

**The New World species of *Ataenius* HAROLD, 1867. VII.  
Revision of the *A. complicatus*-group  
(Scarabaeidae: Aphodiinae: Eupariini)**

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Abstract. The *complicatus* group of the New World species of *Ataenius* HAROLD is revised. Sixteen species are recognized including four species described as new: *A. pearlensis* sp. n. from Panama, *A. quintanaroo* sp. n. from Mexico, *A. saulensis* sp. n. from Guiana and *A. vinacoensis* sp. n. from Argentina. The 12 previously used names are considered valid, two new synonyms are proposed: *Ataenius steinheili* HAROLD (= *A. grenadensis* CHALUMEAU, syn. n.) and *A. beattyi* CHAPIN (= *A. cameneni* CHALUMEAU & GRUNER, syn. n.). The taxa are diagnosed, keyed and illustrated, available biological information and distribution data are given.

Key words: Scarabaeidae, Aphodiinae, *Ataenius complicatus*-group, new species, taxonomy, New World.

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**INTRODUCTION**

This is the seventh part of revision of the New World species of the genus *Ataenius* HAROLD (STEBNICKA 2001, 2002, 2003, 2004, 2005 and STEBNICKA & LAGO 2005), and deals with *A. complicatus*-group of species widely distributed in the southern United States, Mesoamerica, South America and West Indies. As now understood, the group consists of sixteen species, four of which are here described as new. Of the total number of 16 species considered, one species is hitherto known only from the United States, one species occurs in USA and Mexico, one species is apparently endemic to the West Indies and thirteen species are distributed in the Central and South America.

**COLLECTIONS STUDIED**

Approximately 2090 specimens of *Ataenius complicatus*-group have been selected from the material of Aphodiinae hitherto identified, including all the type specimens available in the collec-

tions. Material for this study was obtained from the following institutions and private collections. The abbreviations listed below are used in all text citations:

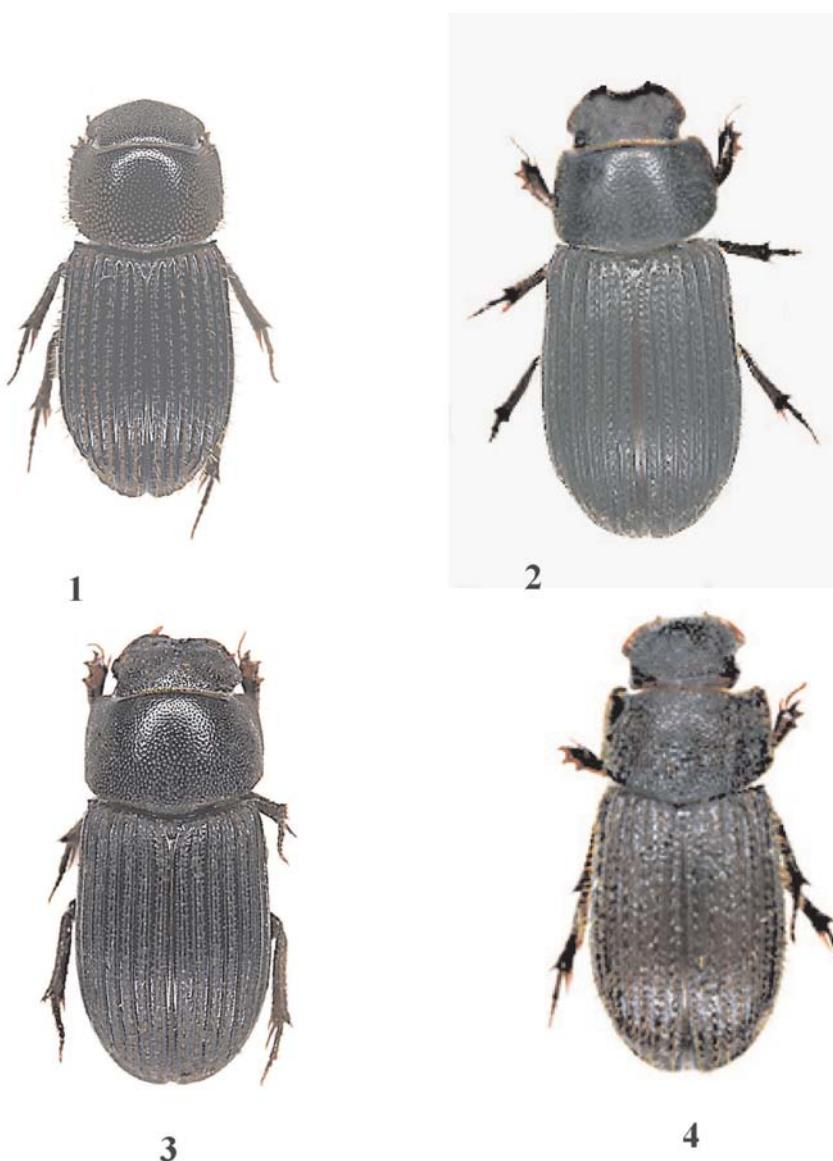
ANSP	Academy of Natural Sciences of Philadelphia, Pennsylvania, USA
CFC	Carlos FLECHTMANN Collection, Brasilia (Brazil)
CMNO	Canadian Museum of Nature, Ottawa, Canada
FCC	F. CHALUMEAU Collection, Lesser Antilles, Guadeloupe
FMLT	Fundacion Miguel Lillo, Tucumán, Argentina
FSCA	Florida State Collection of Arthropods, Gainesville, USA
FVMC	Fernando VAZ-DE-MELLO Collection, Viçosa, Brazil
GMDC	G. & M. DELLACASA Collection, Genova, Italy
HAHC	Henry & Anne HOWDEN Collection, Ottawa, Canada
HNHM	Hungarian Natural History Museum, Budapest, Hungary
ISEA	Institute of Systematics and Evolution of Animals PAS, Krakow, Poland
MACN	Museo argentino de Ciencias naturales B. Rivadavia, Buenos Aires, Argentina
MHNG	Muséum d'histoire naturelle, Geneva, Switzerland
MMU	Museum of Manchester, The University, Manchester, England
MNHN	Museum National d'histoire naturelle, Paris, France
NRS	Naturhistoriska Riksmuseet, Stockholm, Sweden
RTC	R. TURNBOW Collection, Enterprise Alabama, USA
SMNS	Staatliches Museum für Naturkunde, Stuttgart, Germany
SMTD	Staatliches Museum für Tierkunde, Dresden, Germany
TMP	Transvaal Museum, Pretoria, South Africa
UNSM	University of Nebraska State Museum, Lincoln, Nebraska, USA
USNM	United States National Museum of Natural History, Washington DC, USA
WWC	William WARNER Collection, Chandler, Arizona, USA
ZMHB	Zoologisches Museum für Naturkunde der Humboldt Universität, Berlin, Germany
ZSM	Zoologische Staatssammlung, Munich, Germany

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## TAXONOMY

### The *Ataenius complicatus*-group

Diagnostic characters. Approximate length 2.8-7.0 mm, body (Figs 1-4, 22) in most species elongate-oblong, moderately convex, setigerous or glabrous, castaneous to black, weakly shiny. Head moderate in size, clypeal margin broadly rounded on each side of median emargination or more or less sharply angulate or denticulate; clypeal surface along anterior margin usually smooth and shiny, never transversely wrinkled, middle of head variously punctured,



Figs 1-4. Habitus: 1 – *Ataenius pearlensis* sp. n.; 2 – *A. punctatohirsutus* SCHM.; 3 – *A. quintanaroo* sp. n.; 4 – *A. bispinulosus* SCHM.

vertex with scattered punctures or with regular band of closer punctures. Pronotum transverse, surface with usually uniform in size, close punctures, sides and base at middle frequently finely margined, lateral margin with minute to short setae. Scutellum triangular or suboval. Elytra parallel-sided or slightly arcuate, basal bead distinct, humeral denticles fine to moderate; elytral striae deep, punctate, in most species bordered on each side by undulate lines or sharply edged, intervals convex, carinate medially and more or less distinctly deplanate laterally, smooth, rarely eroded posteriorly, 10th interval flattened, shagreened. Ventral surface subopaque, everywhere punctate; abdominal sternites variously fluted along sutures, sometimes sternites 4-5 with coarser



Fig. 5. Distribution of *Ataenius bispinulosus* SCHM. and *A. sculptilis* HAR.

fluting, surface punctures extending from side to side. Profemur scabrous; meso- and metafemora punctate, in most species with strong, complete posterior lines; meso- and metatibiae slender, setaceous, apex usually with accessory spine, slender spurs and few setae; tarsi slender, relatively short, basal tarsomere of metatarsus longer than upper tibial spur and usually equal in length to following tarsomeres together. Epipharyngeal structures of the Eupariini type, generally similar to those in the other species-groups of *Ataenius*.

External sexual differences slight, frequently difficult to recognise. In male, penultimate abdominal sternite shorter and eroded disc of pygidium longer than in female. Male genitalia (Figs 6-13, 17-21) in some species well differentiated, in some similar in shape and details; aedeagus moderately sclerotized, parameres usually as long as phallobase or longer, usually sinuate, narrowed apically; internal sac in most species with symmetrical, serrate sclerites and fine spicules.

**A f f i n i t y.** *Ataenius complicatus* is a compact group of species being most closely allied to the *A. scutellaris*-group (revision in preparation), sharing a number of character states such as the shape and sculpture of the head, pronotum and ventral sclerites. The differences include mostly the elytral sculpture in the *complicatus*-group, the undulate striae and carinately elevated or coarsely punctured intervals and the characters of the male genitalia.

### Key to *A. complicatus*-group of species

- 1 Dorsum entirely or in part covered with conspicuous, erect setae . . . . . 2  
   — Dorsum in part covered with minute pubescence or glabrous. . . . . 7
- 2(1) Clypeal anterior margin denticulate on each side of triangular median emargination . . . . . 3  
   — Clypeal anterior margin rounded or subangulate on each side of arcuate median emargination . . . . 4
- 3(2) Pronotal disc smooth, coarse punctures separated by one their diameter; elytra about 3 times as long as pronotum, intervals subcarinate medially; eroded disc of pygidium with areolate pits. Argentina. . . . . *A. punctatohirsutus* SCHM.  
   — Pronotal disc rugosely punctate, punctures nearly contiguous; elytra about 2.5 times as long as pronotum; intervals flat, slightly swollen; eroded disc of pygidium longitudinally strigose. Argentina, Paraguay. . . . . *A. bispinulosus* SCHM.
- 4(3) Elytral striae bordered by more or less distinct, undulate lines, intervals convex to carinate at middle, deplanate on each side . . . . . 5  
   — Elytral striae not bordered by undulate lines, intervals convex to carinate at middle, frequently narrowly deplanate or eroded on each side. . . . . 14
- 5(4) Length 3.8-4.0 mm; head at middle with large ocellate punctures bearing erect setae; lateral margins of pronotum and elytra widely, deeply crenate; elytral striae narrow. Panama . . . . . *A. pearlensis* sp. n  
   — Length 5.0-7.0 mm; head at middle with moderate, close, finely setigerous punctures; lateral margins of pronotum and elytra finely crenulate; elytral striae wide . . . . . 6
- 6(5) Body subopaque; pronotal punctures on disc separated by less than one their diameter; elytra about 2.5 times as long as pronotum. Central and South America, Lesser Antilles. . . . . *A. complicatus* HAR.  
   — Body shiny; pronotal punctures on disc separated by one their diameter or more; elytra about 2.3 times as long as pronotum. Surinam, Venezuela . . . . . *A. hispidus* HAR.
- 7(1) Dorsum shiny; elytral intervals only slightly convex at middle, narrowly flattened and punctate on each side . . . . . 8  
   — Dorsum opaque; elytral intervals narrowly carinate at middle, deplanate and impunctate on each side . . . . . 10
- 8(7) Length 5.6-7.0 mm, body elongate; pronotal punctures on disc spartated by one their diameter; elytral intervals on outer side with row of close, deep punctures. USA, Mexico . . . . . *A. sculptor* HAR.  
   — Length 3.8-4.0 mm, body oblong oval; pronotal punctures variously spaced; elytral intervals finely punctate throughout . . . . . 9
- 9(8) Clypeal anterior margin sharply angulate or finely denticulate; pronotal punctures on disc separated by less than one their diameter; elytral intervals with close punctures. South America, West Indies . . . . . *A. sculptilis* HAR.  
   — Clypeal anterior margin widely rounded; pronotal punctures on disc separated by one their diameter or more; elytral intervals with scattered punctures. South America . . . *A. forsteri* BALTH.
- 10(7) Length 4.5-6.0 mm; clypeal anterior margin broadly rounded. . . . . 11  
   — Length 3.5-4.0 mm; clypeal anterior margin with sharp angulations or upturned denticles . . . . . 12
- 11(10) Pronotal punctures coarse, close, confluent halfway to sides. Argentina. . . . . *A. vinacoensis* sp. n.  
   — Pronotal punctures moderate in size, halfway to sides separated by one their diameter. Mexico . . . . . *A. quintanaroo* sp. n.
- 12(10) Clypeal surface to vertex nearly smooth with indistinct, minute punctures; pronotal punctures on disc shallow, mixed fine and moderate, separated by 2-3 times their diameters. USA . . . . . *A. insculptus* HORN  
   — Clypeal surface with fine, distinct punctures gradually increasing in depth and density toward vertex; pronotal punctures on disc equal in size, moderate, separated by one their diameter or less . . . . . 13
- 13(12) Punctures of pronotum coarse, everywhere almost contiguous. West Indies. . . . . *A. beattyi* CHAP.  
   — Punctures of pronotum moderate in size, on disc separated by about one their diameter. Colombia, Mexico, Venezuela. . . . . *A. steinheili* HAR.

