

A new species of *Eulichas* JACOBSON from Vietnam (Coleoptera: Eulichadidae)

M.A. IVIE & M.A. JÄCH

Abstract

Eulichas milleri sp.n. (Coleoptera: Eulichadidae) is described from Vietnam, and its relationship to other *Eulichas* JACOBSON is discussed. The type locality of *Eulichas incisicollis* PIC is corrected to the Cameron Highlands of Malaysia.

Key words: Coleoptera, Eulichadidae, *Eulichas*, new species, Vietnam, Malaysia.

Introduction

JÄCH (1995) cataloged the family Eulichadidae, and reviewed the species from China, Laos and Vietnam. Although much work remains to be done on the species beyond that region, Jäch's work provides a framework classification of the family. COSTA & VANIN (1998) provided the basis for integrating larval characters into the classification.

A new species of *Eulichas* JACOBSON from central Vietnam presents a remarkable expansion of the genitalic concepts recorded for the family. We take this opportunity to describe this species in order to discuss these characters, and integrate this species into the classification system proposed by JÄCH (1995). In addition, examination of a syntype of *E. incisicollis* PIC enabled us to clarify the type locality of that species.

The description follows the format and terminology of JÄCH (1995).

Material cited is deposited in the following collections:

BMNH The Natural History Museum, London

FSCA Florida State Collection of Arthropods, Gainesville, USA

MTEC Montana Entomology Collection, Montana State University, Bozeman, USA

NMW Naturhistorisches Museum, Wien

Eulichas (s.str.) *milleri* sp.n.

TYPE LOCALITY: Hai Van Pass, 30 km north of Da Nang, Truong Son Mountains, central Vietnam. The summit of the pass is recorded at 496 m a.s.l.

TYPE MATERIAL: **Holotype** ♂ "VIETNAM: DaNang Hai Van Pass UTM Coord. 937918 02 JUN 1970, blt T. H. Dickens". Deposited in the NMW, with permission from the FSCA. **Paratypes** (FSCA, MTEC, NMW): 5 ♂♂, same data as holotype; 25 exs.: same data except "03 JUN 1970".

DIAGNOSIS: Males 25 - 28 mm long. Body form elongate, slender. Integument piceous to rufo-piceous, lightest on elytra which have a definite reddish cast. Pubescence coarse, mostly light grey, forming distinct ocellations, within which the pubescence is finer and black (Fig. 1); maculations vary with degree of rubbing; most consistent aspect a series of ocellations that tend to coalesce into stripes of diamonds crossing suture at 5 – 6 evenly spaced intervals. Antenna robust (Fig. 2) about 0.45 times as long as body; terminal antenomere 2 times as long as wide, slightly wider than maximum width of penultimate antenomere, concave (ventral) surface with

dense small tubercles. Pronotum ca. 2 times as wide as long; disc slightly convex; punctures smaller baso-medially, separated by about one diameter, slightly denser, larger and more strongly impressed laterad and anterior to center; hind angles slightly acute; hind margin crenulate; lateral margin evenly arcuate and convergent from hind to anterior angles; lateral margin rimmed, raised anteriorly, setting off narrowly explanate area in anterior third; hindmargin straight in front of scutellum, bisinuose to each side. Elytra with numerous punctate longitudinal lines (about 12 between suture and humeral callosity), punctures separated by about a diameter, rows not impressed; elytral apices rounded to small acute tooth at sutural margin. Prosternal process reaching anterior edge of mesocoxae, moderately wide. All tarsi with plurisetose empodia. Abdominal sternites with a pair of rounded bare-looking spots (actually with fine dark setae that are difficult to see) at antero-lateral corners, a pair of small shining tubercles at the postero-mediad edges thereof, and another pair of spots postero-mediad of the tubercles, giving a regular, diagonally-spotted appearance.

