

## Parasitology

**Back volumes.** Vols. 1–71: Inquiries should be addressed to Wm. Dawson & Sons Ltd, Cannon House, Folkestone, Kent. Vols. 72 onwards: quotations for parts still in print may be obtained from Cambridge or the American Branch of Cambridge University Press.

**Copying.** This journal is registered with the Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923, USA. Organizations in the USA who are also registered with C.C.C. may therefore copy material (beyond the limits permitted by sections 107 and 108 of US copyright law) subject to payment to C.C.C. of the per-copy fee of \$16.00. This consent does not extend to multiple copying for promotional or commercial purposes. Code 0031–1820/2013 \$16.00.

Organizations authorized by the Copyright Licensing Agency may also copy material subject to the usual conditions.

**ISI Tear Sheet Service.** 3501 Market Street, Philadelphia, Pennsylvania 19104, USA, is authorized to supply single copies of separate articles for private use only.

**For all other use,** permission should be sought from Cambridge or the American Branch of Cambridge University Press.

**Claims** for missing issues can only be considered if made immediately after receipt of the subsequent issue.

**Advertising.** Details of advertising in Parasitology may be obtained from the publisher.

**Online submission.** Authors are encouraged to submit their manuscripts online. Go to <http://mc.manuscriptcentral.com/par/> to open an author's account for Parasitology. Manuscript Central is helping to improve the speed of the publication process for the journal.

**Front Cover illustration:** *Eimeria tenella*: early-stage immature schizonts at 72 h (A) and 2nd generation large immature and mature schizonts at 84 h (B) in the lamina propria; 3rd generation schizonts in the epithelium of the crypts at 96 h (E). From Matsubayashi *et al.* Vol.139(12) pp. 1553–1561.

© Cambridge University Press 2014

The Edinburgh Building, Cambridge CB2 8RU, United Kingdom  
32 Avenue of The Americas, New York, NY 10013-2473, USA  
477 Williamstown Road, Port Melbourne, VIC 3207, Australia  
C/ Orense, 4, Planta 13 28020 Madrid, Spain  
Lower Ground Floor, Nautica Building, The Water Club, Beach Road,  
Granger Bay, 8005 Cape Town, South Africa

*Printed in the UK by Bell & Bain*

# PARASITOLOGY

## CONTENTS

### REVIEW ARTICLES

- Vaccine against scabies: necessity and possibility**  
Xiaosong Liu, Shelley Walton and Kate Mounsey 725
- Trichomonads in birds – a review**  
Aziza Amin, Ivana Bilic, Dieter Liebhart and Michael Hess 733
- The journey towards elimination of gambiense human African trypanosomiasis: not far, nor easy**  
J. R. Franco, P. P. Simarro, A. Diarra, J. A. Ruiz-postigo and J. G. Jannin 748

### RESEARCH ARTICLES

- Liposomes produced by reverse phase evaporation: *in vitro* and *in vivo* efficacy of diminazene aceturate against *Trypanosoma evansi***  
Camila Belmonte Oliveira, Lucas Almeida Rigo, Luciana Dalla Rosa, Lucas Trevisan Gressler, Carine Eloise Prestes Zimmermann, Aline Ferreira Ourique, Aleksandro Schafer Da Silva, Luiz C. Miletti, Ruy Carlos Ruver Beck and Silvia Gonzalez Monteiro 761
- Supplementing with vitamin C the diet of honeybees (*Apis mellifera carnica*) parasitized with *Varroa destructor*: effects on antioxidative status**  
Marek Farjan, Elżbieta Łopieńska-Biernat, Zbigniew Lipiński, Małgorzata Dmitryjuk and Krystyna Żótkowska 770
- Functional study of a genetic marker allele associated with resistance to *Ascaris suum* in pigs**  
Per Skallerup, Stig M. Thamsborg, Claus B. Jørgensen, Heidi L. Enemark, Ayako Yoshida, Harald H. H. Göring, Merete Fredholm and Peter Nejsum 777
- Leishmania mexicana* lipophosphoglycan activates ERK and p38 MAP kinase and induces production of proinflammatory cytokines in human macrophages through TLR2 and TLR4**  
A. Rojas-Bernabé, O. García-Hernández, C. Maldonado-Bernal, J. Delegado-Dominguez, E. Ortega, L. Gutiérrez-Kobeh, I. Becker and M. Aguirre-García 788

- Protein deficiency alters impact of intestinal nematode infection on intestinal, visceral and lymphoid organ histopathology in lactating mice**  
Lisa M. Starr, Maurice R. Odiere, Kristine G. Koski and Marilyn E. Scott 801
- Inhibition of NAD<sup>+</sup>-dependent histone deacetylases (sirtuins) causes growth arrest and activates both apoptosis and autophagy in the pathogenic protozoan *Trypanosoma cruzi***  
Phercyles Veiga-Santos, Lissa Catherine Reignault, Kilian Huber, Franz Bracher, Wanderley De Souza and Tecia Maria Ulisses De Carvalho 814
- Is the tapeworm able to affect tissue Pb-concentrations in white rat?**  
Zuzana Čadková, Daniela Miholová, Jiřina Száková, Petr Válek, Ivana Jankovská and Iva Langrová 826
- Modelling inter-human transmission dynamics of Chagas disease: analysis and application**  
M. C. Fabrizio, N. J. Schweigmann and N. J. Bartoloni 837
- DTU I isolates of *Trypanosoma cruzi* induce upregulation of Galectin-3 in murine myocarditis and fibrosis**  
María F. Ferrer, Carla A. Pascuale, Ricardo M. Gomez and María S. Leguizamón 849
- Re-assessing the relationship between sporozoite dose and incubation period in *Plasmodium vivax* malaria: a systematic re-analysis**  
Andrew A. Lover and Richard J. Coker 859