- 14(4) Length 2.8-3.0 mm; body shiny, rusty brown to castaneous; elytral intervals obtusely carinate.  
Brazil, Venezuela . . . . . *A. elegans* HAR. . . . .
- Length 3.8-5.0 mm; body opaque; elytral intervals sharply carinate . . . . . 15
- 15(14) Clypeal anterior margin rounded; punctures of pronotum large, everywhere equally spaced, separated by one their diameter; elytral striae as wide as intervals with coarse punctures, intervals narrowly carinate. French Guiana . . . . . *A. saulensis* sp. n.
- Clypeal anterior margin obtusely rounded, sharply angulate or finely denticulate; punctures of pronotum moderate in size, unequally spaced, everywhere close, separated by less than one their diameter; elytral striae narrower than intervals with moderate punctures, intervals tectiform. Central and South America, Barbados . . . . . *A. crenulatus* SCHM.

***Ataenius complicatus* HAROLD**

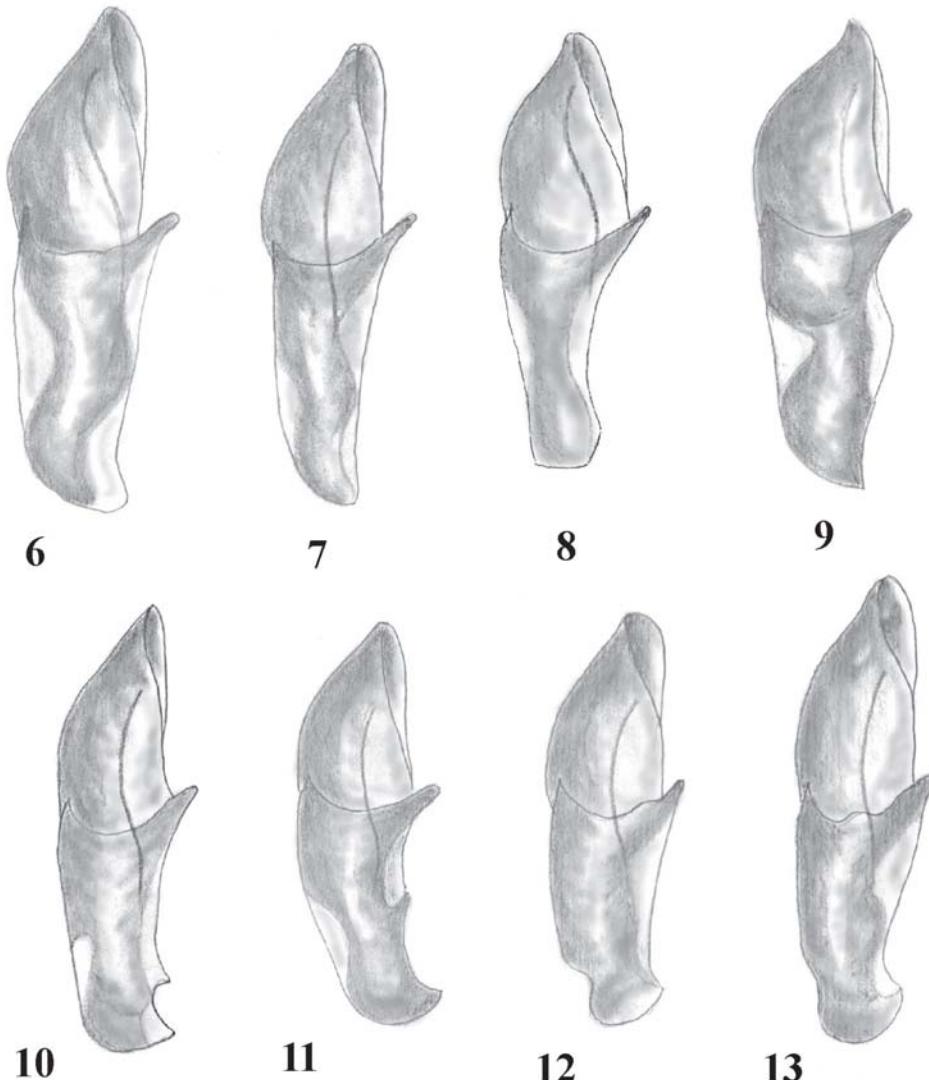
(Figs 6, 14)

*Ataenius complicatus* HAROLD, 1869: 102.- 1876: 96; SCHMIDT 1922: 425; DELLACASA 1988: 112 (catalogue); STEBNICKA 1998: 204; GALANTE & STEBNICKA & VERDÚ 2003: 293, fig. 9.

*Ataenius loretii* MARTINEZ, 1952: 194-110, figs. 38a-b, 48.- STEBNICKA 1998: 204 (as synonym of *complicatus*).

M a t e r i a l e x a m i n e d. *Ataenius complicatus*: lectotype (Brazil) designated by CARTWRIGHT (1973), in MNHN. *A. loretii*: holotype (sex undetermined), labeled “Argentina de Salta, Dep. General San Martin, Tartagal”, in MACN; paratypes (4): “Argentina Prov. Cordoba, Dep. Ponilla, Tanti”, coll. MARTINEZ, in CMNO.

Other specimens (227). **Argentina** - Prov. Salta, Cabarra Corral, 13.I.1991, S. ENDRÖDY-YOUNGA (TMP); Prov. Jujuy, Termes del Palmar, 29.I.1948, WILLINK & MONROS (FMLT); Prov. Cordoba, Dpto Ponilla, Tanti, III.1950, M.J. VIANO (CMNO); Capilla del Monte, 25.I.1982, 100 m, H.& A. HOWDEN (CMNO); Norte Lago San Roque, I. 1990, M. ARCHANGELSKY (WWC); Prov. La Rioja, Dep. Rosario, Penalosa Sierra de Argana, El Rocillo, 20.X.1997, IRVIN & PARKER (CMNO). **Belize** - 48 km SW Belize City, 4.VII.1981, W.E. STEINER (USNM). **Bolivia**: - Santa Cruz, 3.7 km SSE Buena Vista Hotel Fauna & Flora 430 m, 14-19.X.2000, M.C. THOMAS (FSCA); Villa Montes nr Rio Pilcomayo, 1-29.XI.1930, leg. EISENSTRAUT (ZMHB). **Brazil** - (Ba) Bahia, Encruzilhada, 900 m, XI.1972, M. ALVARENGA (FSCA); (MG) Minas Gerais, Aguas Vermelhas, XII.1997, F. VAZ-DE-MELLO; Paracatu, III.1998, F. Vaz-de-Mello, III.1997, S. LAURENGO; Cordisburgo, Faz. Pontinha, XII.1996, F. VAZ-DE-MELLO (FVMC); Unai, Faz. Bolivia, 22-24.X.1964, Exp. Dep. Zoologia (MHNG); Pedra Azul 700 m, XI.1972, SCABRA & OLIVEIRA (FSCA); (Pe) Pernambuco, Recife; (Am) Amazonas, Manaus (MHNG); (RJ) Rio de Janeiro (SMTD), Tijuca River, XII.1884, E. GROUVELLE (ZMHB); (SP) Sao Paulo, Mirante do Paranapanema, 22.I.1992, leg. RODRIGUEZ (CFC); (ES) Espiritu Santo, Linhares, IX.1972, ROPPA & ALVARENGA (FSCA, USNM); (RN) Rio Grande do Norte, Natal, IV.1921, E.C. GREEN (USNM). **Colombia** - N de S Santiago, 13.V.1974, H.& A. HOWDEN (CMNO). **Costa Rica** - Guanacaste, Pk Guanacaste, Est. Santa Rosa 800 m, 1.V.1995, JAMESON & RATCLIFFE (UNSM); San José, Colón, 20.V.1983, G.V. MANLEY (CMNO). **El Salvador** - La Libertad (ISEA). **Guatemala** - Zacapa, 6 km W Teculutan, La Palmilla, 4.VI.1991, H.& A. HOWDEN (CMNO); 15 mi NW Zacapa, 1000 ft, 25.VII.1974, O'BRIEN & MARSHALL (PKLC). **Honduras** - El Paraiso, 17 mi W Belize, 8-12.VIII.1972, S. & J. PECK (CMNO); Morazan, 30 km ESE Tegucigalpa, Zamorano, 22.VIII.1994, 830 m, H.& A. HOWDEN (CMNO); Augustine, 1500 m; vicinity of Yuscaran; El Loarque, 30.VII.1968, B.K. DOZIER (FSCA); Cerro Uyuca, 5 km W Zamorano 1100 m, 17.V.2000, SMITH & OCAMPO (UNSM). **Mexico** - Chiapas, Mirador Manos do Imploran nr Chicoasen, 10.VI.1989, B. RATCLIFFE (UNSM); Chiapas, 26 km NW Comitan Hwy; Cinco Cerros 860 m, 5-9.VI.1990, H.& A. HOWDEN, Chiapas, Laguna Belgica, 13.VI.1990, H.& A. HOWDEN; 2.5 km W Cinco Cerros, Cinco Cerros km 30 on Hwy 190, 1500 m, 8.VI.1989, H.& A. HOWDEN, El Aguacero, 16 km W Ocozocoautla 650 m, 10.VI.1990, H.& A. HOWDEN; Chiapas, 2 km S Chicoasen, Rd to Mirador, 18.VI.1989, H.& A. HOWDEN (CMNO); 2 km W Chicoasen, 30.V.1987, RATCLIFFE & JAMESON (UNSM); Veracruz, Los Lirios, Rancho El



Figs 6-13. Male genitalia in lateral view: 6 – *Ataenius complicatus* HAR.; 7 – *A. pearlensis* sp. n.; 8 – *A. bispinosus* SCHM.; 9 – *A. punctatohirsutus* SCHM.; 10 – *A. sculptor* HAR.; 11 – *A. quintanaroo* sp. n.; 12 – *A. sculptilis* HAR.; 13 – *A. forsteri* BALTH.

