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Revision of the Genus *Sphenophorus* in South  
America (Coleoptera, Curculionidae,  
Rhynchophorinae)



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## Revision of the Genus *Sphenophorus* in South America

PATRICIA VAURIE<sup>1</sup>

### ABSTRACT

The 18 species of *Sphenophorus* of South America are arranged in four species groups. Seven new species are described: *asper*, *dolosus*, *foveatus*, *levis*, *mimelus*, *tenuis*, and *tomentosus*. Four new syn-

onyms are proposed. Corrections are made of names listed erroneously in the catalogues for the genus. A species not occurring in South America is included for other reasons given in the text.

### INTRODUCTION AND ACKNOWLEDGMENTS

South American representatives of *Sphenophorus* Schoenherr have been mentioned in the literature by a dozen or more authors, but they have not previously been studied as a whole. The North American species (Canada to Panama) were revised by me in 1951, and the species of Europe and North Africa by Pesarini (1964). Species in other regions still await revision.

Seventy-five species occur in North America where perhaps the genus originated, 18 in South America, only six in all of Europe, North Africa, and Asia; in remaining areas of Africa and in the Pacific region 26 species are recorded (Csiki, 1936). Thus the South American species comprise about one-sixth of the species of the genus.

Although 32 species are listed for South

America in the catalogue of Blackwelder (1947) under "*Calendra*" and "*Merothricus*," only 11 are in effect valid; the others belong in other genera (see below under Systematics) or have been relegated to synonymy. The seven additional species I describe herein brings a total of 18.

I have examined approximately 915 specimens, including the types of previously described forms except for *crassus* Blanchard, *crassus* var. *rufus* Chevrolat, *crudus* Erichson, *pedestris* Voss, and *tetricus* Gyllenhal.

The species are small or large (6 to 18 mm.), elongate or stocky and robust, shiny or opaque, black, black with red, sandy or mouse-colored. Although they are readily divisible into species groups (see below), the species themselves are less amenable to exact defini-

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tion. One of the reasons for this is the presence in about half the species of a dense, clayey coating or encrustation that obscures the punctation and becomes worn in patches that vary from individual to individual. When greased, this clayey coating darkens to gray or black and tends to flatten or erase any rugosities that are present in ungreased specimens. Often mud and small pieces of debris cling to the surface; some individuals, in fact, resemble small clods of earth.

The collections and facilities offered in New York at the American Museum of Natural History and in Paris at the Muséum National d'Histoire Naturelle were of great help in this study. Specimens were lent by these museums as well as by the institutions that follow: Entomology Division, Department of Scientific and Industrial Research, Auckland; Museu de Zoologia, São Paulo; Museum für Tierkunde,

Dresden; National Museum of Natural History, Smithsonian Institution, Washington, D.C.; Universidad de la Republica, Montevideo; Zoologisches Museum, Berlin.

For sending types for examination I thank Drs. T. Nyholm, Naturhistoriska Riksmuseet, Stockholm, and J. O. Husing, Zoologisches Institut, Halle. Several individuals kindly lent specimens from their collections: Dr. Henry H. Hespenheide, Anne and Henry Howden, Dr. Guillermo Kuschel, and Lois and Charles O'Brien. Dr. Cincinnato Gonçalves of the Instituto de Biologia, Universidade Federal de Rio de Janeiro, sent some important specimens identified by Costa Lima. I am especially grateful to Mrs. M. Favreau for the line drawings. The photographs were made by the Photographic Department of the American Museum of Natural History.

## CHECKLIST OF SPECIES OF *SPHENOPHORUS* IN SOUTH AMERICA

### SPECIES GROUP *BRUNNIPENNIS*

- |  |                                     |
|--|-------------------------------------|
| 1. <i>brunnipennis</i> (Gemar)                 | 5. <i>levis</i> , new species       |
| <i>signaticollis</i> Gyllenhal                 | 6. <i>asper</i> , new species       |
| <i>punctatostratus</i> Gyllenhal, new synonymy | 7. <i>tremolerasi</i> Hustache      |
| 2. <i>cincticollis</i> Gyllenhal               | 8. <i>vilis</i> Hustache            |
| <i>defrictus</i> Boheman, new synonymy         | 9. <i>brutus</i> Gyllenhal          |
| 3. <i>dolosus</i> , new species                | <i>crudus</i> Erichson              |
| 4. <i>foveatus</i> , new species               | 10. <i>seriepunctatus</i> Gyllenhal |

### SPECIES GROUP *RUSTICUS*

- |   |                                     |
|---|-------------------------------------|
| 11. <i>rusticus</i> Gyllenhal                     | 13. <i>tomentosus</i> , new species |
| <i>campestris</i> (Chevrolat)                     | 14. <i>mimelus</i> , new species    |
| <i>nigroscutellatus</i> (Chevrolat), new synonymy | 15. <i>tetricus</i> Gyllenhal       |
| <i>bruchi</i> Hustache, new synonymy              | 16. <i>tenuis</i> , new species     |
| 12. <i>napoanus</i> Hustache                      |                                     |

### SPECIES GROUP *BRASILIENSIS*

- |  |  |
|--|--|
| 17. <i>brasiliensis</i> Hustache                 | 19. <i>crassus</i> Blanchard               |
| 18. <i>tenuivittatus</i> (Buchanan) <sup>1</sup> | <i>crassus</i> var. <i>rufus</i> Chevrolat |
|  | <i>pedestris</i> (Voss)                    |

<sup>1</sup>Not South American (see explanation below).

## SYSTEMATICS

### GENUS *SPHENOPHORUS* SCHOENHERR

*Sphenophorus* Schoenherr, 1838, p. 874 (type, by original designation, *Curculio abbreviatus* Fabricius).

*Trichischius* LeConte, 1876, p. 426 (type, by monotypy, *Trichischius crenatus* LeConte).

*Merothricus* Chevrolat, 1885, p. 290 (type, by original designation, *Sphenophorus rusticus* Gyllenhal).

*Nesorthognathus* Voss, 1943, p. 234 (type, by

monotypy, *Nesorthognathus pedestris* Voss, a synonym of *S. crassus* Blanchard).

The name *Calendra*, which I used for this genus in my revision (1951), was declared rejected and invalid (along with *Calandra*) some years ago (1959).

One or two specimens of several North American species have been seen from South America. These species are not included; they have no doubt either been wrongly labeled or imported accidentally in their host plants, but are not established. They are: *aequalis* Gyllenhal, *australis* Chittenden, *callosus* (Olivier), *pertinax* (Olivier), and *zeae* Walsh. Both *aequalis* and *pertinax* were redescribed as new species from South America by Hustache (1936) in error. Their names, respectively, *geminatus* and *semicalvus*, were synonymized by Kuschel (1955). *Sphenophorus tenuivittatus* (Buchanan), from the Dominican Republic, however, is included as it was omitted from the revision of the species of North America.

Gross measurements are taken from the fovea on the front of the head (not the rostrum which is often stretched out) to the apex of the elytra (not the pygidium which is generally turned down). The rostrum is measured from the frontal fovea to the apex; the elytra are measured from the front of the scutellum to the apex of the elytra. The elytra are considered short when they are only one-fourth or one-fifth longer than the pronotum, which would mean that the pronotum would be equal in length to the distance from the base to before the subapical callus of the elytra.

**Distribution.** Many species are apparently associated with rivers or coastal areas. The greatest number of species (13) are found in the southern and eastern regions of Brazil, with good representation also in neighboring Paraguay, Uruguay, and northern Argentina. Fewer species inhabit the western and northern parts of South America, as well as Chile (see table 1). The most widespread species is *rusticus*, the range of which extends from Guadeloupe in the Lesser Antilles south throughout South America in every country except for Chile, Bolivia, Peru, and Ecuador.

**Biology.** A few pieces of information on their modes of life are known for eight of the

18 species. Some species (*brunnipennis*, *cincticollis*, *seriepunctatus*, *tenuis*, and *tremolerasi*) have been collected in weeds or underbrush, under stones, or on the shores of rivers or ponds, or in detritus along the coast; *tomentosus* and *brasiliensis* were found attacking rice plants and *brasiliensis* was found breeding in cattail (*Typha*); *levis* and *tremolerasi* are recorded from bromeliads.

**Sexual Dimorphism.** In males the venter is strongly or feebly concave and the pygidium is square and apically truncate; in females the venter is generally flat or feebly convex and the pygidium is rather acuminate and narrower than that of males. These differences are so slight in many cases that without both sexes on hand for comparison it is difficult to determine the sex. In half the species, however, males are told by their many hairs on the venter or tibiae.

**External Characters.** The characters of North American species are given in detail in my previous revision (1951). In the South American group the characters utilized are: the presence or absence of encrustation on the body, including the head, antennae, and tarsi; the shape and size of the rostrum; rarely the length of the second antennal segment; the shape, length, punctuation, and pattern of the pronotum (vittae may be flat, raised, or merged); the length and sculpture of the elytra; the width of the metepisternum; the shape and vestiture of the pygidium; the length of the spongy apex of the antennal club, and the degree of dilation of the club.

**Male Genitalia.** The median lobe is a flattened, arcuate tube with two long appendages or apodemes. The apex can be truncate, rounded-truncate, triangular, or strongly acuminate and needle-like. The narrow, virtually parallel margins of the lobe are sclerotized, but the extreme apex in a few species is rather transparent or membranous. The eighth tergum is elongate, its apex hairy, generally rounded-truncate; in some species emarginate. The aedeagus serves as a distinguishing character among most but not all species. Thus in four species of the *rusticus* group it is quite similar in shape and is also subject to individual variation.

Comparison with *Sphenophorus* of other regions. In North America 14 of the 74 species

TABLE 1  
Geographic Distribution of the Species of *Sphenophorus*  
(Countries are listed from south to north.)

	Chile	Argentina	Uruguay	Paraguay	Brazil	Bolivia	Peru	Ecuador	Colombia	Venezuela	Guyana	Surinam	French Guiana	Trinidad	Antilles
<i>asper</i>	—	—	—	—	X	X	X	—	—	—	—	—	—	—	—
<i>brasiliensis</i>	—	X	—	—	X	—	—	—	—	—	—	—	—	—	—
<i>brunnipennis</i>	X	X	X	—	X	X	—	—	—	—	—	—	—	—	—
<i>brutus</i>	X	—	—	—	—	X	X	—	—	—	—	—	—	—	—
<i>cincticollis</i>	—	X	X	X	X	—	—	—	—	—	—	—	—	—	—
<i>crassus</i>	—	X	X	X	—	—	—	—	X ?	—	—	—	—	—	—
<i>dolosus</i>	—	X	—	—	X	—	—	—	—	—	—	—	—	—	—
<i>foveatus</i>	—	X	X	X	X	—	—	—	—	—	—	—	—	—	—
<i>levis</i>	—	X	X	—	X	—	—	—	—	—	—	—	—	—	—
<i>mimelus</i>	—	X	X	X	X	—	—	—	—	—	—	—	—	—	—
<i>napoanus</i>	—	—	—	—	—	—	—	X	—	—	—	—	—	—	—
<i>rusticus</i>	—	X	X	X	X	—	—	—	X	X	X	X	X	X	X
<i>seriepunctatus</i>	X	—	X	—	—	—	X	—	—	—	—	—	—	—	—
<i>tenuis</i>	X	X	—	—	X	—	—	—	—	—	—	—	—	—	—
<i>tenuivittatus</i>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	X
<i>tetricus</i>	—	—	—	—	X	—	—	—	—	—	—	—	X	—	—
<i>tomentosus</i>	—	—	—	—	—	X	—	X	—	X	—	—	—	—	—
<i>tremolerasi</i>	—	X	X	—	X	—	—	—	—	—	—	—	—	—	—
<i>vilis</i>	—	X	X	X	X	—	—	—	—	—	—	—	—	—	—
Totals	4	12	10	6	13	4	3	2	2	2	1	1	2	1	1

possess dilated tarsal segments, whereas one only (*brasiliensis*) is so equipped in South America. In the United States several species (*germari*, *compressirostris*, *cultellatus*, and *seratipes*) are provided with projections, sinuations or serrations on the tibiae, but only one species (*crassus*) in South America has modified tibiae. There are apparently more species in North America with distinctive characters of the rostrum (*compressirostris*, *cultellatus*, *latinasus*, *melanocephalus*, *zeae*, and others), whereas the rostrum in the species of South America, with the exception of *crassus* and *vilis*, is rather similar in all species: arcuate and compressed laterally, with the postmentum acute at the ventral apex. Species with a dense encrustation or feltlike covering are more numerous in North America, and smooth, glossy species with reddish markings (*brunnipennis*, *cincticollis*, *crassus*, *tremolerasi*, *asper*, and *levis*) are more abundant in South America. In

males of a number of species from both continents the venter and tibiae are strongly ciliate or hairy. On both continents also the sexes are generally distinguished by the more concave abdomen and wider or more truncate pygidium of the male.

The six species of Europe, Asia, and North Africa do not appear to be much diversified, being black or vaguely reddish, without vittae or other elevations, and shining or opaque, but not encrusted. Their dorsal appearance is similar to that of two species from the western United States, *graminis* and *vomerinus*. The antennal groove or scrobe in at least two of the species (*abbreviatus* and *piceus*) is farther from the eye than that of New World species and is separated from the eye by a minute tooth; the mesepimeron is larger and the metepisternum wider. A review of these species appeared in 1964 by Pesarini.

For Africa and the Pacific region, Csiki

(1936, pp. 53, 54) listed 26 species under *Sphenophorus* (as "*Calandra*"), but the majority of species described in *Sphenophorus* have been transferred to other genera, as *Aplotes*, *Temnoschoita*, and *Odoiporus* of Chevrolat; *Trochorhopalus* Kirsch, *Rhabdocnemis* Faust, and probably others. Chadwick (1970) mentioned *S. brunnipennis* as being established in Australia.

*Changes in the Catalogues.* As stated in the Introduction, many species listed as *Sphenophorus* (under "*Calandra*") in the catalogues of Junk (Csiki, 1936) and Blackwelder (1947) do not belong in the genus and have been subsequently removed to other taxa. Because these changes were made after publication of the catalogues and appear in various works, it seems pertinent to mention them here: Kuschel (1950) transferred *chilensis* Blanchard to *Scirpicola* in the Baridinae, and *aduncus* Erichson and *tornowi* Brethès to *Homalostylus* Chevrolat, and in 1955, *morreni* Roelofs to *Nassophasis*. Vaurie (1951) removed *aterrimus*, *mundus*, and *octocostatus* Champion to *Rhodo-baenus* LeConte; in 1966 transferred nine names to *Metamasius* Horn, and in 1968 placed *austerus* and *atratus* Gyllenhal in a new genus, *Foveolus*. The last change was *rubrotesselatus* Blanchard to *Metamasius* (Vaurie, 1969). I record here two additional changes: *S. pygidialis* Chevrolat as synonym of the cosmopolitan *Cosmopolites sordidus* Germar (from reading of original description), and *notandus* Olliff to *Metamasius* (from examination of the type). Probably also not belonging in *Sphenophorus* are *erythrurus* Chevrolat (Guadeloupe), *atricolor* Chevrolat (Martinique), *mexicanus* Champion (Mexico), and *obliquevittatus* Taschenberg (Ecuador).

