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BOOK REVIEW

BÜNING J.: THE INSECT OVARY. ULTRASTRUCTURE, PREVITELLOGENIC GROWTH AND EVOLUTION. Chapman & Hall, London, etc., 1994, x+400 pp., illustr. ISBN 0-412-36080-2. Price GBP 79.00.

The insect ovary, due to its essential role in insect reproduction, has been a perennial topic of investigation. Its scope has drammatically increased during the last decades: from desriptive anatomy, histology and embryology, and basic physiology, to sophisticated inquiry incorporating cell biology, ultrastructural studies, developmental genetics, molecular aspects, and phylogenetic interpretation of its anagenesis. Surprisingly, perhaps due to the complexity of the subject, as well as topical and taxonomical isolation of individual studies, no integrative monograph has ever been available. Büning's monograph fills admirably the gap.

All the above mentioned fields of interest are covered by Büning (except fore the purely endocrinological and ecophysiological aspects), and the reader will find here all necessary information as well as the original interpretations. Actually, Buning is a representative of the three major recent schools of ultrastructural oogenesis-centred embryology, including the German (Büning and others), Polish (Biliński and others), and Japanese (several leading students) scientists. S. Biliński has written a chapter on the entognathan ovaries for this monograph. I will not waste space with a description of all the contents and expression of my admiration for the book; there is simply all that a reader of any inclination might need to look for, and it is based on a complete coverage of literature (over 1,250 items).

What I really appreciate is Büning's comparative approach, rarely found in generally orientated monographs. He does not avoid the unusual situations found in minor, odd, and phylogenetically important taxa, but he looks them for. For many of them the information is unavailable, but the ongoing research (Bilinski, Büning, Štys et al.) is aimed to fill in the gaps. Undoubtedly, the ultrastructural oogenetic characters provide almost the same amount of phylogenetically important information as provided by other morphological data. The evolutionary (phylogenetic) conclusions included in the present monograph are preliminary, and will be elaborated in upcoming papers. It should be noted that many new cladogenetic hypotheses originated just from the oogenetic information (the seminal papers in this respect are King & Büning, 1985; Štys & Biliński, 1990; Büning, 1997, in press).

The book is strongly, and without reservations, recommended to all the entomologists concerned with oogenesis, anatomy, embryology, and phylogenetics.

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P. Štys