Tajo, 12.X.1998, MARTINEZ & CRUZ (ISEA); Jalisco, 28.4 km S Chamela, 9-14.VII.1994, R. MORRIS (FSCA); Guerrero, 51 km NW Ixtapa, 18.VII.1985, R. TURNBOW (FSCA). **Nicaragua** – Prov. Rivas, between La Virgen and Sapoa, Rio Canas Gordas, 9.VI.1964, BLANTON & BROCE & WOODRUFF (USNM). **Panama** – Chiriquí, Chiriquicito, 16.V.1986, R. TURNBOW; Coclé Altos de Campana, 13.V.1996, R. TURNBOW (RTC); Colón Prov., Santa Rita Ridge, 18-21.V.1975, B.C. RATCLIFFE (UNSM); Canal Zone, Las Cumbres, 24.IV.1974, H. WOLDA (FSCA); Prov. Cerro Campana, 2800 ft, 13-14.V.1996, WAPPES & MORRIS (FSCA). **Paraguay** – Villarica, Dpto San Pedro, 25.II.1993, F. BRETZENDORFER (SMNS); Villarica, 25 km E Independentia, 21.I.1991, S. ENDRÖDI-YOUNGA (TMP). **Peru** – San Martin, 8 km ENE Tarapoto 550 m. 9.I.1974, T. SCHULZ

(SMNS). **Venezuela** – Guarico, 12 km W Valle de la Pascua, 21-22.VI.1996, H. & A. HOWDEN; Miranda 620 m, Guatopo NP nr Altadegrado, 3-11.VI.1987, S. & J. PECK (CMNO). **West Indies** – Neth. Antilles: Curaçao, Hato, 25-30.XII.1967, B. MALKIN (CMNO).

Distribution. Central and South America, Lesser Antilles (Fig. 14).

**Diagnostic characters.** Length 5.0-7.0 mm. Body elongate-oblong, moderately shiny, in part setaceous, color piceous black. Clypeal margin obtusely rounded or slightly subangulate on each side of moderate median emargination; anterior of clypeus strongly shiny and shallowly irregularly punctate, middle of head to vertex with close, minutely setigerous, moderate punctures separated by less than their diameters, in some specimens almost contiguous, in some less dense. Pronotum transverse, finely margined basally, sides and posterior angles very finely crenulate, fringed with moderately long, slender setae; surface everywhere very closely punctured and shortly setaceous, moderate punctures on disc separated by less than their diameters, punctures on sides slightly larger, very dense, contiguous or confluent. Elytra widest behind the middle, humeral denticles fine, acute; striae strongly impressed, on each side bordered by undulate lines, punctures within striae shallow; intervals obtusely narrowly carinate medially, deplanate and usually eroded laterally, each with yellowish upright setae along striae, 10<sup>th</sup> interval flattened, opaque. Ventral surface strongly microreticulate and evenly punctate; abdominal sternites finely fluted along sutures, closely punctate from side to side and shortly setaceous, punctures at middle same size as those on metasternal disc. punctures on sides irregular, longitudinally wrinkled. disc of



Fig. 14. Distribution of *Ataenius hispidus* HAR. and *A. complicatus* HAR.

pygidium deeply eroded and roughly sculptured. Profemur scabrous; meso and metafemora narrow, parallel-sided, punctate-setose with complete posterior lines; metatibia slender, setaceous, apex with 6-8 short setae and moderate accessory spine; basitarsomere of metatarsus longer than upper tibial spur and subequal in length to following tarsomeres combined. Male genitalia as in Fig. 6.

**R e m a r k s.** *A. complicatus* is one of the most widely distributed species, extending from Mexico to Argentina. It closely resembles *A. hispidus* Har. in the presence of similar characters such as wide, undulate striae and erect, sparse setae on the elytra. In the original description of *A. complicatus*, HAROLD (1869) commented: "Ab A. hispido, cui simillimus, differt corpore minus nitido et thorace multo densius punctato". Specimens examined were collected mostly in cattle dung on pastures and in dry tropical forest.

#### *Ataenius hispidus* HAROLD

*Ataenius hispidus* HAROLD, 1867: 83.- SCHMIDT 1922: 424-425; DELLACASA 1988: 139 (catalogue).

**M a t e r i a l e x a m i n e d.** Holotype, labeled "Typus", "Dr Moritz 1858, Venezuela [Caracas]" "A. hispidus HAR." coll. PETROVITZ, in MHNG.

Other specimens (27). **Surinam** - coll. C. FELSCHE Kauf 20, 1918 (SMTD). **Venezuela** - Mérida; Caracas, coll. C. FELSCHE Kauf 20, 1918 (SMTD); La Guayra, coll. O. THIEME (ZMHB); Arauca, Maracay, El Limon, 22.VI.1996, H. & A. HOWDEN; Bolivar, Guri, 8, 11.VII.1998, H. & A. HOWDEN (CMNO, ISEA).

**D i s t r i b u t i o n** in Fig. 14.

**D i a g n o s t i c c h a r a c t e r s.** Length 5.0-6.0 mm. Body shining black, partially setaceous. Clypeal margin slightly subangulate on each side of median emargination; punctures on head and pronotum separated by about one their diameter. Elytra arcuate, discal intervals slightly flattened medially, shiny and punctate laterally. The remained external characters and those of the male genitalia as in *A. complicatus* (Fig. 6).

**R e m a r k s.** *A. hispidus* is similar in general appearance to *A. complicatus*, but it may be distinguished by having the body shorter and more shiny, the pronotal punctures less close and discal intervals of the elytra flatter. This little known species is rarely found in the collections and has certainly a narrow range of distribution. Specimens examined were collected to light in wet forest.

#### *Ataenius pearlensis* sp. n.

(Figs 1, 7, 16)

**H o l o t y p e** m a l e, Panama, Pearl Is. San José, 5.V.1944, MORRISON JPE, collected at lights, in USNM. Paratypes: 3 - same data as holotype; 1 - Panama, Ft Gulick, 1-5.V.1981, H. HARLAN. Paratypes are in: ISEA, USNM.

**D e s c r i p t i o n.** Length 3.8-4.0 mm. Body (Fig. 1) oblong-oval, carbon black, setaceous, shiny. Head moderately gibbose medially, clypeal margin broadly rounded on each side of very shallow median emargination, genae obtusely rounded; surface narrowly smooth and strongly shiny along anterior margin, middle of head from gena to gena with large, close, ocellate punctures bearing short erect setae and blending into vertical band of fine, very close punctures. Pronotum transverse, base finely margined medially, sides widely, deeply crenate with short scarce setae; surface everywhere punctate, punctures on disc moderate, separated by about one their diameter, toward sides become larger, rugose and setigerous. Scutellum small, narrowly pentagonal. Elytra slightly arcuate with margin in posterior half widely, deeply crenate, humeral denticles distinct, acutely pointed; striae deep with irregularly undulate margins, strial punctures deep; intervals narrowly carinate medially, crenate-punctate laterally with scarce, upright, pale setae, 10<sup>th</sup> interval slightly flattened, shiny. Ventral sclerites microreticulate; mesosternum roughly sculptured, piliferous; mesocoxae separated, space between mesocoxae equal to width of mesofemur, meso-metasternal carina short; metasternum convex, midline impressed, disc finely, closely punctate, lat-

eral metasternal triangle deep, scabrous inside; abdominal sternites finely fluted along sutures, and finely punctate from side to side, disc of pygidium eroded, penultimate sternite and pygidium with few erect setae. Profemur scabrously punctate; meso- and metafemora narrow, posterior lines complete, surface finely punctate; tibiae slender, setaceous, apex of metatibia with few minute setae, without accessory spine; basal tarsomere of metatarsus longer than upper tibial spur and shorter than following tarsomeres combined.

Male. Pronotum narrower and more convex medially than in female; genitalia as in Fig. 7.

Female. Pronotal punctures on disc finer than in male.

**A f f i n i t y.** *Ataenius pearlensis* is very characteristic in having the pronotal side and the elytral margin with widely spaced, deep crenations. It seems to be most closely related to *A. complacatus* and *A. hispidus* but it may be easily distinguished from both these species by its smaller size, the peculiar pronotal and elytral crenations and by the sculpture of the head and elytra.

### *Ataenius bispinulosus* SCHMIDT

(Figs 4, 5, 8)

*Ataenius bispinulosus* SCHMIDT, 1911: 52.- 1922: 447-448; DELLACASA 1988: 272 (catalogue).

**M a t e r i a l** e x a m i n e d. Holotype (sex undetermined), labeled "Nord-Argentinien", "Typus", *Ataenius bispinulosus*", in NRS.

Other specimens (78). **Argentina** - Prov. Santiago del Estero, Mascasin, XI.1956, F.H. WALZ; Stgo del Estero, El Charco, V.1959, F.H. WALZ (ISEA, USNM); Prov. Formosa, Camino Clorinda a Lago Blanca, XII.1956, coll. MARTINEZ (CMNO); Prov. Salta, Gonzales, I.1959, coll. DAGUERRE (ISEA). **Paraguay** - Dpto Boqueron, Oran Chaco, XI.1956, coll. MARTINEZ (CMNO).

D i s t r i b u t i o n. Southern South America (Fig. 5).

**D i a g n o s t i c c h a r a c t e r s.** Length 4.5-5.0 mm. Body (Fig. 4) onlong oval, carbon black, shiny, covered with yellowish upright setae. Clypeal margin finely denticulate on each side of rather deep median emargination, sides arcuate toward obtuse genae; anterior of clypeus narrowly strongly shiny and closely, shallowly punctate, middle of head from side to side with large, shallow, areolate punctures bearing erect setae, vertical punctures smaller, transversely crowded. Pronotum almost parallel-sided, finely margined at middle of base, sides and posterior angles distinctly crenulate, fringed with unequal in length, slender setae; surface everywhere with dense, frequently contiguous and setigerous punctures gradually increasing in size toward sides and here twice larger than those on disc. Elytra widest in apical two-thirds, humeral denticles moderate, acutely pointed; striae shallow, strongly shiny, strial punctures widely spaced, fine, slightly crenate outer margins of intervals; intervals slightly elevated medially, distinctly microreticulate and less shiny than striae with irregular shallow punctures along striae and yellowish erect setae. Ventral surface shagreened; mesocoxae separated, space between mesocoxae equal to width of mesofemur, meso-metasternal carina long; metasternum coarsely closely punctate like as abdominal sternite 5, abdominal sternites 2-5 finely fluted along sutures, punctate from side to side with short, scarce setae; disc of pygidium eroded and roughly sculptured. Profemur scabrous, perimarginal groove deep; meso- and metafemora rather narrow, punctate with complete posterior lines; metatibia slender, setaceous, apex with fringe of 5-6 short setae and sharp accessory spine; basitarsomere of metatarsus subequal in length to upper tibial spur and to following four tarsomeres combined. Male genitalia as in Fig. 8.

**R e m a r k s.** *Ataenius bispinulosus* was hitherto known only from its original description by SCHMIDT (1911). This unusual species is most close to *A. punctatohirsutus* but differs from that species by having the pronotum wider with closer punctures, the elytral intervals flatter and dorsal surface of body with significantly longer and closer setae. Nothing is known on its bionomy, but it is most likely similar to that of *A. punctatohirsutus* (see Remarks under that species).

*Ataenius punctatohirsutus* SCHMIDT

(Figs 2, 9, 15)

*Ataenius punctatohirsutus* SCHMIDT, 1909: 36.- 1922: 446; MARTINEZ 1952: 110, fig. 52; DELLACASA 1988: 279 (catalogue).

