## **Occurrence of the genus** *Hesperinus* WALKER (Diptera, Hesperinidae) in the Oligocene of France

[Ein Vorkommen der Gattung *Hesperinus* WALKER (Diptera, Hesperinidae) im Oligozän von Frankreich]

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Abstract	We report the finding of two <i>Hesperinus</i> specimens in the Oligocene outcrop of Bois d'Asson, France. This is the first record of the genus <i>Hesperinus</i> WALKER, 1848 from Oligocene sediments.
Key words	Hesperinidae, Hesperinus, Europe, France, fossils, Oligocene
Zusammenfassung	Zwei Exemplare von <i>Hesperinus</i> wurden im Oligozän von Bois d'Asson, Frankreich, gefunden. Dies ist der erste Nachweis für die Gattung <i>Hesperinus</i> WALKER, 1848 in oligozänen Sedimenten.
Stichwörter	Hesperinidae, Hesperinus, Europa, Frankreich, Fossilien, Oligozän

## Introduction

The genus *Hesperinus* WALKER, 1848 comprises a few primitive bibionomorph flies which are generally believed to be basal members of the clade including the Bibionidae (FITZGERALD 2004). They have traditionally been treated as a subfamily of Bibionidae (HARDY 1981) but in Europe have generally been assigned to a family of their own, the Hesperinidae (KRIVOSHEINA 1997, PAPP 2010). The genus is believed to represent an old group, but until recently (SKARTVEIT 2009) no fossil species belonging to Hesperinidae had been known. Some species from North American Tertiary deposits had been placed in this genus (MELANDER 1949) but they clearly belong in other bibionid genera (SKARTVEIT 2009). Three species of *Hesperinus* were described from Eocene Baltic amber by SKARTVEIT (2009).

In the modern European fauna the family is represented by *Hesperinus imbecillus* (LOEW, 1858) and the recently described *H. graecus* PAPP, 2010 and *H. ninae* PAPP, 2010 (PAPP 2010, PAPP & KRIVOSHEINA 2010). All these species are considered rare, with a central-southern European distribution (PAPP 2010). The genus is also present in North America, Brazil, Siberia, and Japan. The recent species tend to be found near streams in woodlands and the larvae may live in wet dead wood (PAPP 2010).

Flies of the genus *Hesperinus* are medium-sized, slender nematocerans (KRIVOSHEINA 1997). The head is dichoptic even in males (unlike Bibionidae which have holoptic males) and the antennae are strongly elongated in modern species but less so in species from the Eocene (SKARTVEIT 2009). Legs and abdomen are slender. Venation of the wings is plesiomorphic, similar to the bibionid genera *Penthetria* and *Plecia*. However, *Hesperinus* wings can be recognized by their slenderness (length approximately three times width) and the strongly curved vein  $R_{a+s}$ .