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**Taxonomic review of the New World genus *Genuchinus* Westwood**  
*(Coleoptera: Cetoniidae)*

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**ABSTRACT**

The genus *Genuchinus* Westwood is diagnosed and discussed. *G. v-notatus* Westwood is selected type-species. The characters of the species are examined and a key to the species given. Nine named species are included in an annotated checklist. Three of them are described as new: *G. digitatus* (Mexico), *muzo* (Colombia), *parvulus* (Brazil). *Genuchinus angustus* Casey could not be distinguished from the senior *G. ineptus* (Horn). *Genuchinus brasiliensis* Moser is transferred to *Cyclidinus*. *Genuchinus grandis* VanDyke is a junior synonym of *Lissomelas flohri* Bates. For six names lectotypes are designated.

**INTRODUCTION**

Five years ago I paid some attention to the New World genera of Cremastocheilini (Krikken, 1976). Since then some interesting material has become available, including three undescribed species of *Genuchinus* Westwood, a myrmecophilous genus ranging from the southern United States to Brazil and Peru. My wish to describe these new *Genuchinus* species resulted in the present short review of the entire genus, for which the type-material of all the species but one (location of its types unknown) was re-examined. Problems, however, remained, particularly with the U.S.-Mexican species: the available material is still inadequate for establishing their status (see below). In this paper the generic limitations of *Genuchinus* are revised; the infrageneric classification of *Genuchinus* is examined; a tentative key to the species is given, followed by an annotated checklist of the taxa recognized. This generic section is followed by the descriptions of three new species and notes on others.

In view of the primary objectives of my work on Cetoniidae (supraspecific classification and revision of material kept in the Leiden museum), this study of *Genuchinus* can only be limited. Therefore, all who use this paper are requested to report any new data, either to me or by direct publication. Even the largest museum collections have very few specimens, so that any information on this apparently rare genus would be welcome. The problems alluded to in the previous paragraph can best be solved by colleagues resident in the regions concerned (Arizona, Mexico!).

#### **Genuchinus Westwood**

This seems to be one of the most primitive of the New World genera of Cremastocheilini: the only significant derivative feature superposed on the usual set of cremastocheiline characters proved to be the modified phallus, which should indeed warrant the monophyletic nature of *Genuchinus*. Westwood (1873) included three species, and several more were added since, correctly and incorrectly. One was placed in a new genus (Krikken, 1976) and two others are removed from *Genuchinus* in this paper.

With the description of the three novelties there are now 9 named species included, but, no doubt, others await description. It should be noted that, although nothing seems to be against a place in *Genuchinus*, the males of three species (cf. checklist) are still unknown.

Generic diagnosis. – Interparameral gap of phallus bridged by distinct pair of protrusions, parameral roof abruptly bent in profile (figs. 26, 27). Prothorax without distinct trichomes. Tarsal segments simply claviform, without distinct longitudinal costae and without finer ridges. Predominant microsculpture not consisting of striolae encompassing two punctures.

Anterior margin of clypeus slightly reflexed, in full-face outline more or less rounded, lacking peripheral projections. Clypeopleuron (= anterior, abruptly deflexed margin of clypeus) narrow, unmodified or shallowly impressed; clypeus laterally declivous. General surface of clypeofrontal disc more or less convex, slightly uneven, without isolated modifications. Dorsal outline of pronotum subcircular, with distinct anterolateral angles; posterolateral section of pronotum rounded or obtusely angulate. Lateral border of pronotum entire and immarginate; noto-pectoral transition subabrupt. General surface of pronotum feebly, evenly convex, lacking isolated protrusions and impressions, at most with impressed midline. Scutellum with acute apex. Elytra very elongate, disc flat, sides steeply declivous; apicosutural angle rounded off; humeral and apical umbones distinct. Elytra without pattern of longitudinal striae. Mentum inferiorly with well-developed transverse appendage, its surface flat. Palpi unmodified, their base concealed by expanded mentum. Antennal scapus greatly inflated-dilated, straight distally. Preposternal apophysis well-developed, tapering, directed rostrad; postprosternum unmodified. Anterolateral flange of propectus not distinctly expanded rostrad. Middle coxae narrowly separated,

intercoxal space not protuberant. Mesosternal collum wide, unmodified. Dorsally visible part of mesepimeron narrow, its anterior outline evenly convex. Abdomen with 6 visible sternites; lateral parts of sternites normally convex, indistinct from above; abdominal venter of males impressed. Propygidium unmodified, apart from variably produced spiracles; spiracles of sternite 4 also exposed, others normally concealed by elytra. Pygidium approximately isodiametric, its general surface evenly convex, anal border immarginate, invisible in dorsal view; disc unmodified or slightly double-topped. Fore tibia with two external denticles inferior-longitudinal ridge with terminal denticle. Middle and hind tibiae with distinct, more or less spiniform external elevation. Apex of middle and hind tibiae multilobate. Legs in no way remarkably complanate. Lateral extremity of hind coxa visible in dorsal view. Tarsi slender, 5-segmented, claws normally developed, sickle-shaped. Derm black, frequently with light (pale-brown or white) tomentous markings, sometimes with black velutinous cover; largely glabrous, any setae pale-brown, very inconspicuous. Predominant microsculpture: punctation and (annulate) striolation. Habitus cremastochiliform, elongate, medium-sized (total length 0.9–2 cm).

