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The New World species of *Ataenius* HAROLD, 1867. VIII. Revision of the *A. scutellaris*-group and diagnosis of the *A. texanus-carinator* group with descriptions of new species (Coleoptera: Scarabaeidae: Aphodiinae: Eupariini)

Zdzisława STEBNICKA

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Abstract. The *scutellaris*-group of the New World species of *Ataenius* HAROLD is revised. Fifteen species in the group are recognised including five species described as new: *A. cartago* sp. n. from Costa Rica, *A. iquitosae* sp. n. from Peru, *A. noronhai* sp. n., *A. skelleyi* sp. n. and *A. tarumensis* sp. n. from Brazil. One synonym is proposed: *Ataenius scutellaris* HAROLD (= *A. auberti* PAULIAN, syn. n.). The taxa are diagnosed, keyed and illustrated, available biological information and distribution data are given. The *texanus-carinator* group is characterized and thirteen new species in the group are described and illustrated. These are: *Ataenius bolivarensis* sp. n. (Venezuela), *A. canoasus* sp. n. (Brazil), *A. catarinaensis* sp. n. (Brazil), *A. chinacotae* sp. n**.** (Colombia), *A. cucutae* sp. n. (Colombia), *A. huanus* sp. n. (Peru), *A. lamarensis* sp. n. (Peru), *A. londrinae* sp. n. (Brazil), *A. napoensis* sp. n. (Ecuador), *A. noques* sp. n. (Argentina), *A. palmaritoensis* sp. n. (Venezuela). *A. saltae* sp. n. (Argentina) and *A. santarosae* sp. n. (Peru).

Key words: Scarabaeidae, Aphodiinae, *Ataenius scutellaris*-group, *A. texanus-carinator* group, new species, taxonomy, New World.

Zdzisława STEBNICKA, Institute of Systematics and Evolution of Animals, Polish Academy of Sciences, Sławkowska 17, 31-016 Kraków, Poland.
E-mail: stebnicka@isez.pan.krakow.pl

I. INTRODUCTION

The present contribution is the eight and next to last part of revision of the New World species of the genus *Ataenius* HAROLD (STEBNICKA 2001, 2002, 2003, 2004, 2005, 2006 and STEBNICKA & LAGO 2005). The *Ataenius scutellaris*-group of species revised herein, occurs in the United States, Mesoamerica, South America and West Indies. As now understood, the group consists of fifteen species, five of which are here described as new. Of the total number of 15 species of *A. scutellaris* group, four species are hitherto known only from the United States, one species is apparently endemic to the West Indies and ten species are distributed in Central and South America including two anthropogenic species spreading throughout several oceanic archipelagos.

The *Ataenius texanus-carinator* is the last, XIth group of the Western Hemisphere *Ataenius* and currently contains over 40 species including 13 new species described in this paper. All species of the *texanus-carinator* complex offer a substantial taxonomic challenge; many are not easily distinguishable, others form a morphological transition between the tribe Eupariini and Psammodiini (VERDÚ et al. 2006). The group is treated as a whole in the ongoing author's revision with exhaustive descriptions, distribution and keys for identification of all known species. However, in the course of its preparation it turned out that is necessary to describe new species prior to the completion of the revision, making the names available for other projects in progress.

COLLECTIONS STUDIED

Representatives of the *Ataenius scutellaris*-group and *A. taxanus-carinator*-group have been selected from the material of Aphodiinae identified in the last years, including all the type specimens available in the collections. Material for this study was obtained from the following institutions and private collections. The abbreviations listed below are used in all text citations:

AMNH	American Museum of Natural History, New York, USA
ANSP	Academy of Natural Sciences of Philadelphia, Pennsylvania, USA
CEUA	Collection of Entomology, University of Alicante, Spain
CFC	Carlos FLECHTMANN Collection, Brasilia (Brazil)
CMNO	Canadian Museum of Nature (includes H.& A. HOWDEN collection), Ottawa, Canada
CNC	Canadian National Collection, Ottawa, Canada
FSCA	Florida State Collection of Arthropods, Gainesville, USA
HNHM	Hungarian Natural History Museum, Budapest, Hungary
FVMC	Fernando VAZ-DE-MELLO Collection, Viçosa, Brazil
HAHC	Henry & Anne HOWDEN Collection, Ottawa, Canada
ISEA	Institute of Systematics and Evolution of Animals PAS, Krakow, Poland
MCZC	Museum of Comparative Zoology, Harvard University, Cambridge, USA
MHNG	Muséum d'histoire naturelle, Geneva, Switzerland
MNHN	Museum National d'hitoire naturelle, Paris, France
MUCV	Museo de Universidad Central de Venezuela, Caracas
MZUSP	Museu de Zoologia, Universidade de Sao Paulo, Brazil
NHML	Natural History Museum, London, England
NMNH	National Museum of Natural History, Smithsonian Institution, Washington DC, USA
NRS	Naturhistoriska Rijksmuseet, Stockholm, Sweden
PESC	Paul SKELLEY Collection, Gainesville, Florida, USA
PKLC	Paul K. LAGO Collection, University of Mississippi, Mississippi, USA
RTC	Robert TURNBOW Collection, Enterprise Alabama, USA
SMTD	Staatliches Museum für Tierkunde, Dresden, Germany
UNSM	University of Nebraska State Museum, Lincoln, USA
WBWC	William B. WARNER Collection, Chandler, Arizon, USA
ZMHB	Zoologisches Museum für Naturkunde der Humboldt Universität, Berlin, Germany

TAXONOMY

The *Ataenius scutellaris*-group

D i a g n o s t i c c h a r a c t e r s. Small to medium sized species of approximately 2.5-5.3 mm in length. Body (Figs 2-6) elongate oblong in most species, moderately convex, glabrous, rarely setigerous, colour piceus to black or rusty brown. Head moderate in size, elevated medially, clypeal margin usually broadly rounded on each side of median emargination, in some species dentate or angulate; surface of head minutely to finely punctured, never transversely wrinkled or granulate, vertex with scattered punctures or with regular band of closer punctures. Epipharyngeal structures of the Eupariini type, generally similar to those in the other species-groups of *Ataenius*. Pronotum transverse, surface punctate, sides and base usually margined, lateral margin fringed with short setae or glabrous. Scutellum triangular or suboval. Elytra parallel-sided or slightly arcuate, basal bead fine, humeral denticles fine to large; elytral striae distinctly impressed and punctate, intervals convex or flat, smooth, rarely swollen, in some species eroded posteriorly, lateral intervals usually different, subcarinate, carinate or flattened. Ventral surface shining or alutaceous; abdominal sternites glabrous, finely fluted along sutures, sometimes sternites 4-5 with coarser fluting, surface punctures extending from side to side. Profemur shining, usually coarsely punctate, rarely slightly scabrous; meso- and metafemora shining, metafemur with complete or incomplete posterior line, rarely without postfemoral line; meso- and metatibiae slender, subcylindrical, apex usually with accessory spine, slender spurs and row of setae; tarsi in most species shorter than tibiae, basal tarsomere of metatarsus usually longer than upper tibial spur and frequently equal in length to following tarsomeres together.

External sexual differences weakly indicated, apparent mostly in the length of abdominal sternites 5-6. Male genitalia (Figs 7-14) generally small, weakly sclerotized, parameres usually as long as phallobase, only slightly narrowed apically; internal sac in most species with sclerites and fine spicules.

A f f i n i t y. *Ataenius scutellaris*-group is most closely allied to the *A. complicatus*-group of species (STEBNICKA 2006), sharing a number of character states such as the shape and sculpture of the head and pronotum and similar basic form of the male genitalia. The differences include mostly the elytral sculpture with simply impressed, not undulate striae in the *scutellaris*-group and the discal intervals 1-5 convex but not carinate. The male genitalia of *A. scutellaris*-group are rather weakly differentiated, however, the external characters are usually sufficient to distinguish the various species satisfactorily.

Key to *A. scutellaris* group of species

1	Clypeal margin sharply denticulate on each side of median emargination	2
–	Clypeal margin subangulate or widely rounded on each side of median emargination	4
2(1)	Head finely punctate; pronotal punctures moderately coarse without fine punctures intermixed; elytra with single humeral denticle, intervals convex, frequently narrowly deplanate along striae. USA (eastern states)	*A. cylindrus* HORN
–	Head almost smooth; pronotal punctures mixed fine and moderate; elytra with double humeral denticles, intervals convex, not deplanate along striae	3
3(2)	Pronotum densely, uniformly punctate over outer third; elytral intervals distinctly eroded apically. USA	*A. oklahomensis* BROWN
–	Pronotum with moderately dense, mixed punctures over outer third; elytral intervals weakly eroded or not eroded apically. USA, (southeastern states)	*A. ovatulus* HORN
4(1)	Clypeal margin subangulate on each side of median emargination, surface smooth or punctures inconspicuous; posterior angles of pronotum sinuate, emarginate; elytral intervals eroded apically. USA, West Indies, Madeira, Canary Isl., Portugal	*A. brevicollis* (WOLL.)
–	Clypeal margin broadly rounded on each side of median emargination, surface variously punctate; posterior angles of pronotum straight; elytral intervals eroded or not eroded apically	5
5(4)	Body length 2.5-2.8 mm, colour rusty brown to light castaneous	6
–	Body length 3.8-5.2 mm, colour carbon black to piceous, rarely reddish brown	7

6(5) Elytral intervals with two rows of fine, close punctures bearing very short setae; metatibiae expanded apically; first tarsomere of metatarsus widened apically, subequal in length to upper tibial spur. Brazil . . . . . *A. pereirai* PETR.

– Elytral intervals with minute scattered punctures lacking setae; metatibiae not noticeably expanded apically; basal tarsomere of metatarsus slender, longer than upper tibial spur. Brazil . . . . . *A. tarumensis* sp. n.

7(5) Elytral striae 7-10 wider than intervals with row of large pits 8

– Elytral striae 7-10 narrower than intervals without large pits 9

8(7) Colour piceous; pronotum on each side of disc with oblique, closely punctate depression, punctures od median disc irregularly spaced. Guadeloupe . . . . . *A. hygrophilus* PAUL.

– Colour yellowish brown; pronotum on each side of disc without oblique depression, punctures of median disc uniformly distributed. Venezuela . . . . . *A. latus* PETR.

9(7) Dorsal surface uniformly densely punctured; elytra relatively short, striae fine, intervals flat, only 9th interval convex; metasternum short. USA (north-central states) . . . . . *A. robustus* HORN

– Dorsal surface variously punctured; elytra moderate in length, striae deep, intervals 7-9 convex to carinate; metasternum moderate in length 10

10(9) Punctures of elytral intervals 7-9 usually closer and deeper than those of discal intervals, 10th interval flattened, alutaceous; metatibiae with distinct accessory spine 11

– Punctures of elytral intervals 7-9 similar to those of discal intervals, 10th interval convex, shining; metatibiae without accessory spine 13

11(10) Dorsum partially covered with greyish coating; clypeal median emargination inconspicuous; pronotal base sinuate lacking marginal line; elytra narrower than pronotum with strong humeral denticles. Peru . . . . . *A. iquitosae* sp. n.

– Dorsum without coating; clypeal median emargination distinct; pronotal base straight, margined; elytra as wide as pronotum with fine humeral denticles 12

12(11) Head relatively large; ventral sclerites densely, deeply punctate throughout, metasternal disc without pits at base of carina. Ecuador, Peru, Galapagos Isl. . . . . *A. atramentarius* (ER.)

– Head moderate in size; ventral sclerites usually with moderate, not close punctures throughout, metasternal disc with two elongate pits at base of carina. Central and South America, West Indies, Vanuatu, Seychelles, Mascarenes, Madagascar, Malaya . . . . . *A. scutellaris* HAR.

13(10) Colour black; pronotal posterior angles truncate, slightly excised; elytra slender, parallel-sided Central America . . . . . *A. cartago* sp. n.

– Colour dark brown; pronotal posterior angles obtusely rounded, not excised; elytra arcuate 14

14(13) Elytral intervals subcarinate, irregularly swollen medially with semierect, pale setae. Fernando de Noronha Isl. . . . . *A. noronhai* sp. n.

– Elytral intervals convex, finely punctate along striae, minutely setigerous apically. Brazil, Venezuela . . . . . *A. skelleyi* sp. n.

Ataenius scutellaris HAROLD

(Figs 1, 2, 7)

Ataenius scutellaris HAROLD, 1867: 82.- 1876: 96; SCHMIDT 1922: 425; DELLACASA 1988: 280 (catalogue); BORDAT et al. 1990: 95-96, figs 104, 109, 119; GALANTE & STEBNICKA & VERDÚ 2003: 291.

Ataenius frater ARROW, 1903: 512.- SCHMIDT 1922: 425; CHAPIN 1940: 32-33; BALTHASAR 1964: 513; CHALUMEAU & GRUNER 1974: 803 (as synonym of *scutellaris*).

Ataenius auberti PAULIAN, 1937: 42.- DELLACASA 1988: 272 (catalogue) **syn. n**.

Type data. *Ataenius scutellaris*: described from Venezuela (Caracas). Lectotype designated by CARTWRIGHT (1973) in MNHN. *A. frater*: described from St Vincent. Type in NHML. *A. auberti:* holotype labeled “Efate Isl., Vanuatu”, in MNHN.

M a t e r i a l e x a m i n e d. Type material of *scutellaris* and *auberti* and 267 other specimens. **Bolivia** – Mapiri; Coroico; Yungas de Mairana, 29.I.1999, R. ANDERSON (CMNO). **Brazil** – (Go) Goias, Bella Vista de Goias, Cristianopolis, Faz. Arapuca Velha, 21.IX.1993, A. BANKOVICS (ISEA); (AC) Acre, Rio Branco, II.1997, F. VAZ-DE-MELLO (FVMC); ; (Ro) Rondonia, 62 km E Ariquemes, 8-20.XI.1994, EGER & O’BRIEN (PESC), II.1997, VULINEC & VAZ-

Fig. 1. Distribution of *Ataenius scutellaris* HAR. (arrow indicates direction of dispersion).

DE-MELLO (FVMC); 1.X.1994, 9-17.X.,1993, 25.XI.1993, U. SCHMITZ (PESC); Faz. Rancho Grande, 11.XI.1991, B.C. RATCLIFFE (UNSM); ; 9 km NE Cacaulandia, XII.1996-I.1997, VULINEC & VAZ-DE-MELLO (PESC); (SP) Saõ Paulo, Piracicaba, II.1971, F. PLAUMANN (NMNH); ; Mirante do Paranapaema, 22.I.1992, C. FLECHTMANN (CFC); (MS) Mato Grosso do Sul, Selviria, UNESP Farm, 18.III.1999, 1.VI.1991, C. FLECHTMANN (CFC); (MG) Minas Gerais, Santa Barbara, XI.1994, F. VAZ-DE-MELLO (FVMC);. **Colombia** – Curdinamarca; La Estrella 1700 m; Monteredondo 1400 m; Leticia, Amazonas, 700 ft, 19-25.II.1972, H.& A. HOWDEN (CMNO). **Ecuador** – Pichinda, Tinalandia Hotel, 21.IV.1990, R. ROGERS (CMNO); Pastaza, 25 Km N Pujo, 3.VII.1976, J. PECK (CMNO); Napo, Tana, VI.1971, M. ALVARENGA (NMNH). **Costa Rica** - Puntarenas, Rincon de Osa, 150 m, 22-26.VI.2001, S.& J. PECK (CMNO). **Guyana** Fr. – Hwy 20 km SE St Laurent, 7.VI.1983, E. RILEY & A. RIDER (FSCA). **Mexico –** Chiapas, Palenque, 18.VII.1980, S.& J. PECK (CMNO); Veracruz, 34 mi E Jalapa, Pto National, 17.VIII.1960, H.& A. HOWDEN (HAHC); Lake Catemaco, 24-25.V.1969, H.& A. HOWDEN (CEUA). **Panama –** Prov. Cocle, El Valle, 680 m, 7.VI.2000, H. & A. HOWDEN (CMNO). **Venezuela** – Apure, Hato del Frio, Hwy between Montecal and El Saman, 7.VI.1988, M. EPSTEIN (NMNH); Bolivar, 22 km E Upata, 18-19.VI.1996, H. & A. HOWDEN, 5-6.III.1971, J.& S. PECK (CMNO); Miranda, Guatopo NP, SE Caracas, 400 m. **West In-**

dies – Cuba: Guantanamo Bay, Navy Base, 3.VIII.1974, S. CALHOUN (NMNH); Dominican Rep: Samana, La Vega, Jarabacoa 440 m, 24.VII.1995, S.& J. PECK (CMNO); Barahona, 2 km E Payoso, 12.VIII.1996, R. TURNBOW (RTC); Puerto Rico -St Thomas (ZMHB); Virgin Islands: St Thomas; Antilles: St Vincent, Guadeloupe, Martinique (SMTD); Trinidad: Port of Spain, Caparo Valley (SMTD); **Vanuatu** [New Hebrides] - Malekula Island (ISEA).

