**Description:** This species was adequately described and illustrated by SOLERVICENS (2004: 31). Additional characteristics involve: Antenna as in Fig. 15, pronotum as in Fig. 41, elytral asetiferous punctation striate, elytral 2° setae prominent, epipleural margin serrulate at elytral distal 1/4<sup>th</sup> and habitus as in Fig. 91.

**Variation:** Size: Length 4.0-5.0 mm; width 1.3-2.0 mm. Other than body size, the available specimens were quite homogeneous.

**Distribution** (Fig. 71): In addition to the holotype and allotype, I examined 2 specimens from: Argentina: Provincia de Tucumán, Departamento de Burruyacú, 7 de Abril, 14-27-I-1981, R. Golbach. Specimens are deposited in IMLA, JEBEC, MNNC, and WOPC.

***Oncochelyna tuberculata* (PIC, 1935) (Figs 16, 42, 71, 92)**

*Pelonium tuberculata* PIC 1935: 101.

**Lectotype:** ♀. Argentina, Chaco de Santiago de Estero (MNHN). CORPORAAL 1950: 290 (*Corinthiscus*). SOLERVICENS 1998: 79 (*Exochonotus*); 2004: 31 (*Exochonotus*); 2006: 23 (*Exochonotus*).

**Diagnosis:** The infuscations on the elytral disc will distinguish these beetles from *O. barrigai*.

**Redescription:** Size: Length 3.5 mm; width 1.0 mm. Form: As in Fig. 92. Integument: Castaneous, except elytral disc with infuscations. Head: Cranium coarsely punctate, antennal funicular antennomeres subquadrate (Fig. 16), capitulum lax,



antennomeres 9 and 10 triangular, antennomere 11 ovate; eyes small, frons wide (EW/FW 10/25); last maxillary and labial palpomere securiform. **Thorax:** Pronotum (Fig. 42) with angular tubercle at sides, disc coarsely punctate, without knobs; elytral asetiferous punctures arranged into 10 punctiform striae, punctures binodal, punctures extend to elytral apex, entire length of epipleural margin serrulate. **Abdomen:** Aedeagus short, distal region of phallobase slightly lobed, tegmen very reduced, submembranous, phallobasic struts confluent with phallobasic apodeme, phallobasic rod long; phallic plates broad, phallic apex small triangular.

**Distribution** (Fig. 71): In addition to the lectotype, I examined 8 specimens from: **Argentina:** Provincia la Rioja, Patquia, ?-XI-1959, M. Viana; Provincia Santiago del Estero, Rio Salado; Provincia de Catamarca, ?-?-1926; Provincia de Catamarca, Catamarca, 28 km SE Tinogasta, 15-X-1997, S. Riog, M. E. Erwin, F. D. Parker; Provincia de La Rioja, Londres, 7-XI-1995, Roig, Flores. **Paraguay:** Departamento de Cordillera, Altos, ?-II-1954. Specimens are deposited in: MNHN, MNNC, SDEI, WFBM, and WOPC.

### Genus *Pelmatus* OPITZ, 2017a

**Type species:** *Pelmatus barri* SOLERVICENS 1998: 81. By original designation.

**Diagnosis:** Within the *Labasiella* complex tarsal denticle are present in members of *Inconnexus* OPITZ, *Pelmatus* OPITZ, and *Silvanoclerus* OPITZ. *Pelmatus* specimens are distinguishable from members of the other aforementioned genera by having subsecuriform (Fig. 54B) terminal maxillary and labial palpomeres. These maxillary palpomeres are strongly securiform (Fig. 54A) in members of *Inconnexus* OPITZ and *Silvanoclerus* OPITZ.

**Description:** This genus was adequately described and illustrated by OPITZ (2017a: 73). Additional characteristics are: Pronotal sides reticulated, elytral 2° setae prominent, and elytral posterior slope gradual.

### Key to species of *Pelmatus* OPITZ

- 1 Elytral basal 1/3<sup>rd</sup> reddish-testaceous, distal 2/3<sup>rd</sup> blue-black (Chile).....*Pelmatus bicolor* (SOLERVICENS) (Fig. 94)
- Elytral color mixture of testaceous and brown (Chile).....*Pelmatus barri* (SOLERVICENS) (Fig. 93)