Type-species. – *Genuchinus v-notatus* Westwood, by present designation.

Affinities. – *Genuchinus* belongs, with *Cyclidinus* Westwood, *Cyclidiellus* Krikken and *Psilocnemis* Schaum, to the Cremastocheilini that have the combination of an expanded mentum, a distinct clypeopleuron, dilated antennal scapi, a subcircular or subhexagonal pronotum, and a distinct inferior-longitudinal fore-tibial crest. *Cyclidinus* seems to be the closest relative of *Genuchinus*, lacking the modification of the parameres mentioned as the primary character in the above diagnosis of *Genuchinus*. *Cyclidiellus* has, among other characters, a most peculiar microsculpture (cf. Krikken, 1976); *Psilocnemis* has a very broad clypeopleuron, different tarsal segments, etc.

Infrageneric classification. – At least 14 characters were found to have some importance in the recognition of 10 species (see synoptic table below), but my analysis is, inevitably, very limited. One of the problems I stumbled on, and already alluded to in the introduction, is the segregation of some U.S.-Mexican material: I am unable to segregate *G. ineptus* and *angustus*, certainly not on the characters used by Potts (1945: 73); their relations with *G. velutinus* are neither clear. In any case, all U.S.-Mexican species seem very closely related, but verification on long series is needed. *Genuchinus nevermanni* and *parvulus* represent a distinct group. The relations between the remaining species is unclear; *G. muzo* certainly stands apart by its more strongly modified parameres. *Genuchinus brasiliensis* with its unmodified, simply lobiform parameres (fig. 25), is here combined with *Cyclidinus*; *Genuchinus grandis* is identical with *Lissomelas flohri* (further explanation below).

Distribution. – Nearctic and Neotropical: the total range seems to be very extensive, in spite of the few actual records; southwestern U.S.A. to Brazil and Peru.

Bionomics. – Found with ants; also found on/in a variety of plants, especially Bromeliaceae, Orchidaceae, Liliaceae, Agavaceae, but there are no

reports as to their specific activities. *Genuchinus*, like *Cremastocheilus* Knoch, might well be predators of small soft-bodied insects, e.g. ant larvae. Cazier (1961) gives observations on *G. ineptus*; Cazier & Statham (1962) list host ants of this species.

#### SYNOPTIC TABLE OF CHARACTERS

The following characters and character states are important in the recognition of *Genuchinus* species (see figures):

- 1a, clypeopleuron unmodified; b, distinctly transversely impressed.
- 2a, midline of pronotum not distinctly impressed; b, distinctly impressed.
- 3a, pronotal disc near middle densely to contiguously punctate(-striolate); b, punctures separated by at least one diameter.
- 4a, posterior section of lateral pronotal border simply rounded to obsolescent angle; b, rounded to well-pronounced angle; c, sinuate to posterolateral angle (which may be rounded off).
- 5a, annulate striolae of elytral disc mostly with length/width proportion <2; b, >2.
- 6a, apicosutural section of elytron (sub)angulate; b, very widely rounded.
- 7a, propygidial spiracles poorly produced; b, strongly produced (in dorsal view, beyond border of propygidium).
- 8a, interparameral "bridge" small; b, very large.
- 9a, apical-internal angle of fore tibia not strongly produced; b, apical-internal angle produced, thumb-like, terminal spur very short.
- 10a, head without two longitudinal light-coloured tomentous lines; b, with such lines.
- 11a, pronotum without two longitudinal (non-marginal) light-coloured tomentous lines; b, with such lines.
- 12a, disc of elytra (combined) with large V-shaped patch of light tomentum; b, without or with different tomentous markings (usually more or less scattered).
- 13a, dorsal derm without distinct velutinous cover; b, with distinct black velutinous cover; c, otherwise opaque.
- 14a, total length of body usually over 11 mm; b, under 11 mm.

More colour characters (especially pattern of tomentum) seem useful, but only if series of fresh specimens are available, which is rarely the case. I am unable to give a phylogenetic qualification of the character states listed here, and therefore, although some species can be grouped together (see above, under infrageneric classification), a phylogenetic discussion cannot be given.

In the table: oblique dash = both states occur; \*between parentheses = character state poorly pronounced.