D i a g n o s t i c c h a r a c t e r s. Length 4.0-4.8 mm. Body (Fig. 2) shining, carbon black or piceous. Head gibbose, clypeal margin rounded on each side of moderate median emargination, surface along anterior margin slightly uneven, fine to moderate punctures gradually increasing in size and depth to vertex, generally separated by one diameter or less. Pronotum margined, margin finely crenate with very short, sparse setae, surface punctures on disc fine to moderate, on sides slightly larger and closer, uniformly distributed, generally serparated by about one diameter. Scutellum semioval, punctate. Elytra widest just behind the middle, humeral denticles moderate in size, acute; striae deep, strial punctures slightly crenating inner margins of intervals; discal intervals convex or flat, apically subcarinate and more or less distinctly eroded on each side, each interval with irregular rows of fine punctures along striae, punctures larger and deeper on lateral intervals, 10^{th} interval flat, usually strongly alutaceous. Ventral surface shining, uniformly punctate; mesosternum convex, median carina short; metasternal disc punctate with two oblique pits at base of carina, lateral area and metasternal triangle finely scabrous; abdominal sternites distinctly fluted along sutures and punctate from side to side; disc of pygidium deeply eroded. All femora punctate; profemur closely rugosely punctate; posterior lines of meso- and metafemora strong, complete; apex of metatibia with long external spine, strong accessory spine and row and short setae; tarsi shorter than tibiae, basal tarsomere of metatarsus longer than upper tibial spur and equal in length to following tarsomeres combined. Male genitalia as in Fig. 7.

R e m a r k s. *Ataenius scutellaris* is closely related to *A. atramentarius* in many characters including those of the male genitalia. It differs from that species by its relatively smaller body and smaller head, by less roughly sculptured ventral sclerites and by presence of metasternal pits. Although *A. scutellaris* is widely distributed and occurs in various habitats, it is not numerous in the collections. Specimens examined were collected in forest and in pasture area with *Brachiaria decumbens*, found in human excrements and in bovine and *Guzera* droppings, attracted to light.

D i s t r i b u t i o n. Central and South America, West Indies (Fig. 1), Madagascar, Vanuatu, Seychelles, Mascarenes, Malaya. CHAPIN (1940) recorded *A. scutellaris* from almost all West Indian islands (Bahamas, Jamaica, Hispaniola, Puerto Rico, St Thomas, Tortola, St Croix, St Kitts, Antigua, Montserrat, Dominica, Barbados, St Vincent, Grenada, Trinidad).

Ataenius atramentarius (ERICHSON)

(Figs 8, 15)

Euparia atramentaria ERICHSON, 1847: 110.

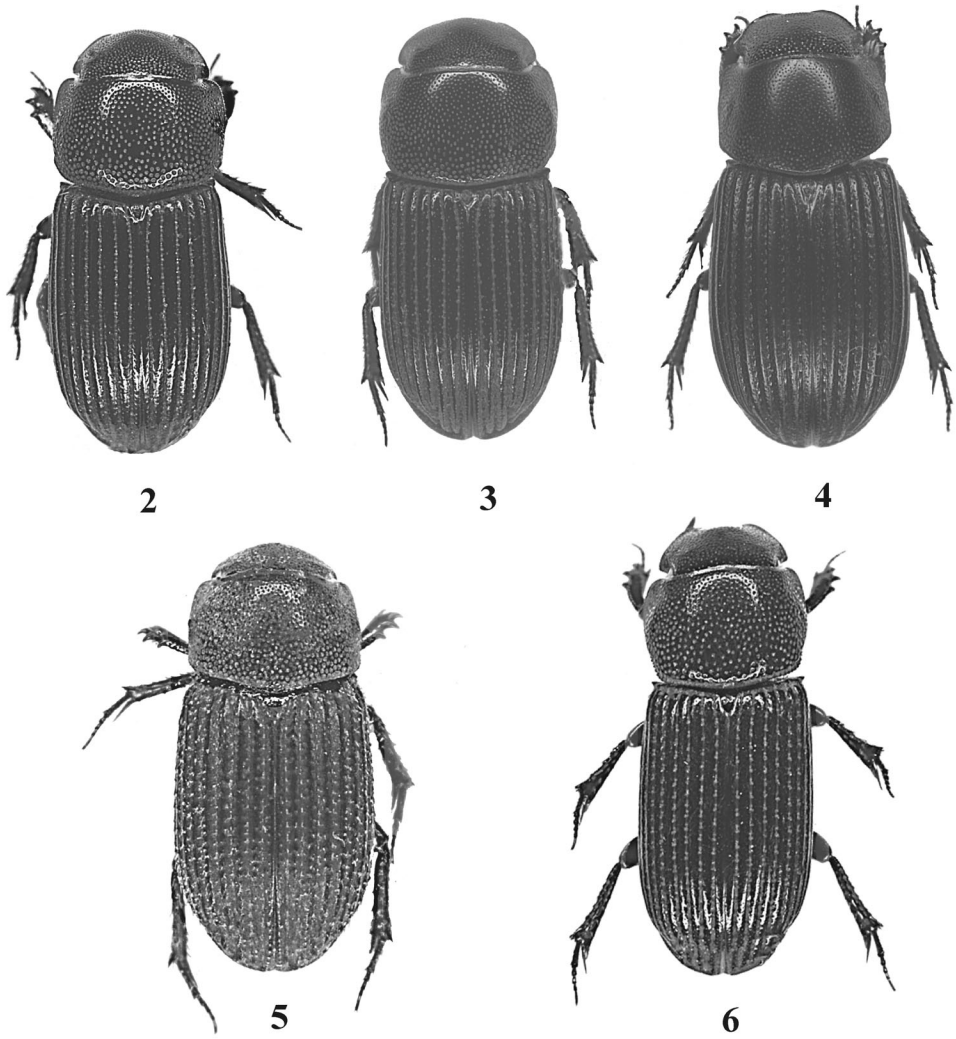
Ataenius atramentarius: HAROLD 1869: 1066; SCHMIDT 1922: 425; CARTWRIGHT 1970: 54; DELLACASA 1988: 92 (catalogue); COOK & PECK 2000: 284.

Ataenius scutellaris: VAN DYKE 1953:123 (nec HAROLD, 1867).

Ataenius dampieri PETROVITZ, 1961: 356.- CARTWRIGHT, 1970: 54 (as synonym of *atramentarius*)

M a t e r i a l e x a m i n e d. *Euparia atramentaria*: Lectotype female (Peru) designated by CARTWRIGHT (1970), in ZMHB. *Ataenius dampieri*: holotype (sex undetermined), labeled 'Galapagos Isl. Floreana IV.59 leg. FOERSTER', '*Ataenius dampieri* PETROVITZ', in MHNG. Paratypes (5), same data as holotype, in MHNG.

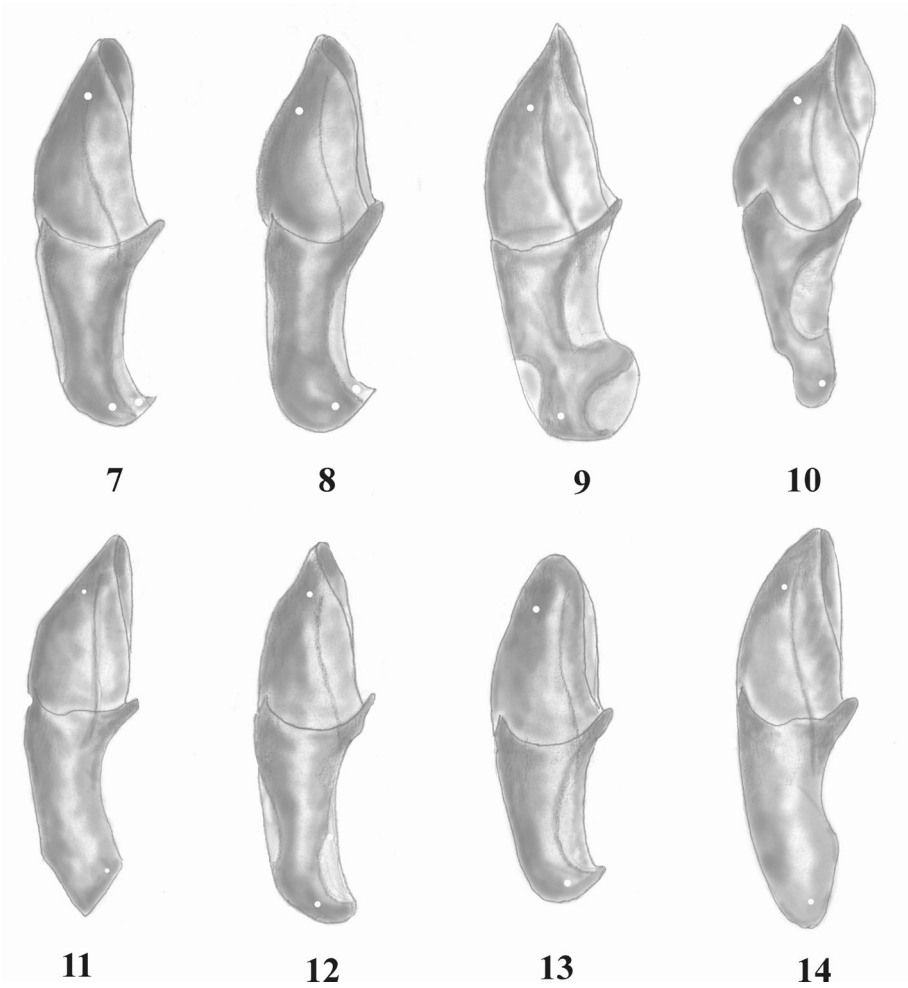
Other specimens (125). **Ecuador** – Guayas, Guayaquil, 18.II.1981, H.& A. HOWDEN (CMNO); Pich. 47 km S Sto Domingo, Rio Palenque, 18-30.VI.1975, S.& J. PECK (CMNO); Manabi, W edge of Manta, 27-28.II.1981, H.& A. HOWDEN (CMNO); Orellana Yasuni 900 m, 10-13.VIII.1998, W. OPITZ (FSCA); Napo, Onkone Gare Camp, G.E. BALL & D. SHPELEY (ISEA); Napo, Lago Agrio,



Figs. 2-6. Dorsal view: 2 – *Ataenius scutellaris* HAR., 3 – *A. iquitosae* sp. n., 4 – *A. skelleyi* sp. n., 5 – *A. noronhai* sp. n., 6 – *A. cartago* sp. n.

7.IX.1979, J. ANDERSON; Napo, Tena 28.V.1977, W.E. STEINER (NMNH); Napo, Jatun Sacha Biol. Sta. 24-26.VII.1998, 450 m, B. RATCLIFFE & al. (UNSM) Esmeraldas, La Union, 3.II.1979, J. ANDERSON; 24.VIII.1956, F.H. WALZ (NMNH); Pastaza, Puyo, 22 km W, 3.II.1976, P. SPANGLER & al. (NMNH). **Peru** – Cuzco, Pilcopata 600 m, 8-10.XI.1973, J.B. HEPPNER; Cuzco, Cosnipata River, 11.III.1952, F. WOYTKOWSKI; Cuzco, Santa Isabel, Cosnipata Valley, 29.XII.1952, R. GORDON; Huan, Tingo Maria, 19-24.IV.1969, P. SPANGLER; Dpto Ayacucho La Mar, Santa Rosa 640 m, 19-25.IX.1976, R. GORDON (ISEA, NMNH); Madre do Dios, Puerto Maldonado, 8.I.1984, L. HUGGERT (ISEA).

D i a g n o s t i c c h a r a c t e r s. Length 4.5-5.2 mm. Body shining, carbon black. Most of the morphological characters as in *A. scutellaris* with: Head relatively large; sides of pronotum usually less closely punctate than in *A. scutellaris*; elytral intervals usually distinctly eroded in apical fourth; ventral sclerites and femora usually densely, deeply punctate; metasternum convex without pits at base of meso-metasternal carina. Male genitalia as in Fig. 8.



Figs 7-14. Male genitalia in lateral view: 7 – *Ataenius scutellaris* HAR., 8 – *A. atramentarius* (Er.), 9 – *A. iquitosae* sp. n., 10 – *A. skelleyi* sp. n., 11 – *A. noronhai* sp. n., 12 – *A. cartago* sp. n., 13 – *A. latus* PETR., 14 – *A. hygrophilus* PAUL.

R e m a r k s. *Ataenius atramentarius* and *A. scutellaris* are very similar externally and difficult to distinguish. The former species occurs exclusively in mountainous area, while *A. scutellaris* is widely distributed and found in various habitats. It seems likely that *A. atramentarius* represents only a geographical form of *A. scutellaris* but this problem needs further studies. Specimens examined were collected at light in premontane moist forest, the specimens from Galapagos were found in the arid zone in leaf litter, in the tortoise pens and in cow dung.

D i s t r i b u t i o n. Ecuador, Peru, Galapagos Isl. (introduced), (Fig. 15).

Ataenius iquitosae sp.n.

(Figs 3, 9, 15)

M a t e r i a l e x a m i n e d. Holotype male: Peru, Iquitos, 25.VI.1963, in sealed shippment of tropical fish, B.K. DOZIER (NMNH). Paratypes (8) – Peru, 20.XI.1963, no 64-2061, tropical fish, C.K. BOETTICKER. Paratypes are in ISEA, NMNH.

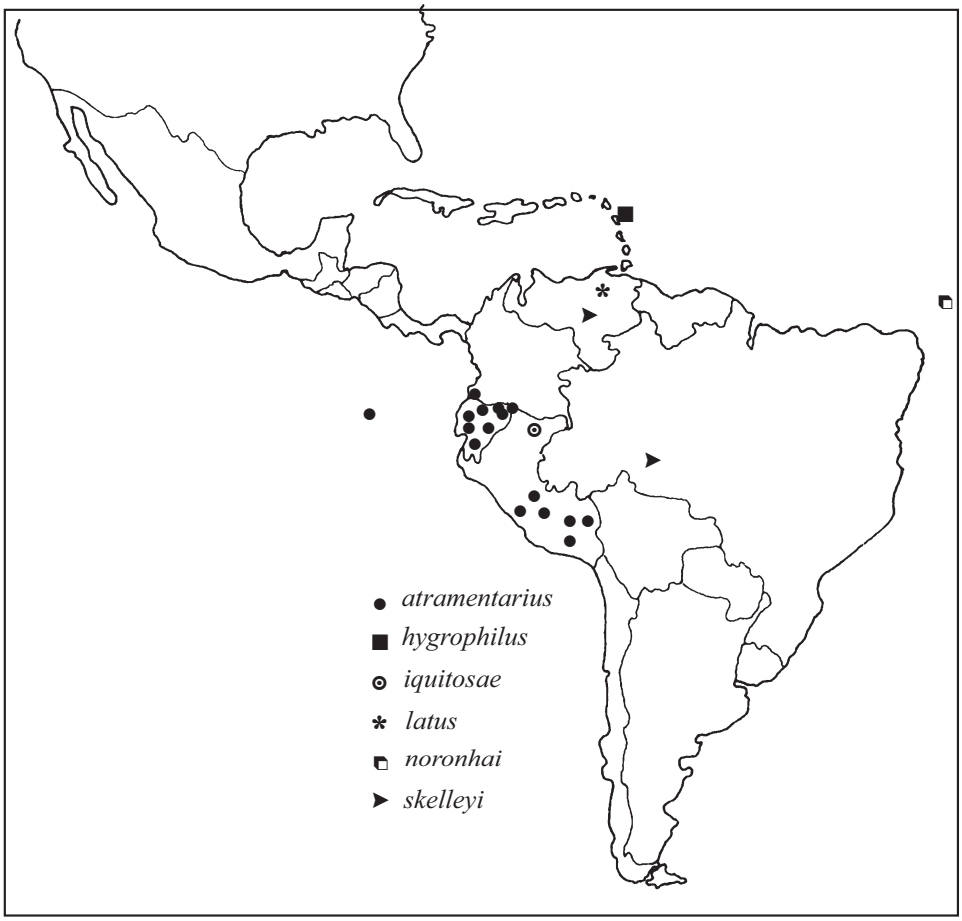


Fig. 15. Distribution of *Ataenius atramentarius* (ER.), *A. hygrophilus* PAUL., *A. iquitosae* sp. n., *A. latus* PETR., *A. noronhai* sp. n., *A. skelleyi* sp. n.

D i a g n o s i s. Body partially covered with fine greyish coating. Pronotal base sinuate. Elytra with strong humeral denticles. *Ataenius iquitosae* is most closely allied to *A. atramentarius* and *A. scutellaris*; it differs from both these species by the following combination of characters: clypeal margin almost truncate with inconspicuous median emargination; pronotal base sinuate without marginal line, surface punctures deep and close; elytra narrower than pronotum with strong humeral denticles, striae wide and deep and lateral intervals carinate.

