

## Review of Bernhauer's Types of *Aleochara* from South America (Coleoptera: Staphylinidae: Aleocharinae)

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**Jan Klimaszewski and Christian Maus (1999)** Review of Bernhauer's types of *Aleochara* from South America (Coleoptera: Staphylinidae: Aleocharinae). *Zoological Studies* 38(2): 207-221. Types of species of *Aleochara* described by Bernhauer from South America are reviewed and assigned to subgenera. Each species is provided with a short diagnosis, drawings of genitalia, photographs of type specimens, and a short discussion on relationships. The following species are considered to be valid: *Aleochara* (*Xenochara*) *aliipennis* (Argentina, Chile), *A. (Aleochara) bruchi* (Argentina), *A. (Xenochara) bruchiana* (Argentina), *Aleochara* (*Xenochara*) *argentina* (Brazil), *A. (Xenochara) glabra* (Argentina), *A. (Xenochara) lacustris* (Peru), *A. (Xenochara) opacula* (Brazil), *A. (Aleochara) parvicollis* (Peru), *A. (Xenochara) richteri* (Argentina), *A. (Xenochara) weiseri* (Argentina), and *A. (Maseochara) missionis* (nom. nov. for *Maseochara argentina*). *Aleochara* (*Xenochara*) *wittei* (Argentina) is considered here to be a new synonym of *A. (Xenochara) richteri*. Six new species groups are erected: *Bruchi* group to accommodate *A. bruchi*, *Glabra* group to accommodate *A. glabra*, *Weiseri* group to accommodate *A. weiseri*, *Richteri* group to accommodate *A. richteri* and *A. bruchiana*, and *Lacustris* group to accommodate *A. lacustris* and *A. aliipennis*. *Aleochara glabra* and *A. weiseri* are transferred from *Coprochara* to *Xenochara*. *A. (Maseochara) missionis*, **nomen novum**, is proposed to replace *Maseochara argentina*. Lectotypes are designated for the following species: *A. argentina*, *A. bruchi*, *A. bruchiana*, *A. glabra*, *A. opacula*, *A. parvicollis*, *A. weiseri*, and *A. wittei*.

**Key words:** Coleoptera, Staphylinidae, *Aleochara*, Taxonomy, South America.

Adults and larvae of the genus *Aleochara* occur in fly-infested habitats. Adults prey mainly on eggs, larvae, and pupae of cyclorrhaphous Diptera, and larvae feed on pupae inside puparia (Peschke and Fuldner 1977, Klimaszewski 1984, Klimaszewski and Jansen 1993, Maus et al. 1998). They are natural fly regulators and are important for biological control programs (e.g., Jones 1967, Bromand 1980, Wright et al. 1989, Jonasson 1990 1994, and many others). The Latin American fauna of this genus is rich in species but is very poorly known. There are some 50 described species from South America but probably the majority of species from the region remains undescribed. The original species descriptions are scattered in the literature and are difficult to use because their authors failed to study the genitalic structures so crucial for species identification.

Several attempts have been made to study type specimens of *Aleochara* species from Latin America, providing genitalic illustrations and redescriptions, in preparation for a review of this group from the region (Klimaszewski and Génier 1987, Klimaszewski et al. 1987, Klimaszewski 1989, Klimaszewski 1990, Pace 1990, Klimaszewski and Ashe 1992). In this paper we examine types of *Aleochara* described by Bernhauer from South America and assign them to subgenera recognized by Klimaszewski (1984) and Klimaszewski and Jansen (1993). We also provide new data on genitalic structures, systematics, and relationships of the South American species described by Bernhauer (1901 1904 1908 1912 1921 1925).

This research was initiated and advanced at BC Research Inc., Vancouver, Canada, and the Albert-

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Ludwigs-Universität, Freiburg, Germany, as a collaborative project which was later completed at the Laurentian Forestry Centre, Sainte-Foy, Quebec, Canada.

## METHODS

All type specimens have been dissected to confirm their identity mainly on the basis of genital structures. Genitalia and terminalia were dehydrated in absolute ethanol, washed in xylene, and embedded in Canada balsam or in water-soluble polyvinylpyrrolidone on microslides attached to the pinned specimens. Outline drawings of genitalia were made using a Wild M3Z stereoscopic microscope with a drawing tube. Photographs were taken using a Zeiss stereoscopic microscope with a camera attachment. Terminology follows that used by Klimaszewski (1984) and Klimaszewski and Jansen (1993).

## CONVENTIONS

### 1. Repository abbreviations

FMNH: Field Museum of Natural History (now The Field Museum), Chicago, U.S.A.

NHMW: Naturhistorisches Museum, Vienna, Austria

ZMB: Museum für Naturkunde der Humboldt-Universität, Berlin, Germany.

### 2. Citation of information on type labels

Data from each label are enclosed with (" "), a forward slash (/) separates lines, and information enclosed by brackets ([ ]) provides further details about the label.

## SYSTEMATICS

### Subfamily Aleocharinae Fleming, 1821

#### Tribe Aleocharini Fleming, 1821

*Diagnosis:* Tarsal formula usually 5-5-5 (4-5-5 in *Tinotus*), maxillary and labial palpi with a minute pseudosegment, larvae are parasitoids within puparia of cyclorrhaphous Diptera in at least some genera (*Aleochara*, *Tinotus*).

*Tinotus* Sharp (1883) is currently assigned to the tribe Hoplandriini mainly on the basis of tarsal formula, but we believe that it belongs in Aleocharini. Except for the 4-segmented protarsi (5-segmented in *Aleochara*) it agrees morphologically with *Aleo-*

*chara*, and according to Peschke (pers. comm.) *Tinotus* larvae are indistinguishable from those of *Aleochara*.

### Genus *Aleochara* Gravenhorst, 1802

For literature review and diagnosis, see Klimaszewski (1984) and Klimaszewski and Jansen (1993).

#### CHECKLIST OF NEOTROPICAL *ALEOCHARA* SPECIES DESCRIBED BY M. BERNHAUER (1901-1925)

#### Subgenus *Xenochara* Mulsant and Rey, 1874

##### *Puberula* Species Group

1. *A. (Xenochara) opacula* Bernhauer 1901: 369 (Brazil)

##### *Sculptiventris* Species Group

2. *A. (Xenochara) argentina* Bernhauer 1908: 371 (Brazil)

##### *Weiseri* Species Group (**new**)

3. *A. (Xenochara) weiseri* Bernhauer 1921: 178 (Argentina)

##### *Richteri* Species Group (**new**)

4. *A. (Xenochara) richteri* Bernhauer 1912: 82 (Argentina)

*A. wittei* Bernhauer 1921: 178 (**new synonymy**)

5. *A. (Xenochara) bruchiana* Bernhauer 1925: 263 (Argentina)

##### *Lacustris* Species Group (**new**)

6. *A. (Xenochara) lacustris* Bernhauer 1908: 372 (Peru)

7. *A. (Xenochara) aliipennis* Bernhauer 1925: 264 (Argentina, Chile)

##### *Glabra* Species Group (**new**)

8. *A. (Xenochara) glabra* Bernhauer 1921: 179 (Argentina)

#### Subgenus *Aleochara* Gravenhorst, 1802

##### *Parvicollis* Species Group (**new**)

9. *A. (Aleochara) parvicollis* Bernhauer 1904: 241 (Peru)

##### *Bruchi* Species Group (**new**)

10. *A. (Aleochara) bruchi* Bernhauer 1925: 263 (Argentina)

#### Subgenus *Maseochara* Sharp, 1883

11. *A. (Maseochara) missionis nomen novum* *Maseochara argentina* Bernhauer 1925: 264 (Argentina); *nec* Bernhauer 1908: 371

#### Subgenus *Xenochara* Mulsant and Rey

For taxonomy and references, see Klimas-

zewski (1984) and Klimaszewski and Jansen (1993).

