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***Grimaldinia pronotalis* n.gen., n.sp. from Mid-Cretaceous Burmese Amber (Hemiptera: Heteroptera, Leptopodidae, Leptosaldinae)**

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Abstract

A new genus and species of leptopodid bug, *Grimaldinia pronotalis* Popov & Heiss is described and illustrated from Burmese Middle Cretaceous (Albian-Cenomanian) amber originating from the northern Myanmar's Kachin State. This is the second finding of Leptosaldinae (Leptopodidae), after Poinar published on *Palaeoleptus burmanicus* from Burmese amber in 2009.

Key words: Hemiptera, Heteroptera, Leptopodomorpha, Leptopodidae, Leptosaldinae, new genus, new species, Burmese Amber, Myanmar, Cretaceous

Introduction

The extant fauna of Leptopodidae is predominantly distributed in the tropics. The family consists of two extant subfamilies of predaceous bugs: Leptopodinae (Old World) and Leptosaldinae (New World). The latter subfamily has a typical habitus: flattened and stout body that is very similar to Saldidae and Omaniidae (Popov 1985, 1989) and a short thick rostrum characteristic of all the Leptopodidae. The extant Leptopodidae is comprised of 10 genera with 37 species (Schuh *et al.* 1987, Schuh & Slater 1995), most of them widespread in the tropics of the Eastern Hemisphere.

Recent discoveries of fossil records of these enigmatic leptosaldine bugs, and also some new unpublished information known to us, support the earlier opinion that leptosaldines were once more widespread than nowadays, and their modern distribution is a relict (Ortuño *et al.* 2007; McKellar & Engel 2014; Grimaldi *et al.* 2013). A similar situation can be observed in the extant Coleorrhyncha, which were another widespread hemipteran groups of insects in both the Mesozoic and the Cretaceous period, but are now restricted to only Gondwanan distributions (Popov & Shcherbakov 1994, 1996). The oldest leptosaldine genera were described from the Middle Cretaceous (Albian-Cenomanian) Burmese amber (*Palaeoleptus* Poinar, 2009) and Canadian Late (Campanian) Cretaceous amber (*Cretaceomira* McKellar & Engel, 2013). Meanwhile, we are convinced that the genus *Palaeoleptus* was erroneously described as a new separate leptopodomorphan family, Palaeoleptidae (Poinar 2009). We argue that it possesses all the main characters of Leptosaldinae (e.g. reniform large eyes that overlap the pronotal collar, rather short and thick rostrum and deeply punctured hemelytra). Further, the “unique wing venation” mentioned as the main family character as shown in fig. 11 (Poinar 2009) cannot be verified on the photo of the wing, and the hemelytron is not well preserved, particularly its distal part, which is very typical for most extinct leptosaldid taxa. Therefore, it is practically impossible to compare any of the visible venation of the photo with the drawing of fig. 11. Moreover, when George Poinar kindly sent one of the authors (YuP) the original photo of the hemelytron of *Palaeoleptus burmanicus*, it could be verified that the visible basal part of the venation corresponds to the typical leptosaldid venation. There is also great doubt about the location of ocelli being too close to the posterior margin of

***Grimaldinia pronotalis* sp. n.**

(Figs. 1–2, photo 1–2)

Holotype. Submacropterous specimen, sex not determined, in a half-moon shaped piece of Burmese Amber (20x4x7mm) embedded in a block of transparent resin; left forewing damaged by an oval cut out probably caused by scavengers; specimen is ventrally attached to a strip of lizard skin, thus ventral side of specimen is not visible, lateral view partly obscured by amber impurities; membranous hind wing of the left forewing is laterally roundly exposed and overlapping the right fore wing, its surface showing dense microsculpture and longitudinal venation.

Deposited as BUB-LEP-1 in the collection of the second author.

Description. As given in the generic diagnosis and description. Coloration of dorsal and ventral side (as far as visible) uniformly black.

Measurements. Length 3.0mm; head width / length 45/24, anterior width between eyes 6; pronotum length at middle / width 11/27, length laterally 14; scutellum length / width 33 / 33; length of eye 10, diameter 4.

Etymology. Refers to the conspicuous configuration of the pronotum.

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