D e s c r i p t i o n. Length 4.0-4.6 mm. Body (Fig. 3) shining, piceous, covered with fine coating mostly on sides. Head large, gibbose, clypeal edge inconspicuously emarginate and rounded toward right-angled, prominent genae; surface of head from anterior margin to vertex finely uniformly punctate, punctures separated by less than one diameter, frontal suture convex near eyes. Pronotum strongly convex, sides finely margined, glabrous, base finely closely crenate without marginal line; anterior angles widely rounded, sides straight toward obtuse posterior angles, base sinuate, slightly emarginate near posterior angles; surface punctures along anterior pronotal margin same size as those of head, become gradually larger toward base and to sides, on disc separated by one diameter, on sides twice larger than discal punctures and contiguous at anterior angles. Scutellum pentagonal, alutaceous. Elytra parallel-sided, narrower than pronotum, humeral denti-

cles strong, acutely directed upwards; striae strongly impressed, wide, strial punctures coarsely crenating inner margins of intervals; discal intervals convex, apically carinate and slightly eroded on each side, each interval with irregular rows of fine deep punctures, 10th interval flattened, alutaceous. Ventral surface shining, everywhere closely punctate; mesosternum convex with rather long pale pubescence, median carina short; metasternal midline impressed, disc punctate with two oblique pits at base of carina, lateral area and metasternal triangle roughly scabrous; abdominal sternites distinctly fluted along sutures, fluting longest on sides of each sternite, surface punctures extending from side to side, separated by one diameter or less; disc of pygidium deeply eroded and swollen. Legs moderate in length; all femora shining, distinctly punctate; profemur closely punctate; posterior lines of meso- and metafemora strong, complete; tibiae setaceous, apex of metatibia with long external spine, strong accessory spine and row and short setae; tarsi shorter than tibiae, basal tarsomere of metatarsus 1/3 longer than upper tibial spur and slightly longer than following tarsomeres combined. Male genitalia as in Fig. 9.

R e m a r k. The species was found separately two times in unusual habitat together with tropical fish.

D i s t r i b u t i o n as in Fig. 15.

Ataenius skelleyi sp.n.

(Figs 4, 10, 15)

M a t e r i a l e x a m i n e d. Holotype male: Brazil, Rondonia, 62 km SW Ariquemes, Fzda Rancho Grande, 8-20.XI.1994, black light, J. EGER & C. O'BRIEN (FSCA). Paratypes (18): 14 – same data as holotype; 1 – same locality, 18.IX.1994, C.W. & L. O'BRIEN; 1 – same locality, 1.X.1994, V. SCHMITZ; 2 – same locality, 5-17.X.1993, J. EGER; 1 – Venezuela, Guarico, 12 km S Calabozo, 6-12.II.1969, P.& P. SPANGLER. Paratypes are in: FSCA, ISEA, NMNH.

D i a g n o s i s. Body oblong oval, subopaque. Clypeal margin rounded, surface punctate. *Ataenius skelley*i is most closely allied to *A. noronhai* sp. n. (see Diagnosis of that species) but it differs by having the elytral intervals finely punctate along striae, lacking swellings and erect setae.

D e s c r i p t i o n. Length 4.0-4.5 mm. Body (Fig. 4) alutaceous, dark brown to piceous, legs reddish brown. Head moderate in size, clypeal margin rounded on each side of narrow but deep median emargination, sides slightly arcuate to obtuse, prominent genae; surface slightly concave just above emargination, punctures fine, gradually increasing in depth from anterior margin to vertex, generally separated by about one diameter. Pronotum transverse, convex, sides and base finely margined, lateral margin crenate, glabrous; anterior angles rounded, sides straight toward almost right-angled posterior angles, base slightly lobed medially; surface punctures fine to moderate, those of median anterior disc very fine, separated by two times their diameters or more, punctures of median posterior disc and of lateral area about twice larger, separated by one diameter, those on extreme sides of pronotum largest and almost contiguous. Scutellum semioval, punctate. Elytra widest at middle, convex, apex with inconspicuous setae, humeral denticles small, obtuse; striae deep, strial punctures slightly crenating inner margins of intervals; intervals increasingly more convex from interval 3th to interval 10th, subcarinate apically, each interval with irregular rows of fine punctures along striae. Ventral surface partially shining, glabrous; mesosternum slightly deplanate, median carina occurs in posterior half; metasternum concave medially, finely punctate, lateral area and shallow metasternal triangle finely scabrous; abdominal sternites 2-3 finely fluted along sutures, fluting of sternites 4-5 coarser and twice longer, surface finely punctate from side to side, punctures separated by 1-2 times their diameters, those of sternite 5th finer and closer; disc of pygidium eroded. Legs moderate in length; all femora punctate, punctures of profemur close, punctures of meso- and metafemora finer, scattered, posterior lines complete; tibiae slender, setaceous, apex of metatibia with thin spurs and row of short setae without accessory spine; tarsi shorter than tibiae, basal segment of metatarsus longer than upper tibial spur and subequal in length to following tarsomeres together. Male genitalia as in Fig. 10.

D i s t r i b u t i o n as in Fig. 15.

E t y m o l o g y. The species is named in honour of Paul SKELLEY, the scarab worker from Florida.

Ataenius noronhai sp. n.

(Figs 5, 11, 15)

M a t e r i a l e x a m i n e d. Holotype male: Brazil, Island Fernando de Noronha [3.49S, 32.23W], IV.1954, M. ALVARENGA, „Coleção M. ALVARENGA" (CMNO). Paratypes (28), same data as holotype, in CMNO, ISEA.

D i a g n o s i s. Head punctate, clypeal margin rounded; elytral intervals convex medially, swollen and setigerous. *Ataenius noronhai* is most close to *A. skelleyi* sp. n. but it may be easily distinguished from that species and from other species in the group by having the elytral intervals irregularly swollen.

D e s c r i p t i o n. Length 3.8-4.2 mm. Body (Fig. 5) oblong oval, moderately shining, partially setaceous; colour dark brown, elytra usually lighter than fore body, legs reddish. Head rather small, convex medially, clypeal margin rounded on each side of deep median emargination, sides straight to obtusely rounded, slightly prominent genae; surface of head at middle with fine longitudinal punctures united on sides into lines, occipital area with band of close punctures separated by less than one diameter. Pronotum transverse, sides and base very finely margined, lateral margin fringed with thin, short, widely spaced setae; surface obliquely concave on sides and minutely setaceous, punctures uniformly distributed, generally fine to moderate in size, on disc separated by one diameter, from halfway to sides become larger and closer. Scutellum triangular. Elytra widest at middle, convex, humeral denticles small, obtuse; striae narrow, deep, strial punctures fine, usually barely visible, covered with oily dirt; intervals strongly convex, medially swollen or slightly tuberculate, each interval with row of erect, short, pale setae separated by more than their lengths, lateral intervals not different. Ventral surface alutaceous; mesosternum deplanate, lower than metasternum, median carina very narrow, extending from metasternum to prosternum; metasternum convex, midline impressed, discal punctures moderate in size, close, lateral area and shallow metasternal triangle finely scabrous; abdominal sternites 2-4 very finely fluted along sutures, fluting of sternite 5th long, surface with very fine and shallow, minutely setigerous and widely spaced punctures; disc of pygidium eroded. Legs relatively thin, slender; profemur scabrously punctate; metafemora longer and slenderer than mesofemora with complete posterior lines and fine, minutely setigerous punctures; meso- and metatibiae setaceous, apex of metatibia with thin spurs and row of short setae, without accessory spine; tarsi shorter than tibiae, basal tarsomere of metatarsus 1/3 longer than upper tibial spur and equal in length to the next tarsomeres combined. Male genitalia as in Fig. 11.

D i s t r i b u t i o n as in Fig. 15.

R e m a r k. The species is most likely restricted to the Fernando de Noronha Island.

Ataenius cartago sp.n.

(Figs 6, 12, 21)

M a t e r i a l e x a m i n e d. Holotype male: Costa Rica, Cartago, km 45 PAN Am. Hwy, 6 km NW El Empalme, 1975 m, 8-26.VI.1997, S.& J. PECK (CMNO). Paratypes (89): 8 – same data as holotype; 1 – Costa Rica, Puntarenas, Monteverde 1500 m, 23-27.II.1991, Fit.Int.traps, H.& A. HOWDEN; 2 – same locality, 3.VI.1979, 21.VIII.1987, H.& A. HOWDEN; 3 – Puntarenas, Monteverde area 26.V-3.VI.1984, E. RILEY & D. RIDER & D. LEDOUX; 4 – same locality, 1520 m, 11-18.VI and 25.VI-2.VIII.1983, D.H. LINDEMAN; 21 – Puntarenas, Monteverde Est. Biol. Monteverde, 1540 m, 10.19N, 84.49W, montane forest litter, A. ANDERSON; 19 – same locality, 1515 m, 11, 12, 13, 14, 17-20.VI.2001, S. & J.PECK; 1 – Monteverde, Sendero Chomogo, Cerro

Roble 1690 m, 28.VII.1983, D.H. LINDEMAN; 23 – Costa Rica, Guanacaste, 6 km NE Sta Elena 1640 m, 10.20N, 84.47W, Sta Elena Forest Reserve, 11-17.VI.2001, S.& J. PECK; 1 – "Guatemala" (no additional data); 1 – Guatemala, Baja Verapaz, 8 km S Purulha 1660 m, 25.V.1991, pine/cloud forest litter, R. ANDERSON; 3 – same locality, 27.V.1991, H & A. HOWDEN; 1 – Guatemala, Zacapa, 3.5 km SE La Union 1500 m, 25-27.VI.1993, cloud forest, J. ASHE & R. BROOKS; 1 – Mexico, Veracruz, 7 km E Huatusco, cloud forest, 22.VI-2.VIII.1983, H.& A. HOWDEN. Paratypes are in CMNO, FSCA, ISEA, NRS.

Other specimens (7): Mexico, Veracruz, Xico (camino a Oxtlapa), 1310 m, in cattle dung, E MONTES DE OCA & Q. SANTIAGO (ISEA).

D i a g n o s i s. Head punctate, clypeal margin rounded. Pronotum convex with truncate and slightly emarginate posterior angles. Elytra narrow, parallel-sided. *Ataenius cartago* differs from all other species in the group by its elongate, slender body resembling some species of the *A. texanus-carinator* group (see Diagnosis of that group).

D e s c r i p t i o n. Length 3.8-4.0 mm. Body (Fig. 6) elongate, parallel-sided, glabrous, shining, piceous to black, legs dark reddish brown. Head moderate in size, clypeal margin rounded and slightly reflexed on each side of narrow but deep median emargination, sides straight toward obtusely rounded, prominent genae; clypeal surface narrowly concave just above emargination, punctures fine, gradually slightly increasing in depth toward vertex, generally separated by one diameter. Pronotum convex, sides and base margined and distinctly crenate, marginal setae inconspicuous; anterior angles obtusely rounded, posterior angles widely truncate and slightly emarginate, base straight; surface deplanate at anterior angles, punctures moderate in size, deep, finest along anterior margin and largest on sides, generally separated by one diameter. Scutellum semioval, punctate. Elytra narrow and less convex than pronotum, humeral denticles small, acute; striae deep, strial punctures strongly crenating inner margins of intervals; intervals convex, slightly more convex laterally and apically, each interval with rows of fine punctures along striae, punctures of intervals 7-10 deepest and closest. Ventral surface shining, uniformly punctured; mesosternum convex, shagreened, median carina short, narrow; metasternum punctate from side to side, shining, lateral metasternal triangle deeply eroded; abdominal sternites finely fluted along sutures, punctate from side to side, punctures separated by one diameter or less; disc of pygidium eroded. Legs slender; profemur shining punctate, punctures same size as those of metasternum; meso- and metafemora finely punctate, posterior line of metafemur incomplete; tibiae slender, apex of metatibia with thin spurs and row of short setae without accessory spine; tarsi shorter than tibiae, basal tarsomere of metatarsus longer than upper tibial spur and subequal in length to following tarsomeres combined. Male genitalia as in Fig. 12.

D i s t r i b u t i o n as in Fig. 21.

Ataenius latus PETROVITZ

(Figs 13, 15)

Ataenius latus PETROVITZ, 1963: 316-317.- DELLACASA 1988: 276 (catalogue).

Type data. Described from Venezuela (Caripe, Edo Monagas) holotype No 5273 in MUCV.

M a t e r i a l e x a m i n e d. Paratype male, labeled 'Venezuela, Caripe, J. Ojasti' 'No 5272', '*Ataenius latus* PETROVITZ' in MHNG.

D i a g n o s t i c c h a r a c t e r s. Length 3.8-4.0 mm. Body oblong oval, glabrous, shining, reddish brown. Head rather small, clypeal margin rounded on each side of shallow median emargination, genae obtuse, prominent; surface along anterior margin strongly shining, smooth, fine punctures of median gibbosity become closer and longitudinal toward genae, those of vertical area round, separated by less than one diameter. Pronotum convex, sides and base finely margined, glabrous; fine punctures of median anterior disc become gradually larger and deeper toward base, separated by one diameter, those on sides twice larger, separated by less than one diameter. Scutellum narrow, triangular. Elytra widest at middle, humeral denticles small; striae and strial

punctures deep, gradually increasing in width and depth from elytral suture to lateral margin, striae 7-10 with large deep pits strongly crenating margins of intervals; discal intervals 1-5 convex, wider than striae, intervals 7-10 subcarinate, narrower than striae, each interval with distinct scattered punctures. Venter shining; metasternum convex, midline impressed, discal punctures coarse; abdominal sternites finely fluted along sutures, surface punctures coarser and closer than those of metasternum; disc of pygidium eroded. Legs moderate in length; all femora punctate, posterior lines of meso- and metafemora strong, complete; tibiae setaceous, apex of metatibia with long external spine, small accessory spine and row of short setae; tarsi shorter than tibiae, basal tarsomere of metatarsus longer than upper tibial spur and longer than following tarsomeres combined. Male genitalia as in Fig. 13.

D i s t r i b u t i o n as in Fig. 15.

R e m a r k s. *Ataenius latus* is most closely related to *A. hygrophilus*; both species share an unusual feature of the elytra with large lateral pits (see Remarks under *A. hygrophilus*). This species is hitherto known only from its type series; no other specimens were found in the material examined.

Ataenius hygrophilus PAULIAN

(Figs 14, 15)

Ataenius hygrophilus PAULIAN, 1947: 39, fig. 40.- CHALUMEAU & GRUNER 1974: 809-810; CHALUMEAU 1983: 79, figs 32, 46; DELLACASA 1988: 275 (catalogue)

Type data. Lectotype (Guadeloupe, Trois-Rivières) designated by CHALUMEAU (1983), in MNHN.

M a t e r i a l e x a m i n e d. Specimens (2).**West Indies** - Guadeloupe (no additional data) in ISEA.

D i a g n o s t i c c h a r a c t e r s. Length 4.0-4.5 mm. Body oblong oval, glabrous, moderately shining, piceous. Head rather large, clypeal margin rounded on each side of deep median emargination, genae right-angled, prominent; surface along anterior margin strongly shining, smooth, punctures above fine to moderate, the latter slightly transverse and close on each side of median gibbosity, vertex with fine round punctures separated by one diameter. Pronotum convex medially with oblique, closely punctate depression on each side of disc, sides and base finely margined, crenate, glabrous; punctures of median disc fine to moderate, irregularly spaced, those from halfway to sides twice larger, almost contiguous. Scutellum narrow, triangular. Elytra microreticulate, about 2.3 times as long as pronotum, humeral denticles small; striae and strial punctures deep, gradually increasing in width and depth from elytral suture to lateral margin, striae 5-10 with large deep pits strongly crenating margins of intervals; discal intervals 1-5 slightly convex, wider than striae, intervals 6-10 subcarinate, narrower than striae, each interval with distinct scattered punctures. Venter shining; metasternum convex, midline impressed, disc with group of moderate punctures at mesocoxae; abdominal sternites finely fluted along sutures and punctate from side to side, punctures finer than those of metasternum; disc of pygidium eroded. Legs moderate in length; all femora punctate, posterior lines of meso- and metafemora strong, complete; tibiae setaceous, apex of metatibia with long external spine, small accessory spine and row of short setae; tarsi shorter than tibiae, basal tarsomere of metatarsus longer than upper tibial spur and subequal in length to following tarsomeres combined. Male genitalia as in Fig. 14.

D i s t r i b u t i o n as in Fig. 15.

R e m a r k s. *Ataenius hygrophilus* is most closely allied to *A. latus*, but it differs from that species by its body size and colour, by presence of the pronotal oblique fossulae and by irregularly distributed pronotal punctures. This very rare species seems to be endemic to Guadeloupe.

Ataenius robustus HORN

Ataenius robustus HORN, 1871: 285.- 1887: 80; SCHMIDT 1922: 427; CARTWRIGHT 1974: 73-74, fig. 13; DELLACASA 1988: 280 (catalogue).

