



On some species of *Pandeleteius* Schoenherr, 1834, in South America south of the tenth parallel (Coleoptera, Curculionidae: Entiminae: Tanymecini)

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Abstract

Three of the southernmost species of *Pandeleteius* (Coleoptera: Curculionidae) occurring south of the tenth parallel in South America are *Pandeleteius griseus* (Voss), *P. platensis* Brèthes, and *P. sahlbergi* Howden, **new species** (type locality: Paraná, Brazil). Diagnoses, descriptions and distributions are given for all three species. A neotype is designated for *Pandeleteius griseus* (Voss) and a lectotype is designated for *Pandeleteius platensis* Brèthes. A key to the three species is provided.

Key words: weevils, new species, Argentina, Bolivia, Brazil, Paraguay, Peru, Uruguay

Introduction

The New World genus *Pandeleteius* includes almost 200 species ranging from Ontario in southern Canada to southern Argentina and Chile. The species of *Pandeleteius* discussed herein range primarily from southeastern Peru and Bolivia to Paraguay, southern Argentina, and Uruguay. With the exception of the new species *Pandeleteius sahlbergi* Howden, Brazilian taxa were not studied in detail. The primary purpose of this paper is to address some nomenclatural issues for *Pandeleteius griseus* (Voss) and *P. platensis* Brèthes, and to describe the new species *P. sahlbergi* Howden.

Collections cited

AMNH	American Museum of Natural History, New York, U.S.A.; L. Herman.
AUEM	Auburn University Entomology Museum, Auburn, Alabama, U.S.A.; W. E. Clark.
BMNH	The Natural History Museum (formerly British Museum, Natural History) London, United Kingdom; R. T. Thompson, M. Barclay.
CASC	California Academy of Science, San Francisco, California, U.S.A.; D. H. Kavanaugh.
CMNC	Canadian Museum of Nature, Ottawa, Ontario, Canada; F. Génier.
CWOB	C. W. O'Brien Collection, Green Valley, Arizona, U.S.A.; C. W. O'Brien.
DZUP	Universidade Federal do Parana, Curitiba, Brazil; G. Rosado-Neto.
MACN	Museo de Argentino de Ciencias Naturales, Buenos Aires, Argentina; M. Viana.
MNHN	Museum National d'Histoire Naturelle, Paris, France; H. Perrin.
MLPC	Museo de La Plata, Facultad de Ciencias Naturales & Museo, La Plata, Argentina; A. A. Lanteri
NMPC	National Museum of Natural History, Prague, Czech Republic; J. Jelinek.
NZAC	New Zealand Arthropod Collection, Auckland, New Zealand; G. Kuschel, R. Leschen.
USNM	National Museum of Natural History, Washington, DC, U.S.A.; D. Furth.
ZMUL	Zoological Museum, University of Lund, Sweden; R. Danielsson.

Key to the *Pandeleiteius* known to occur in South America south of the tenth parallel

1. Elytron with apical umbo and antedeclytival swelling on interval 3 distinct, conical. *P. platensis* Brèthes
- Elytron with apical umbo and antedeclytival swelling (if present) on interval 3 low, evenly rounded to obsolete, not conical . . . 2
2. Elytron with antedeclytival swelling on interval 3 low and elongate, higher than apical umbo in some specimens; intervals 5 and 7 also variously swollen in some specimens *P. sahlbergi* Howden
- Elytron with apical umbo obsolete, no antedeclytival swelling on interval 3 although intervals 3, 5 and 7 may be slightly wider than adjacent intervals and very slightly elevated. *P. griseus* (Voss)

Pandeleiteius griseus (Voss)