**Diagnosis:** Body small to medium sized (length 1.5-7 mm); pubescence even, on elytra usually directed straight posteriorly; antennal segments 6-10 usually moderately transverse; mesosternum usually fully but occasionally partially carinate (carina 2/3-1/2 of mesosternal length); adults occur on a broad range of habitats (e.g., forest litter, animal droppings, carrion).

### **Puberula Species Group**

(as defined by Klimaszewski and Ashe 1992)

**Diagnosis:** Pronotum finely punctate and densely pubescent; elytra often with 2 transverse paler spots extending from shoulder to outer posterior angle; tergal impressions glabrous or with fine punctation; median lobe of aedeagus with approximately straight venter and more or less hooked apex; spermatheca with irregularly coiled posterior duct. This group is rich in species in Latin America, with clusters of closely related species (Klimaszewski and Ashe 1992).

#### 1. *Aleochara (Xenochara) opacula* Bernhauer

*A. opacula* Bernhauer 1901: 369

Figs. 5, 15, 33, 34

**Diagnosis:** Body fusiform oval, medium sized (length 5 mm), dark brown except for rust-brown legs, basal 2-3 antennal segments, apex of abdomen, shoulders, and inner corners of elytra; pubescence yellowish-brown, dense on forebody and less so on abdomen; punctation fine, slightly asperate on elytra, and moderately coarse, longitudinally elongate on abdomen; integument moderately glossy on forebody and strongly so on abdomen. Antennae with segments 4-10 elongate to slightly transverse.

Head approximately as broad as long, temples arcuate and shorter than eyes, pubescence directed obliquely latero-anteriad from middle of disc. Pronotum transverse, nearly as broad as elytra, arcuate basally and laterally, pubescence short, directed obliquely latero-posteriad. Elytra slightly broader than pronotum; pubescence short, dense, and directed approximately straight posteriad. Abdomen moderately glossy, sparsely pubescent, pubescence in tergal impressions scarcely visible and becoming increasingly longer posteriorly. Mesosternum with complete carina, mesosternal process narrowly triangular and acute apically, extending about 2/3 length of mesocoxae. Metatarsus with basal segment as long as 2 following segments combined.

**Male:** Unknown.

**Female:** Spermatheca with large L-curved capsule, sinuate chamber and irregularly twisted duct (Fig. 15). It is very similar to that of *A. puberula* and *A. lescheni* (for illustrations see Klimaszewski 1984 and Klimaszewski and Ashe 1992). Tergite 8 as broad as long, with shallow V-shaped apical emargination (Fig. 33). Sternite 8 as broad as long with apex truncated and slightly emarginate (Fig. 34).

**Bionomics:** Unknown.

**Distribution:** Brazil: Amazon.

**Material examined. Type specimen:** Lectotype (♀, here designated): “*opacula* Fvl./Amazonas/Staudinger”, “*opacula* Brh./Type”, “474”, “Chicago NHMus/M.Bernhauer/Collection” (FMNH). Our lectotype designation label.

**Remarks:** This species is similar externally and with respect to the female genitalia to *A. festiva* Pace (1990) described from Brazil, to the cosmopolitan *A. puberula* Klug (1832), and to *A. lescheni* Klimaszewski and Ashe (1992) described from Costa Rica. It is also similar externally to *A. divergens* Pace (1990) from Peru (female unknown). Since the male of *A. opacula* remains unknown, we cannot with certainty eliminate the potential synonymy of this species to any of the species listed above.

Bernhauer (1901) stated in the description of *A. opacula* that there was more than 1 original specimen. Following the International Code of Zoological Nomenclature, Recommendation 74D, we have designated the only specimen of this species that is present in Bernhauer’s collection (FMNH) as the lectotype.

### **Sculptiventris Species Group**

(as defined by Klimaszewski and Ashe 1992)

**Diagnosis:** Pronotum finely punctate and moderately densely pubescent; elytra often with 2 paler spots near interior posterior angles; tergal impressions with coarse, deep punctation; median lobe of aedeagus with strongly arched venter and simple, not hooked apex; spermatheca with spherical or spherically elongate capsule and sinuate chamber and duct.

#### 2. *Aleochara (Xenochara) argentina* Bernhauer

*Aleochara argentina* Bernhauer 1908: 371.

Figs. 1, 2, 16, 41, 42

**Diagnosis:** Body subparallel, medium sized (length 4.7-5 mm), dark brown except for rust-brown sutural corners, legs, and 3 basal antennal segments; pubescence yellowish, dense on forebody and sparse on abdomen; punctation moderately coarse on forebody, slightly impressed on pronotum,

and coarse, large, and deep in tergal impressions; integument moderately glossy and more so on abdomen. Antennae with segments 4-10 strongly transverse to about twice as broad as long.

Head slightly elongate, temples subparallel and as long as eyes; pubescence moderately long, directed inwards medially and latero-antieriad elsewhere. Pronotum approximately as broad as long and slightly narrower than elytra, arcuate basally and laterally, pubescence moderately long, directed laterad and posteriad along midline and obliquely latero-posteriad on remainder of disc. Elytra slightly broader than either pronotum or abdomen, pubescence dense and directed straight or slightly obliquely posteriad. Abdomen moderately glossy, sparsely pubescent, pubescence short at tergal bases and longer at apices, punctation in tergal impressions coarse, round, and deep. Mesosternum with complete carina, mesosternal process broad and truncated apically, extending about 3/4 length of mesocoxae. Metatarsus with basal segment as long as 2 following segments combined.

*Male:* Unknown.

*Female:* Spermatheca with moderately large capsule, broad apical invagination and thin, sinuate duct (Fig. 16). Tergite 8 elongate, truncated apically (Fig. 41). Sternite 8 elongate, and broadly rounded apically (Fig. 42).

*Bionomics:* Unknown.

*Distribution:* Brazil.

*Materials examined. Type specimens:* Lectotype (here designated) and Paralectotype (2 ♀ ♀): "Bras. [il=Brazil] Chaunar [Chaunar-Region]/Reg.lg. Jan-sen", "*argentina*/Brh. Typus", "Chicago NHMus/M.Bernhauer/Collection", (FMNH). Our designation label.

*Remarks:* This species is here assigned to the *Sculptiventris* species group of the subgenus *Xenochara*. Like other species of this group (*A. sculptiventris*, *A. sallaei*, and *A. verberans*) it has coarsely and deeply punctate tergal impressions and has a similar general shape of spermatheca with approximately spherical capsule and sinuate duct.

Bernhauer (1908) did not specify the number of



**Figs. 1-6.** Photographs of type specimens of *Aleochara* species (apical abdominal segments removed): 1, 2, *A. argentina* (1 = Lectotype female, 2 = Paralectotype female); 3, *A. parvicollis* (Lectotype male); 4, *A. weiseri* (Lectotype female); 5, *A. opacula* (Lectotype female); 6, *A. lacustris* (Holotype male).

specimens on which the original description of *A. argentina* was based. We designate the lectotype and the paralectotype from the only 2 available females of this species in Bernhauer's collection (FMNH).

### **Weiseri Species Group (new)**

*Diagnosis:* Distinct by sparsely pubescent body, fine and sparse punctation, glossy integument, yellowish pubescence directed obliquely postero-laterad on pronotum and elytra, mesosternum triangular, pointed apically, partially carinate, with carina of half mesosternal length, spermatheca tubular consisting of two parts united medially.

3. *Aleochara (Xenochara) weiseri* Bernhauer  
*Aleochara weiseri* Bernhauer 1921: 178.  
Figs. 4, 13, 39, 40

*Diagnosis:* Body elongate, subparallel, medium sized (length 5 mm), dark brown, nearly black, tarsi

and abdominal apex reddish-brown, elytra reddish-yellow; pubescence yellowish to brown, short and sparse; punctation fine; integument strongly glossy. Antennae with segments 4-10 transverse, each at most twice as broad as long.