Type data. Holotype "Missouri", in MCZC.

M a t e r i a l e x a m i n e d. Specimens (4): compared with holotype by O.L. CARTWRIGHT: **USA** -Oklahoma, Stillwater; Nebraska, Lincoln (HNHM). Washington Co. 3.VI.1938, Ark. "collected in damp moss" (ISEA); Marshall Co. MS, Val Doxey St. Pk. 2.IV.2004, P.K.LAGO (ISEA).

D i a g n o s t i c c h a r a c t e r s. Length 3.8-4.7 mm. Body oblong-oval, convex, shining, carbon black, legs reddish. Head rather large, clypeal margin broadly rounded on each side of shallow median emargination, sides slightly arcuate toward right-angled genae; surface everywhere closely, uniformly, moderately punctate, punctures generally separated by less than one diameter. Pronotum with sides and base margined, posterior angles broadly evenly rounded, surface everywhere densely, moderately punctate with slightly elongate punctures on disc. Elytra convex, short, sides arcuate, humeri strongly dentate; striae narrow, fine, intervals flat, densely moderately punctate, punctures uniformly distributed as on head and pronotum, 9th interval strongly convex, intervals laterally and apically minutely setaceous. Mesosternum weakly convex, shagreened; metasternum relatively short, midline moderately deep, disc slightly transversely depressed, punctures usually separated by 1-2 times their diameters; first abdominal sternite margined posteriorly, next four sternites finely fluted along sutures, punctate from side to side; apical lip of pygidium shiny, disc alutaceous, not deeply eroded. Profemur with shining, closely punctate surface; meso- and metafemora with scattered punctures and fine incomplete posterior lines; apex of metatibia with small accessory spine and row of short setae; tarsi as long as tibiae, basitarsomere of metatarsus longer than upper tibial spur and shorter than following tarsomeres together.

Male. Terminal spur of protibia hooked inwardly at the tip, abdominal sternites 4-5 shorter than in female, disc of pygidium longer; genitalia not available for study.

Female. Metasternum longer than in male.

D i s t r i b u t i o n. USA, middle states – Arkansas, Illinois, Iowa, Missourti, Nebraska, New Mexico, Oklahoma, South Dakota, Wisconsin (see CARTWRIGHT 1974, fig. 13).

R e m a r k s. This unusual species may be easily distinguished from all other Nearctic species of *Ataenius* by its very short metasternum, and the entire upper surface of the body uniformly, closely, moderately punctured.

Ataenius brevicollis (WOLLASTON)

(Figs 16, 21)

Oxyomus brevicollis WOLLASTON, 1854: 229.

Ataenius brevicollis: HAROLD 1869: 1066; SCHMIDT 1922: 437; BALTHASAR 1964: 514; WOODRUFF 1973: 113; CARTWRIGHT 1974: 85-86; CHALUMEAU & GRUNER 1974: 807-808.- CHALUMEAU 1983: 77, fig. 40; DELLACASA 1988: 101 (catalogue)

Auperia sulcatula CHEVROLAT, 1864: 413; CARTWRIGHT 1974: 85 (as synonym of *brevicollis*).

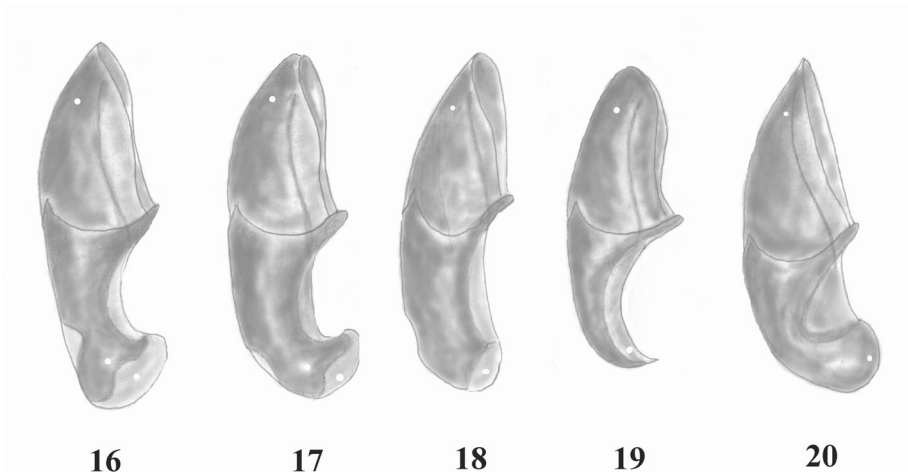
Ataenius sulcatula: HAROLD 1869: 1067; SCHMIDT 1922: 459.

Ataenius sulcatulus: CHAPIN 1940: 41 (non CHEVROLAT, 1864); PAULIAN 1947: 42-43.

Ataenius frankerbergeri BALTHASAR, 1938: 56.- CARTWRIGHT 1968: 27; 1974: 85 (as synonym of *brevicollis*).

Ataenius lherminieri PAULIAN, 1947: 43-44.- CHALUMEAU & GRUNER 1974: 807 (as synonym of *brevicollis*).

Type data. *Ataenius brevicollis*: described from Madeira. Type in NHML. *Auperia sulcatula:* lectotype (Cuba-Havana) designated by CARTWRIGHT (1973) in SMTD. *Ataenius lherminieri:* holotype (Guadeloupe), in MNHN.



Figs 16-20. Male genitalia in lateral view: 16 – *Ataenius brevicollis* (WOLL.), 17 – *A. ovatulus* HORN, 18 – *A. cylindrus* HORN, 19 – *A. pereirai* PETR., 20 – *A. tarumensis* sp. n.

M a t e r i a l e x a m i n e d. Lectotype of *Auperia sulcatula* and other specimens (13). **Bahamas** – Andros Is. Forfar Field Sta., Stafford Creek, 4.VI.2000, M.C. THOMAS (FSCA). **Cuba** – Havana, Baragua (SMTD, ZMHB). **Dominican Rep**. – Santo Domingo (ZMHB). **Guadeloupe** – Grands-Fonds S.A. 25.II.1978; Deshaies, 22.I.1978, 25.II.1972, F. CHALUMEAU (ISEA). **Jamaica** – Westmoreland, Negri, 3.VIII.1984, S.& J. PECK (CMNO). **Madeira. Canary Islands** - La Palma, 22.III.1990, P. OROMI (ISEA).

D i a g n o s t i c c h a r a c t e r s. Length 3.6-4.3 mm. Body oblong oval, shining, piceous to black. Head convex, clypeal margin slightly angulate and reflexed on each side of moderate median emargination, genae small; surface concave just above emargination, punctures minute to fine, separated by two times their diameter. Pronotum convex, sides and base strongly margined, crenate-fmbriate, setae short, sparse; anterior angles rounded, posterior angles truncate and slightly emarginate; surface moderately coarsely punctate throughout, punctures slightly smaller in front, larger and closer posteriorly, irregularly distributed. Elytra convex, humeri weakly dentate; striae deep, strial punctures separated by about four times their diameters, crenating inner margins of intervals; discal intervals slightly convex, apically become strongly carinate and slightly eroded on each side, each interval with scattered fine punctures, lateral and apical intervals with more noticeable punctures bearing incospicuous setae, 10th interval flattened, alutaceous. Ventral surface shining; mesosternum carinate, metasternal midline impressed, disc with numerous minute and fine punctures, lateral area roughly, closely punctate; abdominal sternites finely fluted along sutures, surface coarsely closely punctured from side to side; disc of pygidium deeply eroded and swollen. Legs moderate in length; all femora irregularly punctate, posterior line of metafemur deep, inward one-third or more from apex and usually continued toward coxae by broken elongate segments; apex of metatibia with long external spine, distinct accessory spine and row of short setae; tarsi shorter than tibia, basal tarsomere of metatarsus longer than upper tibial spur and subequal in length to following tarsomeres together. Male genitalia as in Fig. 16.

D i s t r i b u t i o n. Southeastern USA (Florida, Mississippi, Texas), West Indies, Madeira Is., Canary Isl., Portugal (Fig. 21).

R e m a r k s. *Ataenius brevicollis* is most close to *A. ovatulus* but differs from that species by having a single humeral denticle of the elytra and by the lack of clypeal denticles. Its distribution is quite similar to that of *A. heinekeni* (WOLLASTON), (STEBNICKA 2004). Anthropogenic species,

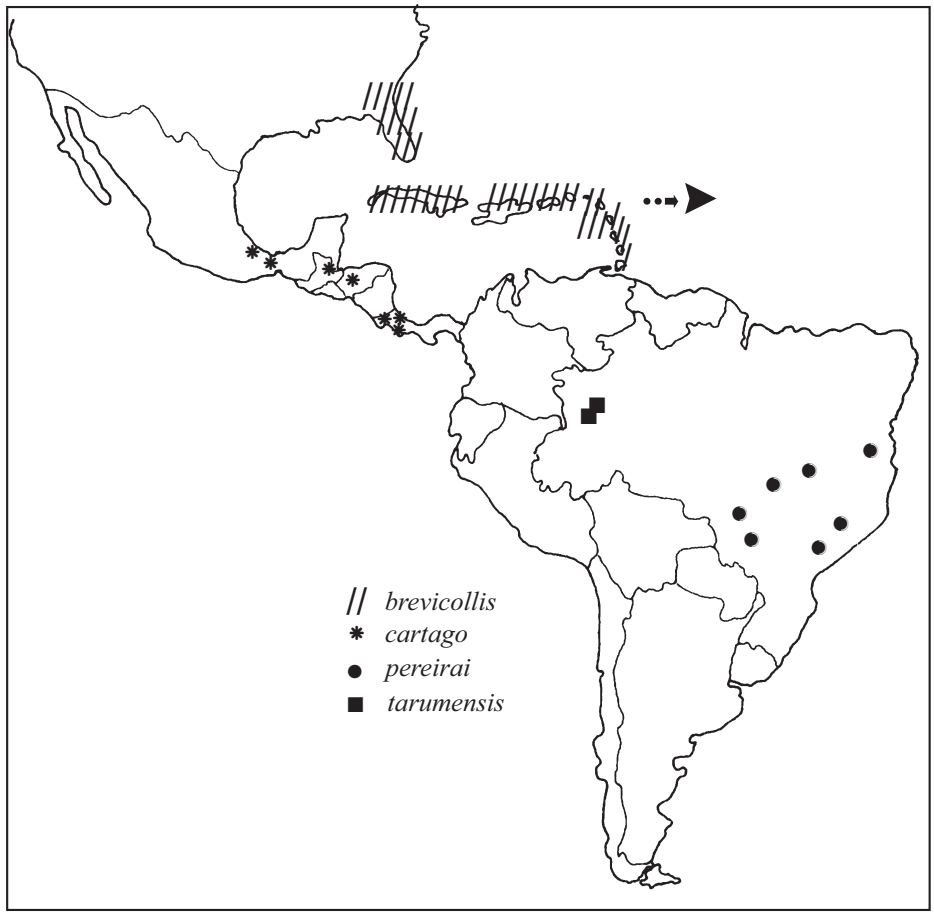


Fig. 21. Distribution of *Ataenius brevicollis* (WOLL.) (arrow indicates direction of its dispersion), *A. cartago* sp. n., *A. pereirai* PETR., *A. tarumensis* sp. n.

recorded by CHALUMEAU (1983) from Lesser Antilles (Guadeloupe, Martinique, Desirade, Les Saintes), known from almost all islands of the French Antilles. WOLLASTON (1854) recorded it as "Rather common around Funchal in Madeira proper, occurring beneath damp garden refuse and under putrid substances near the beach".The specimens examined were collected in rabbit droppings and in traps on coastal coppice, in Florida found in dung in the nests of the wood rat *Neotoma floridana smalli* SHERMAN.

Ataenius ovatulus HORN

(Fig. 17)

Ataenius ovatulus HORN, 1871: 286.- 1875: 142; 1887: 78; SCHMIDT 1922: 447; ROBINSON 1948: 177; WOODRUFF 1973: 123-124, figs 266, 267; CARTWRIGHT 1974: 48-49, fig. 11; DELLACASA 1988: 278 (catalogue).

Ataenius lecontei HAROLD, 1874:20.- HORN 1875: 142; SCHMIDT 1922: 447; ROBINSON 1948: 177.

Ataenius cylindrus: HORN 1875: 142 (non HORN, 1871).

Type data. *A. ovatulus*: lectotype "Louisiana" designated by CARTWRIGHT (1974) in ANSP.

M a t e r i a l e x a m i n e d. Specimen of *Ataenius lecontei* HAR. labeled "Type", "Carolina, Zimmermann" [South Carolina] (ZMHB).

Other specimens (5, det. O.L. CARTWRIGHT): **USA** – Liberty S.C., 19.VIII.1940, O.L. CARTWRIGHT; River Falls S.C., 27.VIII.1942, O.L. CARTWRIGHT (ISEA).

D i a g n o s t i c c h a r a c t e r s. Length 3.0-4.0 mm. Body elongate oval, convex, shining, dark reddish brown to piceous, anterior of clypeus and legs reddish brown. Head convex, clypeus with sharp, triangular teeth on each side of wide median emargination, sides arcuate to right-angled genae; surface almost smooth, inconspicuously uneven and narrowly concave above emargination, more noticeably punctate toward sides and fronto-occipital area. Pronotum convex, sides and base margined, very finely crenate-fimbriate, posterior angles slightly emarginate; surface with mixed minute and moderately coarse punctures, the latter irregularly spaced on disc, closer over outer third and on sides. Elytra convex, ovate with epipleural denticle and 7th interval with distinct tooth at base making humeri doubly dentate; striae moderately wide and deep, punctures crenating inner margins of intervals; discal intervals moderately convex, lateral intervals 7-9 subcarinate, 10th interval flat, alutaceous; intervals apically often with slightly eroded margins. Mesosternum sharply carinate between mesocoxae; metasternum shining, midline deep, lateral area roughly scabriculate; abdominal sternites frequently transversely convex, finely fluted along sutures, surface closely punctate from side to side; disc of pygidium scabrous. Profemoral surface slightly alutaceous, punctate; meso- and metafemora punctate, posterior marginal lines strong, complete; apex of metatibia with close setae and small accessory spine; basal tarsomere of metatarsus longer than upper tibial spur and shorter than following three tarsomeres combined. Male genitalia as in Fig. 17.

D i s t r i b u t i o n. USA – Alabama, Arkansas, Florida, Georgia, Illinois, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, South Carolina, Tennessee, Texas, Virginia (see WOODRUFF 1973, fig. 266 and CARTWRIGHT 1974, fig. 11).

R e m a r k s. *Ataenius ovatulus* is very close to *A. oklahomensis* (see Remarks under that species). It is often found at the bases of large trees in open fields, taken from litter beneath plaster bags on the ground. The larva has been described by JERATH (1960).

Ataenius oklahomensis BROWN

Ataenius oklahomensis BROWN, 1930: 4; CARTWRIGHT 1974: 47-48, fig. 6.

M a t e r i a l e x a m i n e d. Holotype (sex not determined) labeled "Payne County, Oklahoma" No 3038 (CNC) and two specimens: Texas, Harrisbourg (CNC); Louisiana, W Feliciana Par. 11 mi E St Francisville, 28.IV-3.V.2002, H.& HOWDEN (CMNO).

D i a g n o s t i c c h a r a c t e r s. Length 3.5-4.4 mm. As in description of *A. ovatulus* with: pronotum densely, uniformly punctate over outer third, posterior angles distinctly excised or emarginate, base sinuate; elytral intervals strongly convex to subcarinate in posterior third with margins noticeably eroded and alutaceous.

D i s t r i b u t i o n. USA – Arkansas, Louisiana, Oklahoma, Texas (see CARTWRIGHT 1974, fig. 6).

R e m a r k s. *Ataenius oklahomensis* is very close to *A. ovatulus* and most likely represents a geographical form of that species. It differs from *A. ovatulus* in having the pronotal posterior angles more noticeably excised, the pronotal surface with denser punctures over outer third and the elytral intervals more noticeably eroded apically. Male genitalia of both species do not differ in shape.

Ataenius cylindrus HORN

(Fig. 18)

Ataenius cylindrus HORN, 1871:289.- 1875: 142; WOODRUFF 1973: 114-115, figs 240, 241; CARTWRIGHT 1974: 45-46, fig. 14; DELLACASA 1988: 118 (catalogue).

Ataenius horni HAROLD, 1874: 19; SCHMIDT 1922: 454 (as synonym of *cylindricus*!)

Ataenius cylindricus: SCHMIDT 1922: 454.

Type data. Lectotype (Florida), No 3605 designated by CARTWRIGHT (1974), in ANSP.

M a t e r i a l e x a m i n e d. Specimens (7). **USA** – Arizona, Casa Grande, 5.VIII.1924, Ahl. SCHROEDER (ZMHB); Florida, Old Town, VI.1967, leg. LENCZY; Mobile, 25.X.; Gainesville, 12.VIII.1979, P. CHOATE (ISEA).