M a t e r i a l e x a m i n e d. Holotype (sex undetermined), labeled “Argentinien”, “Typus”, “*Ataenius punctatohirsutus* m.”, in NRS.

Other specimens (**26**). **Argentina** - Prov. Cordoba, Dpto de Calamuchila, El Sauce, XII.1964, A. MARTINEZ (MHNG); Prov. Tucuman, Dep. Burruyacu, Chilcas, 5.VI.1972, R. GOLBACH (FMLT); Tucuman, Pto Péron, Capitan Solari, 12.V.1954, “en nido de ave” coll. MARTINEZ (FMLT); Tucuman, Dpto Capital, Puente del Rio Sali, XI.1950, coll. MARTINEZ (CMNO); Prov. Salta, Rio Pescado, VI.1944, D. VELLARD (FMLT); Salta, Dpto. Guemes, X. 1952, coll. MARTINEZ (CMNO).

D i s t r i b u t i o n. Argentina (Fig. 15).

D i a g n o s t i c c h a r a c t e r s. Length 5.0-6.5 mm. Body (Fig. 2) elongate-oblong, moderately shiny, partially setaceous, dark castaneous to piceous, legs reddish. Clypeal margin finely denticulate on each side of deep, triangular median emargination, sides arcuate to obtuse genae; anterior of clypeus from gena to gena closely granulate-punctate, middle of head with coarse, areolate punctures bearing short, erect setae, vertical punctures finer but deep and crowded. Pronotum strongly transverse, relatively short, finely margined at middle of base, sides and posterior angles finely crenulate, fringed with moderate, slender setae; surface everywhere coarsely punctate and shortly setaceous, punctures on disc separated by one their diameter or less, increase in size and density toward sides where are twice larger than those on disc, contiguous. Elytra about 3 times as long as pronotum, widest behind the middle, humeral denticles fine, acute; striae strongly shiny, deep, strial punctures fine, widely spaced, shallowly crenate margins of intervals; intervals subcarinate medially and distinctly deplanate laterally, each with irregular row of very shallow punctures and upright, pale setae along striae, 10<sup>th</sup> interval flattened, opaque. Ventral sclerites microreticulate; mesocoxae separate, space between mesocoxae equal to width of mesofemur, mesometasternal carina long; metasternal disc coarsely punctate like as abdominal sternite 5, abdominal sternites 2-5 finely fluted along sutures, sternites 2-4 with row of shallow, longitudinal punctures and short pale setae along sutures; disc of pygidium roughly sculptured. Profemur scabrous, perimarginal groove moderately deep; meso- and metafemora rather narrow, punctate-setose with complete posterior lines; metatibia slender, setaceous, apex with 6-7 short setae and fine accessory spine; basitarsomere of metatarsus longer than upper tibial spur and subequal in length to following tarsomeres combined. Male genitalia as in Fig. 9.

R e m a r k s. *A. punctatohirsutus* is most closely related to *A. bispinosus* (see Remarks under that species). According to MARTINEZ (1952) the species was found in abandoned nests of birds occupied by the field mice, and also collected with *Triatoma platensis* NEIVA (Hemiptera, Reduviidae, Triatominae). The eight freshly emerged specimens obtained from FMLT were pinned together with the larval cocoons. These cells were oval in shape, 1-1.5 cm long, appearing to be an agglomerate of fine particles of excrements mixed with argillaceous substance.

*Ataenius sculptor* HAROLD

(Figs 10, 16)

*Ataenius sculptor* HAROLD, 1868: 85.- SCHMIDT 1922: 426; CARTWRIGHT 1974: 70-72; DELLACASA 1988: 280 (catalogue); GALANTE & STEBNICKA & VERDU 2003: 292.

*Ataenius oblongus* HORN, 1871: 286; 1887: 81.- SCHMIDT 1922: 426; CARTWRIGHT 1974: 70 (as synonym of *sculptor*).

M a t e r i a l e x a m i n e d. Lectotype (Colombia) designated by CARTWRIGHT (1973) in MNHN.



Fig. 15. Distribution of *Ataenius forsteri* BALTH., *A. punctatohirsutus* SCHM. and *A. vinacoensis* sp. n.

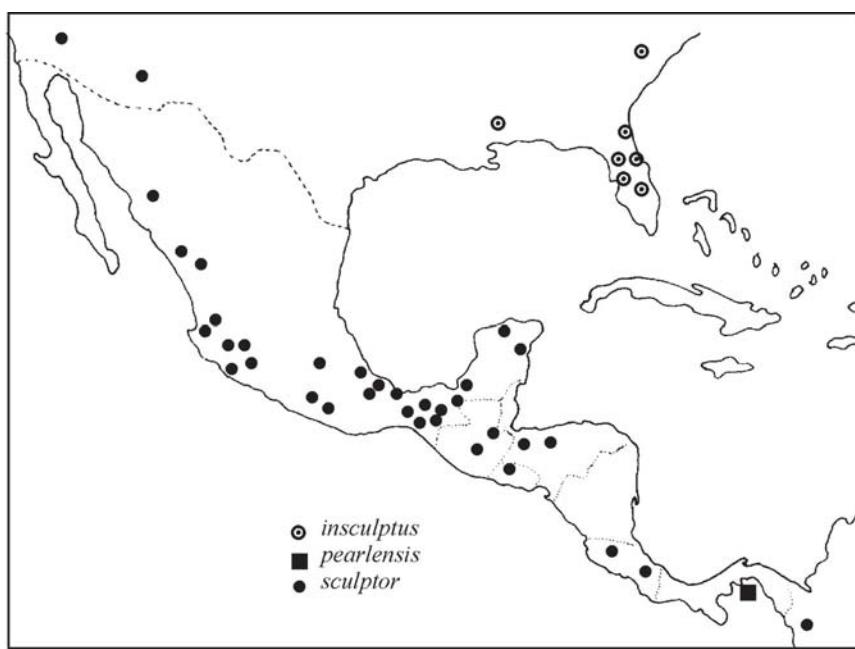


Fig. 16. Distribution of *Ataenius insculptus* HORN, *A. pearlensis* sp. n. and *A. sculptor* HAR.

Other specimens (242). **Costa Rica** – 1 km N of Puntarenas, 12.VIII.1938, V. TATTENBACH (ZMHB); Guanacaste, Cañas, 11.VII.1974, C.W. O'BRIEN (USNM). **El Salvador** - La Libertad (USNM). **Guatemala** – Zacapa, 6 km W Teculutan, La Palmilla, 5.VI.1991; Zacapa, 12 km S San Lorenzo 510 m, 16.VI.1992, H.& A. HOWDEN (CMNO). **Honduras** – Paraíso, 35 km N Danli 700 m, 26.V.1994, H.& A. HOWDEN (CMNO); Morazan, Zamorano, 16.X.1999, RATCLIFFE & OCAMPO (UNSM) **Mexico** – Mexico, coll. C.FELSCHE Kauf 20, 1918 (SMTD); Veracruz, 24-25.X.1961, leg. PEREIRA & HALFTER (MZUSP); Veracruz, Los Tuxtlas, X.1997, F. VAZ-DE-MELLO (FVMC); Veracruz, Los Lirios, Rancho El Tajo, 12.X.1998, MARTINEZ & CRUZ (ISEA); Veracruz, La Mancha, 24.VII.1999, E. GALANTE (CEUA); Sinaloa, Mazatlan, 1-2.VII.1964, P.J. SPANGLER (USNM); Sinaloa, 25-30 km NE Concordia, 30.IX.1990, R. TURNBOW (FSCA); Nayarit, El Cora, A. LÜDECKE; Ixtapa, coll. O. THIEME (ZMHB); Guerrero, 51 km NW Ixtapa, 18.VII.1985, R. TURNBOW (FSCA); Guerrero, Chilpancingo (ZMHB); Jalisco, El Tuito, 14.VII.1993, Jalisco, 6 km N Tuito, 15.VII.1993, MORRIS & WAPPES, near Chamela 9-14.VII.1994, R. MORRIS (FSCA); Jalisco, via Potrero los Mescales nr Teuchilan, 20.41N, 103.52W, 31.VII.2003, M. DELLACASA & I. MARTINEZ (GMDC); Sonora, El Tangue, 30 km N Alamos (USNM); Quintana Roo, 19 km NW Catrillo Puerto, 30.VI.1990, R. TURNBOW (FSCA); Chiapas, Puente Macuilapa nr Los Amatos, 2.VI.1987, leg. MUELLER (PSC); Chiapas, Chicoasen, 19..IX.1985, RATCLIFFE & MESSENGER, Aguacero 7 km N Ocozocoautla, 9-11.XI.1985, RATCLIFFE & MESSENGER (UNSM); Chiapas, Palenque, 28.VII.1983, S.& J. PECK, 6.VI.1991, H.& A. HOWDEN (CMNO); Chiapas, Chancala, Estrella 25 m, 29.VI.2002, M. DELLACASA & I. MARTINEZ (GMDC); Chiapas, Tapachula, 10.IV.2002, (adults and larvae), J. R. VERDÚ (CEUA); Yucatan, 2 km E Chichenitza, 15.VI.1990, R. TURNBOW (FSCA, ISEA); Morelos, Xochitepac, 15.X.1986, I. MARTINEZ (ISEA).

Distribution. USA (Arizona, California: see CARTWRIGHT 1974, fig. 20), Central America (Fig. 16).

**Diagnostic characters.** Length 5.6-7.0 mm. Body elongate oblong, black, shiny, glabrous. Head gibbose medially, clypeal margin broadly rounded on each side of wide, moderately deep median emargination, genae right-angled; surface smooth along anterior margin and closely punctate up to the vertical area. Pronotum transverse, sides and base margined, minutely crenate-fimbriate, surface coarsely closely punctate everywhere, punctures along anterior margin same size as those of head. Elytra elongate, humeri strongly, sharply dentate; striae deeply impressed, strial punctures crenate margins of intervals; discal intervals slightly convex, with row of noticeable, minutely setigerous punctures along each margin, punctures become closer toward lateral, subcarinate intervals and here very close, frequently rugose, 10<sup>th</sup> interval flat, alutaceous with median row of small, shiny, close granules; all intervals apically carinately convex and narrowly eroded on each side. Metasternum long, midline shallow, disc closely, moderately punctate, punctures extending outward to scabrous area on sides; abdominal sternites fluted along sutures, fluting increasingly longer from sternite 2 to sternite 5; surface densely punctate from side to side, disc of pygidium deeply eroded, rough. Profemur densely, scabrously punctate; meso- and metafemora with close, moderate punctures and strong, complete postfemoral lines; meso- and metatibiae with longitudinal, setigerous lines, apex of metatibia with 8-9 heavy setae and strong accessory spine; basitarsomere of metatarsus longer than upper tibial spur and equal in length to following tarsomeres combined. Male genitalia as in Fig. 10.

**Remarks.** *A. sculptor* is easily recognised by its large size and rather coarsely sculptured elytra. It is most closely related to *A. quintanaroo* sp. n. (see Affinity under that species). The specimens examined were collected from May to October to light traps, occasionally found in excrements. Phenology and reproductive features of *Ataenius sculptor* were discussed by MARTINEZ & CRUZ (2002) as well as nesting and preimaginal development by CRUZ & MARTINEZ (2002).

*Ataenius quintanaroo* sp. n.