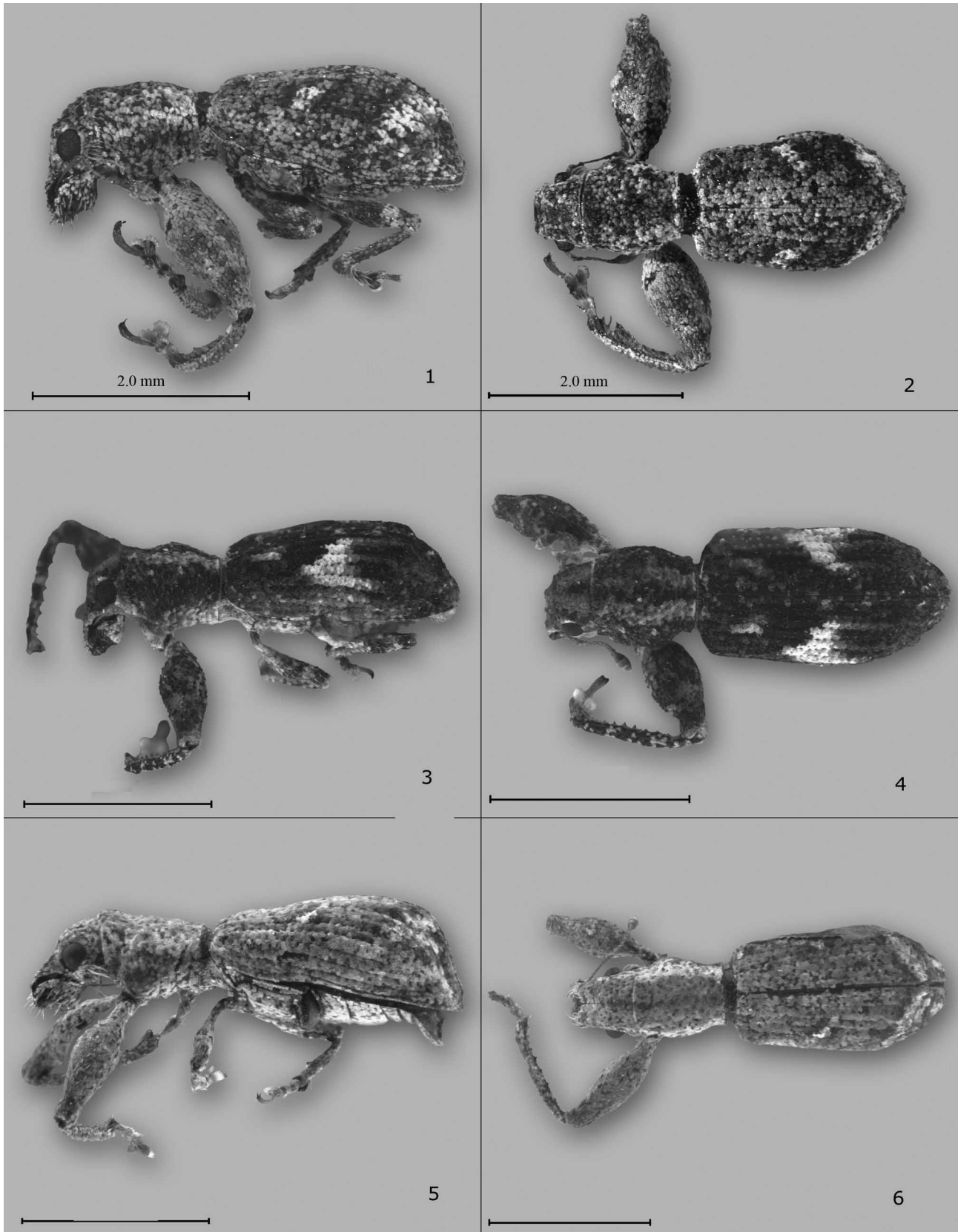
Figs. 1, 2, 7–9, 22

Hadromeropsis (Pandeleiteinus) griseus Voss, 1954: 233. Type series from Südperu: Aina, 1400 m. The series was “destroyed in the war” (Voss, in litteris, 22 May 1963; Weidner, 1976:129). Neotype here designated: male, labeled “Peru: Madre de Dios / Puerto Maldonado / 3.I.1984 / leg. L. Huggert” and with my neotype label (ZMUL).

Pandeleiteius griseus (Voss); Howden 1982: 2 (new combination).

Diagnosis. Body thick in profile. Epistoma large, conspicuous, apex reaching four-fifths to interantennal line; anterior edge of epistoma one-half width of rostrum; sides of epistoma keeled, glabrous or with fewer than seven small, shiny scales. Elytron with intervals 3, 5, and 7 very slightly elevated, more so on females; lacking distinct apical umbo. Female with elytral declivity depressed in profile; sutural interval at summit of declivity distinctly but moderately produced. Protibia of both sexes slightly to distinctly curved, inner edge with fine setae each longer than width of protibia (male) or shorter than width of protibia (female). Male genitalia: aedeagus with dorsolateral edges acute, sharp; surface between edges granulate; ventral surface with carina on proximal half; internal sac in form of thread-like tube.

