



Lineacoelotes, a new genus of Coelotinae from China (Araneae: Amaurobiidae)

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Abstract

A new genus of Coelotinae, *Lineacoelotes* gen. nov., is described. *Lineacoelotes* includes five species from central and western China. The females of *L. bicultratus* (Chen, Zhao & Wang, 1991) comb. nov. from Hubei (transferred from *Coelotes*), the males and females of *L. funiushanensis* (Hu, Wang & Wang, 1991) comb. nov. from Henan (transferred from *Draconarius*), the females of *L. nitidus* (Li & Zhang, 2002) comb. nov. from Hubei (transferred from *Coelotes*) are redescribed, the males of *L. nitidus* are described for the first time. Two new species from both males and females, *L. longicephalus* sp. nov. from Sichuan and *L. strenuus* sp. nov. from Hubei, are described. The females of this new genus have distinct, unusually long spermathecal heads, and the males have a broad, long patellar apophysis and a strongly modified conductor but lack a lateral tibial apophysis and a conductor dorsal apophysis. Comparison of male palps of *Lineacoelotes* gen. nov. suggests that none of the modified apophyses on the dorsal edge of the conductor is homologous to the conductor dorsal apophysis found in many other Coelotinae, but this assumption should be tested in a future phylogenetic analysis. As in other Coelotinae, spinnerets of representatives of *Lineacoelotes* gen. nov. have PMS with 2 cylindrical spigots on the lateral sides and 2 minor ampullate spigots on the middle, and PLS long with 1–2 cylindrical spigots on its base, and the trichobothrium has a transversely striped large hood and a smooth small hood.

Key words: new species, taxonomy, phylogenetic relationships, biogeography, Holarctic

Introduction

The spider subfamily Coelotinae F.O.P.-Cambridge, 1893 is well known for its species richness in Asia, particularly East Asian regions, including China, Japan, and Korea (Platnick 2007). Recent studies also show an abundant distribution of Coelotinae in the Himalayas and Thailand. Based on the specimens from the Himalayan expeditions of J. Martens (Mainz, Germany), Wang (2002) found a new genus (*Himalcoelotes* Wang, 2002) and 10 related species from Bhutan, Nepal and Tibet. Thirty-eight more species belonging to other genera are awaiting description. A series of four papers have been published on the discovery of 24 new endemic Coelotinae from Thailand (Dankittipakul & Wang 2003, 2004; Dankittipakul *et al.* 2005; Chami-Kranon *et al.* 2006). Coelotinae show both high species richness and great variation in their genitalic morphology, particularly that of the male palp. Genitalia of Coelotinae are so diversified that people often find it difficult to assign some species to any of the existing genera (Wang & Jäger, 2007). In fact, many species have been lumped into the genera *Coelotes* Blackwall, 1841 and *Draconarius* Ovtchinnikov, 1999. Wang (2003) tentatively assigned some of the *Draconarius* species to 7 species groups and more groups were recognized subsequently (Dankittipakul & Wang 2004; Zhang *et al.* 2005; Xu & Li 2006a). Obviously many species listed in both *Draconarius* and *Coelotes* are only arbitrarily assigned (Wang & Jäger 2007; Xu & Li 2006b; Xu *et al.* 2006). A compara-