(Figs 3, 11, 23)

H o l o t y p e m a l e, Mexico, Quintana Roo, 17 km NW Carrillo Puerto, 30.VI.1990, R. TURNBOW, in FSCA. Paratypes (21): 2 – same data as holotype; 6 – Quintana Roo, 18 km N Carrillo Puerto, 31.V.1984 and 1.VI.1984, R. TURNBOW; 2 - Quintana Roo, 20 km N Felipe Carrillo Puerto, 12-14.VI.1983, E. RILEY & E. GIESBERT; 1 - Quintana Roo, Kohunlich 68 km W Chetumal, 15-17.VII.1983, seasonal tropical forest litter, carrion traps, S. & J. PECK; 7 – Yucatan, 1 km S Xcalacoop, 11.VI.1983, E. RILEY; 2 - Yucatan, Chichenitza, 25.V.1984, R. TURNBOW; 1 – Chiapas, 8.5 km S Palenque, 17.X.1984, R. TURNBOW. Paratypes are in CMNO, FSCA, ISEA, UNSM.

D e s c r i p t i o n . Length 5.0-6.0 mm. Body (Fig. 3) elongate oval, convex, moderately shiny, black, glabrous. Head moderate in size, gibbose medially; clypeal margin broadly rounded on each side of moderate median emargination, sides slightly arcuate to obtusely rounded genae; surface of head finely shallowly punctate in anterior half, punctures posterior of median convexity increasingly larger, on vertex separated by one their diameter, more concentrated and slightly rugose near genae. Pronotum convex, sides and base finely margined and minutely crenate without fringe of setae; posterior angles right-angled, base sinuate, surface with nearly equal in size, moderate punctures throughout, those on disc separated by one their diameter, closer laterally and confluent at anterior and posterior angles. Scutellum narrow, semi-oval. Elytra about 2.5 times as long as pronotum, sides slightly arcuate, humeral denticles noticeable, sharp; elytral striae deep, strial punctures widely spaced, distinctly crenate inner margins of intervals; intervals obtusely carinate medially and deplanate laterally, each with row of noticeable, close punctures on each side, carinae of discal intervals 1-4 flatter than those of the remained intervals, 10<sup>th</sup> interval flat, mat. Ventral surface opaque, everywhere punctured, glabrous; mesosternum microgranulate, meso-metasternal carina distinct, space between mesocoxae equal to width of mesofemur; metasternal midline deep, discal punctures moderate, separated by one their diameter, lateral area and shallow metasternal triangle scabous; abdominal sternite 3 moderately fluted along suture, fluting of sternites 4-5 long and coarse; surface punctures nearly same size and density as those on metasternum, extending from sides to side; disc of pygidium eroded. Profemoral surface scabrous; meso- and metafemora finely punctate throughout, posterior lines strong, complete; tibiae slender, setaceous, apex of metatibia with fringe of 8-9 setae and distinct accessory spine; basal tarsomere of metatarsus longer than upper tibial spur and longer than following four tarsomeres combined. Male genitalia as in Fig. 11.

A f f i n i t y . *Ataenius quintanaroo* is morphologically close to *A. sculptor* from one hand, and to *A. forsteri* from the other. It differs from sympatric *A. sculptor* by having the body less elongate and smaller, and the elytra with scarcer and less coarse punctures lacking setae. It may be easily distinguished from allopatric *A. forsteri* by its larger and more robust body. The range of *A. quintanaroo* is most likely limited to the southern area of Mexico (Fig. 23).

*Ataenius sculptilis* HAROLD

(Figs 5, 12)

*Ataenius sculptilis* HAROLD, 1868: 86; 1874: 16.- SCHMIDT 1922: 455; DELLACASA 1988: 280 (catalogue).

Type data. Described from Venezuela; type specimen probably lost.

M a t e r i a l e x a m i n e d . Two specimens identified by A. SCHMIDT as ‘*sculptilis*’ Har. (NRS, ZMHB) and 605 other specimens. **Argentina** - Prov. Corrientes, Ituzaingo, 20.XII.1990, S. & J. PECK (CMNO); Prov. Salta, Dep. Santa Cruz, 700 m, Prov. Missiones, Jardin America, Salto Tabay, 22.XII.1990, S. & J. PECK (CMNO); **Bolivia** - Guayaramirim (Beni), Fundo Nuevo Cuba, III.1985, leg. BALOGH & MAHUNKA & ZICSI (HNHM); Beni, 40 km E San Borja, Est. El Porvenir, 6-8.IX.1987, W.E. STEINER (USNM); Beni, Est. Esperanza, 29-30.II.1966., BALOGH & MAHUNKA & ZICSI (HNHM, ISEA); Prov. Sara, Santa Cruz de la Sierra 500 m, 1.IV.1989, J. STEINBACH (ZMHB); Prov. Santa Cruz, 3.7 km SSE Buena Vista Hotel Flora & Fauna 430 m,

14-19.X.2000, M.C. THOMAS (FSCA). **Brazil** – (Ba) Bahia, Encruzilhada 900 m, XI.1972, M. ALVARENGA (FSCA); (MT) Mato Grosso, Corumba (numerous specimens), coll. W.M. MUCHE (SMTD); Chapada dos Guimaraes, XI.1963, M. ALVARENGA (USNM); (Am) Amazonas, Rio Negro, Tapurucuara; (Ro) Roraima, Rio Madeira, Porto Velho (ISEA, HNHM, MHNG, ZMHB); (ES) Espírito Santo, Linhares, X. 1971, F. PLAUMANN (USNM), IX.1972, ROPPA & ALVARENGA (FSCA); (PI) Piauí, Teresina, I.1953, leg. OLIVERA (CFC); (SP) São Paulo, X.1956, coll. MARTINEZ (CMNO); Piracicaba, 2.III.1966, coll. MARTINEZ (CMNO); Fátima Paulista, 3.XII.1992, C. FLECHTMANN (CFC); (AC) Acre, Feijo; (MG) Minas Gerais, Paracatu, III.1998, F. VAZ-DE-MELLO (FVMC); (Ro) Rondonia, 62 km S Ariquemes, Faz. Rancho Grande, 11-22.XI.1993, B.C. RATCLIFFE, 5-17.X.1993, J.E. EGER, 25.IX.1992, 1.X.1994, U. SCHMITZ (ISEA, PSC, UNSM, WWC); (SC) Santa Catarina, Guaramirim, 23.XII.1991, leg. SCHROEDER, 27.XII.1991, Jaragua do Sul, Rio Cerro, 25.XII.1991, C. FLECHTMANN (CFC); **Paraguay** - Villarica, 25 km E Independencia, 21.I.1991, S. ENDRÖDI-YOUNGA (TMP); Asuncion; San Pedro, Vaca Ihu 160 m, 20.IV.1986, K.F. HOHENSTEIN (SMNS); Paraguari, Nat. Park Ibicuy, 12.I.1983, E. RILEY (FSCA); 3 km N Carapegua; Dpto Boqueron, Puerto Cassado, XI.1950, coll. MARTINEZ (CMNO). **Peru** – Ayacucho La Mar, Santa Rosa 640 m, 8-15.IX.1976, R. GORDON (USNM). **Venezuela** – Tachira, 50 km NE San Cristobal 300 m, 19.V.1974, H. & A. HOWDEN (CMNO); **West Indies** - Puerto Rico: Guanica Forest, Tortuguera, VIII.1962, J. MALDONADO (USNM); Trinidad: Morne Bleu 700 m, Tunapuna, 11-13.VIII.1969, H. & A. HOWDEN (CMNO); Virgin Islands: St Thomas (SMTD).

Distribution. South America, West Indies (Fig. 5).

**Diagnostic characters.** Length 3.8-4.0 mm. Body elongate oblong, piceous, glabrous, moderately shiny. Clypeal margin finely denticulate or sharply angulate on each side of moderate median emargination, sides straight toward obtuse genae; surface uniformly finely punctate, punctures usually separated by less than their diameters. Pronotum transverse, sides and base finely margined, posterior angles fringed with short pale setae; surface punctures rather fine, evenly distributed, on disc separated by about one their diameter or less, on sides closer. Elytra almost parallel-sided, humeral denticles small, sharply pointed, apical margin of elytra with fringe of short setae; striae deep, slightly undulate, striae punctures fine; intervals slightly convex medially and deplanate laterally, each with minute to fine, frequently close punctures, 10<sup>th</sup> interval flat, opaque. Ventral sclerites everywhere uniformly finely punctate; metasternal midline impressed, discal punctures evenly distributed; abdominal sternites finely fluted along sutures, punctate from side to side, punctures same size and density as those of metasternum; disc of pygidium eroded. Profemur closely scabrously punctured; meso- and metafemora narrow, punctate, posterior lines complete; metatibia slender, apex with 6-7 short setae and small accessory spine; basal tarsomere of metatarsus slightly longer than upper tibial spur and as long as following tarsomeres together. Male genitalia as in Fig. 12.

**Remarks.** *Ataenius sculptilis* is very similar externally to sympatric *A. forsteri*; it differs from that species by having the clypeal margin distinctly denticulate or sharply angulate, the pronotal punctures and those on ventral sclerites slightly finer and closer. The general sculpture of elytra of both species is similar to that of *A. quintanaroo* sp. n. (Fig. 3). The species is also very close to *A. steinheili*, to *A. beattyi* and to *A. insculptus* as well, but may be distinguished from these species by the characters given in the key. The numerous specimens examined were collected in the tropical transition forest, on wet grassland and in bovine dung on pasture area.

#### *Ataenius forsteri* BALTHASAR

(Figs 13, 15)

*Ataenius forsteri* BALTHASAR, 1960: 4-5.- DELLACASA 1988: 275 (catalogue).

**Material examined.** Holotype (sex undetermined), labeled ‘Bolivien, Rio Yacuma, Espiritu, 250 m, 25.IV.1954, W. FORSTER’, “*Ataenius forsteri* Dr.V. BALTHASAR”, in ZSM.

Other specimens (230). **Argentina** - Prov. Misiones, Iguaçu, XII.1994, L. PENA (PSC). **Bolivia** - Guayaramirim (Beni), 23.XI.1966, BALOGH & MAHUNKA & ZSICI (HNHM, ISEA). **Brazil** - (SP) Sao Paulo, Piracicaba, 30.XII.1966, leg. TRIPLEHORN (USNM, WWC); Tiete (USNM); (RN) Rio Grande do Norte, Sao Roque, Itatuba 950 m, 28.III-26.V.1993, J. SAR (HNHM); Mata Atlantica, Sao Roque, 27.III-27.V.1993, J. SAR (ISEA); (SC) Santa Catarina, Nova Teutonia, IX.1972, IV.1971, XII.1971, I. 1973, F. PLAUMANN (CMNO, USNM); (Go) Goias, Bella Vista de Goias, Cristianopolis, Faz. Arapuca Velha, 21.IX.1993, A. BANKOVICS (ISEA); (MS) Mato Grosso do Sul, Campo Grande, 1990-92, F. VAZ-DE-MELLO (FVMC), 11.XII.1995, 15.VI.1996, leg. KOLLER (CFC); Selviria, UNESP Farm 6.V.1999, C. FLECHTMANN (CFC); Três Lagoas, 1.II.1994, C. FLECHTMANN (CFC); (MG) Minas Gerais, Paracatu, XI.1997, F. VAZ-DE-MELLO, III.1997, S. LOURENGO (FVMC); Santa Barbara, I.1995, F. VAZ-DE-MELLO (ISEA); Lambaré, XI.1971, F. PLAUMANN (USNM); Ipatinga, IX.1993, E. GROSSI; Cordisburgo, Faz. Pontinha, VII.1994, F. VAZ-DE-MELLO (FVMC); (MT) Mato Grosso, Mun. Diamantino, Serra do Tombador 450 m, 11.I.2001, GÉNIER & VAZ-DE-MELLO (CMNO). **Paraguay** - Villarica, 25 km E Independencia, 21.I.1991, S. ENDRÖDI-YOUNGA (TMP); Dpto San Pedro, 25.II.1993, F. BRETZENDORFER; San Pedro, Colonia Friesland, 5.III.1993, F. BRETZENDORFER (SMNS). **Venezuela** – Bolívar, Guri, 10.VII.1998, H. & A. HOWDEN (CMNO);

Distribution. South America (Fig. 15).