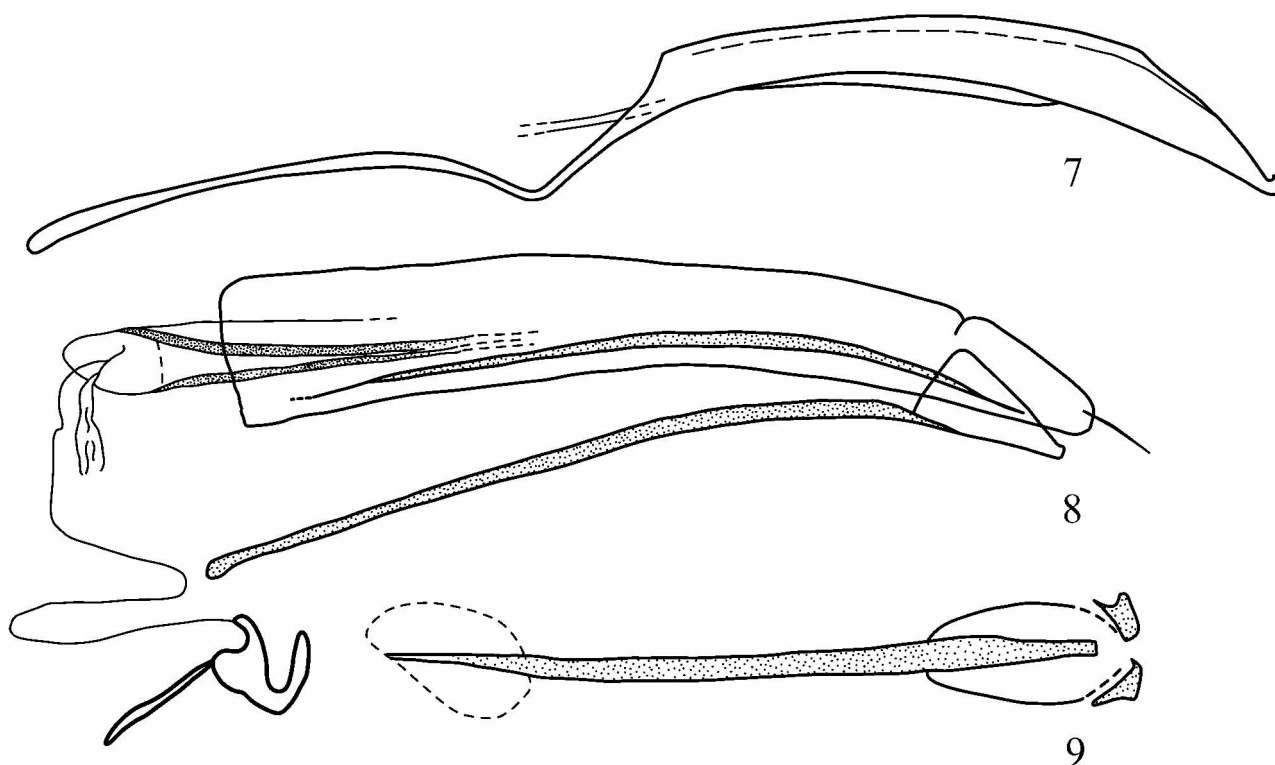
Description of Neotype. Male, slightly teneral, length 3.8 mm, width 1.5 mm. Dorsal surface with pale tan scales; prothorax with indistinct median vitta; elytron with white scales forming circular spot on interval 5 basad of middle and an irregular “V” on declivity from suture to stria 5, circular spot bordered with darker tan scales, remainder of elytron slightly mottled. Scales: contiguous, lacking margins, white scales often imbricate. Rostrum: slightly longer than wide; dorsolateral edges well marked, approximately parallel, very slightly curved inward; sides and scrobe narrowly visible in dorsal view; sides of epistoma glabrous, tapering to point at frons. Interantennal line at half distance to interocular line, glabrous for width of two scales. Epistoma large, conspicuous, apex reaching four-fifths to interantennal line; anterior edge of epistoma one-half width of rostrum; sides of epistoma keeled, glabrous or with fewer than seven small, shiny scales. Scrobe deep, not reaching ventral surface, separated from eye by three scales. Antenna: scape reaching middle of eye, funicle with antennomeres 1 and 2 subequal; club spindleform, slender, as long as last five antennomeres of funicle combined. Eye prominent, almost hemispherical in dorsal view, very slightly elliptical in lateral view, separated from dorsal surface by one or more scales. Prothorax: as wide as long; in dorsal outline, sides almost evenly arcuate, 1.3 times wider over procoxae than across basal constriction; in profile, apical constriction 2.0 times longer than basal constriction, disc almost flat. Pronotum with large foveae separated by more than own diameter; with 9 or 10 postocular setae arising from slight thickening of edge of prothorax. Elytra: 2.3 times longer than prothorax, 1.2 times wider across humeri than across prothorax, 1.7 times longer than wide. In dorsal view, sides of elytra subparallel, apical umbo not evident, apex broadly rounded. In profile, elytra very slightly arcuate basally, gradually elevated to middle, thence gradually arcuate to indefinite summit of declivity; declivity oblique, vertical opposite intervals 9 and 10. On widest part of elytra, intervals 3, 5, and 7 very slightly wider, slightly, if at all, more convex than other intervals. Setae uniserial on intervals, inconspicuous, same color and size as adjacent scales, completely arched, sparse, except larger on intervals 9 and 10 on declivity. Legs: profemur enlarged from extreme ends, 1.5 times longer than metafemur, 2.8 times wider than metafemur; 0.8 times as wide as prothorax at apical constriction; in profile, inner surface indistinctly nodulate, each nodule covered by one scale. Protibia slightly bowed, inner edge with five small, equidistant teeth and a mucro; distally with very small tubercles each with a slender seta perpendicular to surface, as long as 1.5 times width, gradually changing proximally to arcuate, shorter than width of protibia. Protarsomere 1 1.6 times longer than protarsomere 2; protarsomere 2 triangular, protarsomere 5 1.5 times longer than protarsomere 2. Ventricle 5 2.0 times as wide as long, apex truncate-emarginate, evenly convex, apical fourth without scales. Genitalia of neotype not dissected.



FIGURES 1–6. *Pandeleteius*, adult males; 1–2. *P. griseus* (Voss), 1, dorsal view; 2, lateral view (Peru). 3–4. *P. platensis* (Brèthes), 3, dorsal view; 4, lateral view. 5–6. *P. sahlbergi* Howden, 5, dorsal view; 6, lateral view (Brazil).

Variation. Males, length 3.4–4.4 mm, width 1.2–1.7 mm; females, length 3.5–4.8 mm, width 1.3–2.0 mm. Color pattern of elytra variable, apparently not associated with locality, somewhat less pattern in males than in

females. Three independent patterns: 1) overall surface of elytra almost uniformly tan or gray to slightly mottled; 2) interval 5 on basal third with no change in color of scales (infrequent) or with spot of few-to-many imbricate white scales, or with oblique fascia of white scales from stria 3 to stria 6 or 7; white markings sometimes encircled with dark scales; 3) declivity with scattered white scales, or with oblique white fascia from summit of declivity to stria 7. Elytra of males 2.1–2.4 times longer than prothorax, 1.0–1.2 times wider across humeri than across prothorax; elytra of females 2.3–2.8 times longer than prothorax, 1.1–1.3 times wider across humeri than across prothorax. Elytra of females in dorsal view with sides divergent to apical third, thence broadly rounded, apex triangular beneath striae 4 and 5, without apical umbo; profile of disc similar to that of male or more arcuate, summit of declivity distinct at apical twelfth, declivity concave in profile. Procoxae of females separated by distance approximately equal to width of antennal club. Profemur of male 2.1–2.8 times wider than femur; female 1.6–2.2 times wider than metafemur. Protibia of both sexes slightly to distinctly arcuate, inner edge with 5–8 teeth; inner edge of females with tubercles smaller than those of male or absent, long setae shorter than width of protibia, but longer than teeth. Ventrite 5 of female 2.0 times wider than long, apex subtruncate, explanate margin entire, almost flat with pair of shallow basal depressions, scales covering one-half to two-thirds of surface. Genitalia of male (N=4); aedeagus with dorsolateral edges acute, sharp; surface between edges granulate; ventral surface with carina on proximal half; 1.2–1.4 mm; aedeagal apodemes 0.7–0.8 mm long. Internal sac slender tube greater than 0.25 mm (N=1) or approximately 1.0 mm (N=1) with proximal fifth sclerotized, very slender. Tegmen length 0.8 mm. Genitalia of female (N=3); coxites with ventral baculus 1.25 mm long; vagina with two pairs of proximal blades, ventral pair 0.7–0.9 mm long, dorsal pair 0.5 mm long, without sclerites; spermathecal duct 1.4–1.6 mm long. Sternite 8 1.6–1.7 mm long; straight in dorsal view.



