AMPHIZOIDAE:
Taxonomic notes and new distributional records

(Coleoptera)

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Abstract

Amphizoa smetanai ROUGHLEY, XIE & YU, 1998 (Coleoptera: Amphizoidae) is synonymized with A. davidis LUCAS, 1882. Amphizoa sinica YU & STORK, 1991 is recorded for the first time from North Korea.

Key words: Coleoptera, Amphizoidae, Amphizoa davidis, Amphizoa smetanai, new synonymy, new faunistic records, China, North Korea.

Introduction

Amphizoidae or Troutstream Beetles have received more attention than other comparably large water beetle families, especially in North America. Their rather large size, archaic appearance and unusual habitat (fast flowing mountain streams; see e.g., Ji & Jäck 1995) seem to be crucial factors for their popularity. Amphizoa davidis LUCAS even was classified as a "living fossil" by YU, ROUGHLEY & XIE (1996) although this is not supported by palaeontological evidence.

Amphizoidae comprise one genus, Amphizoa LECONTE, with six species. Three species live in western North America; at least one of these, A. insolens LECONTE, is extremely variable morphologically (see KAVANAUGH 1986). The remaining three species have been described from China (A. davidis LUCAS, A. sinica YU & STORK, and A. smetanai ROUGHLEY, XIE & YU); however, examination of type specimens revealed a new synonymy, which is presented herein, together with new distributional records.

Acronyms:

CASS Chinese Academy of Sciences, Institute of Applied Ecology, Shenyang
MHING Museum d'Histoire naturelle, Genève
MHNP Muséum national d'Histoire naturelle, Paris
NMW Naturhistorisches Museum Wien
WMW J.B. Wallis Museum, Winnipeg

Amphizoa davidis LUCAS, 1882


TYPE LOCALITY: "Mou-pin" [= Baoxing County, north of Ya'an], central Sichuan, China.
TYPE MATERIAL: Lectotype ♂ (MHNPC): "Museum Paris, Mou-pin, A. David 1870" \ "398" \ "774 70" \ "Amphizoa davidi, Lucas" (label double-pierced by pin, hence vertical on pin) \ "Type" (red) \ "Museum Paris" \ "Lectotype Amphizoa davidi Lucas designated by D.H. Kavanaugh 1983" (red) (KAVANAUGH 1986).

ADDITIONAL MATERIAL EXAMINED:

NOTE: The name of this species was often spelled as "davidi"; however, the correct original spelling is "davidis".

SYNONYMY: Amphizoa smetanai syn.n.

TYPE MATERIAL: Holotype ♀ (MHNPC): "CHINA Sichuan Emei Shan, 3000 m 29°32N 103°21E 17.VII.1996 C64" \ "collected by A. Smetana, J. Farkaš and P. Kabátek" \ "HOLOTYPE Amphizoa smetanai" \ "Amphizoa davidis LUC. det. Jäch 2000". The specimen is partly damaged, since somebody had stepped on the specimen just before it was collected in 1996.

Following examination of 13 specimens of A. davidis from two different counties we are convinced that the holotype of A. smetanai is conspecific with A. davidis.

Obviously, A. davidis is a rather variable species, especially with regard to the shape of the lateral lobes of the mentum (more elongate and more narrow in the holotype of A. smetanai), shape of the prosternal process, shape of metaventral process (not emarginate anteriorly in the Baoxing and Wenchuan specimens).

Examination of the body size and the coxites of the female genitalia did not reveal significant differences, which would justify specific separation of the single female from Emei Shan.

DISTRIBUTION: Known from four counties in Sichuan: Baoxing, Emei, Kangding, Wenchuan.

Amphizoa sinica Yu & STORK, 1991


MATERIAL EXAMINED (in addition to specimens examined by Ji & Jäch 1995).
NORTH KOREA: 3 km south of Zhenri Feng, Baitou Shan, River Baishui, 1350 m a.s.l., 11.VIII.2000, leg. L. Ji, 2 exs. (CASS).

VARIABILITY: After having examined numerous specimens, we must conclude that this species is more variable morphologically than presumed originally. The anterior pronotal corners for instance are not always distinctly acute.

DISTRIBUTION: China (Jilin), North Korea. First record for North Korea.

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Fig. 1: Geographical distribution of the Asian species of *Amphizoa*.

**References**


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