Diagnostic characters. Length 3.8-4.0 mm. Clypeal edge widely rounded on each side of median emargination. Punctures of head and pronotum separated by about one their diameter. Elytral intervals on disc deplanate. Male genitalia as in Fig. 13.

Remarks. *Ataenius forsteri* is very similar externally to sympatric *A. sculptilis* but differs from that species by the lack of clypeal denticles and somewhat larger and less dense punctures on pronotum and ventral surface. All other external morphological characters of both species overlap, the general sculpture of elytra is similar to that of *A. quintanaroo* sp. n. (Fig. 3). Specimens examined were collected to lights and found in cattle excrements on pastures.

#### *Ataenius elegans* HAROLD

(Fig. 24)

*Ataenius elegans* HAROLD, 1868: 85.- SCHMIDT 1922: 436; DELLACASA 1988: 124 (catalogue)

Material examined. Lectotype (Brazil) designated by CARTWRIGHT (1973), in MNHN.

Other specimens (26). **Brazil** – (MG) Minas Gerais, Caravellas, coll. C. FELSCHE Kauf 20, 1918 (SMTD), Cordisburgo, Faz. Pontinha, I.1996, F. VAZ-DE-MELLO (FVMC); (RG) Rio Grande do Norte, Natal, XI.1973, F. PLAUMANN, IV.1921, E.C. GREEN (USNM); (Pi) Piaui, Teresina, I.1953, leg. OLIVEIRA (USNM); (Pb) Paraíba, Independencia, leg. MANN & HEATH (USNM); (MS) Mato Grosso do Sul, Campo Grande, 18.XII.1995, leg. KOLLER (CFC); Selviria, 21.II.1993, leg. RODRIGUES (CFC). **Venezuela** – Bolívar, 15 km E Caicara, 12-13.VI.1996, H. & A. HOWDEN (CMNO); Bolívar, 22 km E Upata, 18-19.VI.1996, H. & A. HOWDEN; Guarico, 12 km W Valle de La Pascua, 21-22.VI.1996, H. & A. HOWDEN (CMNO, ISEA); Edo Carabobo, Las Vueltas 450 m, 8.VII.1968 (MHNG).

Distribution. South America (Fig. 24).

Diagnostic characters. Length 2.8-3.0 mm. Body elongate oblong, rusty brown, glabrous, moderately shiny. Clypeal margin rounded and narrowly reflexed on each side of moderate median emargination, sides straight toward obtuse genae; surface uniformly finely punctate, punctures separated by one their diameter. Pronotum transverse, sides and base finely marginated, posterior angles fringed with short pale setae; surface punctures fine, evenly distributed, generally separated by about one their diameter. Elytra almost parallel-sided, humeral denticles minute, apical margin with fringe of short setae; striae deep, slightly undulate, strial punctures fine, shallow; intervals subcarinate medially and deplanate latterly, impunctate, 10<sup>th</sup> interval not differ-

ent. Ventral sclerites everywhere uniformly finely punctate; metasternal midline impressed, discal punctures evenly distributed; abdominal sternites finely fluted along sutures, punctate from side to side, punctures same size and density as those of metasternum but closer; disc of pygidium eroded. Profemur shiny, closely punctured; meso- and metafemora fusiform, punctate, posterior lines lacking; metatibia slender, apex with row of close setae, without accessory spine; basal tarsomere of metatarsus equal in length to upper tibial spur and subequal to three following tarsomeres together. Male genitalia similar to those of *A. forsteri* (Fig. 13).

**R e m a r k s.** One of the smallest species in the group, it may be easily distinguished by its small size and rusty colour. The general external characters relate *A. elegans* to *A. forsteri*, also the male genitalia of both species are not markedly differentiated. The individuals examined were found mostly on pastures in cattle excrements.

*Ataenius vinacoensis*, sp. n.

(Figs 15, 17)

H o l o t y p e m a l e, Argentina, Prov. Salta, Viñaco, 15 km S El Carril, 12.II.1982, ex ant refuge deposit, H. & A. HOWDEN, in CMNO. Paratypes (5), same data as holotype, in CMNO, ISEA.

**D e s c r i p t i o n.** Length 4.5-4.8 mm. Body elongate oblong, subopaque, piceous black, covered with greasy coating. Head gibbose medially, clypeal margin obtusely rounded on each side of wide, deep median emargination, sides straight toward nearly right-angled genae; surface slightly concave just above emargination, minute to fine punctures along anterior margin slightly increase in size and density toward vertex, occipital area with fine punctures separated by their diameter or less. Pronotum transverse, sides and posterior angles finely margined, crenate, fringed with short setae; surface evenly convex, everywhere closely punctured, punctures on disc moderate, separated by one their diameter or less, those along base and on sides coarse, confluent. Scutellum triangular, punctate. Elytra about 2.5 times as long as pronotum, humeral denticles fine, acute; striae broad and deep, strial punctures crenate margins of intervals; intervals narrowly carinate at middle, deplanate laterally, carinae slightly uneven with minute setae in apical third of elytra, 10<sup>th</sup> interval flattened, mat. Ventral surface weakly shiny, mesosternum shagreened, minutely hairy with fine, long, opaque carina extending from metasternum to prosternum; metasternal midline impressed, discal punctures fine, separated by one their diameter, lateral metasternal triangle broad, scabrous inside; abdominal sternites with moderate fluting along sutures and shallow punctures from side to side, punctures slightly larger than those on metasternum; disc of pygidium eroded and roughly sculptured. Profemoral surface closely scabrously punctured, perimarginal groove fine; mesofemora fusiform, wider than metafemora, surface punctate, postfemoral lines complete; tibiae slender, setaceous, apex of metatibia with short setae and strong, sharp accessory spine; basal tarsomere of metatarsus subequal in length to upper tibial spur and to following tarsomeres combined. Male genitalia as in Fig. 17.

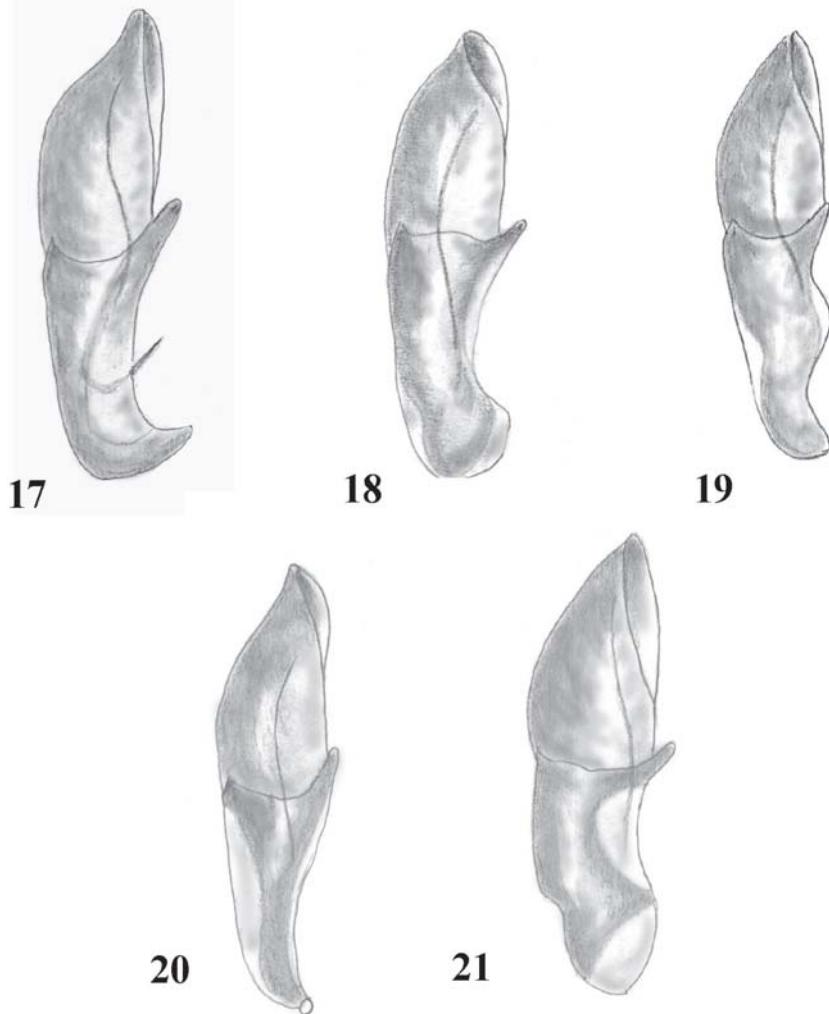
**A f f i n i t y.** *Ataenius vinacoensis* is most close to *A. complicatus* and *A. hispidus*; it differs from both these species by its smaller size and almost glabrous body. The species is also similar to *A. forsteri* and *A. sculptilis* from which it may be distinguished by having the pronotum with coarser and closer punctures and the elytra with intervals narrowly carinate at middle. *A. vinacoensis* seems to be limited in distribution to the southern area of South America (Fig. 15).

*Ataenius steinheili* HAROLD

(Figs 18, 23)

*Ataenius steinheili* HAROLD, 1874: 18.- SCHMIDT 1922: 455; CHAPIN 1940: 16-17; CHALUMEAU 1982: 328-329, fig. 8; DELLACASA 1988: 202 (catalogue); GALANTE & STEBNICKA & VERDÚ 2003: 291, fig. 8.

*Ataenius grenadensis* CHALUMEAU, 1982: 327-328.- DELLACASA 1988: 352 (catalogue), **syn. n.**



Figs 17-21. Male genitalia in lateral view: 17 – *Ataenius vinacoensis* sp. n.; 18 – *A. steinheili* HAR.; 19 – *A. crenulatus* SCHM.; 20 – *A. saulensis* sp. n.; 21 – *A. insculptus* HORN.

**M a t e r i a l e x a m i n e d.** *Ataenius steinheili*: lectotype (Colombia, Barranquilla Mompox, Neu Granada) designated by CARTWRIGHT (1973) in SMTD. *A. grenadensis*: holotype labeled “West Indies, Grenada 11.IX.1967 Krauss”, ‘*Ataenius steinheili* det. CARTW., “*Ataenius grenadensis* nov. Det. F. CHALUMEAU”; paratype: „Trinidad, Port-of-Spain, 24.XI.1935 (Sta 94) BLACKWELDER”, in USNM.

Other specimens (24). **Colombia** (no additional data) (ISEA), Atlantico, Puerto, 12.VII.1920, M. HEBART (USNM); Buga near Cali, XII.1960, G. FREY (MHNG). **Mexico** – Campeche, Escarcega, 27.IV.1962, F. ISLAS (ISEA); Quintana Roo, 10.9 km S of Playa del Carmen, 1.VII.1990, R. TURNBOW (FSCA, ISEA), Veracruz, Los Tuxtlas, 15.III.1985, J. RAZOWSKI (ISEA). **Venezuela** – Bolivar, R. Caura rainforest, 100 km N Corocito, 18.VI-3.VIII.1987, S. & J. PECK (CMNO).

Distribution. Mexico, Colombia, Venezuela, Trinidad, Grenada (Fig. 23).