FIGURES 7–9. *Pandeleteius griseus* (Voss): 7, male, aedeagus, lateral view; 8, female, genitalia; 9, male, sternite 9.

Specimens examined. 84 males, 113 females. **ARGENTINA. Chaco:** Resistencia; El Zapaliar. **Corrientes:** Laguna Brava, E. Corrientes; Laguna Totorá, San Cosme. **Formosa:** W. Clorinda, N.W. Formosa, NW Pirané. **Salta:** General Ballivián. **Santa Fe:** Las Garzas, NE Reconquista. **BOLIVIA. Beni:** Reyes, Trinidad. **La Paz:** Calisaya, Encuentro. **Santa Cruz:** Buena Vista, Ichilo, La Sierra (at Río Pirai), Portachuelo, Potrerillos de Guenda, Cuatro Ojos, Samaipata, Santa Cruz, Warnes. **BRAZIL. Goyas:** Jatahy, Sarandi. **Paraná:** Porto Rico. **PARAGUAY. Alto Paraná:** Embascada, Hohenau. **Asunción:** Boquerón, Cué, Itapúa, Paraguari, San Bernardino, San Lorenzo. **Caaguzú:** Cnel. Oviedo. **Central:** Nemby. **Guairá:** Col. Independencia, Villarrica. **Itapúa:** S. Lorenzo.

La Cordillera: Caacupé. **Paraguari:** Ybcuá. **San Pedro:** San Estanislao, B. Acerval. **Santa Cruz:** Buena Vista. **PERU. Madre de Dios:** Puerto Maldonado.

This species is known from five countries: Argentina, Bolivia, Brazil, Paraguay, and Peru (Fig. 22).

Notes on the Neotype: The collection locality data for the type series is given as “Südperu: Aina in 1400 m Höhe (7., 8.5, 1936, Hamb. Südperu-Expedition)” (Voss 1954). The specimen chosen for the neotype is from a locality nearest to that of Voss’s type locality. A female with data identical to that of the neotype is a teneral specimen missing its abdomen, but otherwise in good condition. Voss’s (1954) Figure 6 is an excellent rendition of a male including its tibial setae.

In the description of the neotype, I have included details of all the features that Voss used to facilitate comparisons in his description of *P. griseus*. The only character state of the neotype that does not appear to be compatible with Voss’s description is the presence of a color pattern. However, color patterns vary considerably, as shown in the discussion of the variation within the species. Thus, a uniformly gray (“gleichmassig greis”) male is within the range of variation, and, indeed, several old male specimens from Argentina (Formosa), Bolivia (Santa Cruz), and Paraguay, differ only in vague white markings which, to the naked eye, may appear to be gray.

Taxonomic notes. The carina on the ventral surface of the aedeagus is distinctive within the species group. A similar carina is seen in other species groups, e.g., *P. hercules* Howden and an undescribed species from Ecuador.

Compared with other species of *Pandeteleius*, *P. griseus* bears a superficial resemblance to *P. maculatus* (Hustache), which occasionally overlaps the range of *P. griseus*. I have seen no males of *P. maculatus*, but females are recognizable by the following combination of characters: length 3.3–3.7 mm; rostrum with all scales apicad of interantennal line, smooth, shiny, slightly metallic; epistoma reaching less than one half to interantennal line; elytral declivity in profile evenly rounded to apex; elytral apex lacking apical umbo; and, vagina with one pair of small sclerites instead of two pairs of proximal blades.