D i a g n o s t i c c h a r a c t e r s. Length 3.3-4.0 mm. Body oblong, convex, moderately shining, black,. Head convex, clypeal margin sharply dentate on each side of triangular, moderately deep median emargination, sides straight toward right-angled genae; surface concave above emargination, elsewhere convex and finely closely, evenly punctured, vertical area with larger, almost contiguous punctures. Pronotum convex, minutely alutaceous; sides and base margined, distinctly crenate-fimbriate, anterior angles obtusely rounded, posterior angles slightly emarginate; surface shallowly, densely, moderately punctate throughout, punctures moderate, minutely setigerous, gradually finer anteriorly at middle. Elytra elongate oval with small humeral denticles; striae wide, deep, rather coarsely punctate, punctures slightly crenate inner margins of intervals; intervals subcarinately convex and more or less distinctly deplanate along striae, each interval with two rows of widely spaced, minute to fine punctures, 10th interval flat and alutaceous. Mesosternum narrowly carinate between coxae; metasternum with deep midline and numerous moderate punctures, lateral area scabrous; abdominal sternites finely punctured from side to side and fluted along sutures, disc of pygidium scabrous. Profemur with perimarginal groove, surface shiny, punctate in anterior half, scabrous posteriorly; meso- and metafemora punctate throughout, postfemoral lines deep and complete; apex of metatibia with small accessory spine and close setae; basal tarsomere of metatarsus, upper tibial spur and following three tarsomeres together nearly equal in length. Male genitalia as in Fig. 18.

D i s t r i b u t i o n. USA – Alabama, Florida, Kentucky, Louisiana, Maryland, Mississippi, New Yersey, North Carolina, Pennsylvania, South Carolina, Tennessee, Texas, Virginia (see WOODRUFF 1973, fig 240 and CARTWRIGHT 1974, fig. 14).

R e m a r k s. *Ataenius cylindrus* is most similar to *A. ovatulus* but it differs from that species in having the head distinctly punctate, the pronotal punctures more uniformly distributed and the elytral intervals carinately convex with slightly deplanate margins. The species is common in Florida (WOODRUFF 1973), collected almost every month at light and in half dry cow dung, also on the dry ground surface under excrements.

Ataenius pereirai PETROVITZ

(Figs 19, 21)

Ataenius pereirai PETROVITZ, 1970: 235-236.- DELLACASA 1988: 279 (catalogue).

M a t e r i a l e x a m i n e d. Holotype male, labeled 'Brasil SP Cajuru 9.II.1964, leg. H.M. CANTER', '*Ataenius pereirai* PETROVITZ', in MZUSP. Paratypes (2), same data as holotype, in MHNG.

Other specimens (30). **Brazil** – (MG) Minas Gerais, Cordisburgo, Faz. Pontinha, VII.1994, F. VAZ DE MELLO (ISEA); Ipatinga, IX.1993, E. GROSSI (FVMC); (Go) Goias, Caldas Novas, X. 1973, F. PLAUMANN (NMNH); (MS) Mato Grosso do Sul, Campo Grande, 15.VI.1996, leg. KOLLER (CFC); Selviria, UNESP Farm, 28.II.1993, C. FLECHTMANN (CFC) (MT) Mato Grosso, Chapada dos Guimaraes, XI.1963, M. ALVARENGA (CMNO); (Ba) Bahia, Encruzilhada 900 m, XI.1972, M. ALVARENGA (FSCA); (DF) Brasilia, XI.1999, N. DEGALLIER (CMNO).

D i a g n o s t i c c h a r a c t e r s. Length 2.6-2.8 mm. Body oblong oval, moderately shining; colour rusty brown, ventral surface yellowish brown. Head relatively small, clypeal margin rounded and slightly reflexed on each side of shallow median emargination, genae obtuse; surface uniformly finely punctate throughout, punctures of vertical area deepest, generally separated by one diameter. Pronotum strongly convex medially, side invisible from above; sides and base finely margined, basal edge at posterior angles fringed with distinct, truncate setae; surface concave at anterior angles with tumosity laterally, punctures moderate in size, uniformly distributed, generally separated by one diameter. Scutellum narrow, triangular. Elytra parallel-sided,

about 2.3 times as long as pronotum, humeral denticles minute; striae narrow, strial punctures slightly crenating inner margins of intervals; intervals convex, each with two rows of fine close punctures bearing very short, pale setae, lateral and apical intervals not different. Ventral surface glabrous; metasternum convex with fine scattered punctures from side to side; abdominal sternites shining, fluting distinct only at sternite 5th, surface punctures fine, extending from side to side; disc of pygidium weakly eroded. Legs relatively short; all femora shining, punctate; metafemora short and wide, wider than mesofemora, posterior line fine, incomplete; meso- and metatibiae as long as femora, expanded apically; apex of metatibia with row of minute setae and slightly arcuate spurs, without accessory spine; tarsi as long as tibiae, basal tarsomere of metatarsus slightly widened apically, subequal in length to upper tibial spur and subequal to following three tarsomeres combined. Male genitalia as in Fig. 19.

D i s t r i b u t i o n as in Fig. 21.

R e m a r k s. *Ataenius pereirai* is one of the smallest species of *Ataenius*. It is most similar to *A. tarumensis* sp. n. (see Diagnosis under that species) but it differs from that species by the characters given in the key. Specimens examined were collected to the light traps on pastures with *Brachiaria decumbens* complex, found in cow dung and in *Guzera* droppings.

Ataenius tarumensis sp. n.

(Figs 20, 21)

M a t e r i a l e x a m i n e d. Holotype male, **Brazil**, Amazonas, Rio Taruma Mirim, NW Manaos, 3. III. 1976, J. ADIS (NMNH). Paratypes (9): 1 – same data as holotype; 7 – same locality, 23.II.1976, 13.X.1976, 21.X.1977, 24.XI.1976, 18.VIII.1981; 1 – Brazil, Amazonas, Rio Negro, Cucui, *Varzea* forest, 16.IX.1978, Brazil Exp., G.E. & K.E. BALL. Paratypes are in: ISEA, NMNH, UNSM.

D i a g n o s i s. One of the smallest species of the group. *A. tarumensis* is most closely allied to *A. pereirai*, sharing with that species the body size and colour. It differs from *A. pereirai* in having the head relatively larger and strongly convex, the pronotal punctures finer, the elytral intervals glabrous and the meso- and metafemora narrow, slightly deplanate.

D e s c r i p t i o n. Length 2.5-2.8 mm. Body oblong oval, moderately shining, glabrous, light castaneous, ventral surface and legs lighter than dorsal surface. Head strongly gibbose, clypeal margin rounded and slightly reflexed on each side of shallow median emargination, sides straight toward small, not prominent genae, frontal suture marked at eyes by distinct elevation; surface punctures from anterior margin to middle of head minute and shallow, those of vertical area slightly deeper but very fine, separated by one diameter or less. Pronotum convex medially, side margins invisible from above, sides and base finely margined; basal margin crenate, glabrous; surface concave at anterior angles with tumosity laterally, punctures generally fine, those along anterior margin and on sides of pronotum finest, disc with slightly larger punctures separated by one diameter. Scutellum narrowly triangular. Elytra parallel-sided, about 2.3 times as long as pronotum, humeral denticles minute; striae narrow, strial punctures slightly crenating inner margins of intervals; intervals convex with minute scattered punctures, lateral and apical intervals not different. Ventral surface moderately shining; mesosternum convex, median carina fine, long; metasternum convex, midline finely impressed, surface from side to side almost impunctate; abdominal sternites finely fluted along sutures, punctate from side to side, punctures same size as those of pronotum. Legs relatively short; all femora narrow, slightly deplanate and minutely punctate, posterior line of metafemur fine, complete; tibiae as long as femora, slender; apex of metatibia with thin apical spurs and row of minute setae, without accessory spine; tarsi shorter than tibiae, basal tarsomere of metatarsus slender, longer than upper tibial spur and subequal in length to following tarsomeres together. Male genitalia as in Fig. 20.

D i s t r i b u t i o n as in Fig. 21.

R e m a r k s. *Ataenius tarumensis* and *A. pereirai* resemble *Ataenius elegans* HAROLD from *A. complicatus* group of species (STEBNICKA 2006), however, both differ from that species by having smaller size and the elytral intervals simply impressed without bordering lines.

The *Ataenius texanus-carinator* group (XI)

D i a g n o s t i c c h a r a c t e r s. Small to medium-sized species of approximately 2.5-4.5 mm in length. Body elongate, parallel-sided in most species or rarely oblong oval, moderately convex, glabrous shining or opaque, in some species entirely or partially covered with various kind of setae; colour reddish brown, piceous or black. Epipharynx and other mouthparts are adapted for soft saprophagy, homogenous in shape or very weakly differentiated and do not offer useful diagnostic characters at the species level. Head usually moderate in size and feebly elevated medially, clypeal margin in most species dentate on each side of median emargination, in some species each side obtusely rounded; clypeal surface with granules or umbilicate punctures in front of median convexity, middle of head minutely to finely punctured or longitudinally strigose (with lines of united punctures); vertex with scattered punctures or with band of closer punctures. Pronotum transverse or subquadrate in shape, surface concave at anterior angles and always punctate, sides and base usually finely margined, margin grooved or not, lateral margin rarely fringed with minute to short setae. Scutellum narrowly triangular or suboval. Elytra parallel-sided or with lateral margin arcuate, basal bead usually fine, humeral denticles minute to moderate in size, elytral striae more or less distinctly impressed and punctured; intervals variously sculptured, those in the *texanus*-complex become convex to subcarinate, smoothly punctate and shining, while species with intervals more roughly sculptured, opaque, carinate, granulate or transversely swollen fall into the *carinator*-complex; lateral intervals in most species are more elevated and narrower than discal intervals**.** Ventral surface usually microreticulate; mesosternum convex, meso-metasternal carina usually very short and wide basally, space between mesocoxae usually equal to width of mesofemur; abdominal sternites minutely to finely fluted along sutures, 5th sternite always deeply grooved, surface punctures fine to moderate in size, in some species setigerous; disc of pygidium eroded. Legs slender; profemur shiny, rarely scabrous, finely to coarsely punctured; meso- and metafemora usually distinctly punctate, metafemora in most species with incomplete posterior line; meso- and metatibiae usually weakly expanded apically, metatibiae with apical row of short setae and thin spurs, accessory spine in most species absent; tarsi slender, basal tarsomere of metatarsus usually longer than upper tibial spur and shorter than following tarsomeres combined. External sexual differences weakly indicated, difficult to recognize, usually the penultimate abdominal sternite in male is shorter than in female. Male genitalia relatively small and weakly differentiated specifically; aedeagus lightly sclerotized, parameres as long as phallobase or shorter, usually excavate ventrally and covered with membrane, internal sac usually with ventral sclerites and spicules.

R e m a r k s. The species of the *texanus-carinator* group are rather easily distinguishable from all other groups by the following combination of characters: clypeus dentate and granulate anteriorly, upper clypeus often longitudinally strigose, disc of pronotum uniformly closely punctured, first (sutural) elytral interval usually with regular row of punctures.

Specimens were collected mostly at lights in subtropical and tropical forest, frequently found in great numbers.

Species with clypeal margin denticulate

Ataenius chinacotae sp. n.

(Figs 22, 35)

M a t e r i a l e x a m i n e d. Holotype male, **Colombia**, 3 km N Chinacota 1000 m, 12 May, 1974, H.& A. HOWDEN (CMNO). Paratypes (44): 23 – same data as holotype; **Bolivia** (7):

3 – Santa Cruz, Saavedra Res. Sta. 25 Mar. 1978, UV trap, O'BRIEN & SERRATE; 3 – Santa Cruz, Samaipata 1600 m, , 18.II.1999, light trap, L. STANGE; 1 – Santa Cruz, 6 km W Sta Cruz de la Sierra, Rio Pirai, 27.III.1998, H.& A. HOWDEN; **Costa Rica** (6): 4 **-** Puntarenas, Monteverde area, 5-7.VI.1983, J.E. WAPPES; **2 –** Monteverde**,** Pension Quatzal, 14.VI.1987, 1380 m, B.& B. VALENTINE. **Ecuador** (2): 1 – Napo, Puerto Nuevo, 1.5 km to River, 9.VII.1976, J. COHEN; 1 – Napo, 24 km S Baeza, 4000 ft, 4.III.1976, J.M. CAMPBELL; **Panama** (8): 1 – Soberania Nat. Park, 26-30.VI.1997, J.P. HUEPNER; 1 – Prov. Chiriqui, 2 km N Sta Clara, 1300 m, 10-31.V.1977, H.& A. HOWDEN; 6 – Cocle Cerro Gaital, 10-12.VI.1985, E. RILEY & D. RIDER. Paratypes are in: CMNO, FSCA, ISEA, NMNH, PKLC, PESC, WBWC, ZMHB.

D i a g n o s i s. Medium-sized species with slender, glabrous body; cuticle shining with generally fine punctation. Clypeus anteriorly finely denticulate, sides truncate in front of genae. Pronotum broad, posterior angles widely truncate. Elytral humeral denticles large, prominent. Metatarsus with basal segment equal in length to four tarsomeres together. The species is most similar to *Ataenius texanus* HAROLD, from which it differs by having a larger pronotum with truncate posterior angles, the relatively longer elytra with larger humeral denticles and significantly thicker tibiae.

D e s c r i p t i o n. Length 4.5-4-7 mm, greatest width 1.5-1.6 mm. Body **(**Fig**.** 22**)** elongate, parallel-sided, shining, glabrous; colour dark brown to carbon black. Head broad, moderately gibbose at middle; clypeal margin denticulate on each side of triangular median emargination, denticles small, upturned, sides of clypeus straight and then truncate before right-angled, prominent genae, clypeal surface along anterior margin strongly shining, slightly concave and finely granulate, median area of head and vertex with fine, slightly elongate punctures separated by about one diameter. Eyes large. Pronotum broad, slightly converging posteriorly, sides and base finely margined, without fringe of setae; anterior angles broadly rounded, posterior angles truncate before straight base; pronotal surface concave at anterior angles, everywhere finely punctate, punctures on disc separated by one diameter, on sides closer, almost contiguous. Scutellum triangular with fine carina basally. Elytra narrower than pronotum, parallel-sided, humeral denticles elongate, sharply prominent, basal bead fine; striae impressed, strial punctures distinctly crenating inner margins of intervals; intervals flat on disc, lateral intervals 8-9 convex to carinate, 10th interval deplanate; surface of intervals with fine scattered punctures, sutural interval with regular row of close punctures. Venter moderately shining; mesosternum convex, minutely shagreened and pubescent, mesometasternal carina wide at base; mesocoxae separated, space between mesocoxae greater than width of mesofemur; metasternum convex, midline deep, anterior half of disc with fine to coarse punctures, lateral metasternal triangle well indicated; abdominal sternites 2-4 finely fluted along sutures, fluting of sternite 5th long and deep, surface punctures shallow, same size as those on pronotum, separated by one diameter; disc of pygidium deeply eroded. Legs relatively long; profemur wide, perimarginal groove distinct, surface punctures same size and density as those on abdomen; mesofemora as wide as metafemora, both finely punctate through, postfemoral lines weakly indicated in apical third; metatibiae with longitudinal, setigerous lines, apical spurs slender, accessory spine lacking; tarsi slender, metatarsus shorter than tibia, basal segment longer than upper tibial spur and subequal to following tarsomeres combined. In male, peniltimate abdominal sternite shorter than in female; genitalia as in Fig. 35.

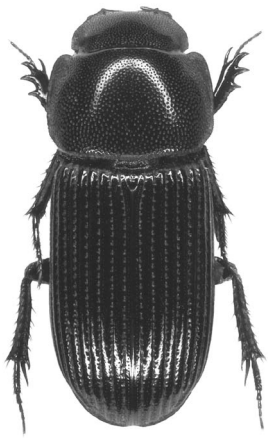
V a r i a t i o n. The paratypes do not differ significantly from the holotype, with the exception of the pronotal punctures varying in depth and density.

R e m a r k s. The general appearance of this species and most of its character states are quite similar to those of some species of the genus *Airapus* STEBNICKA & HOWDEN, 1996, e.g. to *Airapus burrundiae* STEBNICKA & HOWDEN distributed in northeastern Australia and in Papua-New Guinea.

Ataenius napoensis sp. n.

