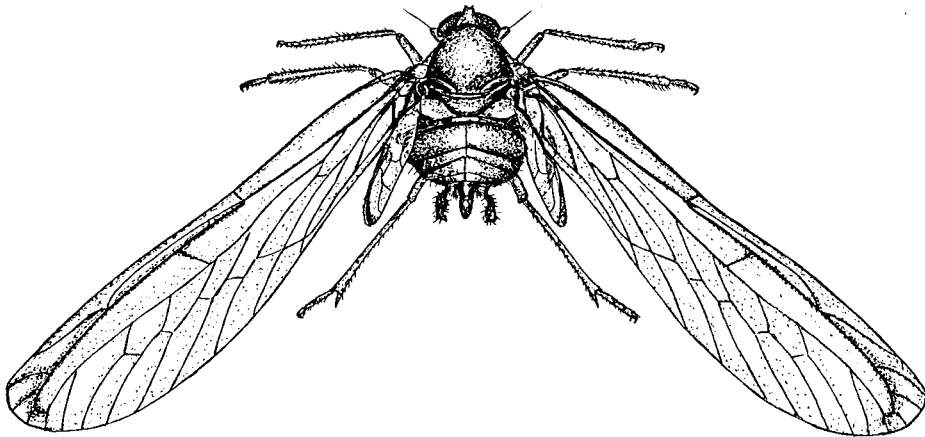


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PROCEEDINGS OF  
2nd INTERNATIONAL WORKSHOP  
ON LEAFHOPPERS AND PLANTHOPPERS  
OF ECONOMIC IMPORTANCE

Edited by  
M. R. Wilson, L. R. Nault



C · A · B INTERNATIONAL INSTITUTE OF ENTOMOLOGY

1987

# Proceedings of 2nd International Workshop on Leafhoppers and Planthoppers of Economic Importance

Brigham Young University, Provo, Utah, USA  
28th July–1st August 1986

Edited by

M. R. WILSON  
(CAB International Institute of Entomology)

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CAB International Institute of Entomology  
1987

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ISBN 0-900301-03-1

Cover: An African derbid, *Diostrombus* spp. Many adult Derbidae are found, often abundantly, on a variety of crop plants in tropical areas of the world but there is, as yet, little evidence of particular importance as pests. Drawing by Graham duHeaume.



Printed in Great Britain by  
Page Bros (Norwich) Ltd

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## Introduction

The papers in this volume are all derived from the *2nd International Workshop on Leafhoppers and Planthoppers of Economic Importance*, held, Provo, Utah, USA 28th July–1st August 1986. The first meeting in this series, in London in October 1982, was organised by the Commonwealth Institute of Entomology (CIE) (now CAB International Institute of Entomology). It was arranged in response to the increasing importance of leafhoppers, planthoppers and other Auchenorrhyncha as agricultural pests and also to the need for research workers of all persuasions to discuss their mutual interests in the group.

The second workshop was made possible by the generous offer by Dr M. Nielson to host the meeting at the Brigham Young University, Provo, Utah. It had been decided from the outset that the papers would be published by CIE, as publishers of the first Proceedings. Papers in the current volume were given at the Workshop either as full presentations or as “poster papers”. Some papers have been included from colleagues who unfortunately were unable to attend in person.

Interactions between species and their host plants was the theme in many papers. To encourage open discussion on this and other topics, the establishment of separate titled sessions was avoided. In these Proceedings, however, papers have been grouped for convenience into four sections; 1. Biology and Distribution, 2. Auchenorrhyncha Vectors of Plant Pathogens, 3. Taxonomy, 4. Host Relationships (including Parasites).

Selection of speakers and papers was made from those registering interest in attending the meeting. It will be clear that not all topics are strictly agricultural or economic. This was a deliberate policy since the Organising Committee would be the first to argue that segregation of research into pure and applied is a negative approach and impedes progress and collaborative efforts. It was, however, agreed that publication of new taxonomic work, especially involving formal name changes or description of new species or genera would be more suited to a primary journal rather than a symposium volume. We consider that the papers included here provide a good cross-section of current research on Auchenorrhyncha.

We should like to take this opportunity of thanking Dr Mervin Nielson for hosting the meeting and Brigham Young University for allowing the meeting to take place and for the excellent facilities provided. We also thank all authors for their co-operation and efforts to provide camera-ready copy, especially when faced with extensive editorial or review changes. Our appreciation is also due to all those colleagues who commented on papers and to CIE staff, especially Amitha Godage and Graham duHeaume who helped in the final preparation of several papers.

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February 1987

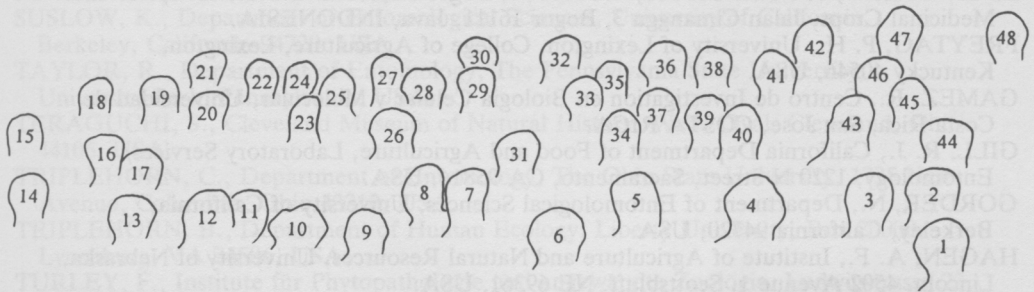
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## **Acknowledgements**

We are pleased to thank CIBA-GEIGY, Switzerland and RHÔNE-POULENC Inc., USA for their generous contributions to the publication costs of these Proceedings.





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