Pandeteleius platensis Brèthes

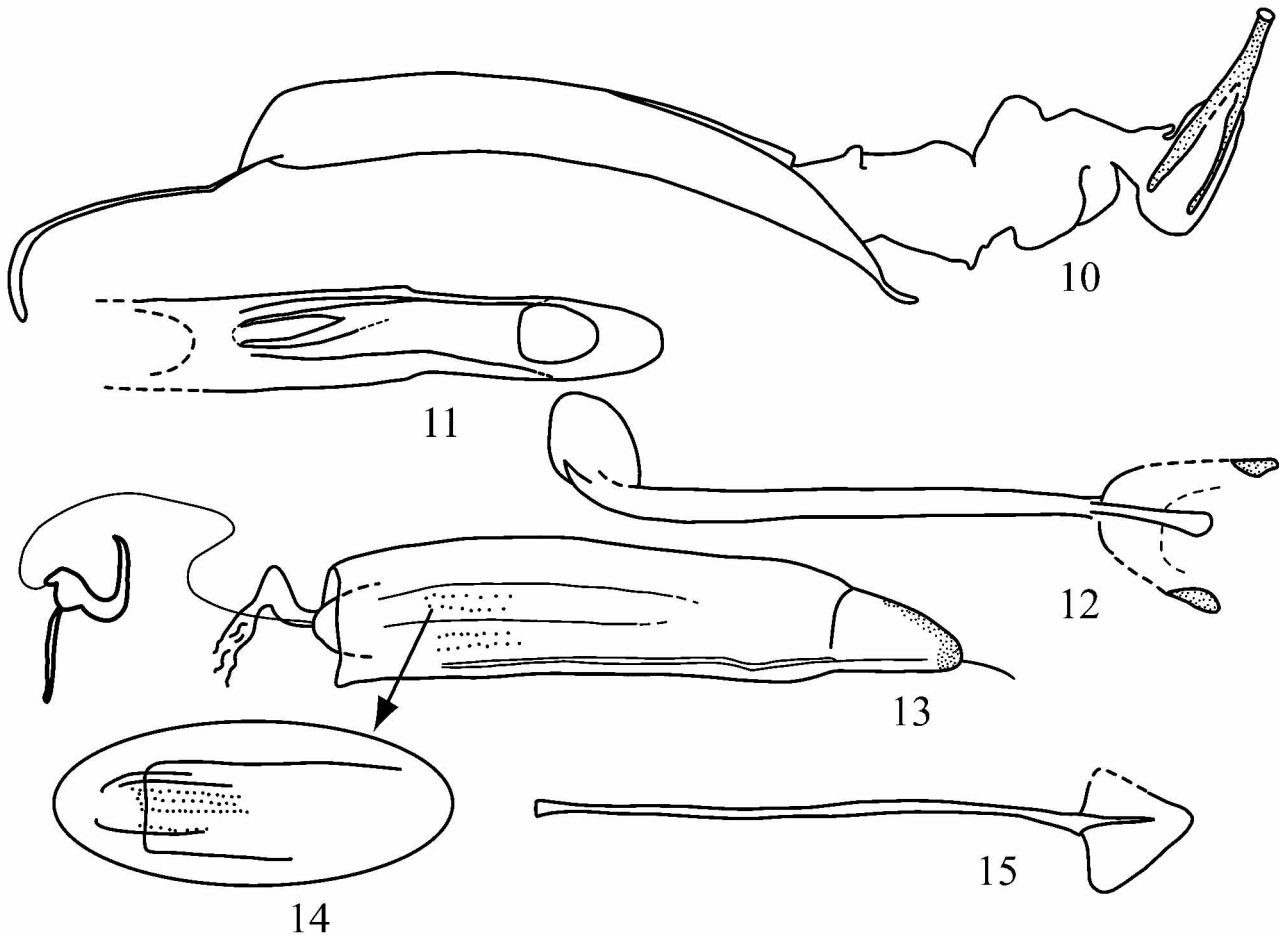
Figs. 3, 4, 10–15, 23

Pandeteleius platensis Brèthes, 1913:192. Lectotype here designated: male, labeled “Bs. Aires/ 2.XI.[1]912/ AZH, Repreparo M. Viana, I.1960” and with my lectotype label. Lectotype at MACN and examined in 1982.

Diagnosis. Integument of teneral specimens tan, darkening with age to black; vestiture with maximum color patterns of tan, gray, white, rust and black scales; older specimens often black with oily appearance concealing features of dorsal surface. Sexes similar in size, appearance. Elytral interval 3 with abrupt conical swelling at apical declivity; interval 5 sometimes slightly enlarged just before declivity; intervals 5 and 6 each terminating in an abrupt, pronounced conical apical umbo on slope of declivity. Aedeagus abruptly widened at basal two-thirds; apex of aedeagus truncate, slightly reflexed; ventral surface of aedeagus smooth.

Supplementary descriptive information. Males, length 3.4–4.3 mm, width 1.3–1.7 mm; females, length 3.3–5.0 mm, width 1.4–2.0 mm. Dorsal setae very fine, inconspicuous, uniserial on elytral intervals. Rostrum parallel-sided, longer than head. Epistoma width less than half that of anterior edge of rostrum, apex of epistoma separated from interantennal line by width of two to four scales; posterior margin low, sides slightly rounded. Scrobe reaching ventral surface of rostrum. Prothorax with sides rounded between distinct basal and apical constrictions; median line not marked; transverse depression each side of median line vague to distinct. Elytron with interval 3 with abrupt conical swelling at apical declivity; interval 5 sometimes slightly enlarged just before declivity; intervals 5 and 6 terminating in abrupt, pronounced conical apical umbo on slope of declivity; elytron of male with sides almost parallel, as much as 1.2 times longer than wide; elytra of female with sides 1.2–1.4 times longer than wide, sides slightly inflated. Procoxae of male separated by slightly less than widest part of antennal club; procoxae of female only slightly more widely separated. Profemur abruptly and greatly enlarged; inner edge with straight row of very small denticles, fewer denticles on ventral surface; denticles obsolete on females. Protibia straight to near apex, thence slightly curved inwards. Protarsi with modified scales on dorsal surface of tarsomeres 1, 2, and 3. Male genitalia: aedeagus abruptly widened at basal two-thirds; 1.2–1.3 mm long, approximately as long as first four abdominal segments; dorsolateral edges with fine carina for most of length of aedeagus, dorsum paler, less sclerotized; in dorsal view with slight, distinct projection from ventral surface approximately at middle; ventral surface smooth, shiny. Apex of aedeagus blunt, transverse, appearing round when tilted, slightly reflexed. Internal sac

of aedeagus membranous, with minute spicules visible in older specimens; membrane partially enclosing sclerotized structure of half its length; distal third emergent, tubular, divided into two stout arms. Tegmen with pair of dorsal processes. Sternite 9 (Fig. 12) teneral (Uruguay). Female genitalia: coxites with ventral baculus 0.8–1.0 mm long; vagina with proximal blades 0.4–0.6 mm long; number and definition of blades indefinite, at least one lateral pair; some specimens with two parallel rows of minute spicules visible ventrad of blades; lacking bursal and vaginal sclerites; spermathecal duct approximately 1.0 mm long. Sternite 8 1.0–1.3 mm long.



FIGURES 10–15. *Pandeleteius platensis* (Brèthes): 10–12, male genitalia, aedeagus extruded (Argentina); 11, dorsal view genitalia (Brazil); 12, sternite 9 (Uruguay). 13–15, female: 13, genitalia (Argentina); 14, same but more mature; 15, sternite 8 (Argentina).