(Figs 23, 36)

M a t e r i a l e x a m i n e d. Holotype male, **Ecuador**, Napo, 4 km S Puerto Napo 500 m, 9.VII.1976, S. & J. PECK (CMNO). Paratypes (110): 7 – same data as holotype; 3 – Napo,



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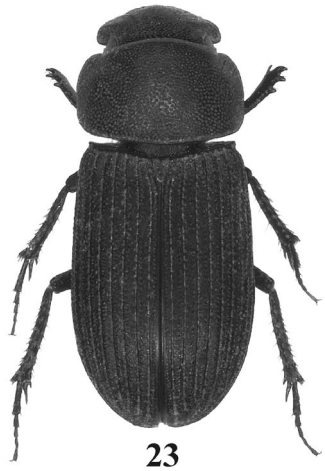

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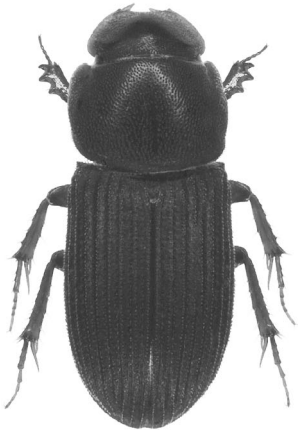

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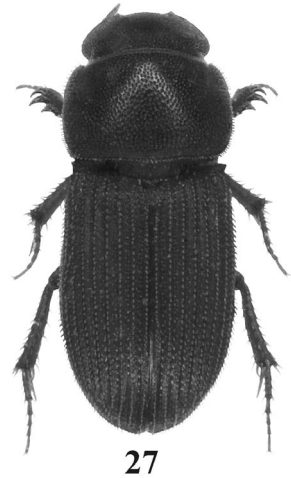

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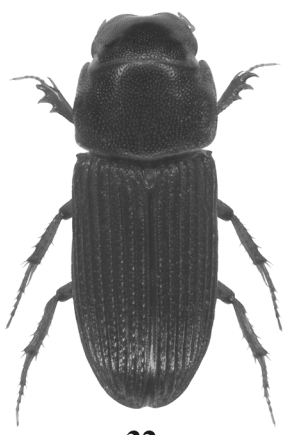

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Figs 22-34. Dorsal view: 22 – *Ataenius chinacotae* sp.n.; 23 – *A. napoensis* sp.n., 24 – *A. huanus* sp.n., 25 – *A. lamarensis* sp.n., 26 – *A. saltae* sp.n., 27 – *A. palmaritoensis* sp.n.; 28 – *Ataenius bolivarensis* sp.n., 29 – *A. londrinae* sp.n., 30 – *A. cucutae* sp.n., 31 – *A. catarinaensis* sp. n., 32 – *A. canoasus* sp. n., 33 – *A. noques* sp. n., 34 – *A. santarosae* sp. n.

Puerto Napo, 465 m, 17.IV.1984, black light, R.S. ZACK; 32 – Napo, Puerto Nuevo, 8.VII.1976, J. COHEN; 11 – Napo, Puerto Nuevo 3 km SW, 9.VII.1976, J. COHEN; 32 – Los Rios, Prov. Quevedo, 56 km N, 28-29.VII.1976, J. COHEN; 27 – Pastaza, Tena, 4.VII.1976, J. COHEN; 4 – Pichinda 250 m, 47 km S Sto Domingo, Rio Palenque Sta., 28-31.VII.1976, S.& J. PECK. **Peru** (25): 9 – Depto Ayacucho La Mar, Santa Rosa 640 m, 8-15.IX.1976, R. GORDON; 8 – Huan, Tingo Maria, 19-24.IV.1969, P.& P. SPANGLER. **Venezuela** (1): Tachira, 2200 ft, 12 km SE San Cristobal, 20.V.1974, H.& A. HOWDEN. Paratypes are in: CMNO, ISEA, NMNH.

D i a g n o s i s. Medium-sized species. Body slender; cuticle opaque, weakly shining, black, dorsal surface with punctures generally fine, dense. Clypeus with small, upturned denticles on each side of triangular median emargination and distinct transverse carina just above emargination. Elytra with very fine pubescence visible under high magnification. *Ataenius napoensis* is similar externally to *A. attenuator* HAROLD, from which it differs by having a clypeal carina, the pronotal punctures closer and the elytral intervals with outer row of granules.

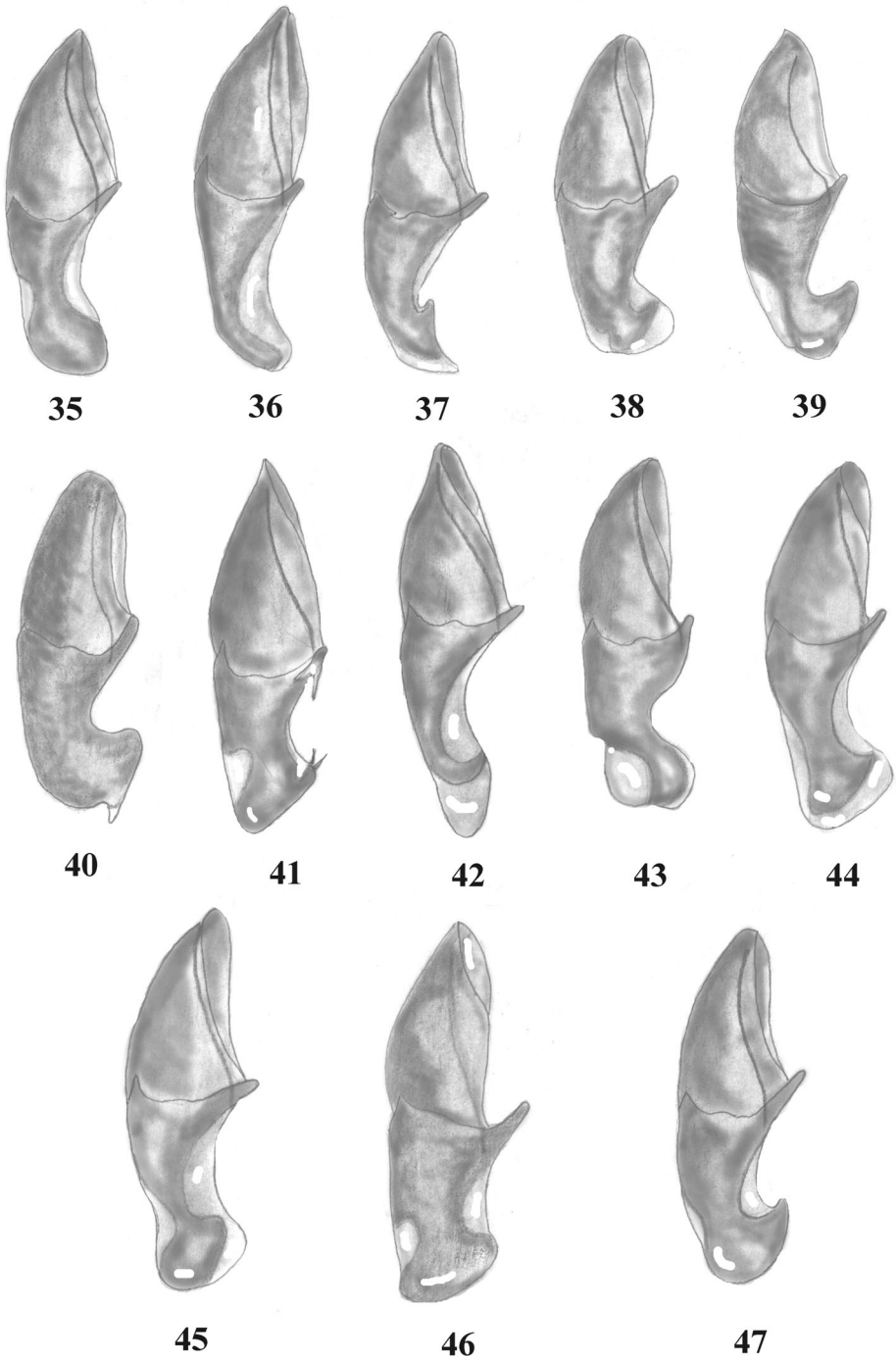
D e s c r i p t i o n. Length 4.5-4.7 mm, greatest width 1.4-1.5 mm. Body (Fig. 23) parallel-sided, weakly shining above, colour carbon black. Head wide, gibbose at middle; clypeal margin denticulate on each side of median emargination, denticles small, upturned; sides of clypeus straight towards obtusely rounded, prominent genae; clypeal surface along anterior margin strongly shining, slightly concave and minutely granulate with distinct transverse carina above emargination, lateral area on each side of median gibbosity with longitudinal lines of fine united punctures, middle of head and vertex with simple punctures separated by one diameter. Eyes large. Pronotum transverse, sides and base finely margined, hairless; anterior angles rounded, sides widely arcuate to obtuse posterior angles; pronotal surface deplanate at anterior angles and shallowly foveate laterally, everywhere densely finely punctate, punctures only slightly larger than those of head, on median anterior disc of pronotum separated by one diameter, on sides very close, nearly contiguous. Scutellum opaque, shagreened with short carina at base. Elytra parallel-sided, shagreened and minutely setigerous, basal bead between intervals 5-8 with row of small denticles, humeral denticles not different; elytral striae very fine, shallow, punctures inside striae inconspicuous, discal intervals 1-6 flat, lateral intervals 7-10 carinate, sutural interval with row of close punctures, each of the remaining intervals with row of fine granules on outer side. Venter moderately shining; mesosternum convex, shagreened and pubescent; mesocoxae separated, space between mesocoxae equal to width of mesofemur; metasternum convex, midline distinct, fine punctures scattered; abdominal sternites from side to side with shallow, not close punctures separated by one diameter, fluting along sutures fine, short, longest at penultimate sternite; disc of pygidium deeply eroded. Legs relatively long; profemur wide, perimarginal groove deep, surface with scattered punctures; mesofemur as wide as metafemur, both finely punctate without posterior lines; metatibiae with longitudinal, setigerous lines, apical spurs slender, accessory spine lacking; metatarsus shorter than tibia, slender, basal segment longer than upper tibial spur and subequal in length to three following tarsomeres combined. In male, penultimate abdominal sternite shorter than in female, disc of pygidium longer; genitalia as in Fig. 36.

V a r i a t i o n. The paratype specimens vary from the holotype in the following respects: clypeal denticles less distinctly prominent (in older specimens), clypeal carina more or less elevated; pronotal punctures vary in density; elytral intervals more or less roughly sculptured.

Ataenius huanus sp. n.

(Figs 24, 37)

M a t e r i a l e x a m i n e d. Holotype male, **Peru**, Huan, Tingo Maria, 19-24.IV.1969, P.& P. SPANGLER (NMNH). Paratypes (23): 7 – same data as holotype. **Ecuador** (16): Pichinda, Santo Domingo (47 km S), 28.VII.1976, black light, J. COHEN. Paratypes are in ISEA, NMNH.



Figs 35-47. Male genitalia in lateral view: 35 – *Ataenius chinacotae* sp.n.; 36 – *A. napoensis* sp.n., 37 – *A. huanus* sp.n., 38 – *A. lamarensis* sp.n., 39 – *A. saltae* sp.n., 40 – *A. palmaritoensis* sp. n., 41 – *Ataenius bolivarensis* sp.n., 42 – *A. londrinae* sp.n., 43 – *A. cucutae* sp.n., 44 – *A. catarinaensis* sp. n., 45 – *A. canoasus* sp. n., 46 – *A. noques* sp. n., 47 – *A. santarosae* sp. n.

D i a g n o s i s. Medium-sized species. Clypeal margin sharply angulate but not distinctly denticulate, upper clypeus with longitudinal, close punctures. Pronotum broad, wider than elytra, posterior angles contiguously rounded. The species is closely allied to *Ataenius attenuator* HAROLD and to *A. napoensis* sp. n. (see Diagnosis under that species). It differs from both these species in having the head larger, the clypeal margin without well defined denticles, the pronotum wider with arcuate posterior angles, the elytra shorter and narrower than pronotum and the male genitalia with narrower, acutely pointed parameres.

D e s c r i p t i o n. Length 3.9-4.0 mm, greatest width 1.4-1.5 mm. Body **(**Fig**.** 24 **)** elongate, slender, moderately shining, piceous. Head weakly gibbose at middle, clypeal margin more or less sharply angulate on each side of shallow median emargination, sides straight toward right-angled, prominent genae; clypeal surface just above median emargination narrowly strongly shining and slightly uneven with trace of minute granules, upper clypeus with fine, close, longitudinal punctures tending laterally to coalesce into lines, vertical punctures finer and less close. Pronotum wider than elytra, posterior angles widely rounded to base, lateral and basal edge with fine marginal line and very short setae separated by their own lengths; surface slightly concave at anterior angles, finely punctate throughout, punctures slightly larger than those of head, on disc separated by one diameter, on sides larger and closer, largest at anterior angles. Scutellum narrowly triangular with two pits at base. Elytra parallel-sided, humeral denticles acute, basal bead indicated; striae narrowly impressed, strial punctures crenating inner margins of intervals; intervals slightly convex, more elevated laterally and apically, each with minute setigerous punctures along striae, setae visible under high magnification. Venter alutaceous; mesosternum convex, meso-metasternal carina short, wide basally; mesocoxae separated, space between mesocoxae equal to width of mesofemur; metasternal midline distinct, fine and moderate punctures concentrated along mesocoxae, lateral metasternal triangle well defined, lateral area scabrous; abdominal sternites finely fluted along sutures, fluting of sternite 5th longest; surface punctures same size as those on pronotum, extending from side to side of each sternite, laterally slightly scabrous; disc of pygidium deeply eroded. Legs slender; profemur narrow, surface shining, punctate; meso- and metafemora minutely to finely punctate, posterior lines complete; tibiae with longitudinal, setigerous lines, apex with slender spurs and few setae, without accessory spine; tarsi slender, basal segment of metatarsus longer than upper tibial spur and longer than following three tarsal segments combined. External sexual differences difficult to recognize; male genitalia as in Fig. 37.

V a r i a t i o n. The punctures of the head and pronotum vary in depth and density.

Ataenius lamarensis sp. n.

(Figs 25, 38)

M a t e r i a l e x a m i n e d. Holotype male, **Peru**, Depto Ayacucho La Mar, Santa Rosa 640 m, 19-25.IX.1976, R. GORDON (NMNH). Paratypes (51); 49 – same data as holotype; **Bolivia** (2): Santa Cruz, 5 km ESE Warnes, Hotel Rio Selva, 20-21.X.2000, MORRIS & WAPPES. **Argentina** (4): Prov. Salta, 13 km SW Oran, Rio Santa Maria, 400 m, 13.XI.1995, L. HERMAN. Paratypes are in: AMNH, FSCA, ISEA, NMNH.

D i a g n o s i s. Small species. Body elongate. Clypeal margin denticulate, surface granulate. Pronotum on sides with diagonally confluent punctures forming longitudinal lines. Elytra strongly shagreened, intervals subgranulate with row of short setae at outer margins. *Ataenius lamarensis* is most closely allied to *A. martinezi* Petrovitz and to *A.bolivarensis* sp. n. It differes from the former species in having the elytral intervals less coarsely sculptured with significantly shorter setae in regular rows; from *A. bolivarensis* it may be distinguished by its smaller, slenderer body, the head with finer clypeal granules and punctures, the pronotal punctures confluent on sides and the elytral sculpture coarser.

D e s c r i p t i o n. Length 3.2-3-8 mm, greatest width 1.1-1-2 mm. Body (Fig. 25) alutaceous, in part setaceous, colour piceous, legs reddish brown. Head narrower than pronotum, gib-

bose at middle; clypeal margin with fine, upturned denticles on each side of triangular median emargination, sides straight towards obtuse genae; clypeal surface in anterior third finely granulate, strongly shining, median gibbosity almost impunctate, shining, lateral area of head near genae and vertex very finely punctate. Pronotum convex, minutely setaceous, sides and base finely margined, lateral margin fringed with minute, club-shaped setae visible under high magnification; anterior angles obtuse, sides arcuate toward base, posterior angles feebly marked; pronotal surface deeply concave at anterior angles, everywhere finely, densely punctured, punctures on disc slightly longitudinal, separated by less than one diameter, finest along anterior margin, from halfway to sides become contiguous and diagonally confluent toward anterior angles. Scutellum triangular, shagreened. Elytra widest in apical third, humeral denticles fine, acutely prominent upwards; striae narrow with inconspicuous punctures, intervals flat on disc, subcarinate laterally and apically, surface uneven, strongly shagreened with vague granules scattered, outer side of each interval with regular row of very fine granules bearing very short, close setae. Ventral surface partially shining; mesosternum finely shagreened and pubescent, meso-metasternal carina short, space between mesocoxae equal to width of mesofemur; metasternum shining, midline weakly impressed, ended by small pits, surface finely punctate, lateral metasternal triangle deep, punctate inside; lateral area scabrous; abdominal sternites subopaque, finely punctate-setose, fluting along sutures inconspicuous; disc of pygidium eroded. Legs slender; all femora shining, finely punctate, middle and hind femora without posterior lines; tibiae setaceous, apex of metatibia with row of short setae and thin spurs; tarsi shorter than tibiae, basal tarsomere of metatarsus subequal in length to upper tibial spur and slightly longer than following three tarsomeres together. External sexual differences weakly indicated; in male penultimate abdominal sternite shorter and less deeply grooved than in female; genitalia as in Fig. 38.