Thus the genus *Sphenophorus*, which in the 1830s and 1840s included about 125 species, has been gradually whittled down even as new species were added to it, and there are still species in some parts of the world which will probably be reallocated to other genera when studied.

#### SYNOPTIC TABLE TO SPECIES GROUPS

A. Tarsi dorsally and most of antennae shining, not tomentose.

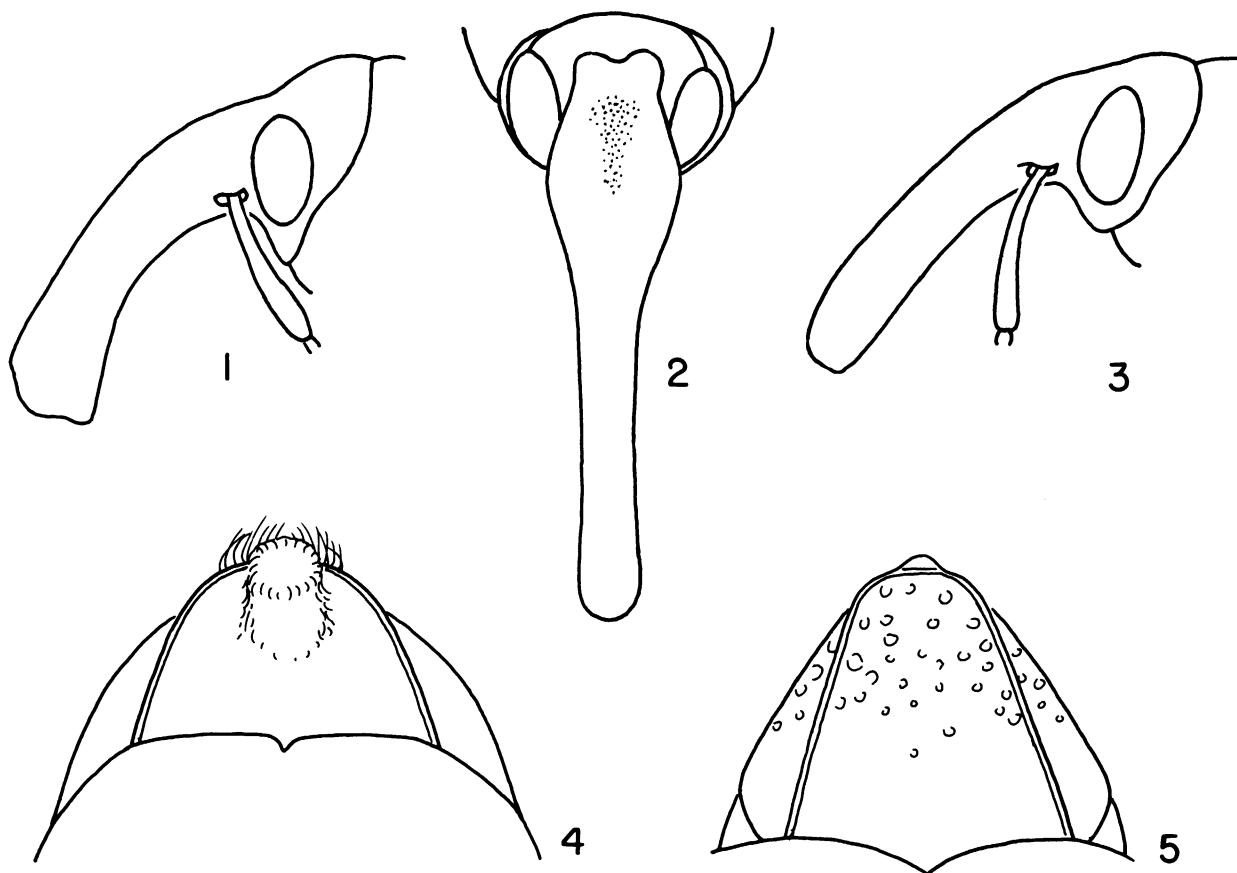
1. Third segment of tarsi widely dilated, about twice width of second segment ..... (two species) *brasiliensis*<sup>1</sup>
2. All tarsal segments about equally narrow.
  - a. Metepisternum wide; tibiae with outer apexes toothed or widely dilated ..... (one species) *crassus*
  - b. Metepisternum narrow; tibiae with apexes not dilated.
    1. Surface mostly glabrous; front of head glabrous; pygidium flat or convex .... (10 species) *brunnipennis*
    2. Surface mostly tomentose, opaque, encrusted; front of head eroded or encrusted (fig. 2); pygidium abruptly tumid, rather conical ..... (three species) *rusticus* (part)
- B. Tarsi dorsally and most of antennae tomentose, encrusted ..... (three species) *rusticus* (part)

#### KEY TO THE SPECIES OF SPHENOPHORUS OF SOUTH AMERICA

Note: In males venter generally concave, in females flat or convex; in males pygidium generally wider, more square, truncate at apex, in females narrowed to apex, more acuminate.

1. Hind tibia with apex widened and flared outward, forming cuplike area; front tibia virtually bilobed, with large apical outer tooth almost as long as uncus; metepisternum very wide (five rows of punctures across middle) . . . *crassus* Blanchard  
Hind tibia of same width throughout; front tibia with outer apical angle, if visible, smaller than uncus; metepisternum across middle with only three or fewer punctures ..... 2
2. Tarsi with third segments about as narrow as preceding segments; ventrally with long hairs laterally ..... 3  
Tarsi with third segments widely dilated, wider than preceding segments; ventrally with spongy hairy pads ..... 20
3. Tarsi dorsally glabrous, shining ..... 4  
Tarsi dorsally tomentose, with felt like encrustation ..... 16
4. Pygidium flat or convex; front of head shining; dorsum mostly shining (can be tomentose within punctures or on elytral striae) ..... 5  
Pygidium bulbous or strongly tumid; front

<sup>1</sup>A species from the Greater Antilles is included in this group.



FIGS. 1-5. Body parts of *Sphenophorus*. 1. Rostrum widely dilated at apex, *S. tetricus* and others. 2. Front of head eroded or encrusted, *S. rusticus* group. 3. Rostrum not dilated, *S. tenuis*. 4. Apex of pygidium, *S. tenuis*; characteristic also of *rusticus*, *tetricus*, *tomentosus*. 5. Apex of abdomen, female *S. cincticollis*.

- of head encrusted or eroded (fig. 2) unless greased over; dorsum mostly opaque or encrusted (can have black stripes on pronotum) .....18
5. Rostrum subcylindrical; dorsally and laterally about same width throughout; ventrally with apex rather rounded, not sharp; pronotum with three broad, scarcely elevated, finely punctate black vittae outlined by larger punctures. ....  
..... *vilis* Hustache
- Rostrum laterally compressed, flattened; apex widened; ventrally with apex acutely angulate; pronotum various ....  
.....6
6. Prosternum with sides, at least in outer half, virtually impunctate .....7<sup>1</sup>
- Prosternum with sides either entirely densely punctate, or with at least some punctures in outer half .....10
7. Male (pygidium truncate at apex) with venter glabrous and hind tibia not noticeably ciliate; both sexes with pygidium generally tomentose, encrusted .....  
..... *brunnipennis* (Germar)<sup>2</sup>
- Male with venter hairy and hind tibia ciliate

<sup>1</sup>Two species (*asper* and *levis*) are keyed out in both couplets.

<sup>2</sup>If abdomen at apex is minutely triangular (fig. 5), specimen is a female, but is not *brunnipennis*, but *cincticollis* (see couplet 9).

- within; both sexes with pygidium generally bare .....8
8. Pronotum coarsely densely punctate except on three black vittae (fig. 8); vittae feebly elevated, outlined by punctures from base to apex; male with aedeagus projecting in long, rather blunt point (fig. 20); female with last segment of abdomen hairy (best viewed in profile); (see also couplet 14 below) .....  
*asper*, new species (part)  
 Pronotum in apical half or more finely punctate or impunctate; vittae either flat, as if painted on, or merged together (fig. 7); male with aedeagus either formed like a spear head or drawn out in long, needle-like point (figs. 17, 19); female with apex of abdomen not hairy .....9
9. Rostrum shorter than pronotum; basal dilation over antennal insertion about as wide as long; elytra generally scarcely longer than pronotum; male with eighth tergum feebly emarginate; female with apex of abdomen minutely triangular (fig. 5); smaller (7 to 9 mm.) .....  
*cincticollis* Gyllenhal  
 Rostrum almost as long as pronotum; basal dilation over antennal insertion longer than wide; elytra one-fourth to one-third longer than pronotum; male with eighth tergum truncate; female with apex of abdomen rounded; larger (8 to 14 mm.) (see also couplet 15 below) .....  
*levis*, new species (part)
- 10(6). Elytral striae with bare, distinct punctures cutting almost halfway into intervals; pronotum generally with subapical depression of punctures at middle .....11  
 Elytral striae with punctures, if visible, contained within depressed stria line, not invading intervals; pronotum generally without subapical depression .....12
11. Pygidium with punctures fine, much smaller than those of elytral striae; elytra (tilted forward) with intervals 3, 5, and 7 slightly raised over other intervals; female with pygidium furnished with lateral tufts of hairs at apex .....  
*brutus* Gyllenhal  
 Pygidium with punctures coarse, as large as those of elytral striae; elytra smooth, all intervals at same level; female without tufts at apex of pygidium .....  
*seriepunctatus* Gyllenhal
- 12(10). Hind femur clavate, with apex not extending to apex of elytra; middle femur with apex not extending to hind trochanter; pronotum at sides of base with row of backward pointing yellow hairs; male with venter glabrous; aedeagus truncate apically ..... *tremolerasi* Hustache  
 Hind femur more gradually widened, with apex extending almost to apex of elytra or beyond; middle femur with apex extending to or overlapping hind trochanter; pronotum at sides of base strongly margined; male with venter hairy-tomentose; aedeagus acuminate .....13
13. Small (5.5 to 7 mm.); elytra on disc with intervals 2 and 6 depressed, and striae narrow lines with punctures scarcely visible ..... *dolosus*, new species  
 Larger (8 to 17 mm.); elytra on disc with all intervals of equal elevation, and striae almost as wide as intervals, with generally large, distinct punctures .....14
14. Pronotum with two or three rows of large dense punctures surrounding median vitta from base to apex (fig. 8); lateral vittae where narrowed in front of middle interrupted by several punctures; vittae feebly elevated; female with apex of abdomen hairy; (see also couplet 8 above) .....  
*asper*, new species (part)  
 Pronotum either virtually impunctate in more than apical half or with basal rows of dense punctures not extending to apex; lateral vittae generally not interrupted by punctures in front of middle; vittae, if present, not elevated; female with apex of abdomen not hairy ....15
15. Pronotum red with three black vittae; rostrum at base in front of eye smooth, at apex (viewed in profile) scarcely wider than antennal club; (see also couplet 9 above) ..... *levis*, new species (part)  
 Pronotum generally black with vittae obsolete, indicated only by punctures at base; rostrum at sides of base in front of eye with elongate or round, often encrusted fovea of punctures; rostrum with apex (viewed in profile) twice width of antennal club .... *foveatus*, new species
- 16(3). Smaller (6.5 to 10 mm.); elytra scarcely longer than pronotum, strongly narrowed to apex (figs. 12, 13); subapical calluses sharp, bulbous, prominent; male with first two segments of abdomen forming

- deep hollow . . . *tomentosus*, new species  
Larger (8 to 14 mm.); elytra longer, less narrowed behind; subapical calluses less prominent (figs. 10, 11); male with first two segments of abdomen feebly depressed . . . . . 17
17. Elytra entirely encrusted with sandy, brownish covering; rostrum dorsally finely unicarinate among dense punctures; male with venter not or scarcely hairy and eighth tergum with apex truncate; female with pygidium encrusted, generally depressed laterally; not known from Ecuador . . . . . *rusticus* Gyllenhal  
Elytra black, opaque, with eroded encrusted depressions (fig. 11) laterally; rostrum not carinate; male with venter distinctly hairy and eighth tergum with apex emarginate; female with pygidium bare, convex, irregularly punctate; Ecuador only . . . . . *napoanus* Hustache
- 18(4). Antennal funicle with second segment distinctly longer than wide and twice length of third segment; elytra almost one-half longer than pronotum *tenuis*, new species  
Antennal funicle with second segment of same size and width as third and about as wide as long; elytra not more than one-third longer than pronotum . . . . . 19
19. Elytra only about one-fifth longer than pronotum; rostrum dorsally unicarinate, laterally (in most individuals) with apex scarcely, if at all dilated; pygidium with median tumidity more or less elongate and sides of pygidium depressed or eroded; male with venter glabrous; not found in Brazil . . . *mimelus*, new species  
Elytra one-third or one-fourth longer than pronotum; rostrum dorsally not carinate, laterally with apex strongly dilated (fig. 1); pygidium with median tumidity conical, prominent, especially that of male (fig. 4); male with metasternum and part of abdomen hairy; Brazil . . . . .  
. . . . . *tetricus* Gyllenhal
- 20(2). Pronotum with median vitta irregular in shape, invaded by punctures of interspaces and connected in part to lateral vittae; elytra with alternate intervals raised and punctate; Argentina, Brazil . . . . . *brasiliensis* Hustache  
Pronotum with median vitta diamond-shaped at middle, clearly separated from broad lateral vittae; elytra with alternate intervals impunctate; Greater Antilles . . . . .  
. . . . . *tenuivittatus* (Buchanan)

### Species Group *brunnipennis*

Ten species are included in this group: *brunnipennis* (Germar), *cincticollis* Gyllenhal, *dolosus*, new species, *foveatus*, new species, *levis*, new species, *asper*, new species, *tremolerasi* Hustache, *vilis* Hustache, *brutus* Gyllenhal, and *seriepunctatus* Gyllenhal. Some of these species are black, some a combination of red and black. They differ from the species of other groups except for the *crassus* group in being glabrous on almost the entire surface, including the front of the head, the rostrum, antennal funicle, and the tarsi. The tarsi are not described for each species because they are the same in all members of the group: all segments equally narrow, dorsally shining, with the underside glabrous medially, hairy laterally.

### *Sphenophorus brunnipennis* (Germar)

Figure 6

*Calandra brunnipennis* Germar, 1824, p. 297 (Buenos Aires, Argentina; type, female, in Martin-Luther Universität, Halle, examined).