Specimens examined. More than 400 specimens, at least 200 of each sex. **ARGENTINA.** **Buenos Aires:** Conleñe: Palermo (Buenos Aires), the type locality. **Chaco:** Corzuela; La Escondida; Laguna Oca. **Chaco de Santiago.** **Córdoba:** Alta Gracia la Granja; Dep. de Calamuchita “El Sauce”; Capilla del Monte; Córdoba, Huerta Grande; Los Cocos; Sierras de Córdoba. **Entre Ríos:** Villaguay. **Formosa:** Pirané. **Jujuy:** Pampa Blanca. **Salta:** Cabra Corral; Cerro San Bernardo; General Ballivian; Lomas de Olmedo; Tartagal; Viñaco. **San Luis:** Arizona; Lavaisse-Estancia Don Roberto. **Santa Fé:** Estancia la Noria; Florencia. **Tucuman:** Las Cejas; Horca Molle. **Santiago del Estero:** Chaco de Añatuya/Tentina. **BOLIVIA.** **Santa Cruz:** Achira; Agua Clara Cemetery; Buena Vista; Pampagrande; Warnes. **BRAZIL.** **Bahía:** (Soure) Diamantina; Soure (Nova Soure). **Paraíba:** Condado. **Pernambuco:** ?Serra de Comunati. **Sao Paulo:** Cantareira. **PARAGUAY.** **Itapuá:** (?Pto.) S. Lorenzo. **La Cordillera:** San Bernardino. **Paraguarí:** Ybycuí. **Presidente Hayes:** N. B. Acerval. **URUGUAY.** **Paysandú:** Ciudad Paysandú; Puerto Pepe Ají; Río Uruguay-Barra Arroyo Guaviyu. **Río Negro:** Arroyo Zanja Honda; Blanquea “Pinguino”; Puntas del Arroyo Negro.

This species is known from five countries: Argentina, Bolivia, Brazil, Paraguay, and Uruguay—comprising 22 states and 46 localities (Fig. 23).

Notes on type series. The lectotype is mounted on a card and is missing its head. There is a male paralectotype in the Hustache Collection (MNHN) labeled “Cotypus”, “Bs. Aires/X.24.912”. This specimen is also missing its head as well as parts of its legs. Brèthes described the species well and cites the locality as “Trouve a Palermo (Bs. Aires)”. The Palermo district is near the Rio de La Plata, north of central Buenos Aires but within the city limits.

Biology. Specimens of *Pandeleiteius platensis* were recorded from five genera and nine species of shrubs and trees here listed with location of collection.

Fabaceae

Acacia caven (Mol.) Mol.; Argentina, Capilla del Monte.

Acacia farnesiana (L.) Willd.; Uruguay, Arroyo Zanja Hond., Río Negro.

Acacia furcatispina Burkart; Argentina, Cabra Corral.

Mimosa farinosa Griseb.; Argentina, Viñaco.

Polygonaceae

Piptadenia corylifolia Griseb.; Argentina, Pampa Blanca.

Anacardiaceae

Schinopsis haenkeana Engles; Argentina, Cabra Corral.

Schinopsis quebracho-colorado (Schltdl.); Argentina, Capilla del Monte.

Schinus johnstonii F. A. Barkley; Argentina, Capilla del Monte.

Schinus sp.; Uruguay, Puntas del Arroyo Negro, Rio Negro.

Teneral specimens of *P. platensis* were also collected by Wayne E. Clark on *Mimosa* and *Acacia* near the cotton fields of Condado, Paraiba, Brazil.

Pandeleiteius sahlbergi Howden, new species

Figs. 5, 6, 16–21, 22

Diagnosis. Resembling a pale *Pandeleiteius platensis*, but noticeably differing as follows. Prothorax longer than wide, sides parallel. Elytra of male almost parallel-sided, only slightly wider at distal third; elytra of female inflated from basal sixth, 1.5 times wider at distal third. When present, swellings on elytral interval 3 higher than apical umbo, low and rounded, not conical. Profemur on inner edge smooth, lacking denticles. Male genitalia with aedeagus parallel-sided in dorsal view; apex elongate-elliptical; internal sac seen through aedeagus complex, two-fifths length of aedeagus, surrounding membranes spiculate.

Description. Holotype, male, length 3.7 mm, width 1.5 mm. Color: integument medium brown; scales shades of brown, tan, and white; white scales forming vitta on side of prothorax; small, irregular white spot on intervals 4 and 5 at basal fourth, with “V” on crest of elytra; remainder of dorsal surface brown. Setae of dorsal surface obscure, completely arched; sparse. Scales: very finely granulate, dense on dorsal surface of femora and tibiae; scales imbricate on sides of prothorax and elytral declivity; prosternum and procoxae moderately covered with large thin scales. Rostrum: as long as wide, narrower than head; median line indicated by slightly irregular separation of scales; interantennal line obsolete. Epistoma as wide as one-half anterior edge of rostrum, apex of epistoma separated from interantennal line by width of one scale; epistoma with posterior margin keeled, sides ogival, external edge of keel with some very small enameled scales. Scrobe reaching lower edge of eye, separated from eye by width of two to three scales. Eye moderately prominent, separated from dorsal surface by approximately three scales. Prothorax: 1.1 times longer than wide, in dorsal view sides very slightly rounded between basal and apical constrictions; in profile, apical constriction at midline approximately two times longer than basal constriction; disc of pronotum flat. Pronotum with pair of very slight, short, transverse depressions; foveae sparse; with four or five postocular vibrissae. Scutellum: approximately size of one large scale; with one small scale. Elytra: 2.1 times longer than prothorax, 1.2 times wider across humeri than across prothorax. In dorsal view, sides slightly divergent to distal third, then gradually rounded to apex, apex broadly rounded; apical umbo distinct. At greatest width, elytra 1.2 times wider than across humeri; in profile, elytra flat, gradually elevated to apical third; summit of declivity at

apical sixth, there deflected to apex, intervals 9 and 10 vertical. Elytral intervals 3, 5, and 7 slightly wider than other intervals; interval 3 gradually elevated from middle to just before elytral declivity; intervals 5 and 7 with shorter, lower elevation; intervals 4, 5, and 7 terminating in moderate umbo on declivity. Legs: procoxae separated by approximately greatest width of scape. Profemur moderately, gradually enlarged, 1.2 times longer than metafemur, 1.6 times wider than metafemur. Protibia almost straight, inner edge with five acute equidistant teeth. Ventral surface: ventrite 5 1.9–2.0 times wider than long; very slightly convex medially; explanate margin present on sides only; surface of ventrite 5 squamose on basal half. Genitalia: aedeagus approximately as long as abdomen, slightly narrowed basally, gradually tapered to distal third, apex ending in minute hook; in profile, approximately distal two-thirds straight. Internal sac with darkly sclerotized tube connected to aedeagus by densely, minutely spiculate membrane.