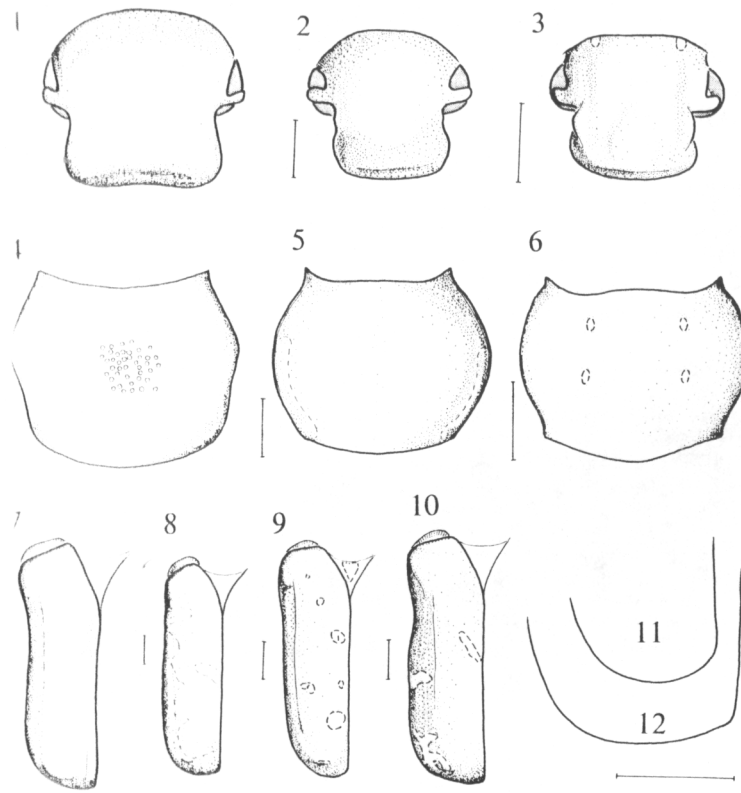
#### KEY TO SPECIES

1. Under 11 mm long. Posterolateral angles of pronotum very distinct (fig. 6). Apicosutural section of elytral border very widely rounded (fig. 11) . . . . . 2

<i>Genuchinus</i> species	characters													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
<i>muzo</i>	b	a	a	b	b	a	a	b	a	a	a	b	c	a
<i>sulcipennis</i>	a	a	b	a	a	a	b	a?	a	b	a	b	b/c	a
<i>peruanus</i>	b	b	b	(b)	b	a	a	a?	a	a	a	b	b	a
sp. indet. A	a	b	b	a	b	a	a	a?	a	a	a	b	c	a
<i>digitatus</i>	a	a	a	a	b	a	a	a	b	a	a	b?	c	a
<i>v-notatus</i>	a	a	a	a	b	a	b	a	a	a	a	a	b	a
<i>velutinus</i>	a	a	a/b	a	b	a	b	a	a	a	a	a	b	a
<i>ineptus</i>	a	a	a	a	b	a	a	a	a	a	a	b	c	a
<i>nevermanni</i>	a	b	b	c	a	b	b	a	a	b	b	b	a	b
<i>parvulus</i>	a	a	b	c	a	b	b	a	a	(b)	(b)	b	a	b

- Over 11 mm long. Posterolateral angles of pronotum subdistinct or rounded off (figs. 4, 5). Apicosutural angle of elytron subdistinct (fig. 12) . . . . .
- 2. Pronotum finely punctate, punctures mostly separated by at least two diameters. Cephalic and pronotal tomentum reduced, not forming distinct lines. Clypeal margin broadly reflexed. Inferior-longitudinal crest of fore tibia very strongly developed. Pronotal midline not impressed . . . . . *parvulus*
- Pronotum coarsely punctate, punctures mostly separated by less than two diameters. Cephalic and pronotal tomentum consisting of two (sometimes interrupted) longitudinal streaks. Clypeal margin narrowly reflexed. Inferior-longitudinal crest of fore tibia low. Pronotal midline impressed (visible with naked eye) . . . . . *nevermanni*
- 3. Fore tibia without long apical-internal thumb, terminal spur long and distinct . . . . .
- Fore tibia with long apical-internal thumb bearing a reduced spur . . . . . *digitatus*
- 4. Interparameral "bridge" large, broad (fig. 23). Pronotal shape as in fig. 4, without midline impression . . . . . *muzo*
- Interparameral "bridge" and pronotal shape different . . . . .
- 5. Head with two longitudinal whitish lines. Annulate striolae of elytral disc mostly with length/width proportion <2 . . . . . *sulcipennis*
- Head without such lines. Annulate striolae of elytral disc more elongate . . . . .
- 6. Pronotum with distinctly impressed midline . . . . .
- Pronotal disc simply deplanate . . . . .
- 7. Clypeopleuron broadly transversely impressed . . . . . *peruanus*
- Clypeopleuron not impressed . . . . . species A<sup>1</sup>
- 8. Disc of elytra (combined) with large V-shaped patch of white (fig. 10). Centre of pronotal disc with punctures separated by at least one diameter, derm shiny. Propygidial spiracles strongly produced . . . . . *v-notatus*
- Whitish pattern of elytra different (or absent). Pronotal punctation dense, also in central area. Tentative key . . . . .
- 9. Spiracles strongly produced, i.e. beyond propygidial border. Generally with extensive velutinous whitish markings. Elytral annulate striolae moderately elongate (length/width mostly 2-4). Dorsal derm opaque due to black velutinous cover . . . . . *velutinus*
- Spiracles feebly produced. Dorsum and underside (in U.S.A.) with few whitish markings. Elytral annulate striolae very elongate (many of them with length/width proportion exceeding 4).  
Dorsal derm without black velutinous cover. (*Genuchinus angustus* included) . . . . . *ineptus*

