The first fossil Myopsocidae (Psocoptera) in Dominican amber

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Abstract

Myopsocus arthuri sp. n. is described from Dominican amber (Miocene?). This first fossil Myopsocidae shows some similarities with the recently described Australian genus Nimbpsocus.

Key words: Psocoptera, Myopsocidae, sp. n., first fossil record, Dominican amber

Introduction

Although the insect order Psocoptera is well represented in the fossil record, the small family Myopsocidae Enderlein is still recorded by only one undescribed specimen from the Mexican Oligocene-Miocene amber (see Lienhard, 2004, Nel et al., 2005, also http://www.ville-ge.ch/musinfo/mhng/page-e/ps-fos.htm;). These small insects are frequent in warm forests, and they are likely to have been present in the Cenozoic forests from which amber is derived, thus discovery of a specimen in amber from the Dominican Republic is not surprising. Dating of Dominican amber is still controversial, with the latest proposed age of 20–15 mya based on foraminifera (Iturralde-Vincent and MacPhee, 1996), and the earliest as 45–30 mya based on coccoliths (Cêpek in Schlee, 1999). A range of ages for Dominican amber may be likely since the amber is associated with turbiditic sandstones ranging from the Upper Eocene to Lower Miocene Mamey Group (Draper et al., 1994). Moreover, Dominican amber is secondarily deposited in sedimentary rocks, which makes definite age determination difficult (Poinar and Mastalerz, 2000). Dominican amber was produced by the leguminous tree Hymenaea protera Poinar (1991). We follow the body and wing venation terminology of Yoshizawa (2005).