



A brief history of the classification and nomenclature of Odonata*

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Abstract

The classification of insect order Odonata is traced from Linnaeus' *Systema Naturae*, through 19th and 20th century morphology-based taxonomies, to molecular phylogenies published before November, 2007. Past and present nomenclatural difficulties are reviewed and the current situation in regard to rival taxonomies is outlined. Ordinal classifications based on morphological data continue to suffer from intractable uncertainty concerning wing vein homologies between Odonata and other Pterygota, but molecular analyses may soon show where the phylogenetic tree of Odonata should be rooted. The natural classification will become much clearer once this has been achieved.

Key words: Palaeoptera, Anisoptera, Zygoptera, wing venation, phylogeny

Introduction

The order Odonata contains around 6000 species of medium-size to very large insects, colloquially called damselflies and dragonflies. Odonata are well known, occur on all continents except Antarctica, often are superb fliers, and may be brightly coloured and show a range of complex behaviours. The adults are associated with still or running fresh water. The larvae, sometimes called nymphs, almost always are wholly aquatic although a very few are semi-terrestrial in damp environments. Both the larvae and adults of all species are voracious and largely indiscriminate predators.