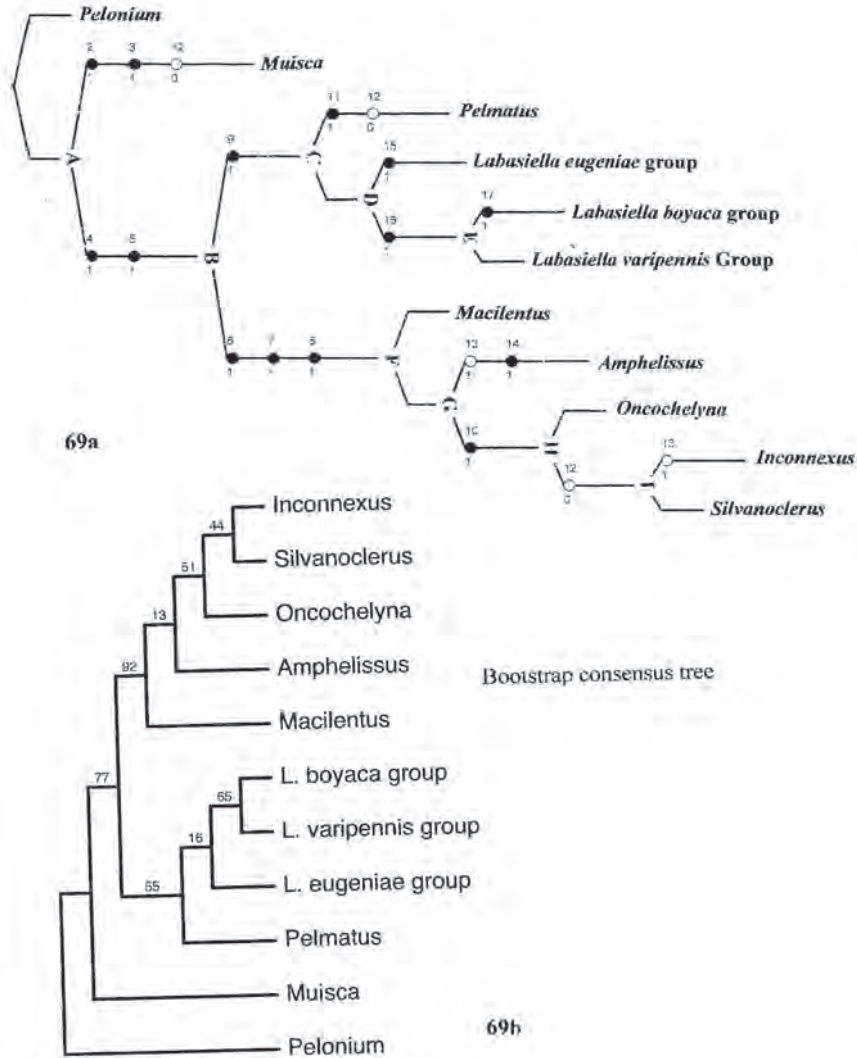
### *Pelmatus barri* (SOLERVICENS, 1998) (Figs 11, 12, 38, 70, 93)

*Exochonotus barri* SOLERVICENS 1998: 81.

**Holotype:** ♂. Chile, Paposo, Costa de Antofagasta, 21/9/1953, Coll. L. E. Peña (MNNC). Allotype and 15 paratypes. Allotype and 12 paratypes from Chile, Chañaral de Aceituno, 23-25-X-1957, L. E. Peña; 1 paratype from Chile, Oortezuelo Buenos Aires, Coquimbo, 7-X-1958, L. E. Peña; 1 paratype from Coquimbo, Los Choros, 2-II-1972, Montenegro; 1 paratype from Choros Bajos, Coquimbo, 2-II-1972, W. Sielfeld. Seven paratypes in MNNC, the allotype and 8 paratypes from the same locality as the holotype. One paratype from: Chile, P. N. La Campana, sector Ocoa, V Región, en bosque quemado, 5-XI-1986, C. Vivar. Allotype and 8 paratypes in UMCE. Twenty-eight additional specimens from the same locality as the allotype and 1 specimen from Quebrada Leones, 20 km N. Caldera, 16-X-1957, L. E. Peña (UMCE). SOLERVICENS 2005: 51 (*Exochonotus*). OPITZ 2017a: 75.



**D i a g n o s i s :** The fasciate markings on the elytral disc will distinguish members of this species from *P. bicolor*, in which elytral fascia are not present (compare Figs 93, 94).



**Figs 69a-69b:** (69a) Proposed phylogeny of *Labasiella* species group and related genera. (69b) Bootstrap consensus tree of *Labasiella* species group and related genera.

**Description:** This species was adequately described and illustrated by SOLERVICENS (1998: 81). Additional characteristics involve: Antenna as in Figs 11, 12, pronotum as in Fig. 38, elytral asetiferous punctation striate, epipleural margin serrulate along entire length of epipleural margin, and habitus as in Fig. 93.

**V a r i a t i o n :** Size: Length 4.0-8.0 mm; width 1.5-3.0 mm. The antennae display

sexual dimorphism with the capitulum much more developed in males (Figs 11, 12).

**Distribution** (Fig. 70): In addition to a paratype I examined 18 specimens from: Chile, Región Coquimbo, Alqui Valley, 21-22-XI-1988; Región Coquimbo, Chañarel de Aceituna, 23-25-X-1957, L. E. Peña; Región Coquimbo, 15 km E Choros bajos, Rio Los Choros, 10-11-XI-1981, 300 m, D. & M. Davis. Specimens are deposited in CSCA, MNHN, MNNC, RGCG, USNM, WFBM, and WOPC.

***Pelmatus bicolor* (SOLERVICENS, 2006) (Figs 13, 39, 70, 94)**

*Exochonotus bicolor* SOLERVICENS 2006: 23.

**Holotype**: ♀. Chile, V Región, PN La Campana, 22-24-ago-2003, Co. Alejandro Vera (MNNC).

**Diagnosis**: The elytral color pattern, as exhibited in Fig. 94, distinguishes members of *P. bicolor* from the remaining species of the *Labasiella* complex.

**Description**: This species was adequately described and illustrated by SOLERVICENS (2006: 24). Additional characteristics involve: Antenna as in Fig. 13, pronotum as in Fig. 39, elytral asetiferous punctures striate, epipleural margin minutely serrulate near elytral apex, and habitus as in Fig. 94.