<sup>1</sup> One female from Mexico: Oaxaca: Inगतengo in collection of H. & A. Howden (Ottawa). More material needed, presumably a new species.



figs. 1-12. *Genuchinus* details. 1-3, head (full-face); 4-6, pronotum (dorsal); 7-10, left elytron (lateral); 11-12, distal outline of left elytron, enlarged. - 1, 5, 8, 12, *G. digitatus*, holotype; 2, 4, 7, 10, *G. muzo*, holotype; 3, 6, 9, 11, *G. parvulus*, holotype; 10, *G. v-notatus*, Mexico. - Scale lines = mm; dashed lines = limits of tomentous markings.

#### ANNOTATED CHECKLIST

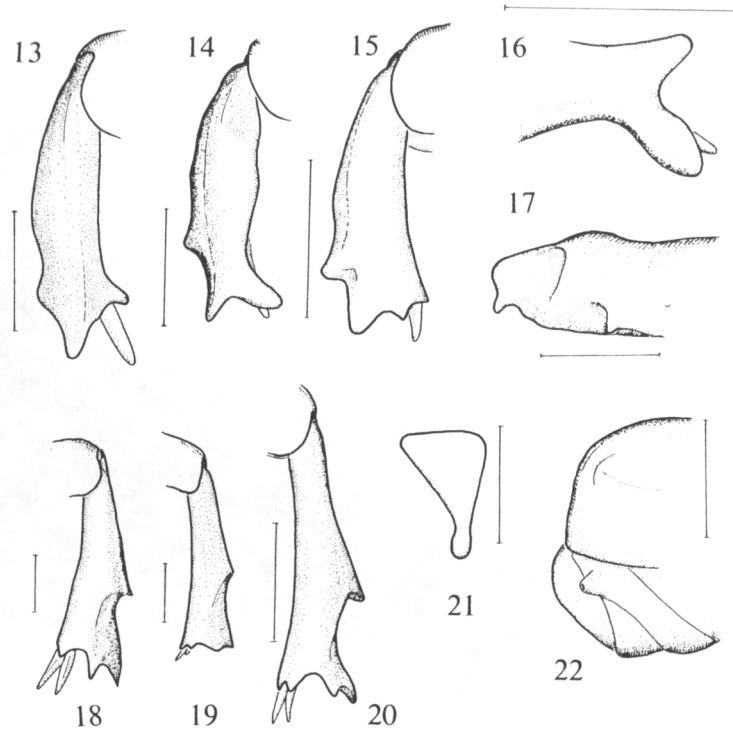
*Genuchinus* Westwood, 1873: 23, including 3 spp., type-sp. *Genuchinus notatus* Westwood (present designation). - At least 9 species from Nearctic and Neotropical regions. - No previous synoptic work.

#### Described species

*G. digitatus* Krikken, present paper, holotype in Mexico City. ♀ unknown. Mexico (type-loc. Cuernavaca).

*G. ineptus* (Horn, 1885: 127, *Cremastocheilus*), holotype in MCZ. Syn.

*G. angustus* Casey, 1915: 343, lectotype in USNM. - Arizona (type-loc. of



Figs. 13–22. *Genuchinus* and *Cyclidinus* details. 13–15, right fore tibia; 16–17, fore-tibial apex (dorsal 16, lateral 17); 18–20, left hind tibia; 21, scapus; 22, distal part of hind body (lateral). – 13, 18, 21, *G. muzo*, holotype; 14, 16, 19, *G. digitatus*, holotype; 15, 20, 22, *G. parvulus*, holotype; 17, *Cyclidinus brasiliensis*, Brazil. – Scale lines = 1 mm.