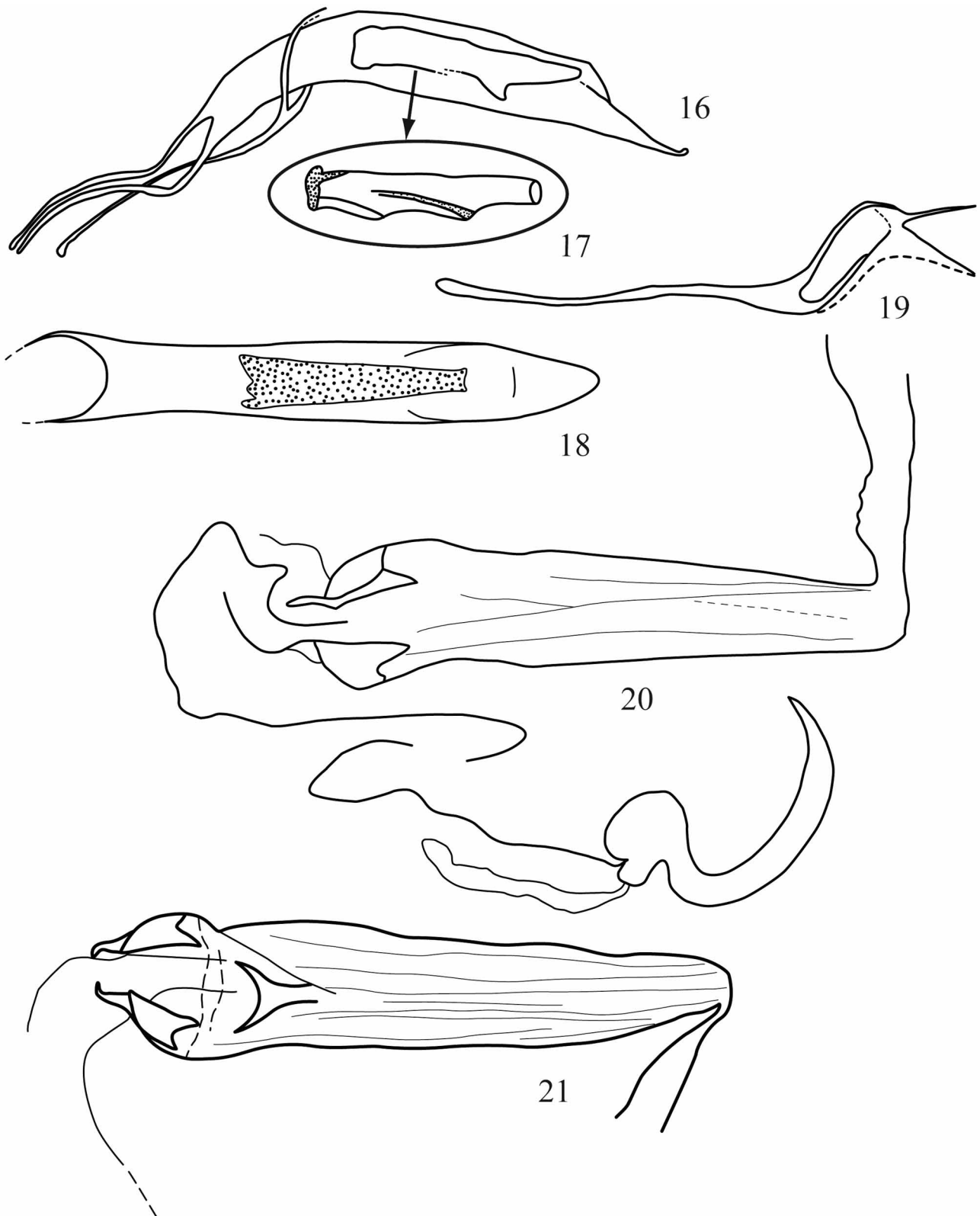
Allotype, female, length 4.5 mm, width 2 mm; differs from holotype as follows. Older specimen with darker integument; elytra with conspicuous line of scales from humeral fifth, abruptly curving to interval 5 at basal two-fifths; with wide diagonal band of dark brown scales between intervals 3 and 7 abutting narrow band of white scales. Profemur as wide as rostrum. Prothorax in profile dorsal surface longer than ventral surface. Elytra 2.6 times longer than prothorax; 1.3 times wider across humeri than across prothorax. In dorsal view, sides of elytra briefly, slightly divergent; thence divergent in straight line to apical umbo at distal sixth, umbo conspicuous, prominent; at greatest width, 1.5 times wider than across humeri. Ventral surface: sternite 5 2.0 times wider than long; explanate margin almost continuous on basal half of ventrite 5. Genitalia: distal coxite deformed, 0.3 mm long. Vagina with proximal end with two pairs of blade-like rods 0.75 mm; distal end with pair of ornate sclerites with minute spicules similar to those of internal sac of male. Spermathecal duct approximately 2.5 mm long, sternite 8 1.37 mm long.

