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**DESCRIPTION OF TWO NEW GENERA AND ONE  
NEW SPECIES OF CERAMBYCIDAE FROM  
THE ARABIAN PENINSULA**

(Insecta Coleoptera Cerambycidae)

**Abstract**

The author describes *Xenoderolus* n. gen. based on *Microderolus arabicus* Villiers, 1968 from Saudi Arabia and Yemen and *Anarchambyx pipposamai* n. gen., n. sp. from Yemen.

**Riassunto**

[Descrizione di due nuovi generi e di una nuova specie di Cerambycidae della Penisola Arabica]

Il presente lavoro propone la descrizione di *Xenoderolus* n. gen. per *Microderolus arabicus* Villiers, 1968 della Penisola Arabica e di *Anarchambyx pipposamai* n. gen., n. sp. di Yemen.

Key words: Coleoptera, Cerambycidae, Cerambycini, Saudi Arabia, Yemen.

**Introduction**

The systematics of Cerambycini of Africa and the Arabian Peninsula is certainly far from well established. Many new species have been described in recent years and assigned to genera such as *Derolus* Gahan, 1891 or *Pachydissus* Newman, 1838 although their real affinities to these genera are questionable and remain to be reassessed.

*Pachydissus* was established by Newman for a single species from Australia (*P. sericus*). Following authors, such as FAIRMAIRE (1887), GAHAN (1891, 1906), AURIVILLIUS (1907) and others, assigned to that genus several species from the Palaearctic region, India and also from tropical Africa. For many of these species new genera may need to be established.

The genus *Derolus* has already been divided by LEPESME & BREUNING (1958) into subgenera, which are now dealt as different genera (ADLBAUER in print), but,

according to preliminary studies based on morphological characters other than those used by these authors, it has certainly to be further divided.

AURIVILLIUS (1925) established the genus *Microderolus* for the new species *M. latevittatus* from tropical Africa (“Congo Belge: Luebo”). VILLIERS (1968) described *Microderolus arabicus* n. sp. from Saudi Arabia. The examination of the type specimens proved, however, that *M. arabicus* is unrelated to the genus to which it was originally assigned and belongs, in fact, to a new genus which is described in the present paper. Moreover, I describe in this paper a new genus based on one new species from Yemen, which, although sharing some characters with *Derolus* Gahan, 1891, *Pachydissus* Newman, 1838 and *Neoplocaederus* Sama, 1991, cannot be referred to any of these genera.

***Xenoderolus*** n. gen. (Cerambycinae, Cerambycini)

*Microderolus* Villiers, 1968: 848; HOLZSCHUH (1993: 120), non AURIVILLIUS (1925).

**Type species.** *Xenoderolus arabicus* (Villiers, 1968: 848) **comb. n.** (Fig. 1).

**Etymology.** The epithet *Xenoderolus* is a combination of the greek word “xenos” (strange, foreign, different) and the genus name *Derolus*, reflecting the dissimilarities between the two taxa. The new genus is masculine in gender.

**Description.** Head finely grooved between the antennal supports, without a longitudinal carina between the upper eye lobes, rasp like punctate posteriorly; temples very elongate, not narrowed behind, eyes very large, moderately prominent, coarsely faceted, deeply emarginate. Pronotum transverse or slightly longer than wide, transversely impressed before the anterior and posterior margins, moderately rounded laterally, the disc not or very shallowly wrinkled or grooved; a “U” shaped fine incision is sometimes visible in the middle before the base; discal surface very finely and densely punctate and sparsely pubescent. Elytra elongate, parallel sided, moderately convex, apices rounded; elytral surface coarsely and deeply punctate at base, punctures become sparser toward the middle and almost disappear on the apical third, clothed with dense short pubescence. Antennae longer than body in male (exceeding the elytral length with the last three segments), about as long as the body in female; all segments cylindrical, not thickened at the apex; first segment sparsely and coarsely punctate, without apical cicatrix, 2<sup>nd</sup> very short, ring-shaped, 5<sup>th</sup> the longest, 1.36x longer than 1<sup>st</sup>, 1.14x longer than 3<sup>rd</sup>, 1.53x longer than 4<sup>th</sup>; in female: 5<sup>th</sup> about as long as 3<sup>rd</sup>, slightly (1.11x) longer than 1<sup>st</sup>, 1.44x longer than 4<sup>th</sup>. Legs slender, tibiae always (in the studied material) without longitudinal carina; anterior and intermediate femora slightly (sometimes undistinctly) carinate on the outer side near the ventral face; hind femora and tibiae not carinate longitudinally, first tarsomere longer than the two following together. Prosternal process wide, gradually curved, not prominent, dilated apically; front coxae globose, coxal cavities rounded externally, closed posteriorly; mesosternal process wide, deeply bilobed apically, coxal cavities open externally to the epimera; metepisterna very narrow. Genitalia not examined.



