

Bulletin of Entomological Research

Editor-in-Chief

William Symondson, Cardiff University, UK

Established in 1910, *Bulletin of Entomological Research* is an internationally recognised journal focusing on applied entomology from the traditional to the cutting edge. The *Bulletin* publishes high-quality and original research papers, review articles and short communications concerning insects, mites, ticks or other arthropods of economic importance in agriculture, forestry, stored products, biological control, medicine, animal health and natural resource management. The scope of papers addresses the biology, ecology, behaviour, physiology, systematics and genetics of species, communities and populations with a renewed focus on the molecular biology and ecology of insects in an applied context.

Price information

is available at: <http://journals.cambridge.org/ber>

Free email alerts

Keep up-to-date with new material – sign up at
<http://journals.cambridge.org/ber-alerts>



Bulletin of Entomological Research is available online at:
<http://journals.cambridge.org/ber>

To subscribe contact Customer Services

in Cambridge:

Phone +44 (0)1223 326070

Fax +44 (0)1223 325150

Email journals@cambridge.org

in New York:

Phone +1 (845) 353 7500

Fax +1 (845) 353 4141

Email

subscriptions_newyork@cambridge.org

For free online content visit:
<http://journals.cambridge.org/ber>



CAMBRIDGE
UNIVERSITY PRESS

Oryx

The International Journal of Conservation

Published for Fauna & Flora International

Editor

Martin Fisher, Fauna & Flora International, UK

Oryx -- *The International Journal of Conservation* is a quarterly peer-reviewed journal of biodiversity conservation, conservation policy and sustainable use, and the interaction of these subjects with social, economic and political issues. The journal has a particular interest in material that has the potential to improve conservation management and practice, supports the publishing and communication aspirations of conservation researchers and practitioners worldwide and helps build capacity for conservation. Besides articles and short communications, *Oryx* regularly publishes reviews, forum sections and letters, and every issue includes comprehensive reporting of international conservation news.

Price information

is available at: <http://journals.cambridge.org/orx>

Free email alerts

Keep up-to-date with new material – sign up at
<http://journals.cambridge.org/orx-alerts>



Oryx

is available online at:
<http://journals.cambridge.org/orx>

To subscribe contact Customer Services

in Cambridge:

Phone +44 (0)1223 326070
Fax +44 (0)1223 325150
Email journals@cambridge.org

in New York:

Phone +1 (845) 353 7500
Fax +1 (845) 353 4141
Email
subscriptions_newyork@cambridge.org

For free online content visit:
<http://journals.cambridge.org/orx>



CAMBRIDGE
UNIVERSITY PRESS

CAMBRIDGE

JOURNALS

International Journal of Tropical Insect Science

Published on behalf of
icipe - African Insect Science for Food and Health

Editor

S. Kelemu, *icipe*, Kenya

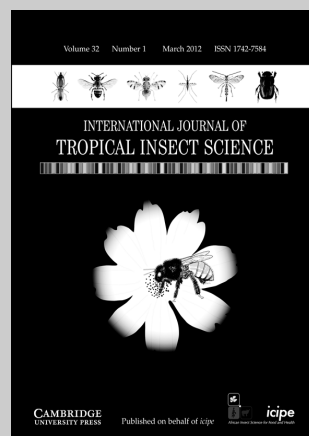
International Journal of Tropical Insect Science is the only journal devoted exclusively to the latest research in tropical and sub-tropical insect science. Each issue brings you original, peer-reviewed research findings on tropical insects and related arthropods, with special emphasis on their environmentally benign and sustainable management. The journal's scope includes arthropod ecology and biodiversity, ethno-entomology, arthropod taxonomy, integrated pest and vector management, and environmental issues. The journal publishes research papers, short communications and scientific notes. The journal also includes reports of meetings and obituaries of prominent scientists, book reviews, and review and mini-review articles that are normally submitted at the invitation of the Editors.

Price information

is available at: <http://journals.cambridge.org/jti>

Free email alerts

Keep up-to-date with new material – sign up at
<http://journals.cambridge.org/jti-alerts>



International Journal of Tropical Insect Science

is available online at:
<http://journals.cambridge.org/jti>

To subscribe contact Customer Services

in Cambridge:
Phone +44 (0)1223 326070
Fax +44 (0)1223 325150
Email journals@cambridge.org

in New York:
Phone +1 (845) 353 7500
Fax +1 (845) 353 4141
Email
subscriptions_newyork@cambridge.org

For free online content visit:
<http://journals.cambridge.org/jti>



CAMBRIDGE
UNIVERSITY PRESS

Entomological Society of Canada / Société d'entomologie du Canada

393 Winston Avenue,
Ottawa, Ontario, Canada K2A 1Y8

www.esc-sec.ca

613-725-2619, fax/télécopieur 613-725-9349, e-mail/courriel entsoc.can@bellnet.ca

Board officers/Officiers du Comité d'administration

President/Président	Rebecca Hallett, Guelph, Ontario	519-824-4120	rhallett@uoguelph.ca
1 st Vice President/1 ^{er} Vice-président	Staffan Lindgren, Prince George, British Columbia	250-960-5846	Staffan.Lindgren@unbc.ca
2 nd Vice President/2 ^e Vice-président	Terry Wheeler, Sainte-Anne-de-Bellevue, Quebec	514-398-7937	terry.wheeler@mcgill.ca
Past President/Président sortant	Rosemarie De Clerck-Floate, Lethbridge, Alberta	403-317-2270	Rosemarie.DeClerck-Floate@agr.gc.ca
Secretary/Secrétaire	Scott Brooks, Ottawa, Ontario	613-694-2718	scott.brooks@agr.gc.ca
Treasurer/Trésorier	Alec McClay, Sherwood Park, Alberta	780-464-4962	alec.mcclay@shaw.ca