**Distribution** (Fig. 70): This species is known only from Chile.

**Genus *Silvanoclerus* OPITZ, 2017a**

**Type species**: *Silvanoclerus dilatatus* OPITZ 2017a: 85. By original designation.

**Diagnosis**: Specimens of this genus resemble superficially those of *Inconnexus* OPITZ, but *Silvanoclerus* specimens differ by having much smaller eyes (compare Figs 53, 54).

**Description**: This genus was adequately described and illustrated by OPITZ (2017a). Additional characteristics are: Pronotal sides reticulated, epipleural angle faintly developed, elytral 2° setae prominent, and elytral posterior slope gradual.

***Silvanoclerus beechi* (SOLERVICENS, 2003) (Figs 18, 44, 71, 95)**

*Exochonotus beechi* SOLERVICENS 2003: 45.

**Holotype**: ♂. Chile, Arica, Qda. de Azapa, 22-26/VII/1987. A second label reads: Coll. SAGI (MNNC). **Paratypes**: Two specimens from the same locality as the holotype (MNNC, 1; UMCE, 1).

**Diagnosis**: The presence of 7 knobs on the disc of the pronotum will distinguish this species from *S. dilatatus*.

**Description**: This species was adequately described and illustrated by SOLERVICENS (2003: 45). Additional characteristics involve: Antenna as in Fig. 18, pronotum as in Fig. 44, elytral asetiferous punctures striate, epipleural margin serrulate near elytral apex, and habitus in Fig. 95.

**Distribution** (Fig. 71): Known only from Chile.

***Silvanoclerus dilatus* OPITZ, 2017a (Figs 17, 43, 54, 71, 96)**

*Silvanoclerus dilatus* OPITZ 2017a: 85.

H o l o t y p e : ♀. Brazil: Minas Gerais, XI-1972, M. Alvarenga (FSCA).

D i a g n o s i s : The crescentiform shape of the infuscation on the basal 1/2 of the elytral disc will distinguish this species from *S. beechi*.

D e s c r i p t i o n : This species was adequately described and illustrated by OPITZ (2017a).

Additional characteristics involve: Antenna as in Fig. 17, pronotum as in Fig. 43, eyes small, elytral asetiferous punctures striate, epipleural margin serrulate along posterior 1/4<sup>th</sup> of epipleural margin, and habitus as in Fig. 96.

D i s t r i b u t i o n (Fig. 71): This species is known only from Brazil.

### Zoogeographic Considerations

Two maps (Figs 70, 71), and Table 2, illustrate the approximate geographic distributions of the genera and species of the *Labasiella* complex. At the outset, it must be recognized that one, this study is based on comparatively few specimens, and two, there is undoubtedly a substantial collection bias in the factors involved in the availability of specimens. It is no accident that many of the species studied occur in Chile, the homeland of my cleridologists colleague, Jaime A. Solervicens. No doubt, a variety of new species of the *Labasiella* complex are still lurking in world collections and in the forests of South America. Therefore, any conjectures about zoogeography and phylogenetics are tentative and provided in the spirit of generating awareness in this interesting group of checkered beetles.

Aside from collection-bias considerations, there seems to be some indication that some of the species encompassed here have an autochthonous character; as suggested by the distributions of the Chilean *Pelmatus barri* and *Labasiella varipennis*. Moreover, except for Chilean genera, other generic members of the *Labasiella* complex are widely distributed in South America, which gives some credibility to the notion that these are fairly ancient taxa of checkered beetles. The apparent limited, almost relictual, distributions of the genera considered herein, and the considerably morphological diversity among them, is a basis for the aforementioned conjecture.

To some extent the distribution of species of the *Labasiella* complex coincide with what previously defined as the "South American Clerofauna" (OPITZ 2005), with most species settled in the more temperate regions, south of the Tropic of Capricorn. A sister group relationship between *Amphelissus meieri*, from Northwestern Colombia, and *Amphelissus goniodus*, from eastern Brazilian Amazonia, suggest a fairly ancient origin for *Amphelissus* based on the widespread distribution (two separate Clerofaunas) between these two checkered beetles. The same story is indicated by the geographic connections among the species of *Labasiella*. At least some of these distributions are undoubtedly a manifestation of vicariant events resulting from Andean orogeny during the Jurassic and early Cretaceous. The absence of *Labasiella* complex species from environs of Middle America invites the speculation that most of the evolution of these species took place after the uplift of the Andes, which would have been a formidable barrier to more northern migrations. The disconnect between Central America (*sensu* OPITZ 2005) and South

America, during the Late Paleogene (MAFAIT & DINKELMAN 1972), also would have been a deterrent to dispersals to more northern latitudes. Not enough detail information is available to discuss the biogeographic relationships among the taxa of Chile, in which there are 10 autochthonous species of the *Labasiella* complex. However, I suspect that such an analysis would approximate comments made by SOLERVICENS (2005b; 2007) involving other Cleridae genera.



Fig 70: The known geographic distribution of species as noted.



Fig 71: The known geographic distribution of species as noted.