Head approximately round, temples arcuate and shorter than eyes, pubescence directed latero-anteriad. Pronotum transverse, slightly narrower than elytra, pubescence sparse, short and directed latero-posteriad. Elytra transverse, slightly broader than pronotum, pubescence short, sparse and directed latero-posteriad. Abdomen subparallel, sparsely pubescent, glabrous in tergal impressions and with longer pubescence on tergal apical third. Mesosternum with partial carina of half mesosternal length, mesosternal process narrowly triangular and acute apically, extending about 2/3 length of mesocoxae. Metatarsus with basal segment as long as 2 following segments combined.

*Male:* Unknown.

*Female:* Spermatheca broadly U-shaped, consisting of 2 tubular parts (capsule and chamber)



**Figs. 7-12.** Photographs of type specimens of *Aleochara* species (apical abdominal segments removed): 7, *A. aliipennis* (Holotype male); 8, 9, *A. bruchi* (8 = Paralectotype female, 9 = Lectotype male); 10, *A. bruchiana* (Lectotype male); 11, *A. richteri* (Lectotype female); 12, *A. glabra* (Lectotype male).

united medially (Fig. 13). Tergite 8 transverse, truncated apically with slight apical emargination (Fig. 39). Sternite 8 transverse slightly produced apically (Fig. 40).

**Bionomics:** Unknown except for the November collection date and elevation of 3400 m.

**Distribution:** Argentina.

**Material examined. Type specimen:** Lectotype (♀, here designated): "Rep.[ublic] Argentina/Prov. Jujuy/30.XI.1919/C. Bruch", "Hornadita/3400 m/Weiser", "Weiseri Brh./Typus/ded. Bruch", "Chicago NHMus/M. Bernhauer/Collection", (FMNH). Our lectotype designation label.

**Remarks:** *Aleochara weiseri* was originally described as a *Coprochara* species; however it shows none of the autapomorphies of this subgenus like pronotal dorsal rows of punctures, coiled spermathecal duct, or complete mesosternal carina (see Klimaszewski 1984, Maus 1998), and therefore it is transferred here to *Xenochara*. Scheerpeltz (1960) recorded *A. weiseri* from Bolivia, but this record should be considered as doubtful because there are no voucher specimens of this species in the Scheerpeltz collection (NHMW), and many specimens in his collection were misidentified as *A. weiseri*.

The *weiseri* group is closely affiliated to the *richteri* group (see remarks under *A. richteri*). Bernhauer (1921) did not specify the number of specimens on which the original description of *A. weiseri* was based. We designated the lectotype from the only available female in Bernhauer's collection (FMNH). For misidentified material see remarks under *A. aliipennis* and *A. bruchiana*.

#### **Richteri Species Group (new)**

**Diagnosis:** Defined by strongly glossy body with evenly distributed, coarse, round, deep punctation on forebody, short and inconspicuous pubescence, scarcely visible transversely reticulate microsculpture, and basal segment of metatarsus as long as 3 following segments combined. Mesosternum bearing weak, scarcely noticeable partial carina, extending 2/3 of mesosternal length. Mesosternal process narrow and pointed apically, extending to 2/3 of mesocoxal length. Median lobe of aedeagus with tubus strongly curved and projecting ventrally, its apical portion narrowly elongate (Fig. 31). Internal sac with long flagellum, coiled once in bulbous, and with 2 small apical and 2 large subapical elongate sclerites, each reflexed basally and ending with a short ventrally pointed tip.

This group is unique in the genus *Aleochara* and

its taxonomic position is unsettled. Further studies are needed to unravel relationships of this taxon to other species and subgenera of *Aleochara*.

#### **4. *Aleochara (Xenochara) richteri* Bernhauer**

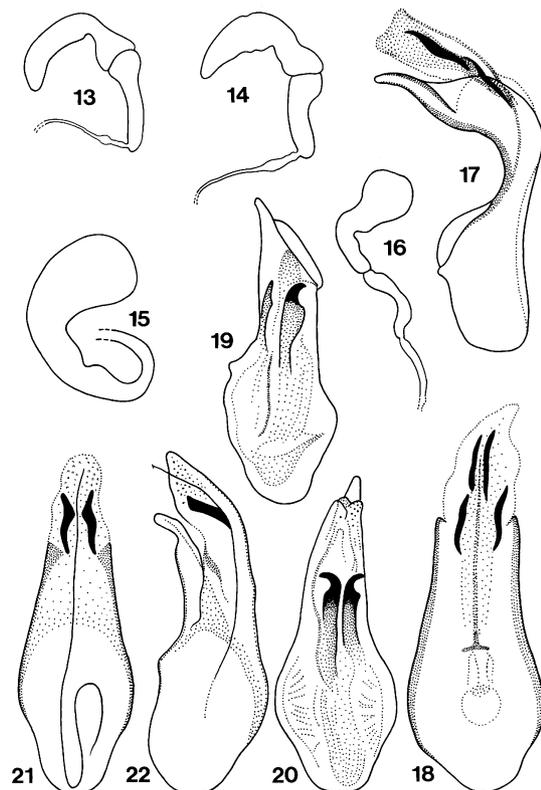
*A. richteri* Bernhauer 1912: 82.

*A. wittei* Bernhauer 1921: 178. **new synonymy.**

Figs. 11, 14, 30, 31, 45, 46, 53, 54

**Diagnosis:** Body robust, fusiform, medium sized (length 5.5-6 mm), uniformly glossy black or black with reddish-brown antennal bases, legs, apex of abdomen, and medio-posterior disc of elytra; pubescence short, scarcely visible with the exception of lateral setae and those on posterior tergal margins; punctation evenly distributed, large, and impressed particularly on pronotum. Antennae with segments 4-10 quadrate or slightly transverse.

Head about as broad as long, temples arcuate, approximately as long as eyes, pubescence short, scarcely visible, and directed latero-anteriad from



**Figs. 13-22.** Genitalia of *Aleochara* species: 13, *A. weiseri*: spermatheca; 14, *A. richteri*: spermatheca; 15, *A. opacula*: spermatheca; 16, *A. argentina*: spermatheca; 17, 18, *A. glabra*: median lobe of aedeagus in lateral and dorsal view; 19, 20, *A. parvicollis*: median lobe of aedeagus in lateral and dorsal view; 21, 22, *A. lacustris*: median lobe of aedeagus in dorsal and lateral view.

middle of disc. Pronotum strongly transverse, slightly narrower than elytra, broadly arcuate basally and laterally, pubescence short, directed latero-posterior from midline of disc; 6 conspicuous large setiferous punctures present (excluding marginal ones), 2 pairs on each side in the proximity of the disc midline, and one more laterally on each side of disc, about half-way between midline and lateral edge of disc. Elytra strongly transverse, slightly broader than pronotum and abdomen, pubescence sparse, directed obliquely latero-posterior from suture. Abdomen subparallel in basal 2/3 and tapering apically, punctures in tergal impression smaller and denser than elsewhere. Mesosternum bears scarcely noticeable fine partial carina (more visible in male) extending 2/3 of mesosternal length, mesosternal process narrowly triangular, acute apically, and extending 2/3 of length of mesocoxae. Metatarsus with basal segment as long as 3 following segments combined.

**Male:** Aedeagus and tergite and sternite 8 similar to those of *A. bruchiana* (Figs. 30, 31, 53, 54).

**Female:** Spermatheca tubular, consisting of tubularly elongate capsule narrowed apically, short spherical chamber, and elongate tubular duct (Fig. 14). Tergite 8 transverse with slightly sinuate apical margin (Fig. 45). Sternite 8 transverse and triangularly produced apically (Fig. 46).