**Diagnostic characters.** Length 3.5-4.0 mm. Body convex, piceous, weakly shiny. Clypeal margin with triangular, upturned denticles on each side of shallow median emargination, sides straight toward obtuse genae; surface minutely shallowly punctate up to median convexity, then punctures increase in size and depth toward vertex; frontal suture slightly convex at eyes. Pronotum convex, sides and base finely margined, fringed with very short, scarce setae; surface with nearly equal in size, moderate punctures throughout, on disc separated by less than one their diameter, on sides contiguous, slightly rugose. Elytra with slight preapical umbone and fine acute humeral denticles; striae deep, strial punctures weakly crenate margins of intervals; intervals narrowly carinate medially and deplanate laterally, median carina shiny, sides of intervals and striae usually covered with sticky coating, intervals 4,5,6,8 shortened before apex, 10<sup>th</sup> interval flat. Ventral sclerites and femora subopaque, uniformly finely and closely punctate, meso-metasternal carina short, space between mesocoxae equal to width of mesofemur; metasternum closely punctate, abdominal sternites distinctly fluted in anterior 1/3, fluting of sternite 5 deepest and longest, surface punctures same size and density as those on metasternum, extending from side to side; disc of pygidium eroded, sternite 5 and apex of pygidium with few short setae. Profemoral surface scabrous; meso- and metafemora with complete posterior lines; metatibia slender, setaceous, apex with small accessory spine; basitarsomere slightly longer than upper tibial spur and subequal in length to following tarsomeres combined. Male genitalia as in Fig. 18.

**Remarks.** *Ataenius steinheili* is most close to *A. beattyi* and differs from that species only slightly by having the less close and finer punctures on the pronotum and the elytral intervals less sharply carinate. This rare species was correctly recorded from Grenada and Trinidad by CHAPIN (1940) and from Mexico by GALANTE & al. (2003). Specimens of “steinheili” and “grenadensis” are difficult to separate even with comparative material, and I can find only minor differences, all of which fall within the range of variation of *A. steinheili*. The species is also very similar to *A. sculptilis*, but differs in having the head smaller with triangular, upturned clypeal denticles. Specimens examined were caught to light traps.

#### *Ataenius beattyi* CHAPIN

(Fig. 23)

*Ataenius beattyi* CHAPIN, 1940: 17.- CHALUMEAU 1977: 235; DELLACASA 1988: 272 (catalogue).

*Ataenius cameneni* CHALUMEAU & GRUNER, 1974: 801-801, figs 13,16.- CHALUMEAU 1983: 67, fig. 31; DELLACASA 1988: 310 (catalogue), **syn. n.**

**Material examined.** *Ataenius beattyi*: holotype female, labeled ‘St Croix Virgin Is. 29.XI.36’, ‘Sta 339 Blackwelder’ *Ataenius beattyi* det CHAPIN 1939’, ‘Type No 53320 USNM’. *A. cameneni*: holotype (not seen) labeled “Guadeloupe, Anse Lagourde, 20.XI.1972, F. CHALUMEAU”, in FCC; paratype examined, same data as holotype, in MNHN.

Other specimens (**46**). **West Indies** – Dominican Rep.: Boca Chica 10 m, 23.IX.1971, Santo Domingo 30 m, 14.XI.1970, J. & S. KLAPPERICH (CMNO); Puerto Rico: Guanica Forest, Tortugera, VIII.1962, J. MALDONADO (ISEA), La Parguera, 24.VII.1960, H. & A. HOWDEN (CMNO); Guadeloupe, Baie-Olive, 21.IX.1975, F. CHALUMEAU (CMNO, ISEA).

Distribution. West Indies (Fig. 23).

**Diagnostic characters.** Length 3.5-4.0 mm. Clypeal margin with triangular, upturned denticles. Punctures of pronotum coarse, very dense, everywhere contiguous, on sides confluent and rugose.

**Remarks.** *Ataenius beattyi* is closely related to *A. steinheili* and most probably represents only a geographic, insular form of *A. steinheili*. It differs from *steinheili* only slightly by having the pronotal punctures larger and closer, while the male genitalia of both species do not reveal any visible differences. The features of *A. cameneni* are quite similar to those of sympatric *A. beattyi* and I can not find any constant differences to separate these two forms. It seems obvious that the insular

populations of many species differ each other and from the continental ones, as being separate by the sea barriers. *A. beattyi* was recorded from Jamaica, Barbados and Virgin Islands (St Thomas, St Croix) by CHAPIN (1940) and from Guadeloupe and Desirade by CHALUMEAU (1983).

*Ataenius crenulatus* SCHMIDT

(Figs 19, 25)

*Ataenius crenulatus* SCHMIDT, 1910: 359; 1922: 431.- DELLACASA 1988: 116 (catalogue); GALANTE & STEBNICKA & VERDÚ 2003: 291

*Ataenius rickardsi* HINTON, 1938: 124, figs 1-4

*Ataenius rickardsi* (sic!): GALANTE & STEBNICKA & VERDÚ 2003: 291 (as synonym of *crenulatus*)

M a t e r i a l e x a m i n e d. *Ataenius crenulatus*: holotype (sex undetermined) labeled “Rio Grande do Sul” [Brazil] “*Ataenius crenulatus* Type”, in NRS. *A. rickardsi*: holotype labeled “Mexico Vera Cruz, Minatitlan, II-1934, John A. RICKARDS”, in USNM.

Other specimens (502). **Argentina** - Prov. Corrientes, Ituzaingo, Villa Olivari, 20.XII.1990, S. & J. PECK; Prov. Chaco, 100 km NW Resistencia, Chaco Nat. Park, 16.XII.1990, S. & J. PECK (CMNO); Prov. Misiones, Monteagudo 185 m, 15.XI.1978, E. KLEIN (MMU); Prov. Jujuy, Callilegua NP, Aguas Negras, 18-28.XII.1987, S. & J. PECK (CMNO); Prov. Formosa, 50 km NW Clorinda PN, Rio Pilcomayo, 17.XII.1990, S. & J. PECK (CMNO); Prov. La Rioja, Dpto Rosario, Penalozza Serra de Argana, El Rocillo, 20.X.1997, IRWIN & PARKER (USNM). **Belize** - Oak Hardwood, 8-12.VIII. 1972, S. PECK (CMNO); Cayo Distr., Maya Mountain Lodge, 19.VII.1993, R. MORRIS (FSCA). **Bolivia** - Guayaramirim (Beni), Mamore River, 42.XI.1966, 1.XII.1966, leg. BALOGH & MAHUNKA & ZICSI (HNHM, ISEA, USNM)); Beni, Santa Cruz de la Sierra, 500 m, 1.IV.1989, J. STEINBACH (ZMHB); Santa Cruz, Saavedra Res. Sta., 25.III.1978, C. O'BRIEN & SERRATE (WWC); Santa Cruz, Buena Vista 380 m, 20.II.1999, L. STANGER (PSC); Santa Cruz, 3.7 km SSE Buena Vista Hotel Flora & Fauna 430 m, 14-19.X.2000, M.C. THOMAS (FSCA); Santa Cruz, 5 km ESE Warnes, Hotel Rio Selva, 20.X.2000, M.C. THOMAS (FSCA). **Brazil** - (Go) Goias, Caldas Novas, X.1973, F. PLAUMANN (USNM); (Pr) Parana, Amambay, 12.III.1998, M. DIAS (CFC); Irati, 17.XII.1993, C. FLECHTMANN (CFC); (MG) Minas Gerais, Paracatu, III.1997, S. LOURENGO, X.1998, F. VAZ-DE-MELLO (FVMC); (SC) Santa Catarina, Nova Teutonia, 19.VIII.1975, F. PLAUMANN (SMTD), IX.1974, I. 1973, F. PLAUMANN (CMNO); (RG) Rio Grande do Sul, Pelotas, I. 1972, F. PLAUMANN (USNM); (MS) Mato Grosso do Sul, Rio Abobral, 19.VII.1998 (CMNO); Três Lagoas, 9.XI.1993, C. FLECHTMANN (CFC); Selviria, UNESP Farm, 18.III.1999, 23.V. 1992, C. FLECHTMANN (CFC); (SP) Sao Paulo, Flora Rica, 18.IV.1992; Teodoro Sampaio, Morro do Diablo Res. Sta. 16.VI.1996, C. FLECHTMANN (CFC); (MT) Mato Grosso, Várzea Grande Co., Cuiaba, 20.IV.1972, W.H. WHITCOMB (FSCA). **Honduras** - Morazan, 6 km SE Zamorano 850 m, 17.V.1994, H. & A. HOWDEN (CMNO). **Mexico** - Oaxaca, Jaltepec Isth. Tehuantepec, 21.V.1964, F.S. BLANTON (CEUA); Veracruz, Poza Rica 2.VI.1987, J. WAPPES (PSC); Veracruz, Lake Catemaco, 24.V.1969, 9.VI.1969, H. & A. HOWDEN (CMNO); Santecomapan, 10.VI.1969, H. & A. HOWDEN (CMNO); La Mancha, 24.VII.1999, E. GALANTE; La Mancha, Fortin de las Flores, 11.VII.1964, D. RABAGO (CEUA); Los Tuxtlas, X.1997, F. VAZ-DE-MELLO, 30.III.1985, J. RAZOWSKI (ISEA); Chiapas, Puente Macuilapa nr Los Amates, 29.V.1964, R. WOODRUFF (FSCA), Chiapas, 10 mi W Agronimos Mexicanos, 8.VI.1991, RATCLIFFE & ASHE & JAMESON (UNSM); Cinco Cerros 800 m, 31.V.1990, 9.VI.1990, H. & A. HOWDEN; Cinco Cerros, 30 km on Hwy 190, 1500 m, 8.VI.1989; El Aguacero, 16 km W Ocozocoautla 650 m, 10.VI.1990, H. & A. HOWDEN (HAHC-CMNO); Yucatan, 2 km E Chichenitza, 15.VI.1990, R. TURNBOW, Tamaulipas, El Cielito nr Eucino, 20-30.VIII.1985, E. RILEY (FSCA); **Paraguay** - Primavera, 7.XII.1953, leg. FOERSTER (FMLT); Puerto P. Stroessner, Acaray Fall, 6.I.1966, leg. MAHUNKA (HNHM, ISEA), Alto Parana, 27 km W Puerto P. Stroessner, 36.I.1983, E. RILEY, Paraguari, Nat. Park Ibicuy, 12.I.1983, E. RILEY, Central, San Lorenzo, 20.I.1985, E. RILEY (FSCA); Villarica, 25 km E Independentia, 28.I.1991, S. ENDRÖDY-YOUNGA (TMP); San Pedro, Vaca Ihu 160 m,

20.IV.1986, K.F. HOHENSTEIN (SMNS); San Pedro, Colonia Friesland, 5.III.1993, F. BRETZENDORFER (SMNS). **Venezuela** – Bolivar, Guri, 10.VI, 1-3.VII, 7.VII. 1998, H.& A. HOWDEN; Guri, 22 km E Upata, 18-19.VI.1996, H.& A. HOWDEN (CMNO); Cotaxtla, 5.VII.1961, F. PACHECO (USNM); Aragua, Cagua, leg. BORDON (MHNG). **West Indies** – Barbados, Belle Plaine, 1.III.1979, S. PECK (CMNO, ISEA).

**Distribution.** Central and South America to Argentina, Barbados (most likely introduced). The species reveals a peculiar disjunct distribution in South America, disappearing in the west and in the Amazon basin (Fig. 25).

