



## The insect Order Thysanoptera: Classification versus Systematics\*

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## **Abstract**

Two widely different classifications of the insect order Thysanoptera are discussed; an essentially phylogenetic system recognizing nine families in two suborders, and an essentially phenetic system recognizing 40 families in two orders. This paper emphasizes the distinction between "classification" and "systematics", the former stressing the importance of differences, whereas the latter stresses the importance of derived similarities. A phylogenetic (i.e. systematic) classification incorporates predictions concerning evolutionary relationships that are important throughout biological studies, whether in host and parasite associations, biogeography, comparative physiology or development. The available phenetic classification of Thysanoptera serves no such broader purpose in biology. Recent molecular data derived from the gene 18S rDNA are analysed, but although some groups of taxa are well resolved, the deep relationships within the Thysanoptera remain unclear.

Key words: Thysanoptera, systematics, classification, phylogeny, 18S rDNA

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