**Bionomics:** Unknown.

**Distribution:** Argentina.

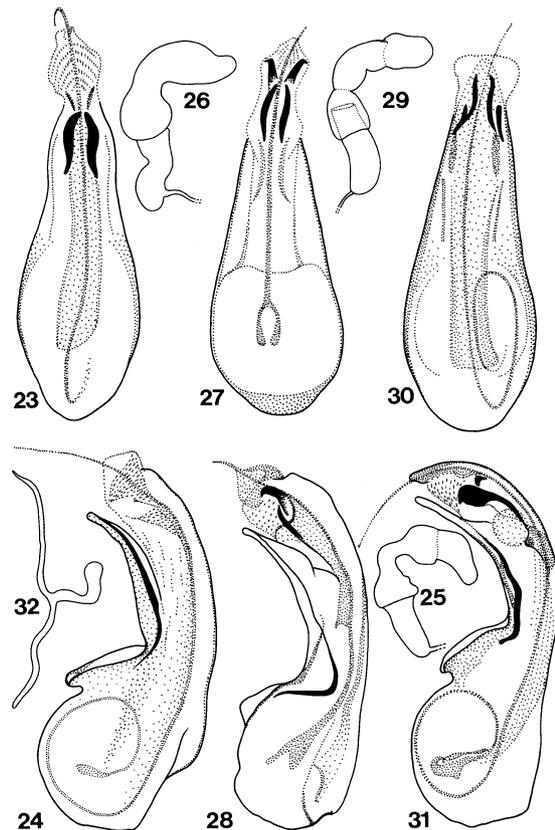
**Materials examined. Type specimens:** Holotype of *A. richteri* (♀): “Comodoro”, “Rivadavia”, “2023”, “Gobernacion/Santa Cruz”, “*Richteri* Brnh./Typus unic”, (FMNH).

Lectotype of *A. wittei* (♀, here designated): “Rep.[ublic] Argentina/Gob. Santa Cruz, 190 [unclear]/C. Bruch”, “Valle Tunel/Dr. Witte”, “Wittei Brh./Typus/ded. Bruch”, “Chicago NHMus/Bernhauer/Collection”. (FMNH). Our lectotype designation label. Paralectotype of *A. wittei* (male): “Valle Tunel/St. Cruz/ Dr. Witte”, “Bruch/donavit”, “*Aleochara*”, “*Wittei* Brnh.”, “Cotypus/*Aleochara/wittei* Bernhauer”, “Cotypus”, “ex coll./Scheerpeltz”, “*Wittei* Bh [=Bernhauer]” (ZMB).

**Remarks:** The type specimen of *A. richteri* Bernh. (1912) is identical externally and in terms of the female genitalia to that of *A. wittei* Bernhauer (1921). The latter species is synonymized here on the basis of published priority.

The spermatheca of *A. richteri* resembles that of *A. weiseri*, but it remains to be seen if this reflects a close relationship. The aedeagus, tergite, and sternite 8 of *A. richteri* are identical to those of *A. bruchiana*, but the 2 species can be readily separated by the different color of elytra (reddish in *A.*

*bruchiana* and black in *A. richteri*). The presence of the coarsely punctated body and only a trace of a partial mesosternal carina prevented us from assigning this species to the *weiseri* species group. Should future studies prove that the male genitalia of both species are very similar in form and structure, their placement in separate species groups should be reexamined. *Aleochara wittei* (= *A. richteri*) was originally described as a *Coprochara* species, but because of a lack of at least some of the characteristics of *Coprochara* (e.g., 2 pronotal dorsal rows of punctures, aedeagal median lobe bearing characteristically shaped and arranged sclerites, mesosternum completely carinate; see Klimaszewski 1984, Maus 1998), the assignment of *A. wittei* to this subgenus was erroneous. Likovsky (1973) transferred *A. wittei* to *Aleochara sensu stricto*, but due to the partially carinate mesosternum in this species his arrangement cannot be accepted. We have designated the specimen from the Bernhauer collection



**Figs. 23-32.** Genitalia of *Aleochara* species: 23-25, *A. aliipennis*: 23, 24, median lobe of aedeagus in dorsal and lateral view, 25, spermatheca; 26-28, *A. bruchi*: 26, spermatheca, 27, 28, median lobe of aedeagus in dorsal and lateral view; 29, *Aleochara* sp. (probably undescribed, related to *A. bruchiana*): spermatheca; 30, 31, *A. bruchiana*: median lobe of aedeagus in dorsal and lateral view (identical in *A. richteri*); 32, *A. parvicollis*: spermatheca.

(FMNH) as the lectotype, following the International Code of Zoological Nomenclature, Recommendation 74 D.

5. *Aleochara (Xenochara) bruchiana* Bernhauer  
*Aleochara bruchiana* Bernhauer 1925: 263  
 Figs. 10, 30, 31, 53, 54

**Diagnosis:** Body robust, fusiform, medium sized (length 4.5 mm), uniformly glossy black with reddish elytra, apex of abdomen, and legs; pubescence short, scarcely visible with the exception of lateral setae and those on posterior tergal margins; punctuation evenly distributed, large and impressed particularly on pronotum. Antennae with segments 4-10 transverse and incrassate.

Head slightly elongate, rounded, temples arcuate, about as long as eyes, pubescence short, scarcely visible and directed latero-anteriad from middle of disc. Pronotum strongly transverse, slightly narrower than elytra, broadly arcuate basally and laterally, pubescence short, directed latero-posteriad from midline of disc; 6 conspicuous large setiferous punctures present (excluding marginal setae), 2 pairs on each side in proximity of disc midline and 1 more laterally on each side of disc, about halfway between midline and lateral edge of disc. Elytra strongly transverse, slightly broader than pronotum and abdomen, pubescence sparse, directed obliquely latero-posteriad from suture. Abdomen subparallel in basal 2/3 and tapering apically, punctures in tergal impressions fine, and those near tergal apical margins coarser. Mesosternum weakly carinate, carina extending to about 2/3 of mesosternal length, mesosternal process narrowly triangular, acute apically, and extending 2/3 length of mesocoxae.

**Male:** Median lobe of aedeagus with tubus strongly curved and projecting ventrally, its apical portion narrowly elongate (Figs. 30, 31). Internal sac with long flagellum, coiled once in bulbus, and with 2 small apical and 2 large subapical elongate sclerites, each reflexed basally and ending with a short ventrally pointed tip (Fig. 31); apical membrane of internal sac coarse. Tergite 8 transverse, truncated apically with apical margin slightly sinuate (Fig. 54). Sternite 8 transverse, with strongly triangularly produced apex (Fig. 53).

**Female:** Unknown.

**Bionomics:** High elevation species (up to 2780 m), collected in February.

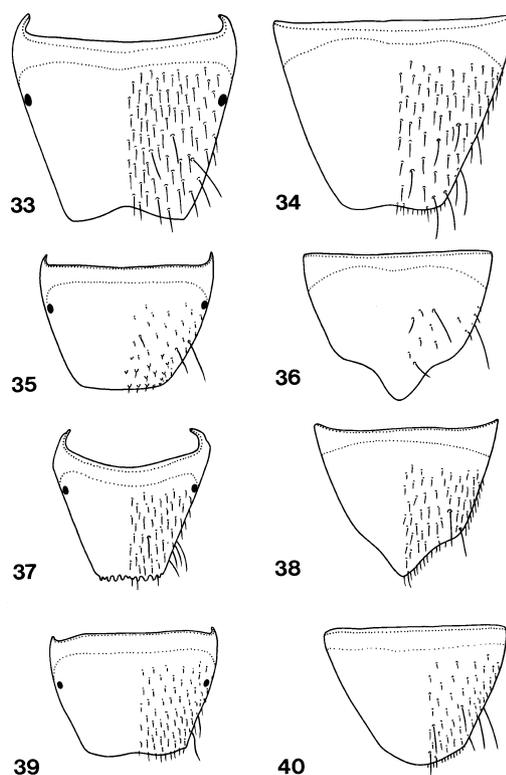
**Distribution:** Argentina.

