

## 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 0031–1820/2017 \$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:** Role of actin in sexual development in *Eimeria maxima*. From Frolich and Wallach, Vol. 142 (7) pp. 855–864.

© Cambridge University Press 2017

University Printing House, Cambridge CB2 8BS, United Kingdom  
1 Liberty Plaza, Floor 20, New York, NY 10006, 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

### RESEARCH ARTICLES

**Isolation and biological and molecular characterization of *Neospora caninum* (NC-SP1) from a naturally infected adult asymptomatic cattle (*Bos taurus*) in the state of São Paulo, Brazil**

Solange Oliveira, Rodrigo Martins Soares, Juliana Aizawa, Herbert Sousa Soares, Daniela Pontes Chiebao, Luis Miguel Ortega-Mora, Javier Regidor-Cerrillo, Natália Quadros Bressa Silva, Solange Maria Gennari and Hilda Fátima Jesus Pena

**Immune responses in mice vaccinated with a DNA vaccine expressing serine protease-like protein from the new-born larval stage of *Trichinella spiralis***

Jing Xu, Xue Bai, Li Bo Wang, Hai Ning Shi, Joke W. B. van der Giessen, Pascal Boireau, Ming Yuan Liu and Xiao Lei Liu

**Ultrastructural features of the tomont of *Cryptocaryon irritans* (Ciliophora: Prostomatea), a parasitic ciliate of marine fishes**

Rui Ma, Xinpeng Fan, Fei Yin, Bing Ni and Fukang Gu

***Rhipicephalus turanicus*, a new vector of *Hepatozoon canis***

Alessio Giannelli, Riccardo Paolo Lia, Giada Annoscia, Canio Buonavoglia, Eleonora Lorusso, Filipe Dantas-Torres, Gad Baneth and Domenico Otranto

**An outbreak of oriental theileriosis in dairy cattle imported to Vietnam from Australia**

Hagos Gebrekidan, Linda Nelson, Greg Smith, Robin B. Gasser and Abdul Jabbar

**The antileishmanial activity of xanthohumol is mediated by mitochondrial inhibition**

Lianet Monzote, Alexandra Lackova, Katrin Staniak, Silvia Steinbauer, Gerald Pichler, Walter Jäger and Lars Gille

**Understanding transmissibility patterns of Chagas disease through complex vector–host networks**

Laura Rengifo-Correa, Christopher R. Stephens, Juan J. Morrone, Juan Luis Téllez-Rendón and Constantino González-Salazar

**Prevalence, hematological findings and genetic diversity of *Bartonella* spp. in domestic cats from Valdivia, Southern Chile**

Ananda Müller, Romina Walker, Pedro Bittencourt, Rosangela Zacarias Machado, Jyan Lucas Benevenute, Renan Bressiani Do Amaral, Luiz Ricardo Gonçalves and Marcos Rogério André

**Effect of host diversity and species assemblage composition on bovine tuberculosis (bTB) risk in Ethiopian cattle**

Dejene W. Sintayehu, Ignas M.A. Heitkönig, Herbert H.T. Prins, Zewdu K. Tessema and Willem F. de Boer

783

**Study on the mitochondrial apoptosis pathways of small cell lung cancer H446 cells induced by *Trichinella spiralis* muscle larvae ESPs**

Jingmei Luo, Li Yu, Guangcheng Xie, Dan Li, Meng Su, Xuerong Zhao and Luanying Du

793

**The distribution of echinostome parasites in ponds and implications for larval anuran survival**

John A. Marino Jr, Manja P. Holland and Earl E. Werner

801

**A retrospective study comparing agar plate culture, indirect immunofluorescence and real-time PCR for the diagnosis of *Strongyloides stercoralis* infection**

Dora Buonfrate, Francesca Perandin, Fabio Formenti and Zeno Bisoffi

812

**Immediate and lag effects of pesticide exposure on parasite resistance in larval amphibians**

Katherine M. Pochini and Jason T. Hoverman

817

**Does the dilution effect generally occur in animal diseases?**

Zheng Y.X. Huang, Yang Yu, Frank van Langevelde and Willem F. de Boer

823

**Evaluation of methylene blue, pyrimethamine and its combination on an *in vitro* *Neospora caninum* model**

Luiz Miguel Pereira, Isabel Cristina Vigato-Ferreira, Gabriela de Luca, Cássia Mariana Bronzon da Costa and Ana Patrícia Yatsuda

827

**The cestode parasite *Schistocephalus pungitii*: castrator or nutrient thief of ninespine stickleback fish?**

David C. Heins

834

**Lysosome-like compartments of *Trypanosoma cruzi* trypomastigotes may originate directly from epimastigote reservosomes**

Juliana C. Vidal, Carolina de L. Alcantara, Wanderley de Souza and Narcisa L. Cunha-E-Silva

841

773