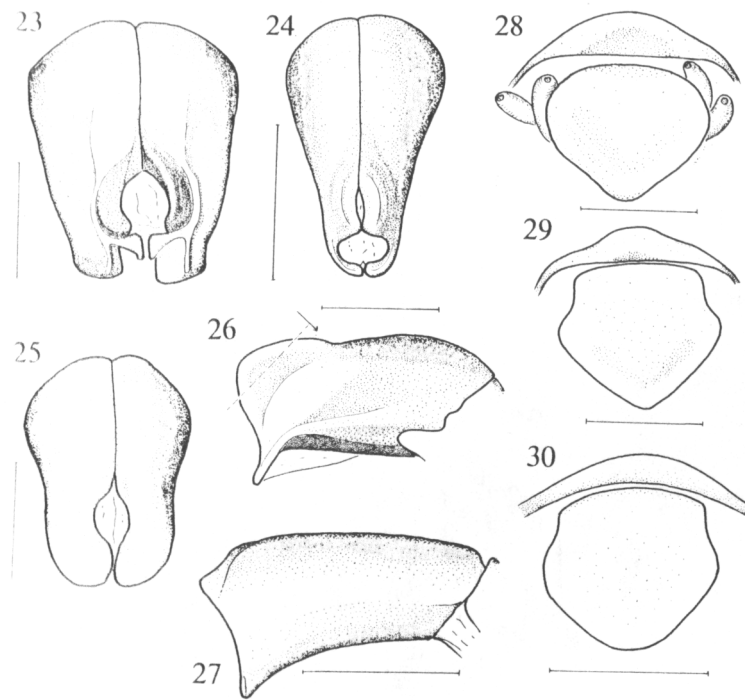
*ineptus* not specified, l.c.), South California, Mexico. – With ants *Formica obscuripes* Forel, *Crematogaster coarctata* Mayr, *Liometopum occidentale luctuosum* Wheeler.

*G. muzo* Krikken, present paper, holotype in Paris. ♀ unknown. – Colombia (type-loc. Muzo). – With formicine ants.

*G. nevermanni* Schauer, 1935: 230, location of syntypes unknown (♂ ♀). – Costa Rica (no detailed locality given, l.c.), Panama (Howden collection!).

*G. parvulus* Krikken, present paper, holotype in Leiden. ♂ unknown. – Brazil (type-loc. Sta. Catharina).

*G. peruanus* Moser, 1910: 366, lectotype in Berlin. ♂ unknown (sic). – Peru (type-loc. Chanchamayo).



Figs. 23–30. *Genuchinus* and *Cyclidinus* details. 23–27, parameres (oblique view 23–25, cf. arrow fig. 26; 26–27, lateral); 28–30, mentum and clypeopleuron (and palpi 28). – 23, 26, 28, *G. muzo*, holotype; 24, 27, 29, *G. digitatus*, holotype; 30, *G. parvulus*, holotype; 25, *Cyclidinus brasiliensis*, Brazil. – Scale lines = 1 mm.

*G. sulcipennis* Westwood, 1873: 24, lectotype in Paris. ♂ unknown (sic). – Ecuador (no detailed locality given, l.c.).

*G. velutinus* Westwood, 1873: 25, lectotype in Paris. – Mexico (no detailed locality given, l.c.).

*G. v-notatus* Westwood, 1873: 24, lectotype in Paris. – Mexico, Nicaragua (type-loc. not specified).

#### DESCRIPTIONS AND NOMENCLATORIAL NOTES

In this section three new species are described, comments on two excluded species are given, and six lectotypes are designated. Although with four lectotypes it seems likely that the author of the species had no more than one specimen before him, one cannot be absolutely sure, and, consequently, lectotypes are designated.



Holotype (male). – Approximate length 15, width 6, height 4.5 mm. Black, opaque, with extensive whitish velutinous cover on metasternum and abdominal sternites 1–4, dorsally with numerous scattered white-brown spots. Derm predominantly annulate-striolate, ventral parts and legs with numerous minute brownish bristles ( $\times 25$ ). Habitus, plate 1, fig. 1.

Cephalic contours, fig. 2. Clypeus (frontal view) with reflexed anterior margin; clypeopleuron narrow, only feebly impressed (fig. 28); disco-lateral transition of clypeus gradually declivous; clypeal disc crowdedly punctate; clypeo-frontal transition superficially depressed on each side. Posterior part of head with subcontiguous annulate punctation; diameters of punctures between eye-canths 0.1 mm, their densities ca 25/0.25 sq. mm. Maximum width of head 2.9 mm.

Pronotal contours, fig. 4; anterior noto-pectoral transition of prothorax gradual; posterolateral angle of pronotum rounded off; general surface of pronotum evenly convex with superficial impressions. Annulate punctation of pronotum dense; punctures isodiametric, their diameters on pronotal centre 0.1 mm, their densities 13–14/0.25 sq. mm. Median length of pronotum 3.2, maximum width 4.0 mm. Scutellum (fig. 7) annulate-punctate.