**Material examined. Type specimen:** Lectotype (♂, here designated): "Rep.[ublic] Argentina/Prov. San Juan/19...[pin hole]/C. Bruch", "*Bruchiana*

Bernh. Typus/Typus.-", "Chicago NHM/M. Bernhauer/Collection".

**Additional material.** Argentina: Puznata del Inca, 2780 m, F. Tippmann, 22.2.38, Scheerpeltz coll. (NHMW) 1 ♂.

**Remarks:** *A. bruchiana* is externally very similar to *A. richteri*, except for the reddish elytra. The male aedeagus and tergite and sternite 8 are identical in the 2 species which are apparently closely related. Bernhauer (1925) did not specify the number of specimens on which the original description of *A. bruchiana* was based. We have designated the lectotype from the only available specimen of this species in Bernhauer's collection (FMNH). We were able to examine 8 females and 1 male from the Scheerpeltz collection (NHMW) which were misidentified as *A. weiseri*. They probably represent an undescribed species (spermatheca Fig. 29), which is closely related to *A. bruchiana*. The male from Potosi has a very similar median lobe of aedeagus to that of *A. bruchiana* but differs externally by the sparsely punctate pronotum, slightly transverse antennal segments 6-10, and less brightly orange elytra. The label data are: Bolivia, Tunari-Massif, 4000 m, 28.12.1948, 28.02.1949, Leg. R. Zischka



**Figs. 33-40.** Tergite 8 (left) and sternite 8 (right) of *Aleochara* species: 33, 34, *A. opacula* (female); 35, 36, *A. glabra* (male); 37, 38, *A. lacustris* (male); 39, 40, *A. weiseri* (female).

(NHMW) 3 ♀♀; Bolivia, Potosi, 4200-4500 m, 9.07. 1949, Leg. P. G. Kuschel (NHMW) 1 ♂, 2 ♀♀; Bolivia, Orura, Huanuni, 4150 m, 13. 01. 1949 (NHMW) 1 ♀; Peru, Puna, Leg. P. G. Kuschel (NHMW) 1 ♀; Chile, Arica, Parinacota, 4400 m, 7. 12.1946, Leg. P. G. Kuschel (NHMW) 1 ♀. We refrain from describing this species as new, because not all of the South American types of *Aleochara* were examined and distribution of the described species is poorly known and understood.

### **Lacustris Species Group (new)**

**Diagnosis:** Distinct by glossy integument with traces of transverse microsculpture, fine and sparse punctation, pubescence directed obliquely latero-posteriad on pronotum and elytra, abdominal impressions glabrous, mesosternum with complete carina, median lobe of aedeagus with straight venter and ventrally produced apex, flagellum long and coiled in bulbous.

6. *Aleochara (Xenochara) lacustris* Bernhauer  
*Aleochara lacustris* Bernhauer 1908: 372.  
 Figs. 6, 21, 22, 37, 38

**Diagnosis:** Body spindle-shaped, small (length 3.5 mm), dark brown to nearly black, with reddish elytra, legs, bases of antennae, and abdominal apex; pubescence yellowish to brown, short, and sparse; punctation fine except slightly larger and shallowly impressed on pronotum and slightly coarse on elytra; integument glossy with traces of transverse microsculpture on head and pronotum. Antennae with segments 4-10 transverse, each at most 1.5 times broader than long.

Head approximately round, temples arcuate, shorter than eyes, pubescence directed obliquely inwards medially and antero-laterad elsewhere. Pronotum transverse, strongly narrowed anteriorly, pubescence directed posteriad along middle line and latero-posteriad on remainder of the disc. Elytra transverse, pubescence directed latero-posteriad towards outer angles. Abdomen glossy, tapering posteriorly, first 3 tergites with deep tergal impressions, impressions glabrous with minute punctation, remaining tergites more coarsely and densely punctate. Mesosternum with complete carina, mesosternal process narrow, acutely pointed, extending about 3/4 length of mesocoxae. Metatarsus with basal segment as long as 2 1/2 times following segments combined.

**Male:** Median lobe of aedeagus with approximately straight venter and strongly produced apex, flagellum long and coiled in bulbous (Figs. 21, 22).

Tergite 8 transverse, serrated apically (Fig. 37). Sternite 8 transverse and triangularly produced apically (Fig. 38).

**Female:** Unknown.

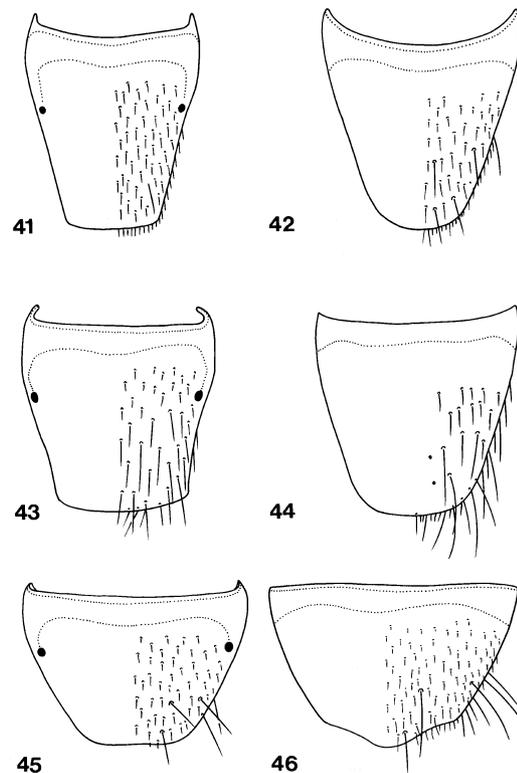
**Bionomics:** Unknown except for the high elevation, 3800 m, collecting site.

**Distribution:** Peru.

**Material examined. Type specimen:** Holotype (♂): "Peru/Bang-Haas" "Titicaca-See", "*Lacustris*/Bernh. Typus", "*Aleochara/lacustris* Bernh./det. R. Pace 1985/Holotype", (FMNH).

**Remarks:** *Aleochara lacustris* is assigned here to the newly erected *lacustris* species group which appears to be related to the *richteri* species group. Species of both groups have similarly shaped median lobe of aedeagus and have a long flagellum coiled in the bulbous (Figs. 22, 24, 31). *Aleochara lacustris* is considered here to be the sister species of *A. aliipennis* due to external similarities and with respect to the similarly shaped male aedeagus (see remarks under *aliipennis*).

7. *Aleochara (Xenochara) aliipennis* Bernhauer  
*Aleochara aliipennis* Bernhauer 1925: 264  
 Figs. 7, 23-25, 51, 52



**Figs. 41-46.** Tergite 8 (left) and sternite 8 (right) of *Aleochara* species: 41, 42, *A. argentina* (female); 43, 44, *A. parvicollis* (male); 45, 46, *A. richteri* (female).

**Diagnosis:** Body narrowly subparallel, tapering less apically and posteriorly than that of *A. lacustris*, small (length 3.8 mm), nearly black, with uniformly reddish elytra, tarsi, and last segment of maxillary palpi, legs and tip of abdomen brownish; pubescence yellowish to brown, short and sparse; punctuation fine, slightly coarse on elytra; integument glossy, with traces of transverse microsculpture on head and pronotum. Antennae with segments 4-10 transverse and incrassate apically.

Head slightly elongate, temples broadly arcuate, longer than eyes, pubescence directed obliquely inwards medially and antero-laterad elsewhere. Pronotum transverse, gradually and moderately narrowed anteriorly, pubescence directed latero-posterior from middle line of disc. Elytra transverse, pubescence directed latero-posterior towards outer angles. Abdomen glossy, tapering at apex, 3 first tergites with deep tergal impressions, impressions glabrous with minute punctuation, remainder of tergites more coarsely punctated. Mesosternum with complete carina, mesosternal process narrow, pointed at apex, extending about 3/4 length of mesocoxae. Metatarsus with basal segment as long as 2 following segments combined.