V a r i a t i o n. In the large series of paratypes examined, variation occurs mostly in the punctation of the head and pronotum and in the more or less coarse sculpture of the elytra.

Ataenius saltae sp. n.

(Figs 26, 39)

M a t e r i a l e x a m i n e d. Holotype male, **Argentina**, Prov. Salta, El Rey Nat. Park 870 m, Arroyo Los Noques, 13-14.XII.1987, UV light in forest, S.& J.PECK (CMNO). Paratypes (61): 50 – same data as holotype; 6 – El Rey N.P., Hosteria 900 m, 3-4.XII.1987, UV light in chaco scrub forest, S.& J. PECK. **Bolivia** (5): 4 – Santa Cruz, Samaipata 1600 m, 8.II.1999, L. STANGE; 1 – Santa Cruz, Buena Vista 380 m, 20.II.1999, at light, L. STANGE. Paratypes are in: CMNO, FSCA, ISEA.

D i a g n o s i s. Small species. Body slender, cuticle subopaque. Clypeal margin with upturned, minute denticles, clypeal surface granulate in front of median convexity. Elytra laterally and apically with very fine pubescence. *Ataenius saltae* is similar externally to sympatric *A. attenuator* HAROLD, but it differs from that species by the following combination of characters: punctures of pronotum significantly denser, especially on sides, pronotal posterior angles broadly rounded; elytra relatively shorter, roughly sculptured with intervals transversely swollen.

D e s c r i p t i o n. Length 3.0-3-5 mm, greatest width 1.1-1.2 mm. Body (Fig. 26) parallel-sided, alutaceous, weakly shining above, colour piceous, anterior of clypeus, anterior angles of pronotum and legs reddish brown. Head narrower than pronotum, gibbose at middle; clypeal margin with minute, upturned denticles on each side of triangular median emargination, sides straight towards small, rounded genae; clypeal surface in anterior third strongly shining, finely granulate, granules separated by about one diameter, middle of head with fine, close longitudinal lines of united punctures, vertical punctures very fine, well separated. Pronotum convex, sides and base finely margined, lateral margin without fringe of setae; anterior angles obtuse, sides arcuate toward base, posterior angles feebly marked; pronotal surface obliquely concave at anterior angles,

everywhere finely, densely punctured, punctures on disc fine but deep, separated by one diameter, from halfway to sides become contiguous. Scutellum triangular, mat. Elytra parallel-sided, humeral denticles distinct, acutely prominent laterad; striae narrow with fine transverse punctures crenating inner margins of intervals; intervals subcarinate on disc, carinate laterally and apically, surface uneven, slightly punctate-swollen, lateral and apical intervals with minute setae visible under high magnification. Ventral surface shining; mesosternum finely shagreened and pubescent, meso-metasternal carina short, space between mesocoxae equal to width of mesofemur; metasternum shining, midline impressed with two small pits at base of carina; surface punctate, punctures deep, separated by one diameter, lateral metasternal triangle deep, scabrous inside, lateral area scabrous; abdominal sternites microreticulate, each shallowly punctate-setose from side to side, fluting along sutures inconspicuous; disc of pygidium eroded. Legs slender; all femora shining, finely punctate throughout, hind femora with fine but complate posterior line; tibiae setaceous, apex of metatibia with row of short setae and thin spurs, accessory spine lacks; tarsi shorter than tibiae, basal tarsomere of metatarsus longer than upper tibial spur and longer than following three tarsomeres together. External sexual differences weakly indicated; in male penultimate abdominal sternite shorter and less deeply grooved than in female; genitalia as in Fig. 39.

V a r i a t i o n. In the large series of paratypes examined, variation occurs mostly in the punctation of the head and pronotum and in the more or less coarse sculpture of the elytra.

Ataenius palmaritoensis sp. n.

(Figs 27, 40)

M a t e r i a l e x a m i n e d. Holotype male, **Venezuela**, Miranda, (Mérida?), Palmarito, Lake Maracaibo, 3.VIII.1989, lakeshore (1 m), UV light, S. & J. PECK (CMNO). Paratypes (83): 7 – same data as holotype; **Colombia** (64): 4 – N de S Cucuta, 700 m, 15.V.1974, H.& A. HOWDEN; 55 – N. de S, 700 m, 30 km S Cuenta, Quod. Honda, 8.V.1974, H.& A. HOWDEN; 5 – N de S 1000 m, 3 km N Chinacota, 8.V.1974, H.& A. HOWDEN; **Ecuador** (10): 2 – Napo, 4 km S Puerto Napo 500 m, 9.VII.1976, S.& J. PECK; 1 – Napo, Puerto Nuevo 13 km SW, 9.VII.1976, J. COHEN; 5 – Napo, Puerto Nuevo, 6.VII.1976, J. COHEN, Peace Corps Smith. Institution; 2 – Santa Cecilia, 42 km W, 16.V.1975, SPANGLER & LANGLEY. **Peru** (2): Tournavista Rd., 34 km W of Pucallpa, 300 m, 26.XII.1971, at light, R.T. SCHUH. Paratypes are in: AMNH, CMNO, ISEA, NMNH.

D i a g n o s i s. Small species. Body parallel-sided, alutaceous, covered with inconspicuous to distinct setae. Head gibbose at middle, clypeal margin finely denticulate, surface above finely granulate. Pronotum closely punctate, lateral and basal margin with row of close club-shaped setae. Elytra shagreened, each interval with row of short, thick setae at outer margin. *Ataenius palmaritoensis* is most similar to *A. opacipennis* SCHMIDT and to *A. santarosae* sp. n. (see Diagnosis under that species). It differs from both these species by having the clypeus denticulate with distinctly granular surface.

D e s c r i p t i o n. Length 2.8-3.0 mm, greatest width 0.7-0.8 mm. Body (Fig.27) shagreened, weakly shining, colour dark castaneous to piceous, surface of head and pronotum with minute pubescence visible under high magnification. Head narrower than pronotum, clypeal denticles small, upturned, median emargination arcuate, sides straight to obtusely rounded genae; fine granules between anterior margin and median gibbosity separated by one diameter, middle of head with minute scattered punctures becoming close on vertex. Pronotum transverse, marginal line fine, visible only on arcuate sides, lateral and basal edge with very short, club-shaped setae separated by less than their lengths; pronotal punctures everywhere fine and close, on disc separated by less than one diameter, become contiguous from halfway to sides and diagonally confluent toward anterior angles. Scutellum narrowly triangular. Elytra parallel-sided, humeral denticles acutely prominent, striae fine, strial punctures close; intervals shagreened, flat on disc, carinate in apical third of elytra, each with outer row of short, thick setae separated by less than their lengths, elytral margin with row

of setae of the same size. Venter weakly shining; mesosternum convex, meso-metasternal carina long; metasternum at the same level as mesosternum, midline impressed, discal punctures distinct, lateral metasternal triangle deep, lateral area scabrous; abdominal sternites very finely fluted along sutures, with shallow, setae-bearing punctures from side to side, disc of pygidium weakly eroded. Legs moderate in length, slender; perimarginal goove of profemur deep, surface shining, closely punctate; meso- and metafemora finely, equally punctate throughout, posterior lines lacking; metatibia as long as femur, setaceous, apex with slender apical spurs and row of 6-7 setae, without accessory spine; tarsi slender, basal segment of metatarsus longer than upper tibial spur and equal in length to following three tarsal segments combined. External sexual differences difficult to recognize; male genitalia as in Fig. 40.

V a r i a t i o n. The paratypes do not differ significantly from the holotype.

Ataenius bolivarensis sp. n.

(Figs 28, 41)

M a t e r i a l e x a m i n e d. Holotype male, labeled "**Venezuela**, Bolivar, Guri, 2.VII.1998, H.& A. HOWDEN (CMNO). Paratypes (17): 2 – same data as holotype; 1 – same locality, 3.VII.1998; 1 – same locality, 13.VII.1998; 1 – Bolivar, 22 km E Upata, 16-18.VI.1996, H.& A. HOWDEN; **Guyana** (1): Dubulay Ranch, Aramatani Creek, 15-18.IV.1995, O. FLINT. Paratypes are in: CMNO, ISEA, NMNH.

D i a g n o s i s. Medium-sized species; body oblong-oval. Clypeal margin denticulate, surface granulate. Pronotum with close, everywhere distributed punctures. Elytra microreticulate, intervals subgranulate with row of extremely short setae at outer margins. *Ataenius bolivarensis* resembles *A. martinezi* PETROVITZ and *A. arenosus* HAROLD. It differs from both species in having the pronotal punctures larger and less dense, and the elytral intervals punctate without transwerse swellings and granules.

D e s c r i p t i o n. Length 3.7-4.0 mm, greatest width 1.4-1.6 mm. Body (Fig. 28) oblong oval, alutaceous, in part setaceous, colour piceous, anterior of clypeus reddish, legs dark brown. Head narrower than pronotum, gibbose at middle; clypeal margin with fine, upturned denticles on each side of triangular median emargination, sides straight towards obtuse genae; clypeal surface in anterior third strongly shining, distincly granular, granules separated by one diameter, upper clypeus to vertex with fine punctures separated by a little more than one diameter. Pronotum convex, minute setae visible under high magnification, sides and base finely margined, lateral margin fringed with minute, widely spaced setae; anterior angles obtuse, sides arcuate toward base, posterior angles well marked; pronotal surface concave at anterior angles, everywhere finely, densely punctured, punctures on disc separated by about one diameter, finest along anterior margin, from halfway to sides become denser, separated by less than one diameter. Scutellum triangular, shagreened. Elytra widest in apical third, humeral denticles fine, acutely prominent; striae narrow with inconspicuous punctures, intervals convex on disc, slightly more elevated laterally and apically, surface distinctly uneven, shagreened, each interval at middle with more or less regular row of fine punctures bearing extremely short setae. Ventral surface partially shining; mesosternum finely shagreened and pubescent, meso-metasternal carina short, space between mesocoxae equal to width of mesofemur; metasternum shining, midline weakly impressed, surface finely punctate, punctures same size as those on pronotum; lateral metasternal triangle deep, punctate inside; lateral area scabrous; abdominal sternites subopaque, finely punctate-setose, punctures shallower than those on metasternum, fluting along sutures very fine; disc of pygidium eroded. Legs slender; all femora shining, closely distinctly punctate, middle and hind femora without posterior lines; tibiae setaceous, apex of metatibia with row of short setae and thin spurs without accessory spine; tarsi shorter than tibiae, basal tarsomere of metatarsus equal in length to upper tibial spur and to following three

tarsomeres together. External sexual differences weakly indicated; in male penultimate abdominal sternite shorter and less deeply grooved than in female; genitalia as in Fig. 41.

V a r i a t i o n. On the basis of 12 paratypes examined, variation occurs mostly insize and in the punctation of the head and pronotum. The specimens from Brazil are smaller than those from Venezuela with finer and closer punctures of the pronotum.

Ataenius londrinae sp. n.

(Figs 29, 42)

M a t e r i a l e x a m i n e d. Holotype male, **Brazil**, (Pr) Paraná, Londrina, Mata Godoy, 25.X.1984, J. LOPES (NMNH). Paratypes (41): 4 – same data as holotype; 3 – (Pr) Paraná, Bocaiuva, V. 1964, XII.1965, F. PLAUMANN; 1 – (Pr) Iguaçú, III.1965, F. PLAUMANN; 1 - (SP) Sao Paulo, Tieté, 21.IX.1933, J. HALIK; 1 – (RS) Rio Grande do Sul, Pardinho, 29.42, 52.28, 100 m, IX.1960, F. PLAUMANN; 1 – (RS) Mateus – Sul, 25.52, 50.22, 800 m, X.1959, F. PLAUMANN; 1 – (RS) Rio Azul, 25.42, 50.45, 1000 m, X.1953, F. PLAUMANN; 1 - (Ro) Rondonia, VII.1952, F.PLAUMANN; 2 - (SC) Nova Teutonia Santa Catarina, VIII.1952, F. PLAUMANN; 1 – (RJ) Rio de Janeiro, Guanabera, X.1963, M. ALVARENGA. **Bolivia** (1): Santa Cruz, Buena Vista vic. Hotel Flora & Fauna. 14-16.X.2000, R. MORRIS. **Paraguay** (4): 3 – Puerto P. Stroessner, 26.XII.1965, leg. LOKSA; 1 – Villarica, Independentia 25 km E, 18.I.1991, forest litter, S. EDRÖDY-YOUNGA; **Argentina** (14): 12 – Prov. Misiones, 15 km SE Pto Iguaçú, 30.XII.1990, forest tree base litter, S.& J. PECK; 2 – Iguaçú Nat. Pk, Salto Macuco, 26.XII.1990, cliff base litter, S.& J. PECK. **Ecuador** (6): Pichinda, 17 km SE Sto Domingo de Colorados, Tinalandia 3000 ft, 16-21.X.1988, ex litter, L. HERMAN. Paratypes are in: AMNH, CMNO, FSCA, ISEA, NMNH, UNSM.

D i a g n o s i s. Small species. Body oblong-oval shining. Clypeal margin finely denticulate, surface granulate in front of median gibbosity. Pronotum convex, moderate punctures evenly distributed. Elytra with intervals crenate-punctate, minutely setigerous apically. *taenius londrinae* is most similar externally to the sympatric *A. pseudocarinator* Balthasar, but is quite distinct in having a more robust body, the head relatively larger, the pronotal punctures less close, the elytral intervals flatter and distinctly punctured.

D e s c r i p t i o n. Length 2.8-3.1 mm, greatest width 1.2-1.3 mm. Body (Fig. 29) moderately shining, colour dark brown to piceous black, legs reddish brown. Head weakly gibbose at middle; clypeal margin with fine, upturned denticles on each side of deep median emargination, sides straight towards rounded, slightly prominent genae; clypeal surface in anterior third finely granulate, granules transverse, unequal in size, middle of head from gena to gena with close, longitudinal lines of fine united punctures, vertex very finely punctate, punctures separated by less than one diameter. Pronotum convex, sides and base finely margined, lateral margin finely crenulate, setae invisible; anterior and posterior angles obtuse, sides arcuate; pronotal surface deeply concave at anterior angles, everywhere moderately punctured, punctures on disc separated by one diameter, finest along anterior margin, from halfway to sides closer, separated by half of their diameter. Scutellum triangular with short basal carina. Elytra widest in apical third, minutely setigerous apically; humeral denticles acutely prominent laterad; striae narrow with transverse punctures distinctly crenating inner margins of intervals; intervals on disc convex to subcarinate, distinctly punctate along striae, lateral and apical intervals carinate, surface uneven, punctate medially, 10^{th} interval flattened. Ventral surface partially shining; mesosternum finely shagreened and pubescent, mesometasternal carina short, space between mesocoxae equal to width of mesofemur; metasternum shining, midline weakly impressed, surface coarsely punctate, lateral metasternal triangle deep, punctate inside; lateral area shagreened, impunctate; abdominal sternites punctate from side to side, punctures nearly same size and density as those on metasternum, fluting along sutures inconspicuous; disc of pygidium eroded. Legs slender; all femora shining, finely punctate, hind femora narrower than middle femora, posterior line visible in apical one-third; tibiae setaceous, apex of

metatibia with row of short setae and thin spurs; tarsi shorter than tibiae, basal tarsomere of metatarsus longer than very thin upper tibial spur and slightly longer than following three tarsomeres together. External sexual differences weakly indicated; in male penultimate abdominal sternite shorter and less deeply grooved than in female; genitalia as in Fig. 42.

V a r i a t i o n. There is a significant variation in the elytral sculpture; some specimens have the discal intervals less elevated, wider and more distinctly punctured, in some the lateral intervals are strongly swollen.

Ataenius cucutae sp. n.

(Figs 30, 43)

M a t e r i a l e x a m i n e d. Holotype male, **Colombia**, N de S 700 m, 30 km S of Cucuta, Honda, 8.V.1974, H.& A. HOWDEN (CMNO). PARATYPES (5): 1 – Colombia, N de S 1000 m, 3 km S Chinacota, 7.V.1974. H.& A. HOWDEN; **Ecuador** (4): 2 – Napo, Limoncocha, 15.VI.1977, W.E. STEINER; 2 – Limoncocha, 0.23 S, 76.38W, 300 m, 31.III.1974, H.P. STOCKWELL. Paratypes are in: CMNO, ISEA, NMNH.

D i a g n o s i s. One of the smallest species of *Ataenius*, parallel-sided, castaneous, shining. Clypeal margin denticulate, surface granulate. Elytra 2.3 times as long as pronotum. Legs relatively short, tibiae with traces of transverse carinae. *Ataenius cucutae* resembles the Costa-Rican *A. parallelipennis* PETROVITZ, sharing with that species an overall appearance, the shape of head and sculpture of body; it differs by its smaller size, shorter elytra and the meso- and metatibiae significantly shorter and thicker.