*Sphenophorus signaticollis* Gyllenhal, 1838, p. 955 ("Brazil to Buenos Aires"; type, female, Buenos Aires, examined; synonymized by Gyllenhal, 1845, and Kuschel, 1955).

*Sphenophorus punctatostratus* Gyllenhal, 1838, p. 956 ("Brazil to Campos Gerais"; type, male, Campos Gerais, Brazil, in Naturhistoriska Riksmuseum, Stockholm, examined). NEW SYNONYMY.

**Diagnosis.** Glabrous; black, red, or black and red; tarsi shining. Similar to *cincticollis*, but males differing notably in having venter glabrous, not bristling with short hairs, hind tibiae only feebly ciliate, if at all, and aedeagus not drawn out to needle-like point; females of *brunnipennis* differ in having apex of abdomen broadly rounded, not minutely acuminate-angular.

**Range.** Argentina, Bolivia, Brazil, Chile, Uruguay. (For 236 specimens examined, see Appendix.)

**Description.** Length 7 to 9 mm. Rostrum (from side) shorter than pronotum, arcuate, compressed laterally, wider at apex than at middle, apex beneath forming right angle; (from above) strongly widened over antennal insertion; base without impressed line; apex flattened or feebly convex. Antennal club fee-

bly dilated; spongy apex one-third or one-fourth length of club. Pronotum either entirely black or with three black flat vittae on red background, vittae in some specimens merged in front forming black "M," vittae in some specimens somewhat elevated; punctation variable, either strong and dense or present only along sides of median vitta at base and apex; some specimens with four or five punctures at apex forming feeble depression. Scutellum elongate, triangular, feebly depressed in front. Elytra long, one-third longer than pronotum; intervals red or black, their dense punctures not visible in all individuals; striae generally obscured by grayish tomentosity; subapical callus feeble.

Prosternum impunctate except around front coxae. Metepisternum at middle with two or three punctures; remainder of underside sparsely or densely punctate. Hind femur gradually widened or feebly clavate. Tarsus as described for group. Pygidium feebly convex, with hairs in punctures that are generally obscured by encrustation but that are actually dense and smaller than punctures at base of pronotum; pygidium of male truncate apically, of female more rounded, without apical tufts. Aedeagus with apex triangularly acuminate; apodemes longer than lobe.

Male: venter depressed, not hairy; pygidium as given above.

*Remarks.* In spite of the differences between *brunnipennis* and *cincticollis*, there are many similarities, some individuals of both species being of the same size, color, and sculpture, and having the same kind of antennae, legs, and dorsal punctation. The two species have been collected together at the same time even in the same plant. Significant morphological differences, however, exist in the characters of the male (see Diagnosis), in the shape and punctation of the pygidium, in the proportion of the pronotum and elytra, and in some specimens in the dorsal apex of the rostrum (flat in *brunnipennis*, generally depressed in *cincticollis*).

The type of *brunnipennis*, a female of 7.5 mm., is typical of the majority of specimens from Argentina and Chile; the antennae, elytra, and legs are red; the head, rostrum, club, and venter black; the pronotum is red with three black vittae that are raised a little at the base;

the median vitta is surrounded by good-sized punctures. The male type of *punctatostratus* is slightly larger, entirely black, with the punctures of the pronotum coarser and covering a wider area, the apical constriction appearing more pronounced due to a ring of tomentose punctures; the vittae are merged across the front and the lateral vittae are quite wide at their bases. Although these two specimens are fairly distinct, examination of more than 200 specimens shows that all gradations exist in the coloration, punctation, shape, and sculpture of the pronotum, and that the punctation can vary no matter what the color or no matter whether the vittae are well separated or merged, flat or elevated. Therefore, I consider *punctatostratus* a synonym of *brunnipennis*, possibly a subspecies, the coarser individuals being mostly from Brazil, but, as in the case of *rusticus* and "*bruchii*," the differences are minimal. Although the name was later corrected to *brunneipennis*, it seems preferable to conserve Germar's original spelling, as done by Bruch (1915) in his catalogue. Sixteen males were dissected.

*Biology.* Fifteen specimens were collected "under stones along river" at Vallenar, Chile, August 18, 1940, by P. A. Berry. A male and three females, also a male of *cincticollis*, were collected by Parker on *Stellaria media*, a genus of herbs of the pink family, Coryophyllaceae, at San Antonio del Areco, Argentina. Other specimens are marked as occurring on grass, in Santiago, Chile; "in *Prunus* sp." Valparaiso, Chile; on the beach, or in the redraft, "*en la resaca*" in Uruguay and Chile. Two males from Barueri, São Paulo, Brazil, were taken by Lenko in March 1957, and November 1959, from the stomachs of the toads, *Bufo crucifer* and *B. icterius*.

Chadwick (1970) gave 10 species of weevils as having become established in Australia. One of these is *brunnipennis*, found in Queensland, and also on a bowling green in New South Wales in 1957 and from six other localities. He noted there was no damage reported.

*Sphenophorus cincticollis* Gyllenhal  
Figures 5, 17

*Sphenophorus cincticollis* Gyllenhal, 1838, p. 954  
("America meridionali"; type, female, in

Naturhistoriska Riksmuseum, Stockholm, examined).

*Sphenophorus defrictus* Boheman, 1845, p. 261 (Montevideo, Uruguay; type, female, in Naturhistoriska Riksmuseum, examined). NEW SYNONYMY.

**Diagnosis.** Glabrous; black, occasionally red or red and black; tarsi shining. Superficially like *brunnipennis*, but differs in having larger punctures on pygidium; dorsal apex of rostrum depressed; elytra shorter; pronotum generally black and virtually impunctate; secondary sexual characters distinct (see below).

**Range.** Argentina, Brazil, Paraguay, and Uruguay. (For 225 specimens, see Appendix.)

**Description.** Length 7 to 9 mm. Rostrum and antennal club as described for *brunnipennis*, but rostrum with ventral apical angle generally sharper, especially in females, more acuminate, and dorsal apex feebly concave. Pronotum, scutellum, elytra, legs, and underside as described for *brunnipennis*, but pronotal vittae generally entirely merged in front, and elytra scarcely longer than pronotum (in most specimens). Pygidium generally bare and shining, with apical lateral tufts of hairs (often worn off); punctures dense, some reticulate, larger than those at base of pronotum; pygidium of male convex, truncate at apex; of female rather flat, acuminate to apex, and with tufts of lateral apical hairs. Aedeagus with apex drawn out in long, needle-like point; apodemes longer than lobe.

Male: metasternum and first abdominal segment depressed, concave, and with two lines of bristly yellow hairs on edge of depression; last segment of abdomen also depressed and hairy; hind tibia densely ciliate on inner side; eighth tergum at apex slightly emarginate; pygidium as given above.

**Remarks.** The type of *cincticollis* is a female of 8 mm., with the typical bare, acuminate pygidium that has large contiguous punctures and latero-apical tufts of hairs; the dark reddish pronotum is almost as long as the elytra and is scarcely punctate except at the base and apex and only faintly on the sides, its vittae are obsolete, showing only at the extreme base. A tiny triangular projection at the apex of the abdomen is in some cases the only character by

which to distinguish the female of *cincticollis* from the female of *brunnipennis*. The type of *defrictus* is also a female and agrees with the type of *cincticollis* except for the pronotum which is black instead of reddish.

Although the sides of the prosternum are impunctate in almost all specimens examined, in one or two individuals there are in effect a few punctures. The rather scooped out dorsal apex of the rostrum and the long pronotum-short elytra combination of the majority of specimens are less marked in some individuals. The hairy venter and ciliate tibiae that readily distinguish males of *cincticollis* from males of *brunnipennis* are present also in males of *foveatus*, *levis*, *asper*, and *tetricus*, generally larger species which differ as stated under those species.

**Biology.** Specimens have been collected at night, under stones, in the stomach of toads (in Barueri, São Paulo, Brazil), on *Stellaria media* (San Antonio de Areco, Argentina), and in the redraft "resaca" of water at Canelones, Parque de Plata, Uruguay. At the three last-named localities, *brunnipennis* also were taken. In both species females appear to be more numerous than males, a proportion found in other species as well. Seventeen males were dissected.

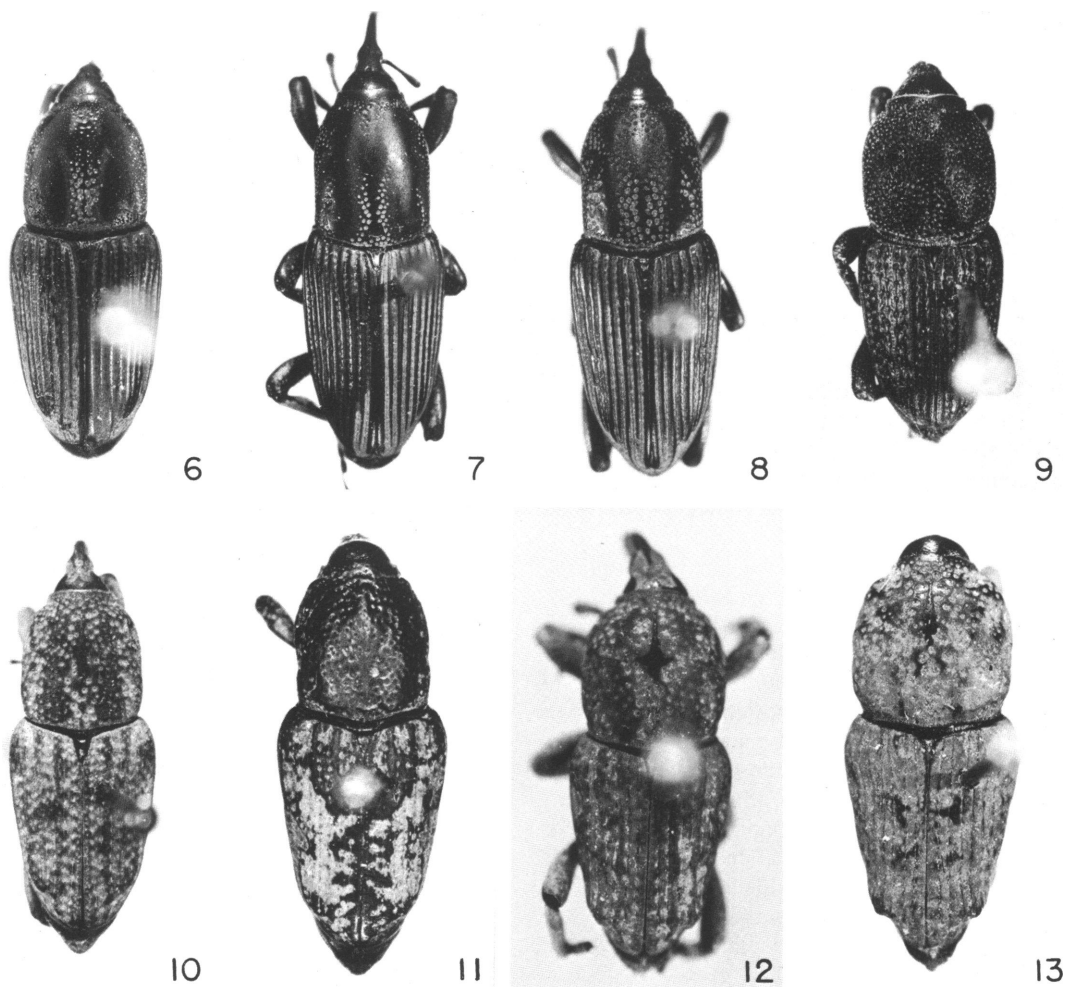
### ***Sphenophorus dolosus*, new species**

**Type Material.** Type, male, San Tome, Corrientes, Argentina, January 1929, in Kuschel collection, DSIR, Auckland, and two female paratypes, Nova Teutonia, Santa Catarina, Brazil, September 15, 1951, and November 1961, Fritz Plaumann, collector, one in Kuschel collection, one to be deposited in the American Museum of Natural History.

**Diagnosis.** Glabrous, black; tarsi dorsally shining. Shape, color, and proportions of *cincticollis* (large pronotum, short and rapidly narrowing elytra) and same characters of male (hairy venter and tibiae; very elongate eighth tergum), but differs in having prosternal sides and pronotum densely punctate, and aedeagus only feebly acuminate.

**Range.** Northeastern Argentina and southeastern Brazil.

**Description of Type.** Length 5.5 mm. Ros-



FIGS. 6-13. *Sphenophorus*, not to scale. 6. *S. brunnipennis*. 7. *S. levis*. 8. *S. asper*. 9. *S. seriepunctatus*. 10. *S. rusticus*. 11. *S. napoanus*. 12. *S. tomentosus*, male. 13. *S. tomentosus*, female.

trum (from side) shorter than pronotum, arcuate, compressed laterally, wider at apex than at middle; apex beneath with acute, drooping angle; (from above) strongly widened over antennal insertion; base and apex rather flat. Antennal club oval; spongy apex one-fourth length of club. Pronotum with large punctures (much larger than those of elytra) surrounding or outlining narrow, impunctate median vitta; lateral vittae wide, at base feebly convex, finely, sparsely punctate; lateral vittae in front of middle interrupted or constricted by punctures;

base at middle with larger, contiguous punctures. Scutellum triangular, feebly depressed at middle. Elytra short, about one-fourth longer than pronotum; intervals 1, 3, 4 in basal third, 5 and 7 feebly raised and with single row of distinct punctures of same size as punctures of lateral vittae of pronotum; striae with sparse, scarcely visible punctures contained within strial line; subapical callus not evident.

Prosternum with dense punctures as large as those on sides of pronotum. Metepisternum

across middle with three punctures. Metasternum and first segment of abdomen concave; sides of metasternum and all abdomen with bristly hairs. Hind tibiae ciliate within; hind femora gradually widened. Tarsus as in group. Pygidium bare, convex, rather narrowly rounded, punctate densely with large and small punctures. Aedeagus with lobe very long, narrow, its apex slightly acuminate; eighth tergum at least four times longer than wide.

*Variation from Type.* The two females measure 6.5 and 7 mm. They differ from the type in having the dorsal apex of the rostrum concave, not flat, the metasternum and abdomen flat and not hairy, the pygidium more acuminate, with hairs in the dense punctures. In one female there are lateral tufts of hairs on the apex of the pygidium and the elytra are rather encrusted so that the striae are covered.

*Etymology.* The species name is from the Latin *dolosus*, meaning deceitful or false.

