

New Mnemosynini taxa (Hemiptera, Fulgoromorpha: Cixiidae) from the Palaeogene of France with notes on their early association with host plants

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Abstract

Three new genera: *Stalisyne* **gen. nov.** comprising *S. lutetiorum* **sp. nov.** and *S. veromanduiorum* **sp. nov.**, *Mnaomaia* **gen. nov.** for *M. bellovaciorum* **sp. nov.**, both from the Lowermost Eocene (Sparnacian) amber of Oise, (Northern France) and *Mnasthaia* **gen. nov.** for *M. arverniorum* **sp. nov.** from the Palaeocene strata of Menat (Auvergne) are described. Characters of extant and fossil Mnemosynini are discussed also. Remarks on co-evolutionary processes of Mnemosynini, as well as Cixiidae and the host plants are presented. Eco-evolutionary processes affecting Mnemosynini and other Cixiidae lineages are presented.

Key words: Cixiidae, Mnemosynini, Oise amber, Menat, Palaeogene, France, co-evolution plant-insects

Introduction

The family Cixiidae Spinola, 1838 has been known in fossil record since the Lower Cretaceous, it is one of the most common groups in the Eocene Baltic amber, but most of species described need to be revised, as their taxonomic placement remain doubtful (Szwedo et al. 2004).

The tribe Mnemosynini Emeljanov, 1993 was recently discussed as well as extant and fossil taxa placed within (Szwedo 2004). The genus *Mnemosyne* was erected by Stål in 1866 to accommodate a species described from Cuba (Stål 1866). The extant species of the genus were revised by Van Stalle, in a series of papers dealing with species from particular geographic areas (Van Stalle 1985, 1987, 1988; Van Stalle & Lauterer 1985). Currently, 45