

## BOOK REVIEW

LANDOLT P. & SARTORI M. (eds): EPHEMEROPTERA AND PLECOPTERA. BIOLOGY – ECOLOGY – SYSTEMATICS. M. Magon + Tinguely & Lachat SA, Fribourg, Switzerland, 1997, xi + 569 pp. ISBN 2-940187-0-0.

This volume represents the proceedings of the VIIIth International Conference on Ephemeroptera and the XIIth International Plecoptera Symposium held together and organized by the Museum of Zoology (Lausanne) and the University of Fribourg in Switzerland in September, 1995. The conference was attended by 150 participants from more than 30 countries. The seventy-seven papers published in this volume were among those presented at this meeting and all papers are in English.

Following tributes to the memory of Olga A. Tshernova and Jaques Aubert, major figures in the development of mayfly and stonefly systematics, the contributions are grouped in the following chapters: Life histories and behaviour (18 papers), Biogeography and distributional patterns (13 papers), Biodiversity and environment (13 papers), Ultrastructure, physiology and methods (12 papers), Systematics and taxonomy (12 papers), and Phylogeny and historical aspects (9 papers).

The papers submitted describe the latest scientific findings on the freshwater insect orders Ephemeroptera and Plecoptera. Life histories are studied in numerous species, e.g., in the remarkable and endangered European riverine species *Palingenia longicauda*, general biological subjects include the study of feeding behaviour, food habits, diel periodicity of emergence, effects of different temperature regimes, mating, oviposition and embryonic development, and a unique drumming behaviour in Northern Hemisphere Plecoptera. Studies on biodiversity and environment are mostly directed to the using of larvae to indicate changes of aquatic habitats, influence of physical disturbance on recolonization patterns and protection of endangered species. The inventory of the larvae in various

ivers and streams world-wide shows their distributional patterns and biogeography. For instance, the complete lists of euholognathan Plecoptera fauna of the former USSR and that of mayflies of the East Palaearctic region are worth of our attention. Contrary to previous conferences directed sometimes mostly to Holarctic fauna, the authors paid an equal attention to other biogeographic areas as well. Methods of electron microscopy became usual not only in structural studies of cuticular sensilla and osmoregulatory organs, alimentary canal and reproductive system but also in ootaxonomy and the determination of instar numbers. On the other hand, the volume contains a single physiological paper dealing with the allozyme variation in the plecopteran genus *Isoperla*. Several taxa are described as new, redescribed and revised; modern phylogenetic theories in Ephemeroptera and palaeontological data concerning Plecoptera are discussed. One of papers deals also with the ectoparasitic chironomids of the genus *Symbiocladius* living on mayfly larvae.

The book is concise, including selected and carefully reviewed papers. The reproduction of highly professional figures and photographs is technically perfect. Quick orientation in such a voluminous book is enabled by a concise index including names of taxa and subjects mentioned in titles and abstracts.

Although the contributions included in this volume cover a broad spectrum of research into the two orders of aquatic insects, the book represents much more than the proceedings of a conference, as it provides a comprehensive coverage of modern information on the biology and taxonomy of Ephemeroptera and Plecoptera. Whether you are a seasoned authority or beginning student, you will find a very competent treatment of all the aspects of study of these orders.

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