**Male:** Median lobe of aedeagus with approximately straight venter and narrow and narrowly elongate apical portion produced ventrally (Fig. 24), flagellum long and with 1 coil in bulbous (Figs. 23, 24). Tergite 8 slightly transverse, shallowly emarginate apically and serrated (Fig. 52). Sternite 8 slightly transverse, and triangularly produced apically (Fig. 51).

**Female:** Spermatheca strongly curved, consisting of tubular capsule broadly connected with short chamber (Fig. 25). Tergite 8 transverse, truncated posteriorly and bearing shallow emargination. Sternite 8 broadly rounded apically.

**Bionomics:** Collection date March and April. Some specimens were collected under dung.

**Distribution:** Argentina and Chile.

**Material examined. Type specimen:** Holotype (♂): Argentina: "Masao. Catam.[arca]/III.21[1921], Weiser", "*aliipennis*/Bernh. Typus/ un.don.Bernh.", "Chicago NHMus/M. Bernhauer/Collection" (FMNH).

**Additional material:** Chile: Prov. Tarapacá, Arica, Putre, under dung, 4.12.1946, P. G. Kuschel, Scheerpeltz coll. (NHMW) 2 ♂♂, 2 ♀♀.

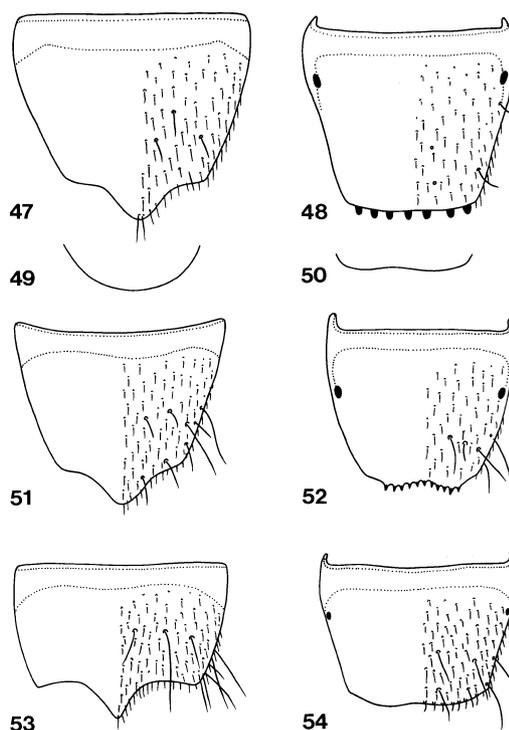
**Remarks:** *Aleochara aliipennis* is considered to be the sister species of *A. lacustris*. Both are very similar externally and have similarly shaped median lobe of the aedeagus and internal sac structures. *A. aliipennis* however has a longer, narrower and more ventrally produced apex of the median lobe (Fig. 24)

than *A. lacustris* (Fig. 22), and male tergite 8 is emarginate and serrated at apex (Fig. 52) while it is truncate and serrated in *A. lacustris* (Fig. 37). Our studies are based on a very small sample size preventing us from examining and understanding specific morphological variation over a geographical gradient. Should further materials of the 2 currently recognized species prove overlapping distributions and clinal overlap of morphological features, *A. aliipennis* should be considered as a synonym of *A. lacustris*.

The Scheerpeltz collection in Vienna (NHMW) contained an additional 3 specimens collected by G. Kuschel from Bolivia, two of which are erroneously identified as *A. weiseri*. One male and 1 female are from Potosi (4200-4500 m) and 1 female from Lake Titicaca, Achacachi (3830 m). They probably represent an undescribed species closely related to *A. aliipennis*. Both species are similar externally but the male from Bolivia does not have serrated margin of tergite 8, and the median lobe of the aedeagus is more bent and strongly produced ventrally, resembling that of *A. bruchiana* more closely.

#### **Glabra Species Group (new)**

**Diagnosis:** Distinguished by strongly glossy,



**Figs. 47-54.** Tergite 8 (right) and sternite 8 (left) of *Aleochara* species: 47-50, *A. bruchi*: 47, 48 (male), 49, 50 apical margin (female); 51, 52, *A. aliipennis* (male); 53, 54, *A. bruchiana* (male) (identical in *A. richteri*).

sparsely pubescent and sparsely punctated body; pronotum with a few larger and a few smaller punctures, 2 larger punctures distributed on each side of midline of disc and 2 laterally near lateral margin; small punctures irregularly scattered; elytra appear glabrous but bear sparse, shallow, irregularly distributed punctures; median lobe of aedeagus strongly bent ventrally. Mesosternum partially carinate.

8. *Aleochara (Xenochara) glabra* Bernhauer  
*Aleochara glabra* Bernhauer 1921: 179  
 Figs. 12, 17, 18, 35, 36

**Diagnosis:** Body subparallel, small (length 3.5 mm), strongly glossy, sparsely pubescent and punctated; head, pronotum, and appendages reddish-brown, elytra yellow, and abdomen black except for reddish apex. Antennal segments 4-10 transverse, at most about twice as broad as long.

Head approximately as broad as long, round, temples arcuate and shorter than eyes, punctation and pubescence sparse, pubescence directed anteriorly. Pronotum approximately round with straight anterior margin, with a few larger and a few smaller punctures, 2 larger punctures distributed medially along median line of disc and 2 laterally near lateral margin; small punctures irregularly scattered. Elytra transverse, appearing glabrous but bearing traces of small, flat punctures. Abdomen virtually glabrous in tergal impressions, setae on posterior margins of tergites long. Mesosternum partially carinate, carina 1/3 of mesosternal length; mesosternal process broadly triangular with round apex, extending to about 2/3 of mesocoxal length. Metatarsus with basal segment as long as 2 following segments combined.

**Male:** Median lobe of aedeagus with tubus strongly produced ventrally and sinuate subapically in lateral view (Fig. 17). Internal sac with 2 apical and 2 subapical sclerites, and elongate flagellum (Figs. 17, 18). Tergite 8 transverse, truncated apically with short, peg-like apical setae (Fig. 35). Sternite 8 as broad as long, triangularly produced apically (Fig. 36).

**Female:** Unknown.

**Bionomics:** Unknown except for collection date in December.

**Distribution:** Argentina.

**Material examined. Type specimen:** Lectotype (♂, here designated): "Rep.[ublic] Argentina/Prov. Jujuy/27.Xii.1919/C. Bruch", "Pucapampa/a/Sta Catalina", "*glabra* Brh./Typus/ded. Bruch", "Chicago NHMus/M. Bernhauer/Collection", (FMNH). Our lectotype designation label.

**Remarks:** In some features, this species resembles *Coprochara*; for example, sparse punctation of pronotum, with a concentration of punctures along both sides of median line, but without 2 distinct rows of equal-sized punctures so typical of *Coprochara*; the almost glabrous integument, spinose tibiae, median lobe of aedeagus in lateral view with strongly bent tubus, and sternite 8 with apical triangular projection and tergite 8 with minute, peg-like apical setae (similar features occur in *A. [Coprochara] sulcicollis* and some *Calochara* species). *Aleochara glabra* was originally described as *Coprochara*, but because it lacks at least some of the characteristics of this group (e.g., 2 pronotal dorsal rows of punctures, aedeagal median lobe bearing characteristically shaped and arranged sclerites, and mesosternum completely carinate, see Klimaszewski 1984, and Maus 1998) we have excluded it from this subgenus and transferred it to *Xenochara*. Its taxonomic position within the genus *Aleochara* is unresolved and needs further study, but preliminary evaluation suggests that some common character states are shared between the subgenera *Coprochara* and *Xenochara*. Relationships between the *glabra* group and the subgenus *Coprochara* are unclear and need to be investigated further. Bernhauer (1921) did not specify the number of specimens on which the original description of *A. glabra* was based. We have designated the lectotype from the only available specimen of this species in Bernhauer's collection (FMNH).