Elytral contours, fig. 7; posthumeral emargination shallow, humeral and distal umbones distinct; elytral disc deplanate, with abundant elongate-elliptic striolae, their length decreasing on lateral declivity, becoming circular; apico-sutural angle of elytron obtuse. Sutural length of elytra 7.0, maximum (longitudinal) length 9.0, maximum width combined 6.0 mm.

Mentum, fig. 28; surface of backward extension abundantly superficially punctate, moderately shiny. Antennal scapus triangular (fig. 21). Preposternum with robust, apically (lateral view) rounded apophysis, its anterior side abundantly setose. Lateral surface of propectus crowdedly annulate-punctate; meso- and metapectus as well as hind coxae densely annulate-punctate, metasternum also with horse-shoe-shaped striolae. Middle coxae subcontiguous. Metasternal disc flat, with finely impressed midline. Visible sternites 1 – 4 of abdomen medially slightly impressed; sternites 1–5 medially annulate-punctate, sublaterally with horse-shoe-shaped striolae, laterally with crowded annulate striolae; punctation on anal sternite (6) fine. Propygidial spiracles conically produced; propygidial derm crowdedly arcuate-striolate. Pygidium transversely subelliptic in outline, general surface strongly convex, double-topped; derm densely annulate-punctate except medially near anal border, where punctation is fine and sparse and intervening space shiny; anal border immarginate.

Fore tibia (fig. 13), with two external denticles and well-developed inferior-terminal denticle; fore-tibial derm punctate-rugulate; terminal spur long, slightly tapering, apex reaching to halfway tarsal segment 3. Middle tibia with distinct external crest at one-third from apex, hind tibia (fig. 18) with somewhat stronger crest at one-third from apex; apex of middle tibia tridentate, of hind tibia quadridentate; tibial derm contiguously annulate-punctate. Tarsi un-

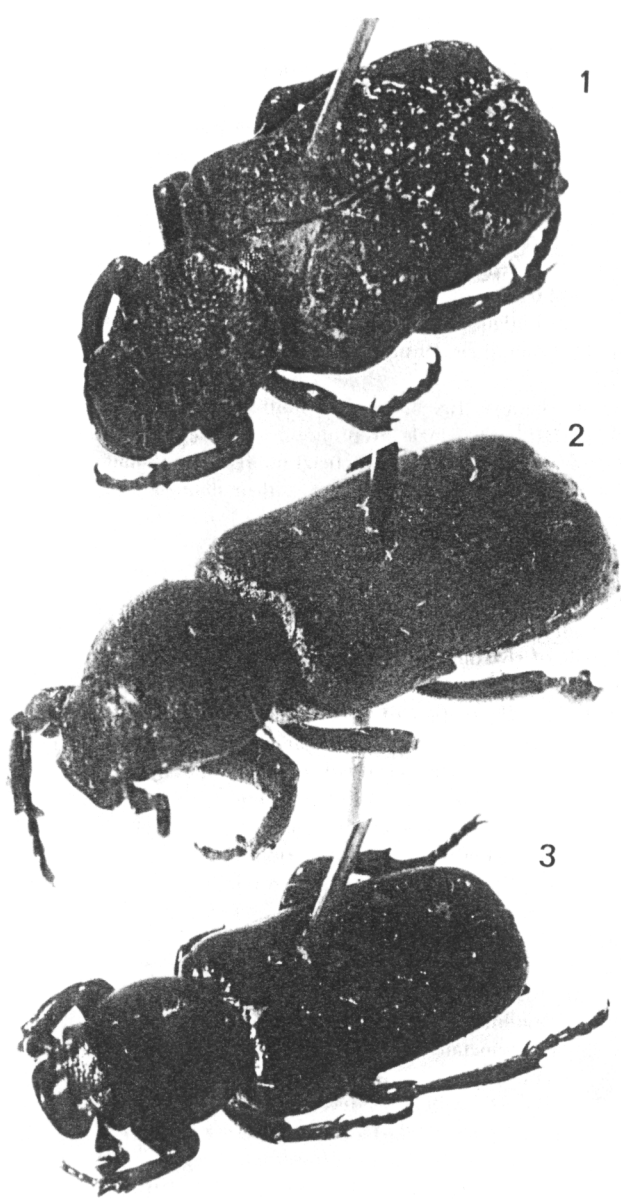


Plate 1. Habitus of new *Genuchinus* species, holotypes. 1, *G. muzo*; 2, *G. digitatus*; 3, *G. parvulus*.

modified, robust, segments slightly angulate in cross-section; claws very robust, their length more than twice the diameter of each of the tarsal segments.

Parameres, figs. 23, 26.

Material examined. – Holotype from “Muzo” (Colombia), labelled “Westwoodi/Steinh.”, “Ex Musaeo/E. Steinheil”; the R. Oberthür collection in the Paris museum. Two male paratypes, also from Muzo, 11-VII-1936, J. Bequaert, alt. 900 m; with unidentified formicine ant, one worker mounted with each paratype (MCZ).