### Phylogenetic interpretations

Figure 69a illustrates my hypothesis of the phylogenetic relationships of the taxa included in this work. The WINCLADA and NONA computer analysis produced a tree with the following indices: L 21, Ci 85, Ri 87. The presence of an acute pronotal tubercle and



presence of elytral binodal punctures establishes the monophyletic status of the *Labasiella* complex. The more obtuse development of the pronotal tubercle and lack of elytral binodal punctures in *Pelmatus bicolor* SOLERVICENS, is considered an evolutionary reversal. In Fig. 69b, the genus *Pelmatus* is nested among the *Labasiella* species groups. I consider this a very dubious placement in view of the two apotypic characteristics (character state 9 and 10) that define the monophyly of *Pelmatus* and considering the lack of an apotypic state to define the monophyly of the *Labasiella* grouping. Accordingly, I have used Fig. 69a. for my narrative of phylogenetic relationships.

Upon review of the known distribution of taxa of the *Labasiella* complex, it is postulated that the ancestral stock of this complex, and its sister genus *Muisca* SPINOLA, existed in South America, on terrain below the 20° meridian. Considering the nature of character state distribution, and in light of the Dollo principle (CROWSON 1972: 340) and other evolutionary generalities, I predict that the ancestor of *Muisca-Labasiella* complex was characterized by the following attributes: Antennae comprised of 11 antennomeres, reticulated pronotal sides, transverse pronotum,

Pronotal disc without tubercles, unguis with denticles, elytral slope gradual, elytral disc non-fasciate, elytral punctures present throughout elytral disc, elytral punctures not binodal, epipleuron without angle, and epipleural margin not serrulate. With these assumptions, I propose the following evolutionary progression from the aforementioned ancestor (ancestor A) to the extant taxa.

Ancestral stock A (Fig. 69a) evolved two major lineages, in one line the pronotum became elongated and there was a reduction of elytral punctures; changes manifest in the genus *Muisca*. The second line produced ancestor B, in which and the pronotal tubercle became acute and the elytral punctures binodal. Ancestor B promulgated progenitor C and F. In the former the elytral disc became fasciate, and in ancestral species F the elytral slope became acute, and the epipleuron evolved serrulations and a posterior angle. Progenitor C evolved *Pelmatus*, in which the antennal funicle became reduced. Ancestral species C also produced progenitor D, which diversified into the *Labasiella eugeniae* species group and into ancestral species E, in which the elytral fascia became angular. Ancestor E produced sister taxa that involve the *Labasiella boyaca* species group and the *Labasiella varipennis* species group.

The second major lineage that stems from ancestral species B involved progenitor F, which diversified into *Macilentus* and into ancestral species G. The latter evolved *Amphelissus*, in which the antennae were reduced to 10 antennomeres. In the second offshoot from ancestor G, ancestral species H, the terminal maxillary and labial palpomeres became securiform. Then, progenitor H generated *Oncochelyna* and ancestral species I, which evolved the species of *Inconnexus* and *Silvanoclerus*.

### Acknowledgements

I am very grateful to the curators, listed in the section of "Repositories of Specimens", for entrusting me with collections in their charge. My thanks to Bradley Sinclair for his review of the manuscript. My thanks to Roland Gerstmeier and Jean-Michel Maes for their translation of the abstract. I also thank my wife Galena for technical assistance, Paul E. Skelley for departmental courtesies, and the Florida Department of Agriculture, DPI, for institutional affiliation and support.

## Zusammenfassung

Bis vor kurzem wurden alle diese Arbeit betreffenden Arten unter der Gattung *Exochonotus* BARR geführt, welche nun als Junior-Synonym von *Labasiella* SPINOLA betrachtet wird. Die in dieser Revision behandelten Taxa bilden innerhalb der Peloniinae eine monophyletische Gruppe: *Amphilissus goniodus* OPITZ nov.sp., *Amphilissus meieri* (SCHENKLING), *Inconnexus lunarus* OPITZ, *Labasiella bimaculata* (SOLERVICENS), *Labasiella boyaca* OPITZ nov.sp., *Labasiella cochabamba* OPITZ nov.sp., *Labasiella eugeniae* (SOLERVICENS), *Labasiella lata* (SOLERVICENS), *Labasiella labaticollis* (PIC), *Labasiella machupicchu* OPITZ nov.sp., *Labasiella mcclarini* OPITZ nov.sp., *Labasiella robles* OPITZ nov.sp., *Labasiella santa* OPITZ nov.sp., *Labasiella solervicensi* OPITZ nov.sp., *Labasiella stangei* OPITZ nov.sp., *Labasiella transversalis* (SOLERVICENS), *Labasiella tucumanensis* OPITZ nov.sp., *Labasiella varipennis* SPINOLA, *Macilentus micidus* OPITZ, *Oncochelyna barrigai* (SOLERVICENS), *Oncochelyna tuberculata* (PIC), *Pelmatus barri* (SOLERVICENS), *Pelmatus bicolor* (SOLERVICENS), *Silvanoclerus beechi* (SOLERVICENS) und *Silvanoclerus dilatus* OPITZ. Neben einer kurzen Diskussion zur Zoogeographie beinhaltet diese Arbeit einen Bestimmungsschlüssel, 56 Strichzeichnungen, 12 raster-elektronenmikroskopische Aufnahmen, 2 phylogenetische Stammbäume, 26 farbige Habitus-Illustrationen sowie 11 Fotos der männlichen Genitalien.