*Remarks.* Although most similar to *cincticollis*, as stated in the diagnosis, *dolosus* agrees with some specimens of *brunnipennis* in the sculpture of the pronotum, but differs in having ventral hairs in the male. In *cincticollis* the pronotum differs in being scarcely punctate and in having the vittae confluent in great part, not outlined by strong punctures. The elytra of *dolosus* differ from those of the other two species in having some intervals raised above others and the striae punctures scarcely visible; the sides of the prosternum are punctate in *dolosus*, impunctate in the other two species.

### ***Sphenophorus foveatus*, new species**

Figure 18

*Type Material.* Type, male, Playa Pascual, San Jose, Uruguay, November 27, 1957, Z. S. Duran, L. C. de Zolessi, collectors, in Universidad de la Republica, Montevideo. Brazil, three paratypes: "Brazil" one male, in Kuschel collection, DSIR, Auckland; Santa Catarina, one male, and Rio Verde, Goias, one female, both in Muséum National d'Histoire Naturelle, Paris. Paraguay: San Bernardino, W. Eisenlehr, collector, one female, in Zoologisches Museum, Berlin. Argentina: Misiones, December 1942, one female, in Kuschel collection; Felipe

Sola, Distrito Puan, Buenos Aires, January 1959, A. Martinez, collector, one female, in Museu de Zoologia, São Paulo.

*Diagnosis.* Glabrous; black; tarsi dorsally shining. Allied to *cincticollis*, *levis*, and *asper*, having same secondary sexual characters in male, but differs from them in having elongate, eroded fovea of punctures at base of beak in front of eye, and eighth tergum of male distinctly emarginate, not scarcely emarginate or truncate.

*Range.* Argentina, Brazil, Paraguay, and Uruguay.

*Description of Type.* Length 10 mm. Rostrum and antennal club as described for *brunnipennis*, but ventral apex of rostrum sharper, acute; dorsal apex concave, and base of rostrum in front of eye with eroded depression of punctures. Pronotum black, without vittae, virtually impunctate except for punctures on apical constriction, narrowly on sides, and in three areas basally (at sides and center). Scutellum and elytra as described for *brunnipennis*, but elytra only one-fourth longer than pronotum.

Prosternum, prosternal sides, and most of venter strongly, coarsely punctate. Metepisternum across middle with three punctures. Hind femur slightly clavate. Tarsus as in group. Pygidium feebly convex, tomentose, almost square; punctures dense, about same size as those of metasternum. Metasternum, first and last segments of abdomen concave, hairy; middle and hind tibiae ciliate within, but hairs short (less than one half width of tibia). Aedeagus (fig. 18) with apex projecting in long, triangular but blunt point as long as first tarsal segment; eighth tergum apically emarginate.

*Variation from Type.* The females lack ventral depressions and hairs, and their tibiae are scarcely ciliate; the pygidium is encrusted as in the males, but in shape is strongly acuminate, not square. In one male the dorsal apex of the rostrum is merely flattened, not concave, and the pronotum is vaguely reddish between faint indications of vittae. In two paratypes the subapical median punctures of the pronotum form a feeble depression. The size ranges from 8 to 13.5 mm. A female in rather bad condition from Sitio Bananal, Guarulhos, São Paulo,

Brazil, is not included in the paratype series; it differs in having the pygidium bare, with large punctures, and the pronotum punctate laterally and apically.

*Etymology.* The species name is from the Latin *foveatus*, meaning depressed or foveate.

*Remarks.* Although similar dorsally to *cincticollis*, *foveatus* is generally twice the size and differs further in having the sides of the prosternum densely punctate, not impunctate, and the pygidium tomentose, not bare. It is also rather similar to *levis*, but the pronotum is black in *foveatus* and the vittae are almost entirely coalesced. One female and all three males were dissected.

### ***Sphenophorus levis*, new species**

Figures 7, 19

*Type Material.* Type, male, three female and one male paratypes, Curitiba, Parana, Brazil, Hatchbach, collector, and 31 males, 27 females, Parana, in the American Museum of Natural History, New York; one male, Parana, in Kuschel collection, DSIR, Auckland; one male, Ypiranga, São Paulo, Brazil, November 1918, Luederwald, collector, in Museu de Zoologia, São Paulo; one female, Nova Teutonia, Brazil, September, 194(?), F. Plaumann, collector, in Kuschel collection; one female, Caviuna, Parana, January 1946, A. Maller, collector, in the American Museum of Natural History. Argentina, five paratypes: one male, Buenos Aires, Mann, collector; one male, San Fernando, Buenos Aires, September, 1962, Daguerre, collector, and one male, Tigre, Buenos Aires, October 1962, Daguerre, collector, in National Museum of Natural History, Smithsonian, Washington, D.C.; one female, Tigre, May 1938, M. J. Viana, collector, in O'Brien collection, Florida A & M University, Tallahassee; one female, Buenos Aires, in Muséum d'Histoire Naturelle, Paris. Uruguay: one male, Kuschel collection; one female, Paysandu, Puerto Pepe Aji, January 21-25, 1970, M. A. Monne, G. Wibmer, C. E. Casini, collectors, in Universidad de la Republica, Montevideo.

*Diagnosis.* Glabrous; dark red with black stripes on pronotum; tarsi dorsally shining.

Color and pattern of *brunnipennis* and of some *cincticollis*, both of half the size, and of *asper*, which differs in having heavily punctate pronotal interspaces. Similar male characters of hairy venter and ciliate tibiae as *asper*, *cincticollis*, and *foveatus*, but aedeagus differs.

*Range.* Argentina, eastern Brazil, and Uruguay.

*Description of Type.* Length 8 mm. Rostrum (from side) almost as long as pronotum, arcuate, compressed laterally; in profile wider at apex than at middle; apex beneath sharply angulate; (from above) feebly widened over antennal insertion; base without impressed line; apex feebly flattened. Antennal club dilated; spongy apex about one-fourth length of club. Pronotum extremely finely punctate, except for larger punctures (size of striae punctures of elytra) in basal half on each side of median black vitta and in clusters laterally at base and middle of sides, also few larger punctures subapically; color red with three bare black flattened vittae; median vitta rather fusiform. Scutellum elongate, impressed in front. Elytra dark red, about one-third longer than pronotum; intervals bare, flat, minutely punctate; striae encrusted, depressed, almost as wide as intervals, densely punctate; subapical callus feeble.

Prosternum with sides sparsely punctate. Metepisternum at middle with three punctures. Metasternum and first segment of abdomen deeply concave; abdomen and sides of metasternum with short, bristly hairs. Tibiae and femora densely ciliate within; hind femur gradually widened. Tarsus as in group. Pygidium bare, convex, with contiguous, hairy punctures larger than those at base of pronotum; apex truncate. Aedeagus with sides parallel to near apex where forming long, flat, almost transparent triangle, like a spear head (fig. 19); eighth tergum truncate.

*Variation from Type.* The paratypes vary in length from 8 to 14 mm. Females differ from males in having the pygidium narrowly rounded to rather acuminate with latero-apical tufts of yellow hairs or bristles (can be worn off); the venter and tibiae not hairy; the abdomen only feebly, if at all, concave. Females in general are larger than males. Some paratypes differ from the type in having the elytra and the

spongy apex of the antennal club slightly shorter. In about half the series of 72 specimens from Parana, the prosternal sides are virtually impunctate; in the remainder they are sparsely punctate, or, in several, are rather more densely punctate. The pronotum varies in the size, density, and extent of the punctures.

*Etymology.* From the Latin *levis*, meaning smooth or polished.

*Remarks.* In the 38 males and 34 females of *levis* examined, the pronotum is red with three black stripes which are flat, as if painted on the surface. The stripes are not coalescent as are those of *foveatus*, nor elevated as those of *asper* (they can be feebly elevated at the base in some specimens). In *levis* the punctures of the pronotum normally do not extend forward around the median vitta as they do in *asper*, but in three specimens of *levis* (Paysandu, Uruguay; Tigre, Argentina; Nova Teutonia, Brazil), the basal punctures do continue to the apex, outlining the median vitta. Strongly punctate individuals such as these can be distinguished from females of *asper* in having no visible hairs on the last abdominal segment, and from males in having the apex of the aedeagus flat, shaped like a spearhead, not rather bulbous and shaped like a pointed finger, and the eighth tergum with the sides feebly constricted behind the apex, not straight throughout. These two species are allopatric, *levis* occurring farther south, on the east coast from São Paulo to Buenos Aires, and *asper* north and west.

Four females were dissected; 27 males were either dissected or have the aedeagus already ejected and readily visible.

*Biology.* The specimens from Parana are from the Bondar collection in the American Museum of Natural History and bear one or two numbers corresponding to numbers in Bondar's notebooks (on file at the museum). According to these numbers (3071, 4355), the specimens were collected "in Bromeliaceae." Bondar mentioned receiving the species in great numbers from Santa Catarina and Parana. As many were evidently collected at the same time (four or five were originally mounted on points on the same pin), they may have been copulating; if so this may account for the many males

with the aedeagus protruding. A specimen from Uruguay was collected in January at lights at night.

### ***Sphenophorus asper*, new species**

Figures 8, 20

*Type Material.* Type, male, and paratype, female, Teffe (Ega), Amazonas, Brazil, 1879, de Mathan, collector, in Muséum National d'Histoire Naturelle, Paris; male and female paratype, same data, to be deposited in the American Museum of Natural History, New York; one female, Santarem, Amazonas, 1878, de Mathan, collector, and one female, Mato Grosso, 1886, Germain, collector, both in Muséum National d'Histoire Naturelle; one male, "Brazil," in National Museum of Natural History, Smithsonian Institution, Washington, D.C.; one male, three females, Boca do Rio Purus, Amazonas, April 1 to 4, 1967, and one male, Lago do Rei, Ilha do Careiro, Amazonas, in Museu de São Paulo; one male, "Peru," Entomology Division, DSIR, Auckland; one female, "Bolivia," in Museum, Paris.

*Diagnosis.* Glabrous; black or black and red; tarsi dorsally shining. Closely allied to *levis*, with same characters of male—hairy venter and ciliate tibiae—differing from it, also from *foveatus* and *cincticollis*, in having all pronotal interspaces entirely densely punctate.

*Range.* Bolivia, Peru, northern Brazil.

*Description of Type.* Length 9 mm. Rostrum and antennal club as described for *levis*. Pronotum densely punctate in interspaces with punctures of size of those on elytral striae and arranged in two rows that surround median fusiform vitta from base to apex; lateral vittae in front of middle narrowed and interrupted by a few punctures; vittae feebly elevated, scarcely punctate; color dark red with vittae black. Scutellum and elytra as described for *levis*.

Prosternum with sides densely punctate on inner half, rather sparsely on outer half. Metepisternum, metasternum, abdomen, and legs as described for type of *levis*. Tarsus as in group. Pygidium as described for type of *levis*, but punctures smaller than those at base of pronotum. Aedeagus with sides gradually wid-

ening to before apex where narrowed to long, narrow, somewhat blunt point (fig. 20); eighth tergum with apex truncate.

*Variation from Type.* The size of paratypes is from 8 to 10 mm. Females differ from males in having the pygidium narrower, more rounded at apex, with latero-apical hairy tufts, the tibiae not ciliate, the venter hairy only on the last segment of the abdomen. The rostrum appears slightly longer in females. In several paratypes the sides of the prosternum are entirely punctate; in two the pronotal interspaces are black, not red.

*Etymology.* The species name is from the Latin *asper*, meaning rough or uneven.

*Remarks.* When I had seen only two individuals of *asper*, I believed they were a densely punctate variation of *levis* which in itself varies somewhat in punctuation. Specimens of *asper* subsequently examined from the Amazonas region, however, differ conclusively, in my opinion, not only in denser punctuation of the pronotum, but in the presence, in females, of visible hairs on the last segment of the abdomen, and in males of the much narrower, feebly bulbous, not flat apex of the aedeagus which is feebly deflexed, not horizontal, and in the eighth tergum. This tergum in *asper* is parallel-sided, whereas in *levis* it is feebly constricted behind the apex. There is also a slight difference in the shape of the spermatheca and in the antennal club which is rather more elongate and narrow in *asper*. Four males and two females were dissected.

#### *Sphenophorus tremolerasi* Hustache

*Sphenophorus tremolerasi* Hustache, 1937, p. 11 (Pocitos, Montevideo, Uruguay; type, female, in Muséum National d'Histoire Naturelle, Paris, examined).

*Diagnosis.* Glabrous; black or red; tarsi shining. Dorsally similar to several species with pronotal vittae flat and mostly confluent, but differs in having short, clavate femora (apex of middle femur not reaching base of long metasternum), and more dilated antennal club. Elytra often reddish.

*Range.* Argentina, Brazil, Uruguay. (For 72 specimens examined, see Appendix.)

*Description.* Length 8 to 13 mm. Rostrum

(from side) almost as long as pronotum, arcuate, compressed laterally, wider at apex; apex below sharply angulate; (from above) only feebly widened over antennal insertion; base without impressed line; apex with cuplike depression. Antennal club dilated; spongy apex one-third to one-fourth length of club. Pronotum very finely punctate, more distinctly at middle of base; either entirely black or with broad black, flat "M" on red foundation. Scutellum elongate, flat, impunctate. Elytra long, about one-half longer than pronotum; intervals bare, flat, of equal widths, either red or partially red, partially black; striae distinct, with dense punctures of about same size as those at base of pronotum; subapical callus not evident.

Prosternum and underside entirely punctate. Metepisternum at middle with four punctures. Hind femora widened abruptly, bulbous. Tarsus as described for group. Pygidium rather finely punctate, with hairs in punctures; that of male squarish, convex, with apex truncate; of female with apex narrowly rounded. Aedeagus with sides parallel to truncate apex; apodemes much longer than lobe.

Male: venter depressed; pygidium as given above.

*Remarks.* In size, coloration, and dorsal sculpture, this species is similar to many individuals of *levis*, but the sides of the prosternum are uniformly densely punctate, not sparsely punctate or impunctate, the characters of the male differ, and the pygidium is finely, not coarsely, punctate. The elytra of the majority of specimens examined are red and the pronotum black, but variation in color exists. The smooth, finely punctate pronotum with its non-elevated, generally confluent vittae is similar to that of *cincticollis* and to some *brunnipennis*, smaller species with impunctate prosternal sides.

Among the specimens examined, the proportion of males to females is low (16 males to 56 females), as is true also of *brasiliensis*. The type specimen, although labeled as a male, is in fact a female. The tibiae are ciliate on the inner margin in both sexes, but in the type these hairs are worn down. Seven males were dissected.

**Biology.** An example from Montevideo, Uruguay, was found in detritus along the coast, and one from Quilme, Buenos Aires, Argentina, "in Bromeliaceae."

*Sphenophorus vilis* Hustache

*Sphenophorus vilis* Hustache, 1936, p. 114 (Mendoza, Argentina; type, male, in Muséum National d'Histoire Naturelle, Paris, examined).

