

First whiteflies from the Eocene amber of Denmark


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One new genus *Gregorites* Drohojowska & Szwedo with seven new species of whiteflies (Aleyrodidae) from Eocene amber collected in Denmark are described. All new taxa: *Gregorites aegiri*, *G. bergelmi*, *G. skadii*, *G. bestlae*, *G. thrymi*, *G. halogii*, and *G. ymiri* are represents of the subfamily Aleurodicinae. The newly described genus appeared as highly diverse, with 7 new species, while remaining Paleogene Aleurodicinae are monospecific in vast majority. The key for identification of species of Aleurodicinae from Eocene Danish amber is provided. The morphological features of newly established taxa are discussed. A brief overview of the Aleyrodidae preserved in the Eocene fossil resins is presented, their taxonomic diversity and morphological disparity offered by the fossilised imagines are discussed. The importance of the fossil for phylogenetic, evolutionary and ecological studies is presented. Various factors influencing diversification and disparification of whiteflies at local and regional scales are discussed. The potential biases associated with the collection and preservation of specimens are briefly overviewed. Records of Aleyrodidae in the fossil resins of Eocene of Europe are discussed.

Key words: Hemiptera, Aleyrodoidea, Eocene, Danish amber, new taxa.

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