First fossil Eccoptarthridae (Coleoptera: Curculionoidea) from the Mesozoic of China

MING LIU & DONG REN*

College of Life Sciences, Capital Normal University, Beijing 100037, China
* Corresponding author. E-mail: rendong@ mail.cnu.edu.cn

Abstract

In this paper a new species *Cretonanophyes zherikhini* sp. nov. and a new genus and species *Abrocar brachyorhinos* gen. et sp. nov., all placed within the family Eccoptarthridae, are described and illustrated. They pertain to the Late Jurassic Yixian Formation of the western Liaoning province, China. This finding represents the first record of fossil eccoptarthrids from China.

Key words: fossil, weevil, Eccoptarthridae, new taxa, Late Jurassic, Yixian Formation, Liaoning

Introduction

The family Eccoptarthridae is now a relict group comprising four extant genera occurring in Australia and South America (Kuschel 1992, Zimmerman 1994). However the fossils of this family are distributed worldwide and are represented by eleven species belonging to nine genera (Arnoldi 1977, Zherikhin 1977, Kuschel 1992, Gromov *et al*. 1993, Zherikhin & Gratshev 1997, Gratshev & Zherikhin 1999, Gratshev & Zherikhin 2000a, Gratshev & Zherikhin, 2000b, Zherikhin & Gratshev 2004). The earliest occurrence of eccoptarthrids has been assigned to the Late Jurassic, for which two species have been described: *E ccoptarthrus crassipes* Arnoldi, 1977 from the Karatau Range in South Kazakhstan, and *Gobicar ponomarenkoi* Gratshev & Zherikhin, 1999 from the Shar-Teg in Mongolia. The family underwent diversification in the Early Cretaceous. Seven species and five genera have so far been reported from the Early Cretaceous: two from the Trans-Baikal of Russia (Zherikhin 1977), one from the western Okhotsk region of Russia (Gromov *et al*. 1993), three from the Sierra del Montsec of Spain (Zherikhin & Gratshev 1997, Gratshev & Zherikhin 2000a), and one from the Santana Formation of Brazil (Zherikhin & Gratshev 2004). Besides, 25 specimens assigned to this family without description have been