***Genuchinus digitatus* sp. nov.**

Holotype (male). – Approximate length 13, width 4,5, height 3,5 mm. Black, opaque; brownish markings on pronotum and elytra (presumably usually covered with whitish velutinous matter). Derm predominantly annulate-striolate, ventral parts and legs with numerous minute pale-brown bristles ( $\times 25$ ). Habitus, plate 1, fig. 2.

Cephalic contours, fig. 1. Clypeus (frontal view) with reflexed anterior margin; clypeopleuron narrow, slightly impressed along inferior margin; discolateral transition of clypeus gradually declivous; frons almost flat, vertex convex. Entire cephalic surface with scabrous microsculpture, without distinct punctation. Maximum width of head 2.2 mm.

Pronotal contours, fig. 5; anterior noto-pectoral transition of prothorax subgradual; posterolateral angle almost completely rounded off; general surface of pronotum very feebly convex, midline impression scarcely noticeable. Annulate punctation of pronotum dense to very dense; posterior part of some punctures more or less effaced; anterolateral surface only scabrous; punctures isodiametric, their diameters on pronotal centre 0.01 mm, their densities 10–13/0.25 sq. mm. Median length of pronotum 2.9, maximum width 3.8 mm. Scutellum (fig. 8) sparsely annulate-striolate.

Elytral contours, fig. 8; posthumeral emargination shallow, humeral and distal umbones distinct; elytral disc deplanate, with abundant elongate-elliptic striolae, their length decreasing on lateral declivity, becoming almost circular; apicosutural angle of elytron obtuse. Sutural length of elytra 6.0, maximum (longitudinal) length 7.5, maximum width combined 4.5 mm.

Mentum, fig. 29; surface moderately shiny, with superficial, braided striolation. Antennal scapus triangular. Preprosternum with robust, apically (lateral view) rounded apophysis, its apex and anterior side abundantly setose. Lateral surface of propectus with slightly braided, very dense longitudinal striolation; meso- and metapectus as well as hind coxae annulate-striolate, very dense laterally, becoming more or less scabrous; striolae medially small, horse-shoe-shaped. Metasternal disc flat, midline scarcely impressed. Visible sternites 1–4 of abdomen medially distinctly impressed; sternites medially finely punctate, 1–5 laterally densely annulate-striolate. Propygidial spiracles conically produced; propygidial derm finely, braidedly striolate. Pygidium transversely subelliptic in outline, general surface strongly convex, slightly double-topped;

derm densely annulate-punctate, punctural diameters decreasing to anal border; anal border immarginate.

Fore tibia (fig. 14) with two external denticles, well-developed inferior-terminal denticle, and very peculiar, spur-bearing apical-internal thumb (fig. 16), its apex reaching base of tarsal segment 3. Middle tibia with distinct external spine at one-third from apex, hind tibia (fig. 19) with more crest-like protrusion; apex of middle and hind tibiae quadridentate; tibial derm striolate-punctate, external side scabrous; terminal spurs tapering, short, reaching base of tarsal segments 2. All femora striolate and striolate-punctate. Tarsi unmodified, slender, segments claviform; claws medium-sized, their length 1 - 1.5 times the diameter of the tarsal segments.

Parameres, figs. 24, 27.

Material examined. - Holotype only, from "Mexico: Cuernavaca,/Edo. de Morelos,/12-x-72/1500 mts. alt./L. Kohlmann leg.," collected in flight (Mexico City Museum).

#### *Genuchinus parvulus* sp. nov.

Holotype (female). - Approximate length 9, width 3.5, height 2 mm. Black, shiny, with sparse whitish velutinous spots. Derm predominantly annulate-punctate; bristles minute, sparse, pale-brown ( $\times 25$ ). Habitus, plate 1, fig. 3.

Cephalic contours, fig. 3. Clypeus (frontal view) with reflexed anterior margin; clypeopleuron narrow, slightly impressed over most of inferior margin; disco-lateral transition of clypeus gradually declivous; clypeus swollen in front of eyes; frons almost flat; clypeus as well as vertex convex. Entire cephalic surface, except anterolateral areas, abundantly finely punctate, most punctures subannulate. Maximum width of head 2.0 mm.

Pronotal contours, fig. 6; anterior noto-pectoral transition of pronotum abrupt, lateral borders submarginate; posterolateral angle distinct; general surface of pronotum very feebly convex, without midline impression. Annulate punctation fine, abundant but scattered; punctures isodiametric, their diameters on pronotal centre 0.03 mm, their densities 10-14/0.25 sq. mm; disc with 4 small whitish velutinous spots. Median length of pronotum 2.0, maximum width 2.7 mm. Scutellum (fig. 9) with whitish velutinous triangle, apex with striolation.

