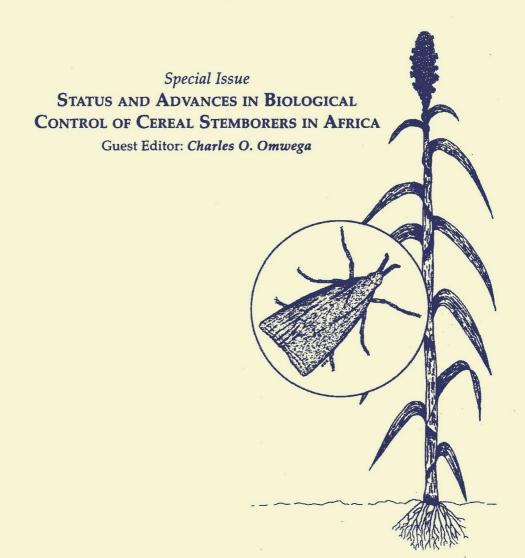
INSECT SCIENCE AND ITS APPLICATION

The International Journal of Tropical Insect Science

Editor-in-Chief: Hans R. Herren



Founded by Thomas R. Odhiambo

INSECT SCIENCE

AND ITS APPLICATION

The International Journal of Tropical Insect Science

Sponsored by the International Centre of Insect Physiology and Ecology (ICIPE) and the African Association of Insect Scientists (AAIS)

Founded by Thomas R. Odhiambo

Editor-in-Chief: Hans R. Herren

Associate Editor: William A. Overholt

Science Editor: Daisy Ouya

Coordinating Editor: Annalee Ng'eny-Mengech

The International Centre of Insect Physiology and Ecology (ICIPE), P.O. Box 30772, Nairobi, Kenya

Editorial Advisory Board

K. Afreh-Nuamah, Ghana

J. Beier, USA

W. Bowers, USA C. Eardley, South Africa

P. Esbjerg, Denmark

I. Fagoonee, Mauritius

R. Galun, Israel

N. Jago, UK

J. Law, USA

B. Le Rü, Kenya

A. Mansingh, Jamaica

I. Mohyuddin, Pakistan D. Munthali, Botswana R. W. Mwangi, Kenya J. A. Odebiyi, Nigeria A. Odulaja, Austria

W.A. Overholt, Kenya (Assoc. Ed.)

D. Pomeroy, Uganda H. C. Sharma, India

H. F. van Emden, UK A. van Huis, Netherlands

PUBLISHED QUARTERLY

Annual Subscription

For the first time, ISA is presenting a 3-tiered rate structure, in which subscribers have a choice of ordering the print, on-line, or print + on-line versions of the journal. *Print version:* For libraries, university departments, government laboratories, industrial and other multiple reader institutions US\$ 298 (2001); 2-year rate (2001–2002) US\$ 550.00 (including postage and insurance), private individuals US\$ 132 (2001); 2-year rate US\$ 210.00 (2001–2002). In the interest of maximising the dissemination of the results published in this important international journal, any individual whose institution takes out a library subscription may purchase a second or additional subscription for personal use at a much reduced rate of US\$ 98.00 (2001); 2-year rate (2001–2002) US\$ 176.00. Members of the International Centre of Insect Physiology and Ecology (ICIPE) and the African Association of Insect Scientists (AAIS) may purchase a subscription at the special rate of US\$ 60.00 (2001); 2-year rate (2001–2002) US\$ 100.00. *Print and on-line versions*: For libraries, university departments, government laboratories, industrial and other multiple reader institutions US\$ 330.00; private individuals US\$ 150.00; AAIS member (based in developing country) US\$ 70.00. *On-line only:* Specially reduced rates for all categories of readership available at http://www.bioline.org.br

reduced rates for all categories of readership available at http://www.bioline.org.br

AAIS membership application forms (registration fee US\$ 20.00; annual membership fee US\$ 20.00) may be obtained from:
Honorary Secretary, African Association of Insect Scientists, P.O. Box 59862, Nairobi, Kenya.

Prices are subject to amendment without notice

Copyright © 2001 — The International Centre of Insect Physiology and Ecology

It is a condition of publication that manuscripts submitted to this journal have not been published and will not be simultaneously submitted or published elsewhere. By submitting a manuscript, the authors agree that the copyright for their article is transferred to the publisher if and when the article is accepted for publication. However, assignment of copyright is not required from authors who work for organisations which do not permit such assignment. The copyright covers the exclusive rights to reproduce and distribute the article, including reprints, photographic reproductions, microform or any other reproductions of similar nature, and translations. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, electrostatic, magnetic tape, mechanical photocopying, recording or otherwise, without permission in writing from the copyright holder.

Photocopying information for users in the USA

The Item-fee Code for this publication indicates that authorisation to photocopy items for internal or personal use is granted by the copyright holder for libraries and other users registered with the Copyright Clearance Center (CCC) Transactional Reporting Service, provided the stated fee for copying beyond that permitted by Section 107 or 108 of the US Copyright Law, is paid. The appropriate remittance of \$3.00 per copy per article is paid directly to the Copyright Clearance Center Inc., 27 Congress Street, Salem, MA 01970.

Permission for other use

The copyright owner's consent does not extend to copying for general distribution, for promotion, for creating new works or for resale. Specific written permission must be obtained from the publisher of such copying.

The item-fee for this publication is 0191-9040/01 \$3.00+0.00

ICIPE SCIENCE PRESS

SPECIAL ISSUE

STATUS AND ADVANCES IN BIOLOGICAL CONTROL OF CEREAL STEMBORERS IN AFRICA

The papers in this issue were originally presented at a regional conference on 'Status and Advances in Biological Control of Cereal Stemborers in Africa' held at ICIPE, Nairobi, 15–22 October 2000.

Guest Editor: Charles O. Omwega

ICIPE SCIENCE PRESS

PREFACE

Stemborers are a major constraint to maize and sorghum production in Africa, and the exotic species *Chilo partellus* (Swinhoe) is increasing in importance as a pest of the two staple food crops. A project on the biological control of *C. partellus* was initiated in 1991 at ICIPE with funding from the Netherlands government. Natural enemies were introduced from Pakistan and India and first released in Kenya in 1993. Establishment was confirmed in Kenya in 1995 and subsequently, releases were made in Mozambique in 1996 and Uganda in 1997. More countries joined the collaborative effort from 1997 and by 2000, National Research Institutes and other institutions from nine countries in eastern and southern Africa were participating in the biological control programme.

This special issue of *Insect Science and Its Application* represents the outcome of a regional conference on 'Status and Advances in Biological Control of Cereal Stemborers in Africa' which was held at ICIPE in October 2000. The conference brought together colleagues working on cereal stemborers in Africa, the Netherlands, USA and Australia. The majority of papers in this issue report on the progress and status of biological control efforts in eastern and southern Africa, while others cover topics such as habitat management, cultural control and development of stemborer-resistant maize. A total of 26 papers were presented at the workshop, of which 20 are published in this issue.

We thank all the people who participated and presented their work at this conference and our colleagues who assisted in reviewing and making valuable comments on the manuscripts. We also greatly appreciate the continued support provided for stemborer biological control from the Netherlands government.

We hope the readership of this special issue will find it to be a valuable contribution to the knowledge on biological control and integrated pest management in maize and sorghum agroecosystems.

Charles O. Omwega
Regional Coordinator
Biological Control of Cereal Stemborers Project
International Centre of Insect Physiology and Ecology