

Article



Glabrimycetoporus amoenus, a new tachyporine genus and species of Mesozoic Staphylinidae (Coleoptera) from Liaoning, China

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Abstract

A new genus and species of well-preserved fossil Staphylinidae is described and illustrated. *Glabrimycetoporus amoenus* Yue, Zhao & Ren, **gen. et sp. nov.** is assigned to the tribe Mycetoporini in the subfamily Tachyporinae based on the following characters: head more or less inserted into prothorox, the tenth abdominal tergite broad and oblong; antennal insertions exposed and located anterior to a line drawn between anterior edges of eyes; body strongly tapered to the narrow head and abdominal apex. The specimen was discovered in the Upper Jurassic–Lower Cretaceous Yixian Formation of Beipiao City, Liaoning Province, NE China.

Key words: fossil, Staphylinidae, Tachyporinae, new genus, new species, Mesozoic, Yixian Formation

Introduction

Staphylinidae is one of the largest families of beetles, with over 46,200 known extant species placed in more than 3,200 genera of 32 subfamilies; while nearly 400 new species have been added each year (Herman 2001). Diverse fossil staphylinids are known from the Jurassic to Early Cretaceous: species of Piestinae, Omaliinae, Oxytelinae and Tachyporinae from deposits in Turga, Unda, Daya and Onokhoy, Russia (Ryvkin 1990), Olisthaerinae and Omaliinae from Novospasskoye and Kubekovo, Russia (Ryvkin 1985); Oxytelinae and Tachyporinae from Karatau, Kazakhstan (Tichomirova 1968); Oxytelinae from Manlay, Mongolia (Tichomirova 1980); Staphylininae and Tachyporinae from Laiyang, China (Zhang 1988; Zhang *et al.* 1992), unidentified staphylinids from Liaoning (Lin 1976) and Hebei (Hong 1990, 1992), China. Cretaceous impression fossils are known from the Russian Far East (Ryvkin 1988), and Linqu, China (Zhang 1989, 1994).

Recently we examined a well-preserved fossil of Staphylinidae from the Yixian Formation and describe it here as a new genus and a new species. The age of the Yixian Formation is controversial and three opinions have been proposed: the Late Jurassic (Ren *et al.* 1997; Zheng *et al.* 2003), transition from the Late Jurassic to Early Cretaceous (Chen *et al.* 2004; Wang *et al.* 2004, 2005), or the Early Cretaceous (Swisher *et al.* 1999; Li *et al.* 2001; Pang *et al.* 2002; Zhou *et al.* 2003). At present, we cannot draw a definite conclusion about the age of this formation, based on our new specimen.

Material and methods

The type specimen of the new species is deposited at the Key Laboratory of Insect Evolution & Environmental Changes, Capital Normal University in Beijing, China. The specimen was examined using a Leica MZ12.5 dissecting microscope and illustrated with the aid of a drawing tube attachment. Line drawings