Fig. 1 - *Xenoderolus arabicus* (Villiers, 1968) n. comb. Holotype female.



Fig. 2 - *Microderolus latevittatus*, Aurivillius, 1925. Female. Republique Centrafricaine: La Mabokè (R. Mourglia det.).

**Discussion.** VILLIERS (1968) described *M. arabicus* from a single female and assigned it to the genus *Microderolus* without any remark or comparison. As stated above, *M. arabicus* does not have any relationship with *Microderolus* and rather resembles some species belonging to the genus *Derolus* Gahan, 1891. The following comparison is based on female specimens of *M. latevittatus* Aurivillius, 1925 (Fig. 2) (male not available to me).

*Microderolus* differs from *Xenoderolus* n. gen. by having strongly prominent eyes, upper lobes reduced and far from each other, pronotum subcylindrical, 1.37x longer than wide, almost parallel sided, only slightly and obtusely tuberculate laterally, surface impunctate and glabrous, glossy, with a transverse gibbosity before the middle; elytra strongly convex, somewhat raised along the suture, dehiscent before the apex, apices subtruncate, elytral surface densely clothed with longer adpressed pubescence. Antennae shorter, hardly reaching beyond the middle of elytra, 1<sup>st</sup> segment very robust, 2<sup>nd</sup> more elongate, longer than wide, 3<sup>rd</sup> the longest, 1.15x longer than 5<sup>th</sup>. Legs short and stout, all femora and tibiae finely but distinctly carinate on each side along the ventral face.

*Derolus mauritanicus* (Buquet, 1840), the type species of the genus, differs from *Xenoderolus* n. gen. by the structure of pronotum, antennae and legs. Pronotum is more or less dilated laterally just beyond the middle, “more or less deeply wrinkled above and with a rather deep nitid groove with sharp edges curving downwards on each sides behind the middle” (GAHAN, 1906); antennae with 3<sup>rd</sup> and 4<sup>th</sup> segments slightly tickened at the apex, the 5<sup>th</sup> to 10<sup>th</sup> angulate anteriorly at the apex”, 1<sup>st</sup> segment about as long as 4<sup>th</sup>, 5<sup>th</sup> 1.28x longer than 3<sup>rd</sup> and about twice longer than 1<sup>st</sup> and 4<sup>th</sup>. All legs are always more or less distinctly longitudinally carinate on each side.

**Distribution and host plants.** *Xenoderolus arabicus* (Villiers, 1968) (**new comb.**) is currently known from Yemen: Habarut, (type locality); Lawdar NE of Aden, leg. M. Rejzek; Jabal Bura’ NEE of Al Hudaydah, leg. M.Rejzek; Saudi Arabia: Shuqayq, NW of Jizan; Makkah; Fayfa (HOLZSCHUH, 1993); HOLZSCHUH (1993) also quoted Oman, but without exact locality. The record of this species in the United Arab Emirates: Abu Dhabi, Jebel Hafit (HOWARTH & GILLET, 2004; VAN HARTEN, 2005) is based on misidentification (*Derolus* sp.). This interesting beetle is ecologically associated with *Acacia* spp.; adults were collected in March, April and August, emerged from wood, sitting or running after dusk on dead small branches and twigs of these plants (HOLZSCHUH, 1993; Rejzek, pers. comm.).

***Anarchambyx*** n. gen. (Cerambycinae, Cerambycini)

Type sp. *A. pipposamai* n. sp.

**Etymology.** From the greek root “anarchia” (no authority, no state), referred to the historical anarchic movement followed by my father and “*Cerambyx*”. The new genus is masculine in gender.