Type series. Holotype: male, Rolandia, Paraná, Brazil, X.1947 (AMNH). **Allotype:** female, Caviuna, Paraná, Brazil, I 1946, A. Maller, Coll. Frank Johnson Donor (AMNH). **Paratypes:** 5 males, 12 females. **ARGENTINA. Misiones:** 1 male, “Arg. Misiones, Pindapoy, Jan. 1943, P. Bridarolli” (CMNC). **BRAZIL.** 1 female, (no locality data), 4997, on minute yellow triangle, Pascoe Coll. 93-60 (BMNH). **Minas Gerais:** 1 female, Albuquerque de Castelnau, 1847; 1 female, minute black triangle, Santa Rita, Aug (?) 1850, Sahlberg, Sharp Coll. 1905-313 (BMNH). **Paraná:** 1 male, pink oval, Pascoe Coll. B.M. 1893-60 (BMNH); 1 female, Caviuna, IV-1945, A. Maller, Coll. Frank Johnson Donor (CMNC); 1 female, Rolandia, XI-1947, A. Maller, Coll. Frank Johnson Donor (AMNH); 1 female, P. Grossa, Pedreira G[obscured by pin]chuva, 9-44, 2041, Coleção F. Justos Jor, Dpto. Zool. UF-Paraná (DZUP); 1 female, Curitiba, 16-II-66, C. Ext. D.Z. U.F.P. (DZUP). **Santa Catarina:** 1 male, Nova Teutonia, 27°–11'B, 52°–23'L, I 1974, 300–500 m, Fritz Plaumann, Depto. Zool., UF-PARANA (DZUP). **São Paulo:** 1 male, 1 female, 55864, Campinas, A. Fry Coll. 1905-100 (BMNH); 2 females, Cantareira, Halik, 1 XI 1938, 5525 (1), 8148 (1) Halik 1966 collection (USNM); 1 female, Vila Amalia, S.Paulo-Capitol 21.IV.1960, J. Halik, 16757, Halik 1966 collection (USNM); 1 male, São Paulo, Bras Mraz, Mus Pragense LGT (NMPC).

This species is known from Argentina (Pindapoy) and south eastern Brazil from Santa Catarina to southern Minas Gerais states (Fig. 22).

Variation. Male paratypes are 3.2–4.8 mm long and 1.2–1.8 mm wide; female paratypes are 3.1–4.8 mm long and 1.5–2.4 mm wide. The color pattern on the distal declivity of the elytra is often white, but the dorsal surface of the elytra varies considerably. On one male from Paraná the basal half of the dorsal surface of the elytra is entirely white. On two specimens (one each from Santa Catarina and Curitiba) interval 3 is much more prominent than on the other females.

Etymology. The new species, *Pandeteius sahlbergi*, honors R. F. Sahlberg, professor at the University of Helsinki. A review of Sahlberg's work is given by Nelson Papavero (Papavero 1973) in which he relates that Sahlberg in 1849 “undertook at his own expenses a trip to Brazil.” He collected in “the interior of the Provinces of Rio de Janeiro and Minas Gerais from Chapeu d’Uvas to Diamantino...” “Martins had specimens collected by Sahlberg in Santa Rita, on August 1850.”

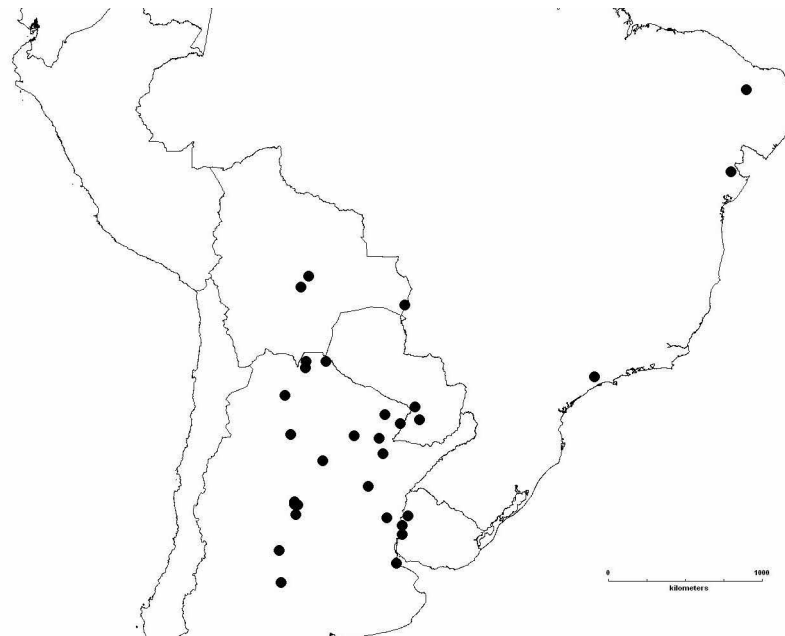


FIGURES 16–21. *Pandeleteius sahlbergi* Howden: 16–19: male genitalia, 16, lateral view; 17, enlarged lateral view (Brazil); 18, dorsal view genitalia; 19, tegmen. 20–21: female genitalia (allotype), 20, dorsal view; 21, ventral view.



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FIGURE 22. Map of collection localities for *Pandeleteius griseus* (black dots) and *P. sahlbergi* (grey dots).



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FIGURE 23. Map of collection localities for *Pandeleteius platensis* (black dots).

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Literature cited

- Brèthes, J. (1913) Description d'un *Pandeleiteius* (Coléoptères Curculionides) nouveau de Buenos Aires. *Physis*, 1(4), 192–193.
- Howden, A.T. (1982) Revision of the New World genus *Hadromeropsis* Pierce (Coleoptera, Curculionidae, Tanymericini). *Contributions of the American Entomological Institute*, 19(6), i–iii, 1–180.
- Papavero, N. (1973) *Essays on the history of Neotropical Dipterology, with special reference to collectors (1750–1905)*. Museu de Zoologia, São Paulo. Vol. 2, pp. i–iii, 217–446.
- Voss, E. (1954) Curculionidae (Col.). *Beiträge zur Fauna Perus*, 4, 193–376.
- Weidner, H. (1976) Die Entomologischen Sammlungen des Zoologischen Instituts und des Zoologischen Museums der Universität Hamburg. IX. Teil. Insecta VI. *Mitteilungen aus dem Hamburgischen Zoologischen Museum und Institut*, 73, 87–264.