



Ecological and Environmental Physiology of

Insects

Ecological and Environmental Physiology Series Series Editor: **Warren Burggren**

Volume 3—Insects

Insects are the most ecologically important multicellular heterotrophs in terrestrial systems. They play critical roles in ecological food webs, remain devastating agricultural and medical pests, and represent the most diverse group of eukaryotes in terms of species numbers. Their dominant role among terrestrial heterotrophs arises from a number of key physiological traits, and in particular by the developmental and evolutionary plasticity of these traits.

Ecological and Environmental Physiology of Insects presents a current and comprehensive overview of how the key physiological traits of insects respond to environmental variation. It forges conceptual links from molecular biology through organismal function to population and community ecology. As with other books in the Series, the emphasis is on the unique physiological characteristics of the insects, but with applications to questions of broad relevance in physiological ecology. As an aid to new researchers on insects, it also includes introductory chapters on the basics and techniques of insect physiology ecology.

This accessible text is for both graduate level students and researchers in the fields of comparative physiology and insect physiological ecology, including specialist courses in insect ecology. It will also be of relevance and use to professional entomologists, ecologists, molecular biologists, and evolutionary biologists seeking a concise but authoritative overview of the topic.

Each volume in the *Ecological and Environmental Physiology Series (EEPS)* focuses on the ecological and environmental physiology of a key taxon to provide a state-of-the-art review, synthesis, and consideration of future topics that are relevant to how organisms have evolved and coped with the environmental features of their habitats.

EEPS comprises short, affordable volumes that will appeal to students, researchers, consultants, and other professionals in the fields of physiology, physiological ecology, and ecology.

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