Elytral contours and colours, fig. 9; posthumeral emargination shallow, humeral and distal umbones distinct; elytral disc deplanate, with numerous, mostly elliptic striolae, becoming circular and more punctiform on lateral declivity; apicosutural section of elytron widely rounded (fig. 11). Sutural length of elytra 4.3, maximum (longitudinal) length 5.3, maximum width combined 3.5 mm.

Mentum, fig. 30; surface moderately shiny, with numerous arcuate striolae. Antennal scapus triangular. Preprosternum with robust, short, apically truncate apophysis, apex sparsely setose. Lateral surface of propectus with slightly braided, dense longitudinal striolation; mesosternum arcuate-striolate,

remainder of pectus annulate-punctate (metasternal disc) to annulate-striolate (laterally); hind coxae annulate-striolate. Metasternal disc flat. Abdomen medially impressed over visible sternites 1–3, sternites 2–4 laterally with velutinous whitish marking; sternites 1–5 medially finely annulate-punctate, laterally densely annulate-striolate. Propygidial spiracles strongly conically produced (fig. 22); propygidial derm with somewhat scabrous. Pygidium transversely subelliptic in outline, general surface strongly convex, slightly double-topped; derm densely, finely annulate-punctate; anal border immarginate; base with velutinous whitish spots.

Fore tibia (fig. 15) with two external denticles and well-developed inferior-terminal denticle. Middle and hind tibiae with very distinct external denticle at 0.3 from apex; apex of middle tibia tridentate, of hind tibia quadridentate; tibial derm densely hemipunctate, with inconspicuous bristles; terminal spurs tapering, short, reaching base of tarsal segments 2. All femora densely hemipunctate, with inconspicuous bristles. Tarsi unmodified, slender, segments claviform; claws medium-sized, their length 1–1.5 times the diameter of the tarsal segments.

Material examined. – Holotype only, from “Hansa Humboldt/Sta. Catharina/Brasilien Reitter” (Leiden museum).

#### **Genuchinus ineptus** Horn(= *angustus* Casey syn. nov.)

Notes. – I am unable to recognize in the type-material two different species. There is some variation in the length/width proportion of the pronotum in the type-series of Casey's *angustus*, a character used by Potts in his key (1945: 73), ranging from 85/97 (lectotype) to 85/105. The holotype of *ineptus* has this proportion 85/104 (sic!).

Lectotype. – Out of 4 syntypes of *angustus* sent to me by the USNM I select as lectotype ♀ specimen no. 1 of the USNM type series no. 48691, from “Santa Rita Mts./Ariz. 5 to 8000 ft./July, F.H. Snow”, ex Casey collection 1925; length ca. 12.5 mm.

#### **Genuchinus peruanus** Moser

Lectotype. – Here designated, a ♀ in the Berlin museum, labelled “Peru/Rio Oxabamba/La Merok/Chanamayo”, “peruanus/Type Mos.”; length ca. 16.5 mm.

#### **Genuchinus sulcipennis** Westwood

Lectotype. – Here designated, a ♀ in the Paris museum, labelled “G. sulcipennis/West Equador/Buckley.”, ex Oberthür-Parry; length ca 11.5 mm.

**Genuchinus velutinus** Westwood

Lectotype. — Here designated, a ♂ in the Paris museum, labelled “G. velutinus/West. Mexico”, ex Oberthür-Parry; length ca 14 mm.

**Genuchinus v-notatus** Westwood

Lectotype. — Here designated, a ♂ in the Paris museum, labelled “Genuchinus/V. notatus. Mexico/Westw. Th. Oxon. Pl.”, ex Oberthür-Parry; length ca 15 mm.

**Cyclidinus brasiliensis** (Moser) comb. nov.

(figs. 17, 25)

Notes. — *Genuchinus brasiliensis* Moser (1910: 365) has an aedeagus different from that of the various *Genuchinus* species discussed above and its fore tibiae are most peculiarly modified. The present recombination with *Cyclidinus* Westwood is tentative, because too little is known of the South American Cremastocheilini of the *Genuchinus* group, i.e. *Genuchinus* + *Cyclidinus* + *Cyclidiellus*. If no transitional forms between *brasiliensis* and members of these genera are found, a separate genus-group position for *brasiliensis* might be considered.

Lectotype. — Here designated, a ♀ in the Berlin museum, labelled “Theropolis/Brasil.”, “brasiliensis/Type Mos.” “Michaelis” (apparently the collector); length ca 16 mm.

The figures are based on a ♂ from Brasil (Paris museum).

**Lissomelas flohri** Bates (= *Genuchinus grandis* VanDyke syn. nov.)

Notes. — From the description of *Genuchinus grandis* VanDyke (1952: 12) it was already suspected that the beetle concerned belongs to *Lissomelas flohri* Bates (1889). An examination of the holotype of VanDyke's name (kept in the California Academy of Sciences, San Francisco) confirmed this suspicion.

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