

## The first snipe fly (Diptera: Rhagionidae) from the Middle Jurassic of Inner Mongolia, China

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### Abstract

The description of the oldest Rhagionidae in China, *Sinorhagio daohugouensis* gen. et sp. nov., is given as new to science. It comes from the Middle Jurassic Daohugou Formation of Inner Mongolia. The relationships of *Sinorhagio* and other relevant genera of Rhagionidae are discussed.

**Key words:** Diptera, Rhagionidae, *Sinorhagio*, new genus, Daohugou, China

### Introduction

Rhagionidae is a small family in lower Brachycera. It consists of 2 subfamilies: Spaniinae (4 genera) and Rhagioninae (14 genera). Up to now, 18 extant genera and above 500 extant species have been described throughout the world (Nagatomi 1982). Fossil Rhagionidae have 26 genera (18 extinct genera) and above 50 species (Kovalev 1982, Evenhuis 1994, Ren 1998, Ren *et al.* 1995, Kovalev & Mostovski 1997, Nagatomi & Yang 1998, Mostovski 2000, Mostovski & Jarzembowski 2000, Krzeminski & Krzeminska 2003, Mostovski *et al.* 2003). However, historically, the Rhagionidae has included a rather heterogeneous mixture of genera, some of which are seemingly related to other families of lower Brachycera, especially the Stratiomyidae, the Xylophagidae, and the Tabanidae. Therefore, the precise limits of the family have remained unclear and are much debated (James & Turner 1981).

Rhagionidae is one of the most archaic Diptera and can date back to the early middle Triassic. The oldest Brachycera (Rhagionidae: *Gallia alsatica* Krzeminski & Krzeminska 2003) were discovered in the Vosges Mts (France, Alsace) by Louis Grauvogel and Jean-Claude Gall (Krzeminski & Krzeminska 2003). Since the Middle Jurassic, the Brachycera