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A review of the genus *Lamellipalodes* Maulik (Coleoptera: Lampyridae)

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Abstract

The Otoretinae genus *Lamellipalodes* Maulik, 1921 is reviewed. Four species are proposed as new to science, *L. bajhangensis* Bocakova **sp. nov.**, *L. holzschuhi* Bocakova **sp. nov.** and *L. godawarensis* Bocakova **sp. nov.**, all from Nepal, and *L. yunnanensis* Bocakova **sp. nov.** from China (Yunnan) and northern Laos. Six species are redescribed. Illustrations of diagnostic characters are included, with a checklist and a key to *Lamellipalodes* species. The genus is newly recorded from China and Laos.

Key words: taxonomy, Otoretinae, checklist, key, new species, Oriental Region

Introduction

Lamellipalodes Maulik, 1921 is a small genus of Otoretinae fireflies distributed from southern India to the foothills of the Himalayas. The genus was originally monotypic (Maulik 1921). Later, two new species from Nepal were described by Wittmer (1995) and another two species from Thailand and Myanmar (Kawashima 2007). Brancucci and Geiser (2009) recognized another species, *L. lineatus* (Pic, 1921), originally placed in the genus *Eugeusis* Westwood, 1853.

Lamellipalodes is one of the more attractive otoretine representatives. Conspicuously enlarged terminal palpomeres of maxillary and labial palpi can be 10x longer than penultimate palpomere. This character is shared also by *Eugeusis*, *Hyperstoma* Wittmer, 1979, and *Lamellipalpus* Maulik, 1921. Similarly as in several other otoretine genera only males of the genus *Lamellipalodes* are known, and females are assumed to be brachypterous, or apterous, maybe even larviform. Phylogenetic relationships of *Lamellipalodes* are not known, although the genus is assumed to be closely related to *Lamellipalpus* (Brancucci & Geiser 2009), whose members also have considerably larger mandibles, while those of *Lamellipalodes* are small.

Due to the external similarities the genus was placed in Drilidae (Wittmer 1944). Drilidae were found to be a polyphyletic assemblage by (Crowson (1972) who considered *Lamellipalpus* a member of predominantly non-luminous fireflies of the subfamily Otoretinae. The placement of closely related *Lamellipalodes* in the subfamily Otoretinae was supported by Brancucci & Geiser (2009), and recently by Janisova and Bocakova (2013) who clarified the concept of the Otoretinae. Recently, Branham (2010) revived his previous hypothesis and considered Otoretinae genera (including *Lamellipalodes*) as incertae sedis within elateroids, although the placement of Otoretinae within Lampyridae was robustly supported by analyses of DNA sequences (Bocakova *et al.* 2007, Sagegami-Oba *et al.* 2007, Stanger Hall 2007). Lately, the lampyrid placement of the Otoretinae including related *Lamellipalpus* was corroborated by multigene analyses of huge elateroid dataset (Kundrata *et al.* 2014).

Here, a taxonomic revision of *Lamellipalodes* is provided and four new species from Nepal, India, Laos, and China are proposed. Descriptions, illustrations, a checklist, and a key to species are provided.

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