Aedeagus (Figs. 3 - 4) differing distinctly from all described for the family (JÄCH 1995). Basal piece narrowly lyriform, with long basal parameral apophyses; parameres very wide and complex, with medio-dorsal "thumb" attenuating caudally in narrow acute ventrally directed hook, and very wide latero-ventral "hand"; basal parameral hook well developed, but no distal parameral hook present; median lobe reaching beyond parameres, with well developed penile spine; fibula strongly sclerotized, narrowly acute apically, reaching nearly to end of median lobe.

Female unknown.

RELATIONSHIPS: The presence of the basal parameral hook, penile spine and long excised median lobe are characteristic of the subgenus *Eulichas*. The long basal piece and basal parameral apophyses place it in the *E. funebris* species group, while the widened and tuberculate last antennomere and the lack of a distal parameral hook are shared with *E. pacholatko* JÄCH.

Eulichas milleri will key to couplet 6 in the key of JÄCH (1995). The following couplets should be used in place of number 6 in that key, in order to accommodate *E. milleri*:

- | | | |
|----|--|-------------------|
| 6 | Last antennomere of male covered with small tubercles on ventral surface, distal parameral hook lacking..... | 6a |
| - | Last antennomer of male not ornamented on ventral surface; distal parameral hook present | 7 |
| 6a | Parameres very wide and complex, as in Figs. 3 - 4..... | <i>milleri</i> |
| - | Parameres narrower, as in JÄCH (1995: Fig. 43) | <i>pacholatko</i> |

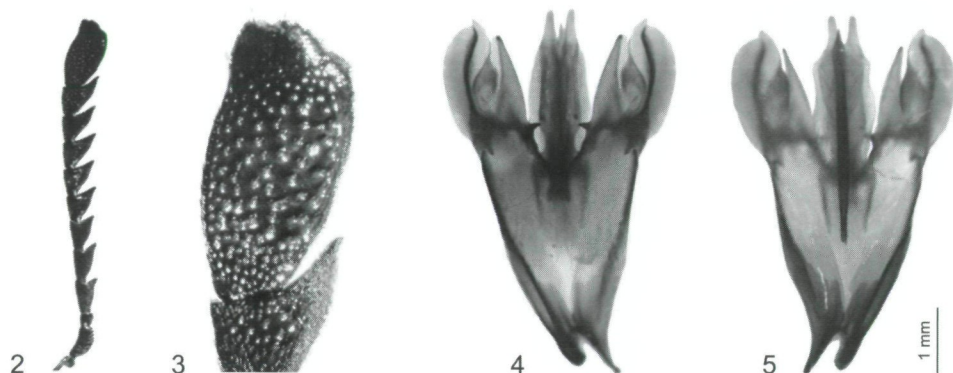
ETYMOLOGY: Named for coleopterist, collecting partner and friend Richard S. Miller, who spent a portion of his youth in the area occupied by this species, and donated part of the type series.

Eulichas inciscollis PIC

In his description of *Eulichas inciscollis* PIC (1933) cites the type locality as "Archipel Malais: Ilse [probably typographical error for "isle" (island)]". A single syntype (probably female) in the BMNH, is labeled "Camerons Island" [the original description cites the BMNH as the source of the type(s), but does not specify a single individual, so this specimen must be considered a syntype (ICZN 1999, recommendation 73F)]. A conspecific female of this distinctive species (MTEC) was collected in November 1982 by H.F. Wong in the Cameron Highlands of Malaysia. Since there is no Camerons Island within the range of *Eulichas*, it seems clear that the label was misinterpreted, leading Pic to misrecord the provenance of the type. Therefore the type locality should be corrected to Cameron Highlands (Pahang, Peninsular Malaysia).



Fig 1: Habitus of *Eulichas milleri*



Figs. 2 – 5: *Eulichas milleri*: 2) antenna, dorsal view, 3) 11th antennal segment, enlarged, ventral view, 4) aedeagus, ventral view, 5) same, dorsal view.

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Michael A. IVIE

Department of Entomology, Montana State University, Bozeman, MT 59717, USA (mivie@montana.edu)

Dr. Manfred A. JÄCH

Naturhistorisches Museum, Burgring 7, A - 1014 Wien, Austria (manfred.jaech@nhm-wien.ac.at)

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