**Diagnosis.** Mostly glabrous, black; tarsi shining. Differing from other species in having rostrum subcylindrical, not compressed, not widened apically, and apex ventrally not sharp.

**Range.** Argentina, Brazil, Paraguay, Uruguay. (For the 15 specimens examined, see Appendix.)

**Description.** Length 9 to 17 mm. Rostrum (from side) almost as long as pronotum, feebly arcuate, subcylindrical, scarcely compressed, not widened apically; apex beneath rounded to minutely angulate; (from above) only feebly widened over antennal insertion; base in some individuals with feebly depressed line; apex not depressed. Antennal club dilated or not; spongy apex one-fifth to one-sixth length of club. Pronotum with three bare, finely punctate, feebly elevated black vittae (some specimens also with two short lateral branches); lateral vittae at base much wider than median vitta; median vitta generally wider in front than behind; interspaces with large punctures that are tomentose within. Scutellum oblong, flat, impunctate. Elytra long, one-half longer than pronotum; intervals convex, with bare, elevated black stripes, finely punctate; striae almost as wide as intervals, with larger punctures; subapical callus not evident.

Prosternum and underside entirely punctate. Metepisternum across middle with three or four punctures. Hind femur gradually widened. Tarsus as in group. Pygidium finely, densely punctate, with hairs in punctures; that of male convex, slightly more tumid and hairy toward apex; of female feebly convex at center, with apex acuminate. Aedeagus with sides parallel to narrowly rounded apex.

Male: venter feebly depressed; tibiae ciliate within; pygidium as given above.

**Remarks.** The convex black stripes on the

elytra are similar to those of *tenuivittatus*, and some *levis*. In *vilis* the stripes may be long or short. The pronotum of *vilis* also resembles the pronotum of *tenuivittatus* and *asper*. The pygidium of the male of *vilis* is narrow, not square as in most species. Three males were dissected.

*Sphenophorus brutus* Gyllenhal

Figure 22

*Sphenophorus brutus* Gyllenhal, 1838, p. 948 (Peru; type, female, in Naturhistoriska Riksmuseum, Stockholm, examined).

*Sphenophorus crudus* Erichson, 1847, p. 137 (Peru; type not examined; synonymized by Kuschel, 1955).

**Diagnosis.** Glabrous, black; tarsi shining. Similar to *seriepunctatus*, but differs in having punctures of pygidium smaller than those of elytral striae, not equal in size; apex of aedeagus truncate, not rounded, and intervals of elytra feebly alternately raised.

**Range.** Bolivia, Chile, Peru. (For 27 specimens examined, see Appendix.)

**Description.** Length 7 to 9 mm. Rostrum (from side) shorter than pronotum, arcuate, compressed laterally, wider at apex than at middle, in some individuals slightly tumid at base; apex beneath with acute, drooping angle; (from above) strongly widened over antennal insertion; base impressed; apex rather flat. Antennal club oval; spongy apex one-fourth length of club. Pronotum with elongate median apical depression enclosing punctures, or with punctures concentrated in front of narrow median vitta or impunctate line; remainder of pronotum with large, irregular punctures, some as large as those of elytral striae; lateral vittae broad but feebly elevated, with punctures smaller than those of interspaces. Scutellum somewhat elongate, depressed medially. Elytra short, about one-fourth longer than pronotum; intervals 3, 5, 7 (in some individuals also interval 1) feebly elevated; intervals cut into by large punctures of striae which are as large as punctures on pronotal interspaces; subapical callus not evident.

Prosternum and underside entirely punctate. Metepisternum across middle generally with

only two punctures. Hind femur gradually widened. Tarsus as in group. Pygidium with hairs in punctures; punctures fine, smaller than those on elytral striae; of male truncate apically; of female narrowly rounded and with two lateral tufts of hairs at apex. Aedeagus (fig. 22) with sides parallel to truncate, medially slightly knobbed, apex; apodemes longer than lobe.

Male: venter feebly depressed; pygidium as given above.

*Remarks.* Although I have not seen Erichson's *crudus*, which Kuschel synonymized with *brutus*, the description mentions the alternately elevated elytral intervals. In the type of *brutus*, the intervals are actually less noticeably elevated than those of other specimens examined. Two males were dissected.

*Sphenophorus seriepunctatus* Gyllenhal

Figures 9, 23

*Sphenophorus seriepunctatus* Gyllenhal, 1838, p. 950 (Peru; type, male, in Naturhistoriska Riksmuseum, Stockholm, examined).

*Diagnosis.* Glabrous, black; tarsi shining. Similar to *brutus*, but differs in having punctures of pygidium very large, not fine; aedeagus apically rounded, not truncate; and elytra with intervals, flat, not alternately elevated.

*Range.* Chile, Peru, Uruguay. (For 20 specimens examined, see Appendix.)

*Description.* Length 7 to 9 mm. Rostrum, antennal club, and pronotum as described for *brutus*, but rostrum in some specimens has apex dorsally depressed, pronotum is more finely punctate, with largest punctures not larger than those of elytral striae, median vitta lacking and lateral vittae indistinct, in most specimens merged across middle. Scutellum and elytra as described for *brutus*, but intervals flat, not alternately elevated; striae punctures generally larger than those at base of pronotum; subapical callus feebly tumid.

Prosternum, underside, metepisternum, and legs as described for *brutus*. Pygidium (at least of seven individuals) bare, without hairs, with dense, contiguous punctures as large as those of elytral striae; of male truncate, of female narrowly rounded. Aedeagus (fig. 23) with sides gradually narrowing to obliquely rounded

apex; apex feebly knobbed medially; apodemes longer than lobe.

Male: venter feebly depressed; pygidium as given above.

*Remarks.* Gyllenhal's two species, *brutus* and *seriepunctatus*, both of which occur in Chile and Peru, are very similar and could be mistaken one for the other at first sight. They recall the well known *venatus* Say of North America. They differ from the equally small and shining *brunnipennis* and *cincticollis* in having the sides of the prosternum punctate, not impunctate, the pronotum generally furnished with a more marked median apical depression, and the striae punctures of the elytra sufficiently large to cut into the intervals. Two males and one female were dissected.

*Biology.* A female from San Camilo, Peru, was collected in July on weeds or underbrush ("en maleza"), and one in March at Colonia Ciudad, Uruguay, in the surf or redraft ("en la resaca").

Species Group *rusticus*

Six species are included in this group, three having the tarsi dorsally encrusted (*rusticus* Gyllenhal, *napoanus* Hustache, and *tomentosus*, new species), and three having them shining (*tetricus* Gyllenhal, *tenuis*, new species, and *mimelus*, new species). They are mostly covered with a dense feltlike brownish or dark gray encrustation which is varied in some species by the presence of black shining stripes or spots on the pronotum or elytra. They resemble the species of the *brasiliensis* group in being encrusted, although more completely, but they differ from them in having the tarsi narrow, not dilated apically. The species are rather small (6 to 10 mm), with *rusticus* reaching 14 mm. The front of the head and dorsal base of the beak, when not obscured by grease, are seen to be encrusted or eroded; this character is used in the synoptic key to the species groups but is omitted from the descriptions.

*Sphenophorus rusticus* Gyllenhal

Figures 2, 4, 10, 21

*Sphenophorus rusticus* Gyllenhal, 1838, p. 937 (Cayenne, French Guiana; type, male, in

Naturhistoriska Riksmuseum, Stockholm, examined).

*Merothricus campestris* Chevrolat, 1885, p. 291 (Cayenne; type, male, in Naturhistoriska Riksmuseum, Stockholm, examined; synonymized by Kuschel, 1955).

*Merothricus nigroscutellatus* Chevrolat, 1885, p. 291 (Cayenne; type, female, in Naturhistoriska Riksmuseum, Stockholm, examined). NEW SYNONYMY.

*Sphenophorus Bruchi* Hustache, 1936, p. 112 (Jujuy Province, Argentina; type, female, in Muséum National d'Histoire Naturelle, Paris, examined). NEW SYNONYMY.

**Diagnosis.** Covered with brown encrustation, but some black elevations showing; tarsi encrusted. Similar to *napoanus*, but differs in having brown, not blackish, encrustation, abruptly tumid pygidium, and generally carinate rostrum. Similar also to *tomentosus*, but with different genitalia.

**Range.** From islands of Guadeloupe and Trinidad south through northern South America (Guianas, Venezuela, Colombia) and Brazil to Paraguay, Uruguay, and Argentina. (For 61 specimens examined, see Appendix.)

**Description.** Length 9 to 14 mm. Rostrum (from side) slightly shorter than pronotum, arcuate, compressed laterally, wider at apex; apex below sharply angulate; (from above) strongly widened over antennal insertion, where encrusted; finely carinate in some specimens among dense punctures; base generally obscured by encrustation; apex in some specimens feebly depressed. Antennal club oblong, not dilated; spongy apex a mere line. Pronotum either entirely encrusted, or with bare median black line that may be transversely enlarged in front of middle, forming black triangle; broad lateral vittae indicated under coating, generally with finer punctures than those in interspaces, but punctuation variable; many specimens with large coarse punctures. Scutellum elongate, triangular, depressed basally in some specimens. Elytra about one-fourth longer than pronotum; some specimens with two or three transverse depressions; intervals uneven, undulate, finely punctate; some specimens with intervals 3 and 5 elevated; striae with punctures visible or not, depending on thickness of encrustation; subapical callus tumid, prominent.

Prosternum with sides punctate under encrustation. Metepisternum scarcely punctate, with only one puncture at middle. Hind femur gradually widened. Tarsus with segments equally narrow, below glabrous medially, hairy laterally; above tomentose. Pygidium encrusted, and with bristly hairs on tumidity and in lateral apical tufts; that of male with prominent conical tumidity near apex and apex truncate; that of female tumid from base to apex, often eroded on sides, and apex rather acuminate. Aedeagus (fig. 21) sharply triangular at apex; margins at apex broadened and sclerotized; apodemes much longer than lobe.

Male: venter feebly concave, with inconspicuous hairs; pygidium as given above.

**Remarks.** In most museum collections this species is identified as *bruchii*. The similarity of *bruchii* (type locality, Argentina) to *rusticus* (type locality, Cayenne) was not suspected by Hustache as *rusticus* had been placed as the type species of another genus, *Merothricus* Chevrolat, 1885. In 1966, however, I synonymized *Merothricus* with *Sphenophorus* (p. 230, footnote) without further discussion. Having now reexamined the types of these "*Merothricus*" (*rusticus* and its synonyms, *campestris* and *nigroscutellatus*), I find that Chevrolat's generic description certainly does not differentiate *Merothricus* from *Sphenophorus* although he describes the mesosternum as advancing "*en pointe*" between the anterior "*pattes*"; this point seems due to an inverted "V" of encrustation between the coxae; it is not structural.

The types of *rusticus* and *campestris* are males (Chevrolat said that *campestris* was a female), about 11 mm. in length, and the type of *nigroscutellatus* is a female of 14 mm. All three specimens are covered dorsally with a buffy coating except for a short, narrow median black line on the pronotum; in *campestris* vague, sinuous darkish lateral vittae are also visible. The type of *bruchii* is a female and differs only in having the median line of the pronotum expanded slightly in front of the middle to form a small black triangle or cross.

The thickness of the coating or encrustation can change the aspect of the pronotum and elytra, causing the punctures to appear larger or smaller and the surface smoother or rougher. In

the type of *rusticus* the third elytral interval is somewhat elevated; in the type of *bruchii* and in some other specimens the intervals are of equal height.

The antennal club is oblong from every angle and its spongy apex scarcely marked. The pronotum is as long as the distance between the base of the elytra to the front of the subapical callus. The punctation of the bare median line of the pronotum is quite fine. In all specimens the base of the rostrum under the antennal scrobe is somewhat tumid. The lateral bristly tufts on the pygidium of the male are on the apical corners, those of the female are merely on the sides; these tufts are best seen at high magnification and are often hidden by the encrustation.

Two slight differences exist between some of the northern individuals and those from farther south, but they do not appear sufficiently distinct or constant to establish subspecies, especially in view of the fact that the aedeagus is similar in 10 males examined from various localities (Apure and Maracay, Venezuela; Guadeloupe Island; Amazonas, Brazil; central Paraguay; Uruguay, and Argentina). In the majority of specimens from the north the black triangle or diamond of the median bare line of the pronotum is not present, and the rostrum appears rather longer and narrower.

Ten males and 10 females were dissected.

### *Sphenophorus napoanus* Hustache

Figure 11

*Sphenophorus napoanus* Hustache, 1936, p. 112 (El Napo, Ecuador; type, female, in Muséum National d'Histoire Naturelle, Paris, examined).

**Diagnosis.** Black; elytra encrusted; tarsi encrusted. Similar to opaque or greased specimens of *rusticus*, but differs from them and from other species in having oblique, eroded, encrusted depressions from the sides of the elytra toward the center. Differs further from *rusticus* in having apex of aedeagus more narrowly pointed and eighth tergum strongly emarginate.

**Range.** Eastern Ecuador. (For three specimens examined, see Appendix.)

**Description.** Length 8 to 12 mm. Rostrum and antennal club as described for *rusticus* but base of rostrum with deeply impressed line and

not carinate. Pronotum with surface vaguely uneven due to three scarcely elevated, indistinct vittae (in type only narrow median vitta visible), finely and sparsely punctate in two specimens, coarsely, more densely in one specimen. Scutellum elongate, triangular, flat. Elytra about one-fourth longer than pronotum, uneven, with eroded areas (in two specimens filled with buffy encrustation) from base obliquely to middle and posteriorly to subapical callus, also two eroded depressions on outer elytral intervals (behind humerus and at middle); striae, where visible, sparsely punctate; callus evident.

Prosternum, metepisternum, hind femur, and tarsus as described for *rusticus*. Pygidium convex toward apex, with hairs in punctures; that of male squarish, with apex broadly truncate and punctures obscured, of female, bare, narrowing to rounded apex, punctate deeply, irregularly with punctures almost as large as those of striae. Aedeagus feebly widening from base to before apex; apex narrowly acuminate; apodemes longer than lobe.

Male: venter concave and covered with yellow hairs; eighth tergum strongly emarginate and hairy; pygidium as given above.

**Remarks.** The type of *napoanus* is labeled as male, but the slightly exposed genitalia show it to be a female. The female from Rio Verde is dorsally similar to the type, having the elytral encrustations clearly evident, but the unique male (Limoncocha), although degreased, remains greasy black, and the encrustation of the elytra can only be surmised by the depressions.

This species is not only similar in many ways to *rusticus*, it is also similar in general appearance to the Mexican and Central American species, *S. sulcifrons* Chevrolat. It differs from *sulcifrons*, however, in having a less tumid pygidium, and emarginate, not truncate eighth tergum, and the tarsi dorsally encrusted, not shining. The aedeagus is similar in the two species. *Sphenophorus napoanus* and *tomentosus* are the only species recorded from Ecuador.

