The oldest Vespinae from the Paleocene of Menat (France) (Hymenoptera: Vespidae)

ANDRÉ NEL1 & FRANCIS AUVRAY2

2 154 rue Léon Maurice Nordmann, F-75013 Paris, France

Abstract

Paleovespa menatensis sp. nov. is the oldest Vespinae to be described from the Paleocene of Menat (France). This subfamily could have diversified relatively recently, during the Late Paleogene, which could be congruent with its apparent absence in the Mesozoic.

Key words: Insecta, Hymenoptera, Vespidae, Vespinae, sp. nov., Paleocene, France

Introduction

Wasps of the subfamily Vespinae (Hymenoptera: Vespidae) are rather scarce in the fossil record. Carpenter and Kojima (1997) gave a list of the known Vespinae that are distributed in the two genera Vespa L., 1758 and Paleovespa Cockerell, 1906, from the Baltic amber, and the Oligocene of Germany and USA. This subfamily lacks accurately described taxa older than the Middle-Late Eocene Baltic amber, although some nests attributable to Vespinae or Polistinae are known from the Cretaceous (Wenzel 1990; Carpenter and Grimaldi 1997; Carpenter 2000). Further species are known from the Chinese Miocene and the Baltic amber (Zhang 1989; Poinar 2005).

The entomofauna of Paleocene volcano-sedimentary maar (circa - 60 Ma., spongodiatomite) of Menat (Puy-de-Dôme, France) is very diverse with the most diverse and abundant orders being Blattodea and Coleoptera. Hymenoptera are relatively rare in this outcrop (Piton 1940; Nel and Petrulevicius 2005). Although Piton (1940) described a Polistinae Polistes vergnei from this site, no Vespinae has been recorded from Menat. In 1954, one of us (F.A.) discovered a specimen of Vespinae in this outcrop, which we described below. It represents the oldest record of the Vespinae. We follow the body and wing venation nomenclature of Brothers and Finnamore (1993).