## Resumen

Hasta recientemente, las especies tratadas en este trabajo eran clasificadas como *Exochonotus* BARR, genera actualmente considerado sinónimo junior de *Labasiella* SPINOLA. Las especies listadas aquí forman un grupo monofilético adentro de la subfamilia Peloniinae: *Amphilissus goniodus* OPITZ, sp.nueva, *Amphilissus meieri* (SCHENKLING), *Inconnexus lunarus* OPITZ, *Labasiella bimaculata* (SOLERVICENS), *Labasiella boyaca* OPITZ, sp.nueva, *Labasiella cochabamba* OPITZ, sp.nueva, *Labasiella eugeniae* (SOLERVICENS), *Labasiella lata* (SOLERVICENS), *Labasiella labaticollis* (PIC), *Labasiella machupicchu* OPITZ, sp.nueva, *Labasiella mcclarini* OPITZ, sp.nueva, *Labasiella robles* OPITZ, sp.nueva, *Labasiella santa* OPITZ, sp.nueva, *Labasiella solervicensi* OPITZ, sp.nueva, *Labasiella stangei* OPITZ, sp.nueva, *Labasiella transversalis* (SOLERVICENS), *Labasiella tucumanensis* OPITZ, sp.nueva, *Labasiella varipennis* SPINOLA, *Macilentus micidus* OPITZ, *Oncochelyna barrigai* (SOLERVICENS), *Oncochelyna tuberculata* (PIC), *Pelmatus barri* (SOLERVICENS), *Pelmatus bicolor* (SOLERVICENS), *Silvanoclerus beechi* (SOLERVICENS) y *Silvanoclerus dilatus* OPITZ. Una breve discusión sobre la zoogeografía está incluida, así como una clave de las especies, 56 dibujos ilustrativos, 12 microfotografías realizadas con microscopio electrónico, 2 árboles filogenéticos, 2 mapas de distribución de las especies, 25 fotografías de especímenes y 11 fotografías de genitalia machos.