**Diagnostic characters.** Length 3.8-5.0 mm. Body elongate oblong, dark brown to piceous, mat. Head variable in shape and sculpture, clypeal margin in most specimens finely denticulate or sharply angulate on each side of median emargination, in some specimens subangulate or obtuse; surface usually finely, closely punctured from anterior margin to vertex, rarely almost impunctate in anterior third. Pronotum transverse, sides and base fringed with short pale setae, their length and density variable; surface everywhere punctate, punctures moderate in size, sometimes coarse, always very dense, usually separated by less than one their diameter, frequently contiguous, confluent and rugose. Elytra with slight preapical umbone and fine, acute humeral denticles; striae deep, strial punctures slightly crenate margins of intervals; intervals tectiform, more or less acutely elevated medially, mat, each with median row of minute setae visible under high magnification, 10<sup>th</sup> interval flat. Under surface weakly shiny, uniformly finely punctate; meso-metasternal carina short, space between mesocoxae smaller than width of mesofemur; metasternum, abdominal sternites and femora with punctures usually separated by one their diameter, in some specimens closer or scarcer; fluting of abdominal sternites fine, increasingly longer from sternite 3 to sternite 5, disc of pygidium eroded. Meso- and metafemora with complete posterior lines; tibiae slender, setaceous, metatibia apically with small accessory spine and fringe of 8-9 short setae; basal tarsomere of metatarsus longer than upper tibial spur and shorter than following four tarsomeres combined. Male genitalia as in Fig. 19.

**Remarks.** *Ataenius crenulatus* is very variable, especially clypeal margin varies in shape similarly as in *A. languidus* SCHMIDT (STEBNICKA 2005). In most specimens the anterior clypeal edge is finely denticulate, in some individuals including Mexican “rickardsi” obtuse or subangulate. The species is most closely allied to *A. saulensis* sp. n. (see Affinity under that species). Specimens examined were collected in various biotopes: in cattle and horse dung and in *Guzera* droppings on pastures with *Brachiaria decumbens* and *Gennisetum clandestinum*, at UV light in wet forest and in open grassy forest, in litter of thorn scrubs, under tree bark and in the beach debris.

#### *Ataenius saulensis* sp.n.

(Figs 20, 22, 24)

**Holotype male**, French Guiana, Saul, Mt Galbao 740 m, 3.37N, 53.16W, 5.V.1997, intercept trap, J. ASHE & R. BROOKS, in CMNO. Paratypes (6): 1 – same data as holotype; 1 – Saul (7 km N), 3 km NW Les Eaux Claires, Mt La Fumee 490 m, 3.39N, 53.13W, 1-8.VIII.1997; 3 – Roura (18.4 km SSE) 240 m, 4.36N, 52.13W, 25-29.V.1997; 1 – Roura (39.4 km SSE) 270 m, 4.32N, 52.8W, 29.V – 10.VI.1997, J. ASHE & R. BROOKS. Paratypes are in CMNO, ISEA.

**Description.** Length 3.8 -4.0 mm. Body (Fig. 22) oblong, convex, dark brown to piceous, glabrous, weakly shiny, venter lighter than upper surface. Head slightly convex medially, clypeal margin broadly rounded on each side of narrow and shallow median emargination, genae right-angled; surface everywhere closely finely punctate from anterior margin to vertex, punctures almost contiguous or separated by less than their diameters. Pronotum transverse, posterior angles truncate and slightly emarginate on each side of base, lateral and basal edge finely crenate by punctures without fringe of setae; surface evenly convex, punctures moderate to coarse, evenly distributed and very close, generally separated by about half their diameter. Scutellum small, narrow,

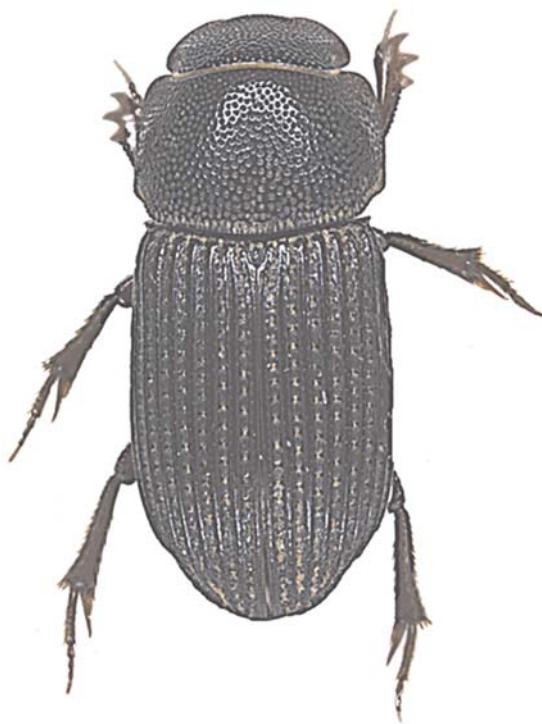


Fig. 22. Habitus of *Ataenius saulensis* sp. n.

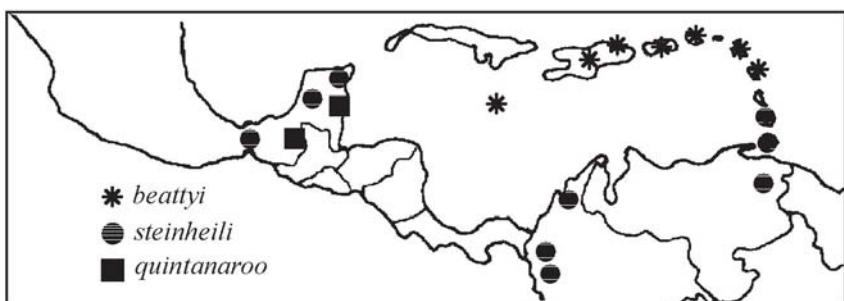


Fig. 23. Distribution of *Ataenius quintanaroo* sp. n., *A. beattyi* CHAP. and *A. steinheili* HAR.

carinate medially. Elytra about 2.5 times as long as pronotum, humeral denticles very small, acute; striae wide and deep, about two times as wide as intervals, striae punctures inside striae large, crevicing inner margins of intervals; intervals narrowly and sharply carinate, more shiny than striae, impunctate, 10<sup>th</sup> interval flattened, opaque. Ventral sclerites microreticulate and everywhere punctate; metasternum shagreened, meso-metasternal carina short, space between mesocoxae equal to width of mesofemur; metasternal midline impressed, discal punctures separated by one their diameter, lateral area and broad metasternal triangle scabrous; abdominal sternites finely fluted along sutures and closely punctured from side to side, punctures twice larger than those on metasternum, separated by about one their diameter; disc of pygidium eroded. Profemur densely, slightly

roughly punctate; meso- and metafemora finely punctate throughout with complete posterior lines; metatibia slender, setaceous, apically with fringe of short, numerous setae without accessory spine; basitarsomere of metatarsus longer than upper tibial spur and slightly longer than following four tarsomeres together.

Male. Pronotum shorter and more convex than in female; genitalia as in Fig. 20.

Female. Posterior angles of pronotum with deeper emargination than in male.

Distribution. French Guiana (Fig. 24).

Affinity. *Ataenius saulensis* is most closely allied to *A. crenulatus*, but it may be distinguished from that species by having the head smaller with very dense punctures and the elytra with very deep striae wider than sharply carinate intervals.

*Ataenius insculptus* HORN

(Fig. 16, 21)

*Ataenius insculptus* HORN, 1887: 70.- SCHMIDT 1922: 454; ROBINSON 1947: 150; WOODRUFF 1973: 120-121, figs 257, 258; CARTWRIGHT 1974: 28-28, pl. 2a, fig. 4.

*Ataenius sculptilis*: LECONTE 1878: 402 (non HAROLD, 1868)

Type data. Holotype (Tampa, Florida), in ANSP.

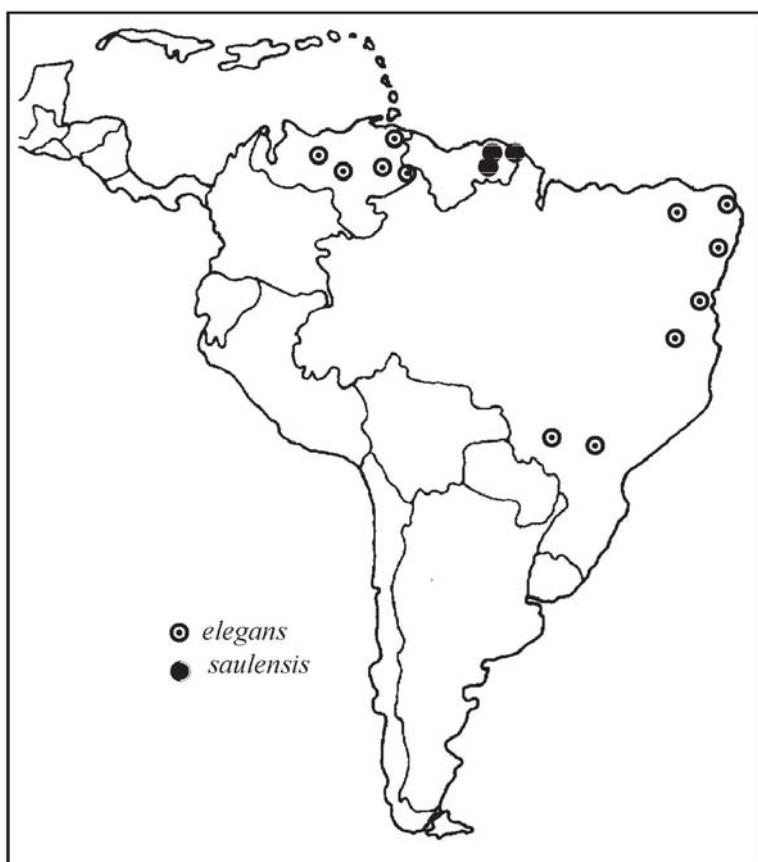


Fig. 24. Distribution of *Ataenius saulensis* sp. n. and *A. elegans* HAR



Fig. 25. Distribution of *Ataenius crenulatus* SCHM.

M a t e r i a l e x a m i n e d. Specimens (6). USA - Florida, Putnam Co. 3 mi E Melrose K. Ordway Pres. SE edge Ross Lake, 13.IV.1998, P. SKELLEY (ISEA); New Jersey, Martha, 5.XI.1947, M. ROBINSON (ISEA).

D i s t r i b u t i o n. Southeastern USA (see CARTWRIGHT 1974, fig. 4), (Fig. 16).

D i a g n o s t i c c h a r a c t e r s. Length 3.8-4.8 mm. Body oblong, convex, black, moderately shiny. Clypeal margin finely triangularly dentatae on each side of broad median emargination, genae sharply rounded; surface slightly concave between teeth, elsewhere convex with minute to fine punctures, frontal area closely, quite coarsely punctate. Pronotum subquadrate, posterior angles weakly emarginate and noticeably crenate without fringe of setae; surface with oblique foveae halfway to sides, closely punctate, punctures mixed fine and moderate over anterior disc, laterally more uniform in size, larger and posterior to lateral foveae contiguous. Elytra convex with distinct preapical umbone, sides arcuate, humeri strongly dentate; striae broad and deep, strial punctures coarse; intervals subcarinate to carinate medially and flattened laterally, alternate intervals higher over apical declivity, 10<sup>th</sup> interval flat, alutaceous. Mesosternum weakly carinate be-

tween coxae, metasternal disc with close, moderate punctures and fine median line, lateral metasternal triangle feebly defined; abdominal sternites coarsely fluted along sutures, fluting longer on each succeeding sternite, surface punctures moderate, extending from side to side; disc of pygidium eroded. Profemur scabrously punctate; meso- and metafemora punctate, posterior lines complete; metatibia slender, apex with 7-8 short setae and small accessory spine; basitarsomere of metatarsus longer than upper tibial spur and shorter than following tarsomeres combined. Male genitalia as in Fig. 21.

**R e m a r k s.** *A. insculptus* superficially resembles allopatric *A. sculptilis* and *A. forsteri* sharing with these species similar characters of the elytra, ventral sclerites and legs. It differs by having the pronotal surface with lateral foveae and mixed punctures and the elytra with distinct preapical umbone. The species regarded to be rare (WOODRUFF 1973), was collected under deer droppings and under cow dung in a seepage areas in woods.

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