The Entomological Society of Canada was founded in 1863 to study, advance, and promote entomology. It does this through publications, meetings, scholarships and awards, advocacy, and other activities. Membership is open to all individuals interested in entomology worldwide and is renewable annually. Regular members receive the scientific journal of the Society, *The Canadian Entomologist*, published continuously since 1868, and the newsletter of the Society, the *Bulletin*. Student members receive the *Bulletin* and can elect to receive *The Canadian Entomologist* for a nominal surcharge. All members receive a discount for annual meeting registration fees, have access to members-only privileges at the Society Web site, and receive other benefits. Details on regular and student membership fees and application forms are also available at the Web site. Application forms should be transmitted to the Society Office.

All information found on this page is also available at www.esc-sec.ca. Direct all correspondence about membership, subscriptions, back issues, and changes of address to the Society Office.

Fondée en 1863, la Société d'entomologie du Canada a pour but d'étudier, de faire progresser et de promouvoir l'entomologie. Elle accomplit ceci par des publications, des réunions, des bourses et prix, par plaidoyer ou autres activités. L'adhésion est ouverte à toute personne au monde intéressée à l'entomologie, et elle est renouvelable annuellement. Les membres réguliers reçoivent le journal scientifique de la Société, *The Canadian Entomologist*, qui a été publié sans interruption depuis 1868, et le *Bulletin* de la Société. Les membres étudiants reçoivent le *Bulletin* de la Société et, moyennant un coût nominal, *The Canadian Entomologist*. Tous les membres ont des rabais pour l'inscription à la réunion annuelle, un accès privilégié à la section des membres du site Internet, ainsi que d'autres avantages. Pour les formulaires d'application et des informations concernant l'adhésion régulière ou étudiante, consultez le site Web. Les formulaires d'adhésion doivent être acheminés au siège de la Société.

Toutes les informations sur cette page sont également disponibles au www.esc-sec.ca. Adressez toute correspondance concernant l'adhésion, les abonnements institutionnels, les numéros passés et les changements d'adresses au siège de la Société.

Images

On the spine: Cicada, *Platypedia areolata*, emerged from its chrysalis (Idaho, United States of America)

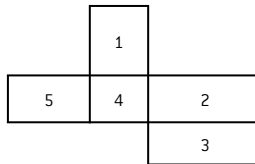
Une cigale, *Platypedia areolata*, émergée de sa chrysalide (Idaho, Etats-Unis d'Amérique)

[Photo: Malcolm Furniss]

Beneath the title: *Cucullia lychnitis* caterpillar on a stem of *Verbascum* [Escalona, Aragon, Spain] 1 July 2011

Une chenille *Cucullia lychnitis* sur une tige de *Verbascum* [Escalona, Aragon, Espagne] 1 juillet 2011

[Photo: Francois Lieutier]



Front cover/Plate supérieur:

- 1 Young Entomologist Aya Hoover in action inspecting a frame of honey bees (*Apis mellifera*) [Beaverlodge Research Farm, Alberta, Canada]
La jeune entomologiste Aya Hoover inspectant un cadre d'abeilles (*Apis mellifera*) [ferme de recherche Beaverlodge, Alberta, Canada]
[Photo: Shelley Hoover]
- 2 One of Canada's rare stag beetles, *Sinodendron rugosum*, walks across the moss [Burnaby Mountain, British Columbia, Canada], 31 July 2013.
Un des rares Lucanidés du Canada, *Sinodendron rugosum*, marche dans la mousse [Burnaby Mountain, Colombie-Britannique, Canada], 31 juillet 2013.
[Photo: Sean McCann]
- 3 Female *Phiddipus regius* (Lake Placid, Florida, United States of America)
Femelle *Phiddipus regius* (Lake Placid, Floride, États-Unis d'Amérique)
[Photo: Guillaume Dury]
- 4 Cabbage seedpod weevil (*Ceutorhynchus obstrictus*), an invasive pest of canola [Delémont, Switzerland]
Charançon de la graine du chou (*Ceutorhynchus obstrictus*), un ravageur envahissant du canola [Delémont, Suisse]
[Photo: Tim Haye]
- 5 Treehoppers (Membracidae) found along a small tree in Guyana being tended by ants (not shown).
Ces Membracidés ont été trouvés le long d'un petit arbre en Guyane sous la garde de fourmis [pas montrées].
[Photo: Steven Paiero]

Back cover/Plate inférieur:

An undetermined Orthoptera (too many tarsomeres for a shorthorned grasshopper) moving its biomass up the food chain. Say's phoebe is doing the honours...

Un orthoptère indéterminé (trop de segments tarsaux pour un criquet) déplaçant sa biomasse vers le haut de la chaîne alimentaire. L'honneur est au moucherolle à ventre roux...

[Photo: Bob Lalonde]

Cambridge Journals Online

For further information on this journal please go to the journal website at:

journals.cambridge.org/tce

CAMBRIDGE
UNIVERSITY PRESS