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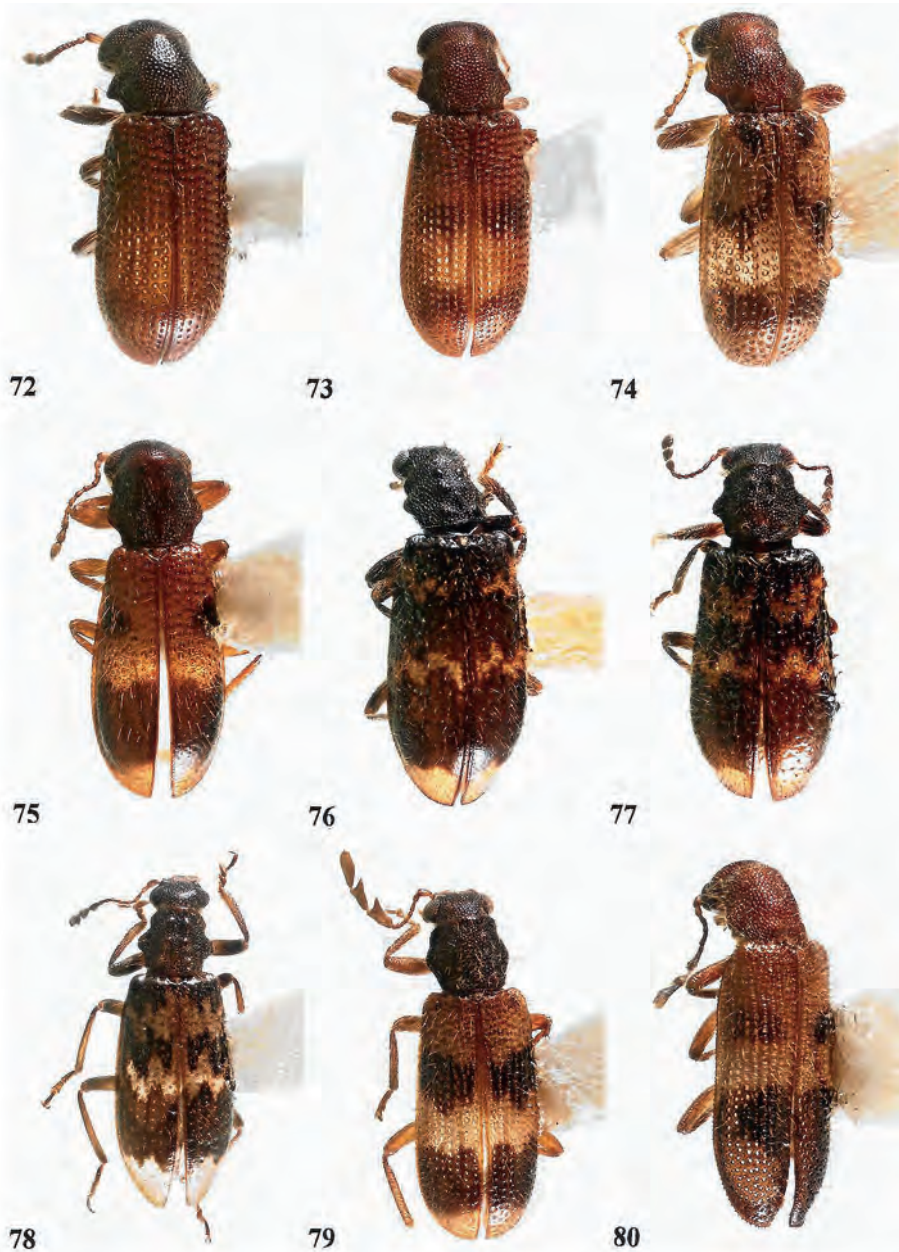
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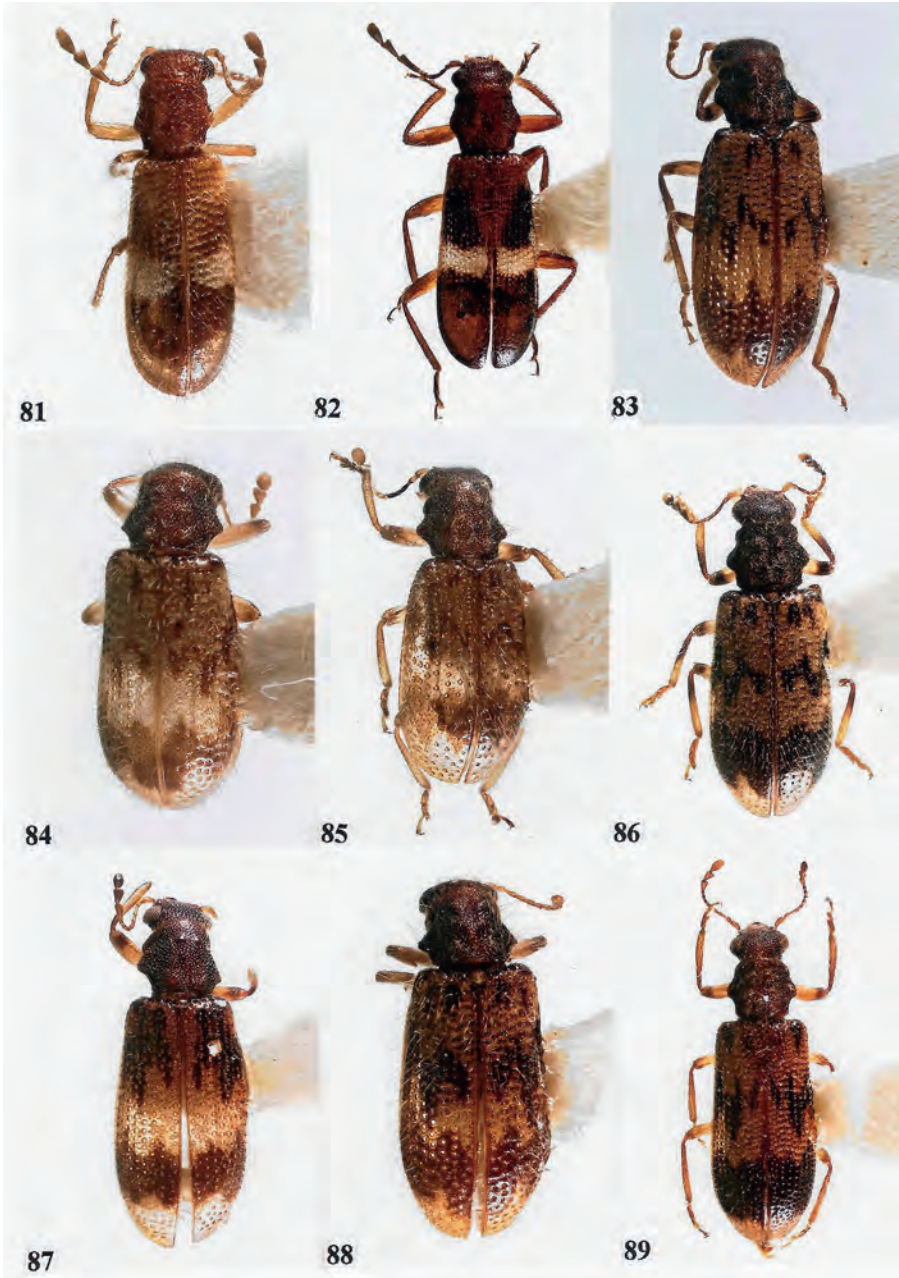
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**Table 2.** Distribution of species of *Amphelissus*, *Inconnexus*, *Macilentus*, *Oncochelyna*, *Silvanoclerus*, *Pelmatus*, *Labasiella* in geographical regions. ●\* indicates a species is distributed in multiple regions. Each dot represents one species.

Generic Taxa	Geographical Regions							
	Colombia	Ecuador	Bolivia	Peru	Brazil	Chile	Argentina	Paraguay
<i>Amphelissus</i>	●				●			
<i>Inconnexus</i>					●			
<i>Macilentus</i>							●	
<i>Oncochelyna</i>							●*	●*
<i>Silvanoclerus</i>					●	●		
<i>Pelmatus</i>						●●		
<i>Labasiella</i>	●	●	●●	●●●		●●●●●●	●●	

