

PREFACE

In 1977 the Environmental Protection Agency (EPA) requested the American Institute of Biological Sciences (AIBS) to establish a Task Group to review test methods for determining the efficacy of pheromones as insect control agents. A Task Group consisting of 7 scientists, an EPA observer, and an AIBS coordinator met in June 1977 to analyze available information on test methods and protocols to aid in formulating EPA guidelines for pesticide registration. It soon became obvious that efficacy had to be defined for crop protection situations utilizing behavior-modifying chemicals (BMC's) such as pheromones.

The Task Group met additionally for 2 days each month in July, August and September to work out a definition of efficacy and to analyze various published efficacy tests in the light of this definition. Field trials representative of many insect types were discussed to determine if efficacy requirements were fulfilled. This book is the final report to EPA in which efficacy is defined and field tests are described and discussed. It was not intended to be a comprehensive review of all published data, but to present a variety of experimental designs in different environments. The report generally was completed by November, 1977.

The Task Group members and sections they wrote in this report are as follows:

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Lepidoptera (fruit crops)

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Controlled-release systems; Lepidoptera (pink bollworm)

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Coleoptera, Isoptera, Orthoptera (stored product and household pests)

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Lepidoptera (forests, fruit crops)

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