D e s c r i p t i o n. Length 2.8-3.0 mm, greatest width 0.8-0-9 mm. Body (Fig. 30) elongate, shining, castaneous in colour. Head narrower than pronotum, convex at middle, clypeal margin finely denticulate on each side of moderately deep median excavation, sides slightly emarginate just behind denticles, then straight toward right-angled genae; clypeal surface anteriorly finely granular, upper clypeus up to vertex with fine, everywhere distributed punctures separated by one diameter. Pronotum subquadrate, relatively long; sides and base finely margined, side margin minutely setigerous; anterior angles obtuse, posterior angles broadly rounded; pronotal surface concave at anterior angles, uniformly punctured, punctures in anterior third and on extreme sides fine but deep, those of posterior two-thirds about two times larger, separated by one diameter. Scutellum very small, triangular. Elytra parallel-sided, near 2.3 times as long as pronotum, humeral denticles distinct, sharp; striae narrow deep, strial punctures slightly crenating inner margins of intervals; intervals convex on disc, a little more elevated laterally and apically, surface smooth, very fine punctures scattered on intervals, more concentrated around scutellum and on the lateral, minutely setigerous intervals 6-10. Ventral surface shining; mesosternum alutaceous, pubescent, mesometasternal carina short and wide, mesocoxae separated, space between mesocoxae greater than width of mesofemur; metasternum convex, midline deep, lateral metasternal triangle well developed, smooth inside, punctures fine, deep, extending from side to side of metasternum; abdominal sternites minutely fluted along sutures, fluting of sternite 5th deepest, punctures same size as those of metasternum, separated by about one diameter; disc of pygidium weakly eroded. Legs relatively short; all femora shining with minute scattered punctures, meso- and metafemora short without posterior lines; meso- and metatibiae relatively thick and distinctly expanded apically, setigerous; apex of metatibia with row of short setae and slender spurs; tarsi shorter than tibiae, very thin; basal tarsomere of metatarsus equal in length to upper tibial spur and subequal to four following tarsomeres combined. External sexual differences difficult to recognise; in male penultimate abdominal sternite less arcuate than in female, genitalia as in Fig. 43.

V a r i a t i o n. The paratypes do not differ significantly from the holotype.

Species with clypeal margin rounded

Ataenius catarinaensis sp. n.

(Figs 31, 44)

M a t e r i a l e x a m i n e d. Holotype male, **Brazil**, Nova Teutonia, Santa Catarina, XII.1971, F. PLAUMANN (CMNO). Paratypes (7): 5 – same data as holotype. **Paraguay** (2): Villarica, Independentia 25 km E, 21.I.1991, S. ENDRÖDY-YOUNGA. Paratypes are in: CMNO, HNHM, ISEA.

D i a g n o s i s. Medium-sized species. Body slender, cuticle subopaque. Clypeal margin rounded on each side of median emargination; clypeal surface punctate-strigose. Elytra apically with very fine pubescence. *Ataenius catarinaensis* is most similar externally to sympatric *A. saltae* sp. n., but it differs from that species by the following combination of characters: the head larger than in *A. saltae*, clypeal margin rounded, without denticles, clypeal surface with no trace of granules; elytra significantly smoother, striae less distinctly punctured, intervals without transverse swellings.

D e s c r i p t i o n. Length 3.5-3.8 mm, greatest width 1.2-1.3 mm. Body (Fig. 31) parallel-sided, alutaceous, weakly shining above, colour piceous to black, anterior of clypeus and legs reddish brown. Head only slightly narrower than pronotum, gibbose at middle; clypeal margin rounded on each side of very shallow median emargination, sides slightly arcuate towards obtusely rounded, prominent genae; surface of head from anterior margin to frontal suture with very shallow longitudinal lines of united punctures, vertex with band of minute, close punctures separated by one diameter; frontal suture slightly elevated near eyes. Pronotum convex, sides and base finely margined, lateral margin without fringe of setae; anterior angles obtuse, sides arcuate toward base, posterior angles feebly marked; pronotal surface concave at anterior angles with small tumosity laterally, everywhere finely, densely punctured, punctures on median anterior disc same size as those of vertex, along base and on sides punctures twice larger and almost contiguous. Scutellum triangular, mat. Elytra parallel-sided, minutely setigerous apically; humeral denticles distinct, acutely prominent laterad; striae narrow with fine punctures inconspicuously crenating inner margins of intervals; intervals convex on disc with fine scattered punctures separated by about 2-3 times their diamaters, on sides subcarinate and slightly uneven, 10th interval not different. Ventral surface weakly shining; mesosternum finely shagreened and pubescent, meso-metasternal carina short, space between mesocoxae equal to width of mesofemur; metasternal midline concave, surface of disc finely punctate, lateral metasternal triangle wide, smooth inside, lateral area scabrous; abdominal sternites microreticulate, each shallowly punctate from side to side, punctures slightly longitudinal, larger than those on metasternum, fluting along sutures fine but distinct; disc of pygidium eroded. Legs slender; all femora shining, finely punctate throughout, middle and femora with complete posterior lines; tibiae setaceous, apex of metatibia with row of short setae and thin spurs, accessory spine lacking; tarsi shorter than tibiae, basal tarsomere of metatarsus longer than upper tibial spur and equal in length to following four tarsomeres together. External sexual differences weakly indicated; in male penultimate abdominal sternite shorter and less deeply grooved than in female; genitalia as in Fig. 44.

V a r i a t i o n. The paratypes do not differ significantly from the holotype.

Ataenius canoasus sp. n.

(Figs 32, 45)

M a t e r i a l e x a m i n e d. Holotype male, **Brazil**, Rio Grande do Sul, Capao de Canoas, April 1967, Fritz PLAUMANN (NMNH). Paratypes (142): – 132, same data as holotype; 2 – Rio Grande do Sul, 16 km S of Casono Beach, 30.XI.1983, near freshwater stream, N.M. GIANUCA. **Argentina** (8): 7 – Buenos Aires, San Clemente del Tuyu (no additional data); 1 – Prov. Buenos Aires, 3.X.1910, E. BRUCH. Paratypes are in: ISEA, MHNG, NMNH, NRS.

D i a g n o s i s. Medium-sized species. Clypeal margin rounded on each side of anterior emargination, median gibbosity shining, frontal suture impressed. Elytra converging from base to apex, intervals subcarinate, with elongate swellings at inner margins. The general appearance relates *Ataenius canoasus* to *A. carinator*-group, the sculpture of the elytra is intermediate between that of *A. carinator* HAR. and *A. scalptifrons* BATES. The species is most similar to sympatric *A. noques* sp. n. from which it differs by its minutely punctate head with impressed frontal suture, and the elytra distinctly narrowed apically, lacking setae. Both species differ from *A. carinator* and *A. scalptifrons* by the lack of clypeal denticles and differently sculptured body.

D e s c r i p t i o n. Length 3.2-3.8 mm, greatest width 1.1-1.2 mm. Body **(**Fig**.** 32**)** elongate, weakly convex, moderately shining, colour reddish brown to black, elytra usually lighter than head and pronotum, legs brown. Head relatively small with circular gibbosity at middle and with distinctly concave, slightly swollen frontal suture extending between eyes just behind median elevation; clypeal margin rounded on each side of narrow but deep median emargination, sides straight to widely rounded, not prominent genae; surface from median gibbosity to clypeal emargination abrupt, strongly shining, impunctate or with few minute punctures, lateral areas of head with very fine, elongate or confluent punctures, vertex behind frontal suture with bans of round punctures separated by less than one diameter.Eye large, partially visible from above. Pronotum wider than elytra, slightly depressed in median basal area and with shallow pit at middle of lateral tumosity; anterior angles rounded, slightly depressed, sides straight to broadly rounded posterior angles; lateral and basal marginal line fine, glabrous; pronotal punctures evenly distributed, uniform, nearly the same size as those on vertex, on disc separated by one diameter, closer on sides. Scutellum triangular. Elytra widest at base and distinctly converging to apex, humeral denticles small, acute; surface of elytra shagreened, striae narrow, shining, strial punctures transversely crenate inner margins of intervals, forming here a row of slightly elongate swellings; intervals obtusely carinate, outer slope of each interval with row of fine punctures along median carina. Ventral sclerites shining in part; Mesosternum scabrous; mesocoxae separated, space between mesocoxae greater than width of mesofemur, meso-metasternal carina narrow, shining; metasternum and abdomen equally punctured, punctures fine but deep, separated by about one diameter, lateral metasternal triangle deep, scabrous inside, lateral area scabrous; abdominal sternites finely fluted along sutures, punctate from side to side, disc of pygidium eroded, apical lip wide, finely punctate. Legs slender; all femora shining, finely punctate, punctures smaller and less dense than those of abdomen; meso- and metafemora narrow, postfemoral lines complete; tibiae slender, shorter than femora, apex of metatibia without accessory spine, apical spurs very thin; hind tarsus as long as tibia, basal segment significantly longer than than upper tibial spur and shorter than following four tarsomeres combined. External sexual differences weakly indicated; in male, penultimate abdominal sternite shorter than in female, genitalia as in Fig. 45.

V a r i a t i o n. In the large series of specimens examined variation occurs mainly in size and colour of body, and in the density of pronotal punctures.

Ataenius noques sp. n.

(Figs 33, 46)

M a t e r i a l e x a m i n e d. Holotype male, **Argentina**, Prov. Salta, El Rey Nat. Park 870 m, Arroyo Los Noques, 13-14.XII.1987, UV light in forest, S.& J.PECK (CMNO). Paratypes (17): 9 – same data as holotype; 1 – El Rey N. P., Hosteria 900 m, 3-4.XII.1987, UV light in chaco scrub forest, S.& J. PECK. **Brazil** (4): 2 – (SP) Sao Paulo, Piracicaba, 12.II.1966, light trap, C.A. TRIPLEHORN; 1 – (Go) Goias, Bela Vista de Goias, Cristianopolis, Faz. Arapuha Velha, 21.IX.1993, A. BANKOVICS; 1 – (MG) Minas Gerais, Cordisburgo, Faz. Pontinha, VII.1994, F. VAZ-DE-MELLO. **Paraguay** (3): 2 – Rio Tebicuarymi, 20.I.1991, shorewashing, S. ENDRODY-YOUNGA; 1 – Puerto P. Stroessner, 6.I.1966, leg. MAHUNKA. Paratypes are in: CMNO, HNHM, ISEA, NMNH.

D i a g n o s i s. Medium-sized species. Clypeal margin rounded, surfce finely granular, upper clypeus with longitudinal lines of united punctures. Elytra parallel-sided, intervals with fine,

elongate tubercles at inner margins and row of setae at outer margins. The species is closely related to sympatric *Ataenius canoasus* sp. n., but it may be distinguished by having the head with distinct longitudinal lines and the elytra not converging apically with intervals setigerous along outer margins. Both species are similar to *A. carinator* HAROLD and *A. scalptifrons* BATES.

D e s c r i p t i o n. Length 3.8-4.0 mm, greatest width 1.2-1.4 mm. Body (Fig. 33) elongate, parallel-sided, weakly shning, colour dark brown to piceous, legs dark brown. Head relatively small, median gibbosity feebly indicated; clypeal margin rounded on each side of narrow but deep median emargination, edge narrowly reflexed, sides straight to obtusely rounded, slightly prominent genae; clypeal surface shallowly concave just above emargination and very finely granular along anterior margin, upper clypeus to vertex with fine longitudinal lines of united punctures, vertical band of round, close punctures separated by less than one diameter. Eye large, not visible from above. Pronotum as wide as elytra, slightly depressed in median basal area and with shallow pit at middle of lateral tumosity; anterior angles rounded, slightly depressed, sides straight to broadly rounded posterior angles; lateral and basal marginal line fine, glabrous, basal margin minutely crenulate, crenations bear minute setae; pronotal punctures evenly distributed, uniform, nearly the same size as those on vertex, on disc separated by one diameter, on sides closer. Scutellum triangular, smooth. Elytra parallel-sided**,** humeral denticles small, acute; surface of elytra shagreened, striae narrow, shining, strial punctures transversely crenating inner margins of intervals, forming a row of slightly elongate tubercles; intervals sharply carinate, outer slope of each interval with row of minute setae visible under high magnification, lateral intervals not different. Ventral sclerites shining in part; mesosternum scabrous; mesocoxae separated, space between mesocoxae greater than width of mesofemur, meso-metasternal carina long, wide basally; metasternum and abdomen equally punctured, punctures fine but deep, separated by about one diameter, lateral metasternal triangle deep, scabrous inside, lateral area scabrous; abdominal sternites finely fluted along sutures, punctate from side to side, disc of pygidium weakly eroded, apical lip wide, finely punctate. Legs slender; all femora shining, finely punctate, punctures smaller and less dense than those of abdomen; meso- and metafemora narrow, postfemoral lines visible in apical one-third of femur; tibiae slender, shorter than femora, apex of metatibia without accessory spine, apical spurs very thin; hind tarsus as long as tibia, basal segment significantly longer than than upper tibial spur and shorter than following four tarsomeres combined. External sexual differences weakly indicated; in male, penultimate abdominal sternite shorter than in female, genitalia as in Fig. 46.

V a r i a t i o n. In the series of 17 paratypes examined, variation is indicated mostly in the density of punctures of the head and pronotum.

Ataenius santarosae sp. n.

(Figs 34, 47)

M a t e r i a l e x a m i n e d. Holotype male, **Peru**, Depto Ayacucho La Mar, Santa Rosa 640 m, 8-15.IX.1976, R. GORDON (NMNH). Paratypes (43): 18 - same data as holotype. **Argentina** (4): 3 – Prov. Salta, El Rey Nat. Park 870 m, Arroyo Los Noques, 13-14.XII.1987, UV light in forest, S.& J. PECK; 1 – Prov. La Rioja, Depto Rosario Penaloza, Sierra de Argana, El Rocillo, 20.X.1997, IRWIN & PARKER. **Bolivia** (21): 1 - Santa Cruz, 13 km SE Santa Cruz de la Sierra, 26.III.1998, H.& A. HOWDEN; 1 – Santa Cruz, 5 km ESE Warnes, Hotel Rio Selva, 20-21.X.2000, MORRIS & WAPPES.; 16 – Santa Cruz, 60 mi N Santa Cruz, 5.I.1960, R.B. CUMMING; 1 – Saavedra Esp. Sta. 60 mi N Santa Cruz, 5.I.1960, R.B. CUMMING; 2 – Beni, 40 km E San Borja, Est. Biol. Beni, Estancia El Porvenir, 6 - 8.IX.1987, open grass savanna and marsh, W.E. STEINER Paratypes are in: CMNO, FSCA, ISEA, NMNH.

D i a g n o s i s. Small species, setaceous above. Clypeal margin obtusely rounded, without trace of denticles. Pronotum convex, narrow, as wide as elytra, distinctly setaceous. Elytral intervals with row of thick short setae along margins. The species is similar in overall appearance to *Ataenius palmaritoensis* sp. n. from which it differs by its smaller size, the clypeal margin rounded and the pronotum narrower with distinct setae.

D e s c r i p t i o n. Length 1.8-2.1 mm, greatest width 0.5-0.6 mm. Body (Fig. 34) parallel-sided, convex; head and pronotum dark brown to black, elytra brownish, lighter than fore body, legs brown. Head gibbose at middle, clypeal margin obtusely rounded nand reflexed on each side of deep median emargination, sides straight to obtuse genae; clypeal surface minutely granulate along anterior margin, upper clypeus to vertex with longitudinal, minute lines of united punctures. Pronotum narrow, disc convex, sides finely margined, lateral and basal margin fringed with club-shaped setae separated by their lengths; surface with circular, smooth tumosity laterally and everywhere closely, roughly punctate, contiguous punctures bear short pale setae. Scutellum narrowly triangular. Elytra slender, humeral denticles inconspicuous; striae shallow, strial punctures very fine, almost invisible; intervals slightly convex on disc, subcarinate apically, lateral intervals not different, surface shagreened, feebly shining, each interval with row of relatively thick, erect setae at outer side; elytral margin with setae of the same size. Venter alutaceous; mesosternum slightly deplanate, meso-metasternal carina short, space between mesocoxae equal to width of mesofemur; metasternum convex, midline impressed, disc closely punctate, lateral metasternal triangle well developed, lateral area scabrous; abdominal sternites finely fluted along sutures and punctate from side to side, seta-bearing punctures shallow, closest on sides; disc of pygidium eroded. Legs slender; perimarginal groove of profemur deep, surface closely punctate; meso- and metafemora with setigerous puctures, posteior lines invisible; metatibia setaceous, apical spurs thin, accessory spine lacking; tarsi slender, basal tarsomere of metatarsus longer than upper tibial spur and equal in length to following three tarsal segments combined. External sexual differences difficult to recognize; male genitalia as in Fig. 47.

V a r i a t i o n. The paratypes do not differ significantly from the holotype, some of them vary in colour.

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