**Description.** Body robust, head marked with a semicircular furrow in front, that circumscribes a flattened slightly raised space; antennal tubercles prominent,



Fig. 3 - *Anarchambyx pipposamai* n. gen., n. sp.. Holotype male.

acute on the inner side, the space between them convex and deeply grooved longitudinally; eyes very large, prominent, coarsely faceted, deeply emarginate. Pronotum transverse, transversely impressed before the anterior and posterior margins, somewhat tuberculate at the middle of each side, strongly and irregularly wrinkled above. Elytra moderately elongate, parallel sided, moderately convex, distinctly impressed at base before the shoulders, apices truncate, sutural angle dentate; elytral surface inpunctate. Antennae shorter than body in male (the only sex known). Legs slender, tibiae without longitudinal carina; femora finely but distinctly carinate on the outer side near the ventral face. Prosternal process wide, curved, not prominent, longitudinally sulcate laterally, dilated apically; coxal cavities rounded externally, closed posteriorly; mesosternal process wide, subquadrate, deeply bilobed apically, coxal cavities open externally to the epimera; metepisterna narrow, metepimera produced apically toward the hind coxae. Male genitalia: IX tergite present; internal sac with basal sclerites well developed.

*Anarchambyx pipposamai* n. sp. (Fig. 3)

**Type series.** Holotype male: Yemen: Mabar, 01.07.1992, light trap, A. van Harten leg., author's collection.

**Description of the holotype male.** Length: 26 mm. Black, somewhat shining, covered with pale grey pubescence, which is sparser on the head and the pronotum, denser on legs and antennae; a few short hairs are visible at the base of the pronotum and at the apical margin of elytra. Pronotum transverse, strongly and irregularly corrugated above. Elytra inpunctate, covered with a very dense microreticulation all over. Antennae not extending beyond the apical fifth; all segment cylindrical, 3<sup>rd</sup> and 4<sup>th</sup> very feebly thickened at the apex; first segment without apical cicatrix, sparsely punctate, 2<sup>nd</sup> very short, ring-shaped, 3<sup>rd</sup>, 5<sup>th</sup> and 6<sup>th</sup> similar in length, each of them slightly longer than 1<sup>st</sup>, 1.31x longer than 4<sup>th</sup>. Legs slender, femora fusiform, tarsi moderately elongate, third segment about as long as the two following united, all segments of hind tarsi longitudinally furrowed beneath, last segment cleft to the base. Male genitalia: median lobe elongate, strongly acuminate apically; tegmen with lateral lobes short, convex and clothed with hairs on internal side. Female unknown.

**Etymology.** The new species is dedicated to the memory of my father, Umberto (Pippo) Sama, old anarchist, born in 1919, passed away in May 2007.

**Discussion.** Despite having carinate femora, the new genus is certainly more closely related to *Pachydissus* Newmann, 1838, and *Neoplocaederus* Sama, 1991, than to *Derolus* Gahan, 1891. *Neoplocaederus* differs from *Anarchambyx* n. gen. by head with a median carina between the upper lobes of the eyes, which extends downwards along the inter-antennary sulcus, pronotum armed with a spine or prominent tubercle on each side, prosternum vertical or almost vertical posteriorly, front coxal cavities angulate externally, antennae much longer than the body in male and with segments 4<sup>th</sup> to 10<sup>th</sup> sharply margined in front and angulate or spined at the apex, legs with femora and tibiae not carinate. *Pachydissus* (compa-

parison with the type species *P. sericus* Newman, 1838) differs from the new genus by third to fifth segments of antennae more or less strongly thickened at the apex; legs with femora not carinate, all segments of tarsi not longitudinally grooved ventrally; prosternal process more or less angulate. *Derolus* [comparison with the type species *D. mauritanicus* (Buquet, 1840)] differs from the new genus by the structure of pronotum, elytra not distinctly impressed before the shoulders, legs with both femora and tibiae longitudinally carinate, internal sac without basal sclerites, tegmen with lateral lobes concave and totally glabrous ventrally. *Diorthus* Gahan, 1891 differs by antennae furnished with a short fringe of short hairs beneath, the first joint with a narrow cicatrix at the apex delimited by a short transverse carina. *Aeolesthes* Gahan, 1890 has front coxal cavities moderately angulate externally, second segment of antennae elongate, legs not carinate.

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