

Volume 87 No. 4 December 2013 ISSN 0022-149X

Journal of Helminthology



JOURNAL of HELMINTHOLOGY

Aims and Scope

Journal of Helminthology provides an international vehicle for the publication of original papers and review articles on all aspects of pure and applied helminthology, particularly those helminth parasites of environmental health, medical or veterinary importance. Research papers on helminths in wildlife hosts including plant and insect parasites will also be welcome. Taxonomic contributions will be acceptable if they contribute to the systematics of a group and particularly if they employ biochemical or molecular biological techniques.

Journal of Helminthology is published quarterly by Cambridge University Press and is available on the internet at journals.cambridge.org/jhl

Editor-in-Chief

Professor John Lewis

Royal Holloway, University of London, UK Tel: +44 (0)1784 443182 Fax: +44 (0)1784 470756 Email: j.w.lewis@rhul.ac.uk

Deputy Editor

Professor Mark Viney

University of Bristol, UK Tel + 44(0) 117 928 7469 Email: mark.viney@bristol.ac.uk

Editorial Board

Prof. Jerzy M. Behnke, *University of Nottingham, UK* Prof. Janine Caira, *University of Connecticut, USA*

Prof. Philip S. Craig, University of Salford, UK

Prof. Eileen Devaney, $University\ of\ Glasgow,\ UK$

Prof. John Gilleard, University of Calgary, Canada

Dr Ryan Hechinger, *University of California*, Santa Barbara, USA

Prof. George Hillyer, *University of Puerto Rico,* San Juan, Puerto Rico

Prof. Celia V. Holland, Trinity College, University of Dublin, Ireland

Prof. Peter J. Hudson, Penn State University, USA

Prof. Eric S. Loker, University of New Mexico, USA

Prof. Rick Maizels, University of Edinburgh, UK

Prof. Richard J. Martin, *Iowa State University*, *Ames*, *USA*

Prof. Santiago Mas-Coma, University of Valencia, Spain

Prof. Aaron G. Maule, *The Queen's University of Belfast*, UK

Prof. Don P. McManus, Queensland Institute of Medical Research, Brisbane, Australia

Prof. Robert Poulin, *University of Otago*, New Zealand

Dr David Rollinson, The Natural History Museum, London, UK

Prof. Bernd Sures, *University of Duisberg-Essen, Germany*

Dr David P. Thompson, Pharmacia & Upjohn Inc., USA

Prof. R.C. Andrew Thompson, Murdoch University, Perth, Australia

Prof. Jozef Vercruysse, *University of Gent, Belgium*

Dr Victor Vidal Martinez, Cinvestav-IPN, Merida, Mexico

© Cambridge University Press 2013
Published by Cambridge University Press
Cambridge CB2 8RU
Cover image supplied by D.J. Hunt, CABI *Bioscience*

This journal issue has been printed on FSC-certified paper and cover board. FSC is an independent, non-governmental, not-for-profit organization established to promote the responsible management of the world's forests. Please see www.fsc.org for information.