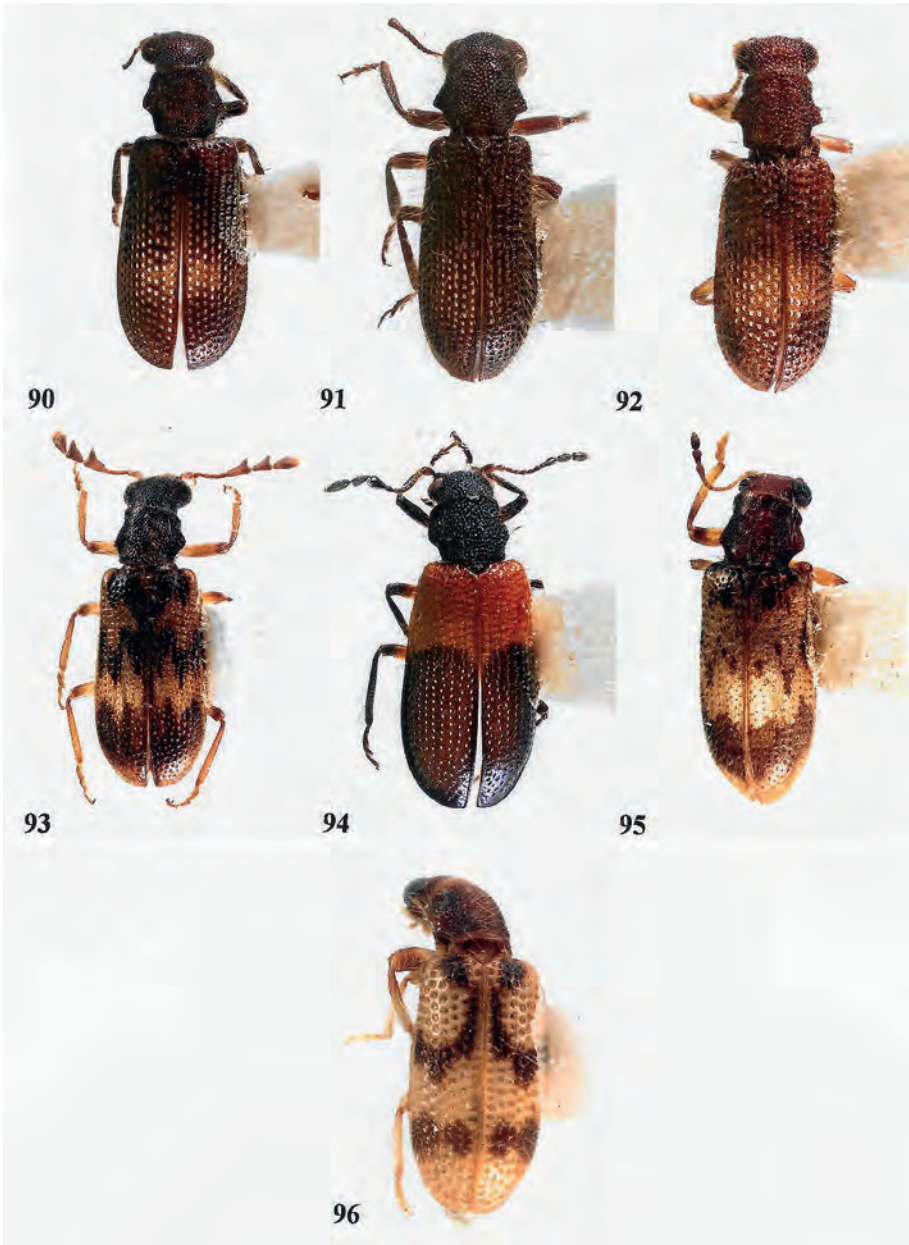


Figs 72-80: Habitus. (72) *Amphelissus goniodus*. (73) *A. meieri*. (74) *Inconnexus lunarus*. (75) *Labasiella bimaculatus*. (76) *L. boyaca*. (77) *L. cochabamba*. (78) *L. mcclarini*. (79) *L. eugeniae*. (80) *L. robles*.