### *Sphenophorus tomentosus*, new species

Figures 4, 12, 13

**Type Material.** Type, male, and paratype, male, Maracay, Venezuela, May 1935, A. Es-

calona Salas, collector, in National Museum of Natural History, Smithsonian, Washington, D.C.; one female, Apure, Venezuela, F. Geay, collector, in Muséum National d'Histoire Naturelle, Paris; five paratypes from Bolivia: two males, Coroico, one female, Songo, in Museum, Paris; one female, Santa Cruz de la Sierra, Sara Province, April 1904, Steinbach, collector, in Zoologisches Museum, Berlin; one female, Sara Province, 1926, Steinbach, collector, in Kuschel collection, DSIR, Auckland; four females from Ecuador: one, Paramba, March 1897, Rosenberg, collector, in Museum, Paris; three, Balzar, February 2, 1957, G. Merino, collector, in National Museum, Washington, D.C.

*Diagnosis.* Covered with dense feltlike brown encrustation with several small black elevated areas; tarsi encrusted. Very similar to, but generally much smaller than, *rusticus*, differing in having shorter, more uneven elytra with more prominent subapical calluses, wider pronotum in female, and less arcuate, less acuminate aedeagus in male.

*Range.* Bolivia, Ecuador, and Venezuela. (For 12 specimens examined, see Appendix.)

*Description of Type.* Length 8 mm. Rostrum and antennal club as described for *rusticus*; base of rostrum with bare, carina-like line showing through encrustation; apex feebly flattened. Pronotum encrusted except for elevated, black shining spot at middle in form of cross that extends forward in narrow line toward apex, and small black basal spot on each side of middle; broad lateral vittae visible under encrustation due to feeble elevation and darker color; punctures dense, some sparse, larger and coarser in interspaces. Scutellum elongate, triangular, depressed basally, narrower than adjacent elytral interval. Elytra scarcely longer than pronotum (pronotum as long as elytra from base to posterior edge of subapical callus), with two depressions, one on side behind humerus, and one, oblique, in front of subapical callus; intervals 3, 4, and 5 rather elevated in basal half; striae with minute, sparse punctures contained within stria line; subapical callus abruptly tumid, extending slightly over edge of elytra.

Prosternum, metepisternum, hind femur, tar-

sus, and pygidium as described for male of *rusticus*. Abdomen with first segment abruptly, deeply concave. Aedeagus with sides somewhat narrowly rounded to vague point that is rather transparent; apodemes longer than lobe; eighth tergum truncate.

*Variation from Type.* Almost every specimen differs in dorsal appearance with the exception of one of the two males from Coroico and the second male from Maracay, both of which resemble the type. Females differ from males in having the pygidium narrower, rather flat, not tumid, and the abdomen less concave. One female is only 6.5 mm. long and one is as large as 10 mm. In six females (three from Bolivia, and three from Ecuador), the pronotum is very large and distinctly wider in front, but in other females it is narrow as in the type. Three females lack a bare vitta on the pronotum; it is only visible as a narrow line under the brown encrustation. Some paratypes are smoother, less rough than the type. In one of the males from Coroico there are three black bare spots on the pronotum, one basally in front of the scutellum, the others in front of the middle on each side of the encrusted median vitta. In one paratype, which appears distorted, the rostrum is virtually straight on top and the pygidium is flattened and lumpy instead of round and tumid.

*Etymology.* From the Latin *tomentosus*, meaning tomentose or matted with hairs.

*Remarks.* Dorsally *tomentosus* resembles some *rusticus*, but it differs in the male in having the aedeagus scarcely acuminate, not sharply triangular, and the sclerotized margins narrow throughout and transparent at apex, not wider and thicker apically. The aedeagus is more like that of *tetricus* and *mimelus*, but is less arcuate. In the male of *tomentosus* the first segment of the abdomen is deeply excavated whereas in *rusticus* the venter is scarcely concave. Some greased specimens are similar to *napoanus*, but that species has elytral depressions filled with encrustation and the pygidium bare, not encrusted. Four males and one female were dissected.

The *Merothricus* "sp. (Martorell 39-246)-Venezuela" cited in the catalogue of Blackwelder (1947, p. 915) is evidently *tomentosus*,

as the specimen listed by Martorell (1939) with a question has the same data as the male type and paratype from Maracay.

**Biology.** The three females from Balzar, Ecuador, were found "attacking rice plants 1½ months old."

***Sphenophorus mimelus***, new species

Figure 14

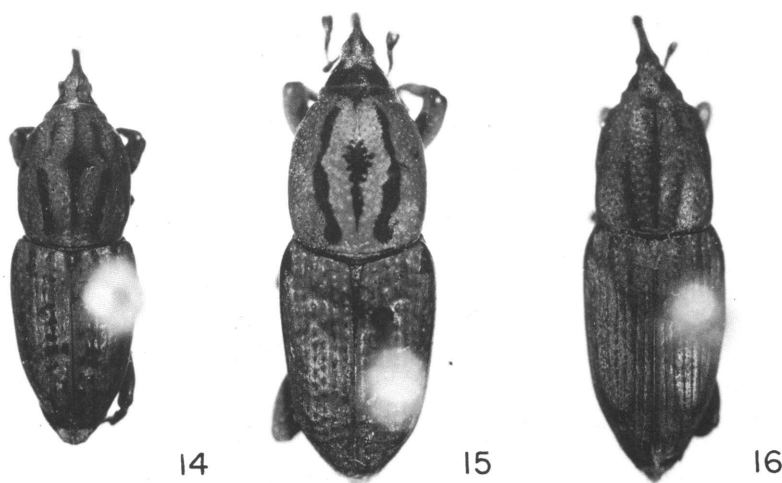
**Type Material.** Type, male, Chaco del Santiago del Estero, Rio Dulce, Argentina, E. R. Wagner, collector, in Muséum National d'Histoire Naturelle, Paris; six paratypes, Argentina: female, Santiago del Estero; male, Olavarria, Buenos Aires, Daguerre, collector, in National Museum of Natural History, Smithsonian, Washington, D.C.; male, Lujan, Buenos Aires, H. H. Maristas, collector, in Kuschel collection, DSIR, Auckland; male, Santiago del Estero, Rio Salado; male, Chaco de Santa Fe, Las Garzas, Rio Las Garzas; female, Haut Parana, Ti ju-Cuare, 1911, Wagner, collector, in Muséum National d'Histoire Naturelle, Paris. Three paratypes, Paraguay: male, Bohls, collector, in Museum, Paris; female, San Bernardino, in Kuschel collection; male, 3 km. east of Ypacarai, October 10, 1968, L. B. and C. W. O'Brien, collectors, in O'Brien collection. Three paratypes, Uru-

guay: two females, Montevideo, J. Tremoleras, collector, in Museum, Paris; one female, Rivera, Sierra and Arroyo de la Aurora, January 12 to 26, 1971, Monne, Moratorio et al., collectors, in Universidad de la Republica, Montevideo.

**Diagnosis.** Either entirely brown-encrusted, or brown with shiny black areas on pronotum and elytra; tarsi dorsally shining. Similar to *tetricus* and *tenuis*, but more robust; elytra shorter; rostrum dorsally feebly carinate; and pygidium of male with median tumidity longitudinal from base to apex, not round and conical near apex.

**Range.** Argentina, Paraguay, and Uruguay, apparently near water.

**Description of Type.** Length 8.5 mm. Rostrum (from side) distinctly shorter than pronotum, compressed, arcuate, wider at apex; apex beneath right angled; (from above) widened angularly over antennal insertion; carinate medially from base to near apex; apex flattened. Antennal club only feebly dilated; spongy apex about one-fifth length of club. Pronotum entirely encrusted, brown, opaque, with three elevated brown vittae furnished with tiny punctures; median vitta fusiform; lateral vittae less wide than median vitta; interspaces basally with punctures twice as large as those of vittae. Scutellum rather oblong, posteriorly



FIGS. 14-16. 14. *S. mimelus*. 15. *S. tetricus*. 16. *S. tenuis*.

not wider than elytral interval. Elytra short, longer than pronotum by only one-fifth; intervals rather undulating, with worn black spots along the striae, and single rows of punctures as small as those of pronotal vittae; striae with punctures indistinct, contained within strial line; subapical callus feebly tumid.

Prosternum with sides punctate about as on sides of pronotum. Metepisternum across middle with three punctures. Hind femur feebly clavate. Tarsus with segments equally narrow; below glabrous medially, hairy laterally; above glabrous. Pygidium encrusted, square, depressed and eroded on sides; apex truncate, with latero-apical tufts of hairs; median tumidity longitudinal from base to apex. Aedeagus as described for *tomentosus*.

*Variation from Type.* The size range is from 6.5 to 9 mm. In females the pygidium is narrower, not so truncate. The 12 paratypes present many small differences. In some the dorsal apex of the rostrum is depressed and the ventral apex not so angulate; in others the scutellum is triangular, or the spongy apex of the antennal club is even smaller than that of the type and the club itself is not at all dilated. In about half the paratypes, the brown coating of the pronotal vittae has become rubbed, thus exposing narrow black opaque stripes in a pattern similar to that of *tetricus*. In these rubbed *mimelus*, however, only the tops of the vittae are black, not the vittae themselves, which are broader and more opaque than the vittae of *tetricus*. Unfortunately, this difference does not show in the photographs (figs. 12, 13). Additional worn black areas are present on the pronotum of some of the paratypes, either as spots or as forked lateral branches at the base or near the apex. The paratype from Olavarria, Buenos Aires, lacks the characteristic carina of the rostrum, and appears to have longer elytra.

*Etymology.* The species name is from the Latin *mimelus*, meaning imitative or similar.

*Remarks.* In addition to the differences given in the Diagnosis, *mimelus* differs from *tetricus* in having the elytral strial punctures generally indistinct and the male with the venter glabrous, not hairy. From *tenuis* it differs further in having the second segment of the antennal funicle as short as, not longer than, the third. Dorsally, however, some individuals

of these three species are very similar, the pattern depending on the amount of grease or on the amount of wear. Fresh specimens of *mimelus* have an entire brown opaque coat or encrustation; fresh specimens of *tetricus* are opaque gray with shining black stripes on the pronotum; fresh specimens of *tenuis* have less distinct black stripes on a reddish or gray background. Five males and one female of *mimelus* were dissected.

*Biology.* The male from Ypacarai, Paraguay, was collected by the O'Briens at night.

*Sphenophorus tetricus* Gyllenhal

Figures 1, 4, 15

*Sphenophorus tetricus* Gyllenhal, 1838, p. 945  
("Brazil;" type not found).

*Diagnosis.* Encrusted; gray, opaque, but with shiny black stripes on pronotum; tarsi dorsally shining. Similar in pattern and narrow elytra to *tenuis*, but differs in having rostrum massive (fig. 1), dilated at apex where, in profile view, distinctly wider toward apex; and male with venter hairy. Differs from *mimelus* as stated below.

*Range.* Brazil in the south; French Guiana (?). (For nine specimens examined, see Appendix.)

*Description.* Length 7.5 to 9 mm. Rostrum (from side) distinctly shorter than pronotum, arcuate, compressed laterally, strongly widened at apical third or fourth; apex beneath sharply angulate; (from above) strongly widened over antennal insertion; base broadly depressed; apex rather flattened. Antennal club dilated (apex as wide as apex of front tibia); spongy apex one-fourth or one-fifth length of club. Pronotum with three narrow, shiny black, feebly punctate, elevated vittae extending from base to apex; median vitta at middle diamond-shaped or feebly widened; lateral vittae feebly curved, interrupted or partially broken near middle; small black spot laterally in front of middle; interspaces with uniform round punctures that are hidden in some examples by opaque coating. Scutellum elongate, triangular, posteriorly not wider than elytral interval. Elytra longer than pronotum by one-third or one-fourth; intervals mostly smooth, but in part rather undulate, with single row of minute punctures; striae with

much larger, sparser punctures that cut into intervals; subapical callus feebly tumid.

Prosternum and underside punctate. Metepisternum across middle with two or three punctures. Hind femur gradually widened. Tarsus as described for *mimelus*. Pygidium encrusted, near apex with prominent, hairy, conical tumidity almost as wide as pygidium and projecting forward; apex with lateral apical tufts of hairs; pygidium of male square, at apex truncate; of female strongly narrowed to apex. Aedeagus about as described for *tomentosus*.

Male: venter concave; metasternum and first and last segments of abdomen with short hairs; pygidium as stated above.

**Remarks.** Although the type of *tetricus* was not found, a female (Rio Grande do Sul, Brazil) compared with the type by Kuschel has been examined. This specimen agrees with Gyllenhal's description in small size, opaque dorsum with "costis tribus elevatioribus nitidus notato . . . ," etc. In all specimens these shining pronotal stripes are in strong contrast with the gray, opaque interspaces of the pronotum. The lateral black spots on the pronotum are not visible in several specimens. The single specimen from French Guiana, which may have been labeled in error, is a female in bad condition, with the tumidity of the pygidium almost flat.

*Sphenophorus tetricus* is dorsally similar to those worn *mimelus* which show black stripes on the pronotum, but it differs from them and from other *mimelus* in having the elytra longer, the tumidity of the pygidium conical, the rostrum widely dilated at the apex and not carinate dorsally, and the venter of the male hairy, not glabrous.

The extensive biological notes on "*tetricus*" quoted by Costa Lima (1956) belong to the large species, *brasiliensis* Hustache. Dr. C. Gonçalves of the Universidade Federal de Rio de Janeiro kindly sent me four of the six specimens from Anchieta, Espírito Santo, which were identified as *tetricus* by Costa Lima.

Two males and a female were dissected.

### ***Sphenophorus tenuis*, new species**

Figures 3, 4, 16

**Type Material.** Type, male, and 14 paratypes, 8 km. northwest of Collipulli, Malleco

Province, Chile, November 3 and 4, 1967, L. and C. W. O'Brien, collectors, in the O'Brien collection (six of these to be deposited in the American Museum of Natural History, New York, and two in the Muséum National d'Histoire Naturelle, Paris); five paratypes, Chile: four, Algarrobo, Valparaíso Province, November 26, 1950, and one, Lebu, Arauco Province, G. Kuschel, collector, in Kuschel collection, DSIR, Auckland. Argentina: one, Buenos Aires Province, Bosq, collector, in DSIR, Auckland. Brazil: one, Fazenda Santa Blanca, Corumba, Mato Grosso, December 10, 1960, K. Lenko, collector, in Museu de Zoologia, São Paulo.

