

Abstract

The tudlov amber has been the only known fossil resin from the Czech Republic, in which the biological inclusions are preserved, and at the same time the only Czech fossil resin occurring not in the area of the Bohemian Massif, but in outer arch of the Outer Western Carpathians. So far, only single findings of fossil Hymenoptera and Diptera have been published. In contrast to mostly Cretaceous ambers of the Bohemian Massif, the age of tudlov amber is usually estimated from the late Paleocene to mid Eocene. This diploma thesis provides an overview of the fossil organisms found in the tudlov amber in the past two decades and it is also the most comprehensive text dedicated to the palaeodiversity of embedded organisms from this remarkable fossil resin. The presence of various microscopic fungi is proven, as well as the presence of angiosperm trichomes, mites and insects (prevalled by Hymenoptera and Diptera). The discovery of a hymenopteran family Stigmaphronidae (Apocrita) is the first Cenozoic evidence of this family, formerly considered as extinct by the end of Cretaceous. Finding of an isolated gymnosperm twig with wood anatomical characters close to genus *Glyptostrobus* allows to outline some conclusions about the paleoecosystem. The Eocene age of the resin is confirmed by the combination of biological and chronostratigraphical approaches.