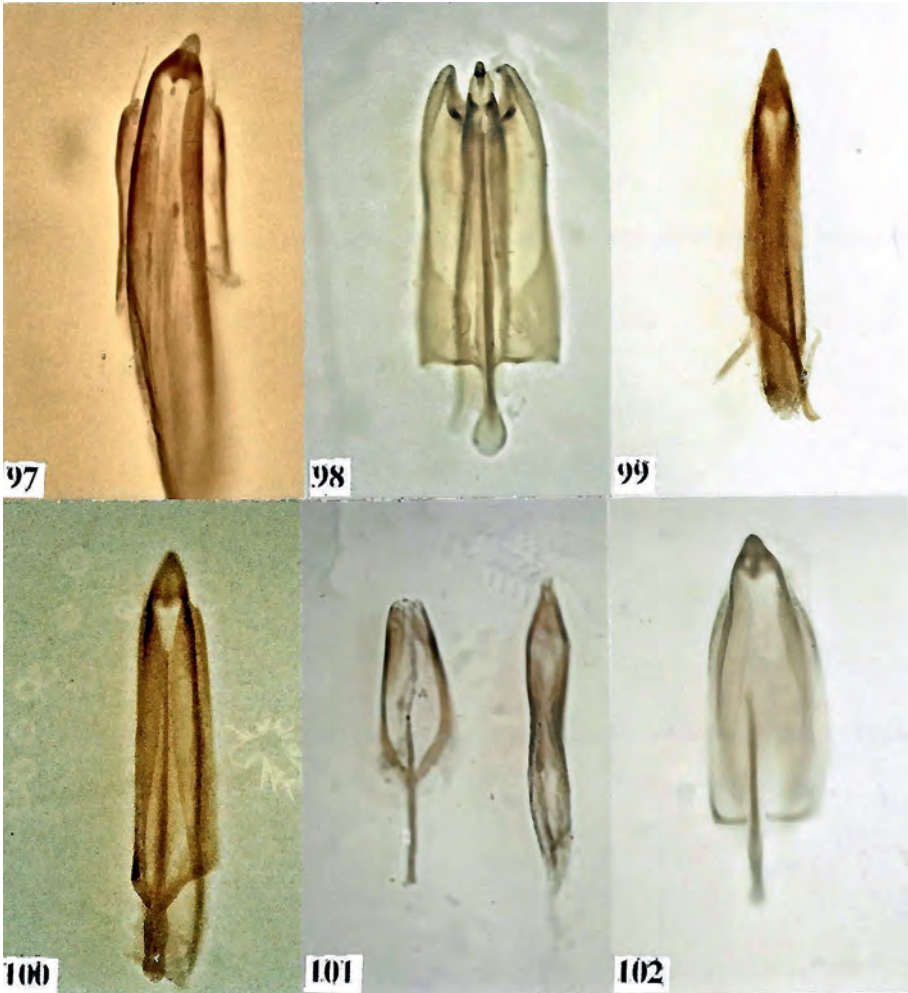


Figs 81-89: Habitus. (81) *L. solervicensi*. (82) *L. transversalis*. (83) *L. lata*. (84) *L. labaticollis*; (85) *L. machupicchu*. (86) *L. santa*. (87) *L. stangei*. (88) *L. tucumanensis*. (89) *L. varipennis*.



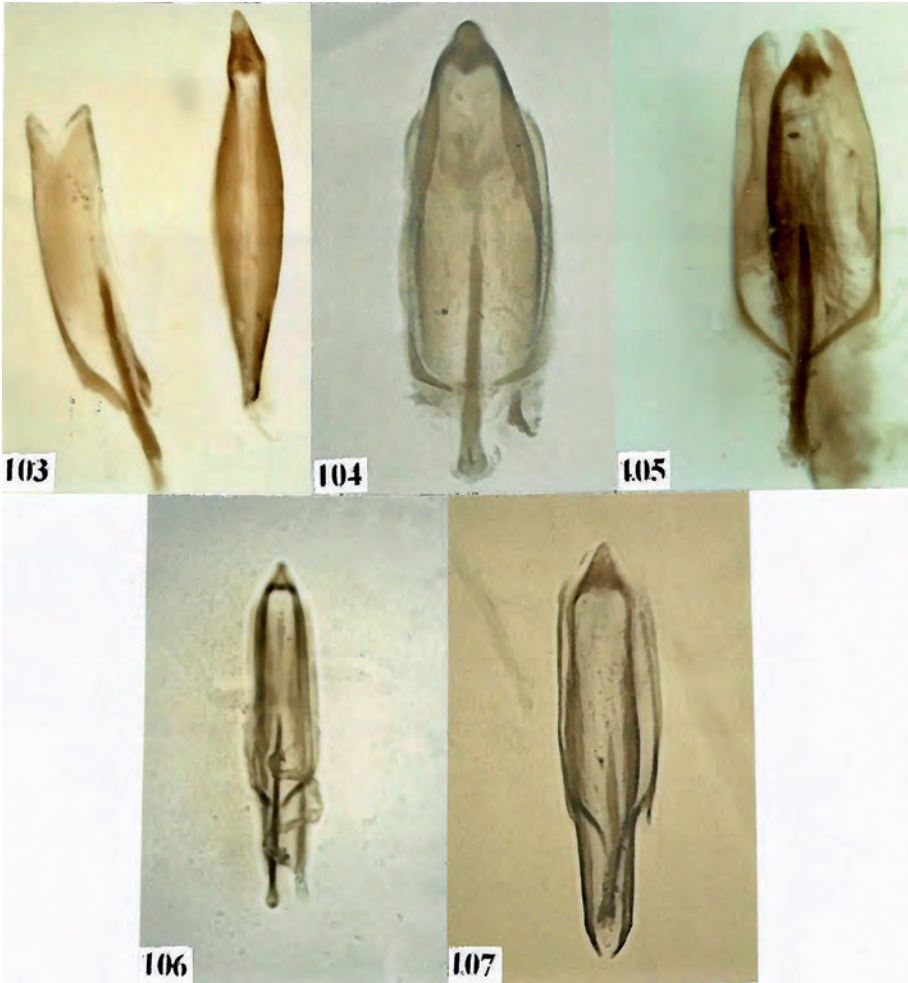


Figs 90-96: Habitus. (90) *Macilentus micidus*. (91) *Oncochelyna barrigai*. (92) *O. tuberculata*. (93) *Pelmatus barri*. (94) *P. bicolor*. (95) *Silvanoclerus beechi*. (96) *S. dilatus*.



**Figs 97-102:** Male genitalia. (97) *Amphelissus meieri*. (98) *Inconnexus lunarus*. (99) *Labasiella boyaca*. (100) *L. mcclarini*. (101) *L. transversalis*. (102) *L. machupicchu*.





**Figs 103-107:** Male genitalia. (103) *Labasiella eugeniae*. (104) *L. tucumanensis*. (105) *L. varipennis*. (106) *L. stangei*. (107) *Macilentus micidus*.