### Subgenus *Aleochara* Gravenhorst, 1802

For taxonomy and references see Klimaszewski (1984) and Klimaszewski and Jansen (1993).

**Diagnosis:** Body usually medium sized to large (length 3-9 mm); moderately to strongly glossy and without microsculpture; pubescence denser on forebody, on elytra usually directed straight or slightly obliquely posteriad; tergites 3-5 usually with deep and sharply defined transverse basal impressions; antennal segments 6-10 usually strongly transverse, each at least twice as broad as long; mesosternum not carinate, usually broad and rounded apically; adults occur most frequently on carrion.

### *Parvicollis* Species Group (new)

**Diagnosis:** Defined by quadrate or slightly transverse antennal segment 4, segments 5-10 transverse, each about twice as broad as long; pronotum semicircular in shape, approximately 2/3 of elytral width, densely pubescent; elytral pubescence directed straight posteriad; eyes large, slightly longer

than temples; median lobe of aedeagus with moderately sized bulbous, and venter straight and apex slightly produced ventrally in lateral view; spermatheca extremely small, occasionally split posteriorly into 2 branches (spermatheca found only in 2 specimens: one with split posterior branch and one with entire posterior branch).

9. *Aleochara (Aleochara) parvicollis* Bernhauer  
*Aleochara parvicollis* Bernhauer 1904: 241.  
 Figs. 3, 19, 20, 32, 43, 44

**Diagnosis:** Body spindle-shaped with elytra distinctly broader than either pronotum or abdomen, medium sized (length 4.9-7.5 mm); uniformly dark brown or with pronotum and postero-lateral portions of elytra paler; pubescence brownish, dense on pronotum and elytra, slightly less so on head, and sparse on abdomen; punctation on forebody fine and coarse on abdomen; integument moderately glossy except for strongly glossy abdomen. Antennae with segments 4 quadrate or slightly transverse, and segments 5-10 about twice as broad as long.

Head elongate, about 2/3 width of pronotum, temples arcuate, slightly shorter than eyes, pubescence moderately long, directed inwards medially and latero-anteriad elsewhere. Pronotum approximately round except for straight apical margin, about 2/3 width of elytra, pubescence short, directed posteriorly along midline and obliquely latero-posteriad on remainder of disc. Elytra broad, densely pubescent, pubescence directed straight posteriorly. Abdomen evenly tapering apically, strongly glossy, sparsely pubescent, pubescence long, punctures sparse, small to moderately large and longitudinally elongate. Mesosternum without carina. Mesosternal process triangular, moderately broad and rounded apically. Metatarsus with basal segment as long as 2 following segments combined.

**Male:** Median lobe of aedeagus with moderately sized bulbous and narrowly triangular tubus in dorsal view, apex pointed and slightly produced ventrally in lateral view; internal sac with 2 pairs of structures, the more ventral ones each sinuate near apex and pointing laterally in dorsal view (Figs. 19, 20). Tergite 8 elongate with broadly rounded apex (Fig. 43). Sternite 8 elongate and truncated apically (Fig. 44).

**Female:** Spermatheca minute and very difficult to find (found only in 2 specimens). In 1 specimen it was split posteriorly, consisting of L-shaped capsule connected to 2 narrowly elongate "arms" (Fig. 32), and in the other case it was not split posteriorly. Tergite 8 truncated apically. Sternite 8 broadly rounded apically.

**Bionomics:** Unknown except for collection dates in December, January, March, and September and elevation of some collection sites ranging from 1000 to 2200 m.

**Distribution:** Colombia and Peru.

**Material examined. Type specimens:** Lectotype (♂, here designated): "*parvicollis* Brh./Marcapata [=Maccapata: incorrect spelling in the original description]. Peru/1000-2000m Slander [S ?]", "*parvicollis*/Bernh./Typus", Chicago NHMus/M. Bernhauer/Collection", (FMNH). Our lectotype designation label.

**Paralectotype** (♂): "Marcapata [=Maccapata: incorrect spelling in the original description]/1000-2000m", "*parvicollis*/Bernhauer/Cotypus", (FMNH).

**Additional materials:** Peru: Dep Cuzco: Cosnipata plain, XII.1900, 1000 m, Garlepp, S.V. (ZMB) 5 ♀♀, 1 sex undetermined; same data except: XI.1900 (ZMB) 1 ♂, 1 ♀; Cajon, Bergland [=Cajon mountains], 1500 m, XII.1900, Garlepp, S. V. (ZMB) 4 ♂♂, 2 ♀♀, 9 sex undetermined; Cajon mountains, 1500 m, I. 1901, Garlepp (ZMB) 1 ♂. Colombia, Cali: Rio Aquatal, 1800 m, leg. Fassl, coll. Scheerpeltz (NHMW) 3 ♀♀; Colombia, Cali, (1 specimen: 19.IX.1908), leg. Fassl., coll. Scheerpeltz (NHMW) 2 ♀♀; Colombia, Cali: Alto de las Cruces, 2200 m, leg. Fassl, coll. Scheerpeltz (NHMW) 1 ♂; Colombia, Cali: Rio Vitaco, 19.IX.1908, 2200 m, leg. Fassl, coll. Scheerpeltz (NHMW) 1 ♂; Colombia, Cali: Rio Vitaco, S. Antonio, III.190, 2000 m, leg. Fassl., coll. Scheerpeltz (NHMW) 1 ♀.

**Remarks:** This species is assigned to the newly erected *parvicollis* species group, and its relationship to other *Aleochara* species/groups remains unknown. Bernhauer (1921) did not specify the number of specimens on which the original description of *A. parvicollis* was based. We have designated one of the specimens in the Bernhauer collection (FMNH) as lectotype.

### **Bruchi Species Group (new)**

**Diagnosis:** Defined by distinctly transverse antennal segments 4-10, segments 5-10 each at least twice as broad as long, pronotum arcuate basally and strongly tapering apically, about 4/5 of elytral width, moderately sparsely pubescent; elytral pubescence directed straight posteriorly and latero-posteriad near inner posterior angles; eyes large, longer than temples; median lobe of aedeagus with moderately sized bulbous and venter broadly arcuate and slightly produced ventrally in lateral view (Fig. 28).

10. *Aleochara (Aleochara) bruchi* Bernhauer

*Aleochara bruchi* Bernhauer 1925: 263  
Figs. 8, 9, 26-28, 47-50

**Diagnosis:** Body spindle-shaped with elytra slightly broader than pronotum, medium sized (length 4-4.9 mm); pronotum, elytra, abdominal apex, legs, and 2 basal antennal segments reddish-yellow, remainder of body dark brown to nearly black; pubescence yellowish to brownish, sparse in general but denser on forebody than on abdomen; punctation coarser on abdomen and elytra than elsewhere; integument strongly glossy particularly on abdomen. Antenna with segment 4 transverse, and segments 5-10 at least twice broader than long.

Head slightly elongate, about 2/3 width of pronotum, temples arcuate and shorter than eyes, pubescence moderately long, directed inwards medially and latero-antieriad elsewhere. Pronotum strongly tapering apically, about 4/5 of elytral width, pubescence moderately long and directed straight along midline and latero-posteriad on remainder of disc. Elytra transverse, moderately sparsely pubescent, pubescence directed approximately straight posteriorly except latero-posteriad near inner posterior angles. Abdomen strongly tapering apically, strongly glossy, sparsely pubescent, pubescence long, punctures sparse, slightly asperate. Mesosternal process broadly elongate in apical 2/3, rounded apically, and extending about 2/3 length of mesocoxae. Metatarsus with basal segment as long as 2 or 2½ of the following segments combined.

