

EVOLUTIONARY ECOLOGY ACROSS THREE TROPHIC LEVELS

GOLDENRODS,
GALLNAKERS, AND
NATURAL ENEMIES

WARREN C. ABRAHAMSON
AND ARTHUR S. WEIS

"An unparalleled, creative, and thorough work as a single set of related questions which sets a new, higher standard for comparable 'field' studies in the future. Most importantly, while this is a solid book for those who are interested in the biology of gall-formers, this work is also source of ideas for a much larger audience. It should be appreciated by many biologists interested in the evolution and dynamics of interacting species."

—David Tiedje, *Georgia Institute of Technology*

Monographs in Population Biology • 39
Series A: Evolution, Theory & Model
Gloss

In a work that will interest ecologists in ecology, genetics, botany, entomology, and parasitology, Warren Abrahamson and Arthur S. Weis present the results of more than twenty-five years of studying plant-insect interactions. Their study centers on the ecology and evolution of interactions among plant, plant, the parasite insect that attacks it, and the suite of insects and birds that act the natural enemies of the parasite. Because this system provides a model that can be subjected to experimental manipulations, it has allowed the authors to address specific theories and concepts that have guided biological research for more than two decades and to engage general problems in evolutionary biology.

The specific subjects of research are the host-plant-galler mutual (ecology), the parasitic insect parasite (ecology), the gall-former (ecology) that induces a gall on the plant stem, and a number of natural enemies of the gallfly. In presenting their detailed empirical studies of the *Solidago canadensis* natural enemy system, the authors demonstrate the complexities of specialized enemy-stimulus interactions and, thereby, the complex interactive relationships among species more broadly. By utilizing a diverse array of field, laboratory, behavioral, genetic, chemical, and ecological techniques, Abrahamson and Weis present the most thorough study to date of a single system of interacting species.

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ISBN 0-501-01208-3



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