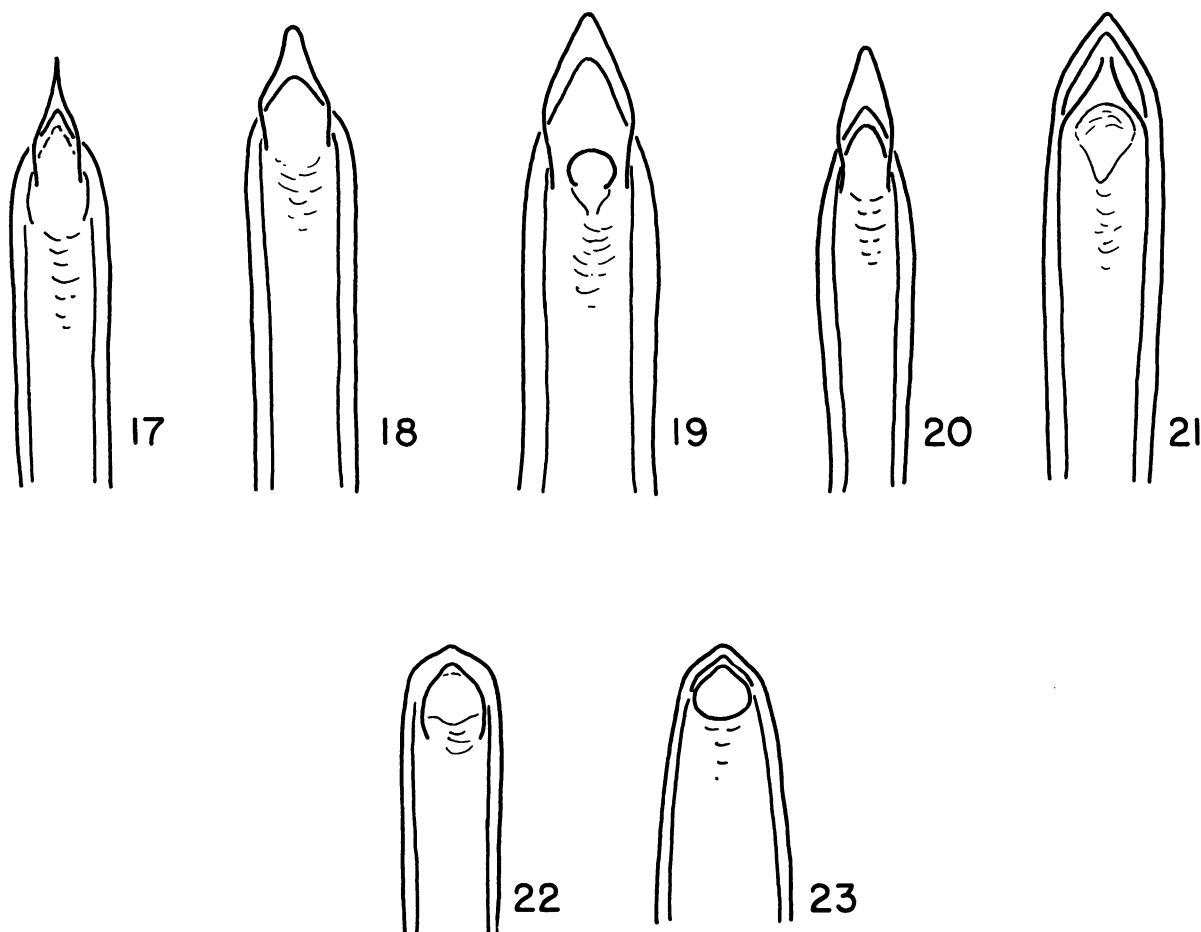
**Diagnosis.** Encrusted; black or red, with three indistinct black vittae on pronotum; tarsi dorsally shining. Similar to *tetricus*, but differs in having virtually straight, not arcuate rostrum that is scarcely dilated at apex (fig. 3) and second segment of antennal funicle almost twice longer than following segment.

**Range.** Brazil, Chile, and Argentina.

**Description of Type.** Length 8 mm. Rostrum (from side) distinctly shorter than pronotum, virtually straight, compressed laterally, scarcely wider in apical half; apex beneath rather obtuse, not sharp; (from above) strongly, abruptly widened over antennal insertion; spongy apex one-sixth length of club, a mere line. Pronotum with three narrow, feebly elevated, virtually impunctate vittae extending from base to apex; median vitta feebly widened at middle; lateral vittae feebly curved; interspaces rather densely punctate, punctures larger than those of discal striae of elytra. Scutellum elongate, posteriorly not wider than elytral interval. Elytra longer than pronotum by one-half; intervals smooth, flat, with single row of minute punctures; striae with larger punctures separated by their diameter or more, cutting slightly into intervals; subapical callus distinct, tumid but not prominent.

Prosternum and underside punctate. Metepisternum across middle with three punctures. Hind femur and tarsus as described for *mimelus*. Pygidium and aedeagus as described for male of *tetricus*.

**Variation from Type.** The size range is from 6 to 8.5 mm. Females are virtually indistinguishable from males unless the males have the venter distinctly concave. In general the



FIGS. 17-23. *Sphenophorus*, apices of aedeagus. 17. *S. cincticollis*. 18. *S. foveatus*. 19. *S. levis*. 20. *S. asper*. 21. *S. rusticus*. 22. *S. brutus*. 23. *S. seriepunctatus*.

metasternum is feebly concave in both sexes, but it is difficult to judge the concavity as it is often so feeble or is greased. Some paratypes are red or reddish; in several the elytra are not quite so smooth and the punctures of the striae are contained within the strial line; in some the spongy apex of the antennal club is longer. The median vitta of the pronotum is not invariably fusiform. In degreased specimens the three vittae are distinct against a gray or reddish background. The slightly eroded coated areas on the front of the head are generally obscured by grease. In some males the apex of the aedeagus is more sclerotized than that of the type.

*Etymology.* The species name is from the Latin *tenuis*, meaning slender, narrow, referring to the shape of *tenuis*.

*Remarks.* In dorsal pattern *tenuis* is similar to *tetricus* and some *mimelus*; it is similar also in the shape of the aedeagus and in the shining tarsal segments, but differs in having much longer elytra (one and one-half times the length of the pronotum). The longer second antennal funicle segment is not necessarily a reliable character in the genus, but it holds true for the 22 specimens of *tenuis*. The ventral side of the rostrum in the type and several paratypes seems especially sharp and carina-like, varying in

length and thickness. The middle femora are short, not reaching the hind trochanter. All the specimens examined are rather greased; several are also muddy. Seven males and four females were dissected.

**Biology.** The 15 specimens of the type series from Collipulli, Chile, were collected by the O'Briens along the Pan-American Highway between Concepcion and Valdivia "from emergent vegetation in a small pond in a large pasture . . . a watering place for cattle" (personal commun.).

#### Species Group *brasiliensis*

Two species are included in this group: *brasiliensis* Hustache, and *tenuivittatus* (Buchanan). Only *brasiliensis* is truly South American, as *tenuivittatus* is restricted to the Dominican Republic, so far as known. Both species are encrusted, *brasiliensis* almost entirely, and *tenuivittatus* in depressed parts only. They differ from species of other groups in having the third segments of the tarsi dilated, not narrow, and padded on the underside.

#### *Sphenophorus brasiliensis* Hustache

*Sphenophorus brasiliensis* Hustache, 1936, p. 111 (State of São Paulo, Brazil; type, female, in Muséum National d'Histoire Naturelle, Paris, examined).

**Diagnosis.** Covered with muddy looking encrustation except for black convex dorsal stripes; tarsi shining. Differing from *tenuivittatus* in dorsal sculpture and from other species in having dilated third tarsal segments.

**Range.** Eastern Brazil and Misiones, Argentina. (For 25 specimens examined, see Appendix.)

**Description.** Length 11 to 18 mm. Rostrum (from side) slightly shorter than pronotum, arcuate, compressed laterally, wider at apex than at middle; apex beneath angulate; (from above) distinctly widened over antennal insertion; base with deep or shallow impressed line; apex not depressed, but may be flattened. Antennal club dilated; spongy apex one-fourth to one-fifth length of club. Pronotum with brown encrustation except for three bare, black, convex vittae

and two baso-lateral branches; lateral vittae sinuous, in some specimens equal in width to median vitta, in others narrower; finely punctate or impunctate; median vitta either narrow line or spreading to touch lateral vittae in several places; interspaces with larger punctures, which are not invariably visible under encrustation. Scutellum elongate, impunctate, with feeble basal depression. Elytra only one-fourth longer than pronotum, with suture, third and fifth intervals and bases of outer intervals furnished with convex, black, punctate, attenuated stripes overlaying brown encrustation; other intervals encrusted, brown, uneven, wavy; striae with large, sparse punctures of same size as those of pronotal interspaces; subapical callus feeble.

Prosternal sides with tiny punctures visible under encrustation. Metepisternum with two or three punctures at middle, but generally not showing through opaque surface. Hind femur gradually widened or feebly clavate. Tarsus with third segment dilated, wider than other segments, below glabrous medially, spongy hairy pads laterally; above glabrous. Pygidium encrusted, finely, sparsely punctate, hairs in punctures, especially on sides and apex, that of male truncate and feebly tumid apically; of female more rounded to apex, narrower. Aedeagus at apex bent and strongly acuminate; eighth tergum truncate at apex.

Male: venter deeply concave; metasternum and abdomen with short yellow hairs; abdomen with apex broadly, shallowly depressed; pygidium as given above.

**Remarks.** This large, elongate species, once recognized, is readily identified even though the elytral sculpture and the brown encrustation can be obscured in heavily greased, blackish specimens. The general pattern resembles somewhat that of *vilis*, but *vilis* has narrow tarsal segments and the dorsum mostly bare and shining. The pronotum is much like that of *tenuivittatus*, but *brasiliensis* differs in having only the alternate intervals of the elytra black and striped, the remainder being heavily encrusted. The aedeagus resembles that of *rusticus*. Two of each sex were dissected.

Although the type of *brasiliensis* is labeled as a male, it is a female. There are only five

males among the 25 specimens examined.

**Biology.** According to a long report by Bemvindo de Novais in the journal, *Ceres*, which was transcribed by Costa Lima (1956, p. 254), under the mistaken name of *Calandra tetrica*, *Sphenophorus brasiliensis* spends all its larval life in the stems of cattail (*Typha dominicensis*), but the adult attacks rice planted nearby. The damage to the rice plants was noted by Novais on his property in Anchieta, Espirito Santo, Brazil, and I have examined four of the Anchieta specimens. For control, Novais recommended extensive irrigation (the weevil cannot live submerged) and destruction and burning of adjacent cattails.

*Sphenophorus tenuivittatus* (Buchanan)

*Calandra tenuivittata* Buchanan, 1936, p. 149 (Sanchez, Dominican Republic, island of Haiti; type, male, in the American Museum of Natural History, New York, examined).

**Diagnosis.** Partially encrusted, but with bare black dorsal stripes; tarsi shining. Differs from *brasiliensis* in having all intervals of elytra black, shining, and impunctate.

**Range.** Known only from type locality in Greater Antilles. (For three specimens examined, see Appendix.)

**Description.** Length 11 to 13 mm. Rostrum as described for *brasiliensis*. Antennal club dilated; spongy apex about one-third length of club. Pronotum with three broad, bare, black, virtually impunctate vittae and two short basolateral branches; lateral vittae sinuous on inner side; median vitta wider and diamond-shaped at middle; interspaces with large punctures. Scutellum triangular, depressed medially. Elytra about one-third longer than pronotum; intervals with elevated bare black impunctate stripes (in type, odd intervals somewhat elevated); striae encrusted, punctures well separated but indistinct; subapical callus feeble.

Prosternum with sides virtually impunctate. Metepisternum at middle with two or three punctures. Legs as described for *brasiliensis*. Pygidium finely, densely punctate, with hairs more abundant in apical third, and tufts of hairs each side of apex; that of male truncate apically, of female narrowly rounded to apex.

Male: venter depressed; tibiae ciliate within; pygidium as given above.

**Remarks.** This species, as stated by Buchanan, is allied to the North American *pertinax*, but the male of *tenuivittatus* lacks the brush of hairs on the abdomen characteristic of *pertinax*; the rostrum is stouter and more compressed. The unique male was not dissected.

Additional species taken in the Antilles are *australis*, *cubensis*, and *venatus* of North America, and *rusticus* of South America. Other species reported in the catalogues from the Caribbean have proved to belong in other genera.

Species Group *crassus*

The only species of the group, *crassus* Blanchard, differs in several instances from the species of the other groups, as described in the Diagnosis of the species and in the Synoptic Table of the groups.

*Sphenophorus crassus* Blanchard

*Sphenophorus crassus* Blanchard, 1843 [1846], p. 204, pl. 18, fig. 8 (Patagonia, Argentina; type not found).

*Sphenophorus crassus* var. *rufus* Chevrolat, 1885, p. 109 (Patagonia, Argentina; type not found; synonymized by Kuschel, 1955).

*Nesorthognathus pedestris* Voss, 1943, p. 234, figs. 4, 5 (Rosario, near Cordoba, Argentina; type not found; synonymized by Kuschel, 1955).

**Diagnosis.** Glabrous, black or reddish; tarsi shining. Differing from other species in having hind tibiae widened apically and flared outward; front tibiae virtually bilobed; metepisternum very wide; pronotum as wide as long; scutellum very large; form wide and robust.

**Range.** Argentina, Paraguay, and Uruguay (Bolivia, according to Chevrolat, 1855). (For 77 specimens examined, see Appendix.)

**Description.** Length 11 to 15 mm. Rostrum (from side) shorter than pronotum, virtually straight, scarcely compressed laterally, narrowing slightly to apex; carinate below; apex beneath rounded off; (from above) widened feebly over antennal insertion, carinate from base to apex; base without impressed line. Antennal club dilated at apex; spongy apex one-fifth length of club. Pronotum as wide as long,

finely, sparsely punctate on narrowed median vitta and on two wide lateral vittae; sides and base with larger punctures; vittae flat, black; remainder red. Scutellum black, broadly triangular, impunctate, as wide basally as two or three elytral intervals. Elytra long, one-half longer than pronotum; intervals bare, red or black, flat, all about same width, with single row of punctures; striae with elongate, merging punctures; subapical callus obsolete.

Prosternum and underside entirely punctate. Metepisternum at middle with five or six punctures. Front tibiae with large outer apical tooth; middle and hind tibiae with apices concave and outwardly toothed; hind femur gradually widened. Tarsus with all segments of equal width; below glabrous medially; hairy laterally; above glabrous. Pygidium flat, without hairs, with large, rather dense punctures that are larger than those of elytral striae; pygidium of male with apex rounded-truncate, of female slightly more narrowly rounded. Aedeagus with sides parallel to narrowly rounded apex.

Male: venter very feebly depressed, pygidium as given above.