**Male:** Median lobe of aedeagus with moderately sized bulbous and narrowly triangular tubus in dorsal view, tubus arcuate with apex pointed and distinctly produced ventrally in lateral view, internal sac with 2 pairs of structures, posterior pair less distinct, and anterior structures pointed and produced ventrally in lateral view (Figs. 27, 28). Tergite 8 bearing 8 denticles apically (Fig. 48). Sternite 8 with triangularly produced apex (Fig. 47).

**Female:** Spermatheca sinuate and composed of enlarged capsule and chamber (Fig. 26). Tergite and sternite 8 truncated apically (Figs. 49, 50).

**Bionomics:** Unknown except for the collection date: March.

**Distribution:** Argentina.

**Materials examined. Type specimens:** Lectotype (♂, here designated): "Rep.[ublic] Argentina/189/C. Bruch", "Caspinchango/Catam.[arca] 5.III. 921[1921]", "*Bruchi* Brnh./Typus/don. Bruch", "Chicago NHMus/M. Bernhauer/Collection", (FMNH). Our lectotype designation label. Paralectotype (female): labelled as the holotype (FMNH).

**Remarks:** A unique species group without apparent close relationship to any of the known North American groups of the subgenus. Bernhauer (1925) did not specify the number of specimens on which the original description of *A. bruchi* was based. We have designated the lectotype from the only 2 available specimens of this species in Bernhauer's collection (FMNH).

### Subgenus *Maseochara* Sharp

For taxonomy and references see Klimaszewski (1984) and Klimaszewski and Jansen (1994).

**Diagnosis:** Body loosely articulated, small to very large (length 2.4-13 mm, usually about 4 mm), uniformly brown, reddish brown, or black; flattened, narrowly subparallel, with strong and long setae distributed on lateral margins of pronotum, elytra and abdomen; forebody with small, impressed punctations and with distinctly reticulate microsculptures consisting of hexagonal or irregularly angular sculpticells; pronotum often broadening apically and with lateral margins arcuate, broadest at middle or in apical third; antennal segments 6-10 usually strongly transverse; mesosternum not carinate; male tergite 8 often with apical serration or pronounced teeth.

### *Wickhami* Species Group

(As defined by Klimaszewski 1984 and Klimaszewski and Jansen 1994)

**Diagnosis:** Body microsculpture consisting of flat sculpticells, either approximately hexagonal in shape or irregularly angular; antennal segments 6-10 strongly transverse; body glossy.

#### 11. *Aleochara (Maseochara) missionis*, **nomen novum**

*Maseochara argentina* Bernhauer 1925: 264, *nec* Bernhauer 1908: 371.  
Figs. 55-58

**Diagnosis:** Body subparallel, medium sized (length 4 mm), uniformly brown except for reddish-brown tarsi, basal antennal segments, and labial palpi; pubescence brown or yellowish brown, moderately dense on elytra and pronotum and sparse elsewhere; punctation sparse, fine, and slightly impressed; integument moderately glossy on forebody and strongly glossy on abdomen. Antennae with segments 5-10 strongly transverse and broadening apically, apical segments maximally twice as broad as long.

Head elongate, temples arcuate and slightly longer than eyes, pubescence directed obliquely

anteriad and inwards on central part of disc. Pronotum trapezoidal in shape, broadest in apical third, pubescence forming arcuate lines from middle of disc. Elytra slightly transverse and broader than pronotum, humeral angles rounded and posterior angles less so, pubescence directed obliquely posteriad towards postero-lateral angles. Abdomen subparallel in basal 2/3 and then tapering, strongly glossy, sparsely pubescent, setae often arising from small granulations. Mesosternum without carina, mesosternal process narrowly elongate in apical 2/3, acute apically, and extending about 1/2 length of mesocoxae. Metatarsus with basal segment as long as the 2nd segment. Mesotibia with long seta on apical third.

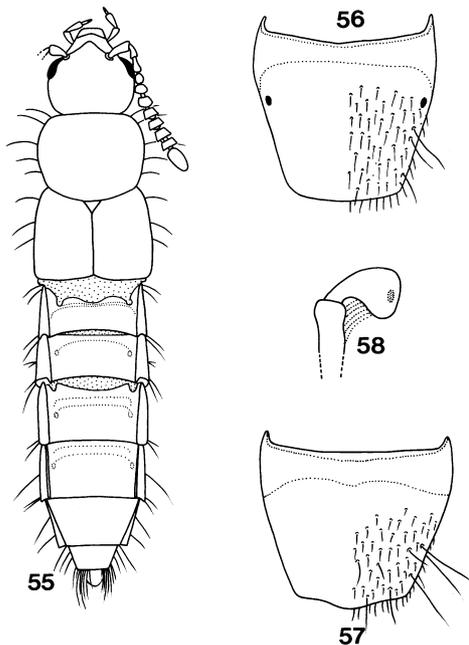
*Male:* Unknown.

*Female:* Spermatheca as in Fig. 58 (posterior part broken). Tergite 8 truncate posteriorly (Fig. 56). Sternite 8 slightly sinuate apically (Fig. 57).

*Bionomics:* Unknown.

*Material examined. Type specimen:* Holotype (♀): "Rep.[ublic] Argentina/Misiones/M. Richter", "2833", "*Maseochara/argentina* Brh./Typus mihi", "Chicago NHMus/M. Bernhauer/Collection" (FMNH).

*Remarks:* Since we consider *Maseochara* as a subgenus of *Aleochara*, then *Maseochara argentina* Bernhauer 1925, is a homonym of *Aleochara argentina* Bernhauer 1908, and the former name has to be



**Figs. 55-58.** *A. missionis* (Holotype female): 55, habitus (legs, left antenna, and pubescence except for the lateral setae not shown); 56, tergite 8; 57, sternite 8; 58, spermatheca (posterior part broken).

replaced. Only a single female of this species is known (Bernhauer 1925). The male characteristics are needed to establish the relationship of this species to other *Maseochara* species.

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## 綜述 Bernhauer 描述之南美洲 *Aleochara* 屬內之模式標本 (鞘翅目：隱翅蟲科：Aleocharinae)

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本文綜述 Bernhauer 所描述的南美洲 *Aleochara* 的模式標本，並將此屬歸入亞屬。每一物種都有一個簡短的鑑定描述、雄外生殖器描繪、模式標本照片以及親緣關係的討論。其中，*Aleochara* (*Xenochara*) *aliipennis* (阿根廷、智利)、*A. (Aleochara) bruchi* (阿根廷)、*A. (Xenochara) bruchiana* (阿根廷)、*Aleochara (Xenochara) argentina* (巴西)、*A. (Xenochara) glabra* (阿根廷)、*A. (Xenochara) lacustris* (秘魯)、*A. (Xenochara) opachula* (巴西)、*A. (Aleochara) weiseri* (阿根廷) 和 *A. (Maseochara) missionis* (*Maseochara argentina* 的新名) 等種類的分類地位為正確的，而 *Aleochara (Xenochara) wittei* (阿根廷) 應為 *A. (Xenochara) richteri* 新的同種異名。在此提出六個新的種群：包含 *A. bruchi* 的 *bruchii* 種群、包含 *A. glabra* 的 *glabra* 種群、包含 *A. weiseri* 的 *weiseri* 種群、包含 *A. richteri* 和 *A. bruchiana* 的 *richteri* 種群以及包含 *A. lacustris* 和 *A. aliipennis* 的 *lacustris* 種群。將 *Aleochara glabra* 和 *A. weiseri* 從 *Coprochara* 亞屬移到 *Xenochara* 亞屬中。提出新名 *A. (Maseochara) missionis* 取代 *Maseochara argentina*。並指定 *A. argentina*、*A. bruchi*、*A. bruchiana*、*A. glabra*、*A. opacula*、*A. parvicollis*、*A. weiseri* 和 *A. wittei* 的選擇。

**關鍵詞：**鞘翅目，隱翅蟲科，*Aleochara*，分類，南美洲。

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