*Remarks.* This is a readily recognizable species and apparently abundant. In the wide metepisternum, which is also much wider in front than behind, and in the straight, subcylindrical rostrum, *crassus* resembles the European *Sphenophorus* (*abbreviatus*, *piceus*) which differ, however, in having a long, narrow pronotum, larger pygidium, nonmodified tibiae, and some of their tarsi dilated.

Voss (1934) was correct in emphasizing the similarity of his *pedestris* to *Orthognathus* (Sipalini) because of the widened hind tibiae and bilobed front tibiae, but in members of that tribe the pygidium and metepimeron are covered, not exposed, the mesepimeron ascends angularly, and the antennae are inserted far from, not close to, the eye.

In his description of *crassus*, Blanchard did not mention the widened tibiae, but his illustration of the species is unmistakable.

## APPENDIX

### SPECIMENS EXAMINED

For convenience, the species and the countries under each species, are listed alphabetically. The institutions or individual to which the specimens belong are indicated by letter symbols in parentheses as follows:

AMNH, the American Museum of Natural History, New York

BM, Zoologisches Museum, Berlin

DM, Staatliches Museum für Tierkunde, Dresden

HO, H. and A. Howden collection, Ottawa

KU, Kuschel collection, Division of Entomology, Auckland

MN, Muséum National d'Histoire Naturelle, Paris

NR, Naturhistoriska Riksmuseum, Stockholm

OB, O'Brien collection, A. and M. University, Tallahassee

SP, Museu de Zoologia, São Paulo

UM, Universidad de la Republica, Montevideo

UR, Universidade Federal de Rio de Janeiro, Instituto de Biologia

USNM, National Museum of Natural History, Smithsonian Institution, Washington, D.C.

For two abundant species I have omitted data on their dispositions.

### *Sphenophorus asper*, new species

BOLIVIA, BRAZIL, PERU: (see under the species in the text).

### *Sphenophorus brasiliensis* Hustache

ARGENTINA: *Misiones*: Rio Parana, 2 ♀ (KU, MN).

BRAZIL: 3 ♀ (MN). *Bahia*: 1 ♀ (KU). *Espirito Santo*: 1 ♀ (DM); *Anchieta*, 2 ♂, 2 ♀ (UR); *Taboa*, 1 ♂, 1 ♀ (AMNH, KU). *Rio de Janeiro*: 2 ♂, 2 ♀ (MN, KU); *Copacabana*, 1 ♀ (UR); *Galeão*, *Guanabara*, 1 ♀ (SP); *Ilha do Governador*, 1 ♀ (SP); *Mendes*, 92 km. de Rio de Janeiro, 3 ♀ (MN); *Pinheiral*, 1 ♀ (UR). *São Paulo*: 1 ♀ (type, MN).

### *Sphenophorus brunnipennis* (Germar)

ARGENTINA: 2, Rosario de Santa Fe, 1; San Antonio de Areco, 2. *Buenos Aires*: 5 (including types of *signaticollis* and *brunnipennis*); *Isla de Martín García*, 3; *Lujan*, 7; *Rosas*, 5; *Tigre*, 2. *Misiones*: *Parana*, 1.

BOLIVIA: Chiquisaca, 2; Cochabamba, 3; Cochabamba, Angostura, 2.

BRAZIL: 7; Campos Gerais, 1 (type of *punctostriatus*); Parahyba, left bank, 1; Rio Grande de San Pedro, 1; Santos, 1. *Espirito Santo*: Tijuco Preto, 1. *Minas Gerais*: Serra d'Estrella, 1. *Rio Grande do Sul*: 4. *Rio de Janeiro*: 4; Ilha do Governador, 1; Lagune Sacuaresme, 3; Mendes, 6; Pirahy, 7. *Santa Catarina*: Corupa, 2; Rio Natal, 1. *São Paulo*: Barueri, 2; Boraceia Estação, Salesopolis, 3; San Bernardo, 1; Santana, 1.

CHILE: 10; Angol, 8; Atacama, El Portillo, 1; Concepcion, 1; Cordillera Nahuelbuta, Rio Picoyquera, Malleco, 1; Quillada, 1, Vallenar, 15; Valdivia, 1. *Aconcagua*: 1. *Coquimbo*: 1; Combarbala, 3. *Santiago*: 3; Buin, 1; El Canelo, 1; Las Condes, 1; Llo Lleo, 42; Padre Hurtado, 1; Las Vertientes, 1. *Valparaíso*: 4; Algarrobo, 1; Concon, 1; Quintero, 2.

URUGUAY: *Canelones*: Parque del Plata, 9. *Colonia*: Ciudad, 6. *Montevideo*: 8; Montevideo: Cerro, 2, Malvin, 1; Pocitos, 2, Punta Gorda, 3. *San Jose*: Arazati, 2; Balneario Kiyu, 4.

NO LOCALITY: 13.

#### *Sphenophorus brutus* Gyllenhal

BOLIVIA: 1 ♂ (MN).

CHILE: 3 ♂, 3 ♀ (MN).

PERU: 7 ♂, 6 ♀ (DM, KU, MN, USNM, and type, ♀, NR); Callao, 2 ♀ (MN); Lima, La Villa, 2 ♂, 2 ♀ (KU).

#### *Sphenophorus cincticollis* Gyllenhal

ARGENTINA: 2; Rosario de Santa Fe, 1; San Antonio de Areco, 3; Tucuman, 1. *Buenos Aires*: 4; Isla Martin Garcia, 13; La Plata, 3; Las Fores, Cumbo El Toro, 1; Lujan, 25; Punta Lara, 1; Rosas, 5; San Fernando, 21; San Isidro, 2; Tigre, 3; Zelaya, 3. *Chaco*: Gran Chaco, Rio Tapenaga, 1. *Cordoba*: Alta Gracia, 1. *Entre Rios*: Concordia, 6. *Jujuy*: Queimado, 1. *Misiones*: Rio Parana, 3. *Salta*: Pocitos, 2; Aquaray, 1.

BRAZIL: 4; Ribeirão Pires, 2. *Minas Gerais*: Plateau de Mantiqueiro, 1. *Rio Grande do Sul*: 2; São Leopoldo, 1. *Rio de Janeiro*: Mendes, 7; Pirahy, 8; Santa Cruz, 1. *Santa Catarina*: Lages, 1; Nova Teutonia, 8. *São Paulo*: Barueri, 1; Corumbatai, 1; Ipiranga, 3; Rincão, 1; Tupan, 1.

PARAGUAY: 2; 3 km. east of Ypacarai, 2.

URUGUAY: Provinces of: *Artigas*: 3; *Canelones*: 8; *Colonia*: 9; *Durazno*: 3; *La Vallejita*: 1; *Maldonado*: 2; *Montevideo*: 52 (including type of *defricatus*); *San Jose*: 1; *Soriano*: 2; *Treinta y Tres*: 3.

"AMER. MER.": 1 ♀ (type of *cincticollis*).

AMERIQUE: 1.

NO LOCALITY: 9.

#### *Sphenophorus crassus* Blanchard

ARGENTINA: "Capital Federal," 1 (AMNH); Ceres, 1 (USNM); Cordoba, 1 (MN); Patagonia, 7 (DM, MN); Plata, 3 (MN); Rosario de la Plata, 2 (MN); San Jose, Cufre, 1 (MN); Santiago, 1 (MN); Tres Arroyos, Copetanos, 1 (USNM); Tucuman, 2 (AMNH, USNM). *Buenos Aires*: 14 (KU, MN, OB, USNM); Delta, 1 (OB); Rosas, 1 (USNM); San Fernando, 1 (US); Tigre, 2 (MN); Zelaya, 2 (USNM). *Chaco*: Santa Fesino, 1 (USNM); Santajacino, 1 (USNM). *Santa Fe*: 2 (MN). *Santiago del Estero*: Chaco de Santiago, Rio Salado, 10 (MN).

PARAGUAY: 1 (MN); Colonia, 1 (MN)

URUGUAY: 1 (UM). *Colonia*: Santa Ana, 3 (UM). *Montevideo*: 9 (DM, MN); Carrasco, 1 (UM); Costa Sur, 1 (UM); Sayago, 1 (KU).

NO LOCALITY: 3 (DM, MN).

#### *Sphenophorus dolosus*, new species

ARGENTINA, BRAZIL: (see under the species in the text).

#### *Sphenophorus foveatus*, new species

ARGENTINA, BRAZIL, PARAGUAY, URUGUAY: (see under the species in the text).

#### *Sphenophorus levis*, new species

ARGENTINA, BRAZIL, URUGUAY: (see under the species in the text).

#### *Sphenophorus mimelus*, new species

ARGENTINA, PARAGUAY, URUGUAY: (see under the species in the text).

#### *Sphenophorus napoanus* Hustache

ECUADOR: El Napo, 1 ♀ (type, MN); Limoncocha, El Napo, 1 ♂ (HO); Rio Verde, Oriente, 1 ♀ (HO).

#### *Sphenophorus rusticus* Gyllenhal

ARGENTINA: Concordia, 1 ♀ (OB); San Jose, 1 ♂ (KU); Tucuman, 2 ♀ (AMNH, MN). *Buenos Aires*: 4 ♀ (BM); Delta Parana, 1 ♂, 1 ♀ (KU, AMNH); Juan B. [?] 1 ♀ (USNM); Lujan, 3 ♂, 1 ♀ (KU, USNM); San Fernando, 1 ♂, 2 ♀ (USNM); San Isidro, 1 ♀ (USNM); Tigre, 1 ♂, 1 ♀ (OB, USNM). *Corrientes*: 1 ♂ (MN). *Jujuy*: Volcan Weiser, 1 ♀ (type of *bruchi*, MN).

BRAZIL: *Amazonas*: Faro, 1 ♂ (MN). *Rio Grande do Sul*: Praia Marrus, Osorio, 1 ♂ (SP).

COLOMBIA: *Amazonas*: Leticia, 1 ♀ (HO).

FRENCH GUIANA: Cayenne, 4 ♂, 3 ♀ (MN, NR, including types of *rusticus*, *campestris*, *nigroscutellatus*); Maroni, 1 ♀ (MN).

GUADELOUPE: Petit Bourg Duclos, 1 ♂, 1 ♀ (AMNH).

GUYANA: 1 ♂ (KU); Bartica District, 1 ♀ (AMNH).

PARAGUAY: 1 ♂ (MN); Asuncion, 1 ♀ (KU); Colonia Nueva Italia, 1 ♀ (AMNH).

SURINAM: Paramaribo, 1 ♀ (KU).

TRINIDAD: Maraval, 1 ♂ (USNM).

URUGUAY: (all UM) *Canelones*: Paso Carrasco, 1 ♂; *Montevideo*: 3 ♂, 4 ♀. *Rio Negro*: Bellaco, 1 ♀. *Rivera*: Route 27, near Capital, 1 ♀. *Rocha*: Laguna Negra, 1 ♀. *San Jose*: Sierra Mahoma, 1 ♂; Rincon de la Bolsa, 1 ♀. *Treinta y Tres*: Capital, 1 ♀.

VENEZUELA: Apure, 1 ♂ (MN); Maracay, 1 ♂, 1 ♀ (AMNH).

### *Sphenophorus seriepunctatus* Gyllenhal

CHILE: 2 ♀ (MN). *Coquimbo*: 2 ♀ (BM).

PERU: 3 ♂, 4 ♀ (AMNH, MN, USNM, NR, including type); Lima, 2 ♂, 3 ♀ (BM, KU, MN, OB); Rio Chillom, Lima, 1 ♀ (KU); San Camilo, Ica, 1 ♀ (USNM).

URUGUAY: *Colonia*: Ciudad, 1 ♀ (UM).

NO LOCALITY: 1 ♀ (MN).

### *Sphenophorus tenuis*, new species

ARGENTINA, BRAZIL, CHILE: (see under the species in the text).

### *Sphenophorus tenuivittatus* (Buchanan)

DOMINICAN REPUBLIC: Sanchez, 1 ♂, 1 ♀ (type, paratype, AMNH), 1 ♀ (paratype, USNM).

### *Sphenophorus tetricus* Gyllenhal

BRAZIL: *Rio Grande do Sul*: 2 ♂, 4 ♀ (DM, KU, MN).

FRENCH GUIANA: 1 ♀ (MN).

NO LOCALITY: 1 ♂, 1 ♀ (MN).

### *Sphenophorus tomentosus*, new species

BOLIVIA, ECUADOR, VENEZUELA: (see under the species in the text).

### *Sphenophorus tremolerasi* Hustache

ARGENTINA: 2 ♀ (OB, MN). *Buenos Aires*: 1 ♂, 8 ♀ (AMNH, BM, KU, MN); Buenos Aires, 4 ♀ (USNM); Isla Martin Garcia, 1 ♂, 2 ♀ (MN,

OB); Lujan, 1 ♂, 1 ♀ (KU); La Plata, 1 ♂, 3 ♀ (BM, SP, USNM); Punta Lara, 1 ♂ (USNM); Quilme, 1 ♀ (USNM); Rosas, 1 ♀ (US); Tigre, 1 ♂ (MN); Zelaya, 2 ♀ (USNM).

BRAZIL: 2 ♂, 3 ♀ (AMNH, MN). *Parana*: Umurosa or Umbrosa, 2 ♂ (AMNH). *Rio Grande do Sul*: Pelotas, 1 ♀ (SP). *Rio de Janeiro*: Nova Friburgo, 1 ♀ (BM).

URUGUAY: *Canelones*: Atlantida, 1 ♂, 2 ♀ (KU, UM); Parque del Plata, 1 ♂, 3 ♀. *Cerro Largo*: Cañada de los Burros, 1 ♂. *Colonia*: Nueva Palmira, 1 ♀; Playa Santa Ana, 2 ♀ (all UM). *Montevideo*: 6 ♀ (MN); Parque Rodo, 1 ♂, 1 ♀ (UM); Pocitos, 1 ♀ (type, MN). *Rocha*: Cabo Polonio, 1 ♀ (UM).

NO LOCALITY: 1 ♂, 3 ♀ (MN).

### *Sphenophorus vilis* Hustache

ARGENTINA: *Buenos Aires*: Delta, 1 ♀ (OB); Lujan, 1 ♂ (KU); Tigre, 1 ♂ (KU). *Mendoza*: 1 ♂ (type, MN). *Santa Fe*: Piquete, 1 ♀ (KU).

BRAZIL: *Bahia*: Bahia: Fazenda Pasto Fora, 1 ♀ (AMNH).

PARAGUAY: 1 ♂, 1 ♀ (MN, OB); Asuncion, 1 ♀ (KU); Colonia Nueva Italia, 1 ♂, 2 ♀ (AMNH).

URUGUAY: *Montevideo*, 1 ♂, 2 ♀ (MN, UM, USNM).

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