

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 0031–1820/2016 \$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: Transmission routes of *Neospora caninum* infection in cattle. From Benavides *et al.* Vol. 141 (11) pp. 1471–1488.

© Cambridge University Press 2016

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

REVIEW ARTICLES

MALDI-TOF MS in clinical parasitology: applications, constraints and prospects

Neelja Singh, Manish Kumar and Jugsharan Singh Virdi

1491

The rediscovery of malaria parasites of ungulates

Thomas J. Templeton, Ellen Martinsen, Morakot Kaewthamasorn and Osamu Kaneko

1501

RESEARCH ARTICLES

Modelling gastrointestinal parasitism infection in a sheep flock over two reproductive seasons: *in silico* exploration and sensitivity analysis

M. Saccareau, C. R. Moreno, I. Kyriazakis, R. Faivre and S. C. Bishop

1509

Reference gene selection and RNA preservation protocol in the cat flea, *Ctenocephalides felis*, for gene expression studies

Catriona H. McIntosh, John Baird, Erich Zinser, Debra J. Woods, Ewan M. Campbell and Alan S. Bowman

1532

Chloroquine-containing organoruthenium complexes are fast-acting multistage antimalarial agents

Taís S. Macedo, Legna Colina-Vegas, Marcelo Da Paixão, Maribel Navarro, Breno C. Barreto, Poliana C. M. Oliveira, Simone G. Macambira, Marta Machado, Miguel Prudêncio, Sarah D'alessandro, Nicoletta Basilico, Diogo R. M. Moreira, Alzir A. Batista and Milena B. P. Soares

1543

Potential cerebral malaria therapy: intramuscular arteether and vitamin D co-administration

Hemlata Dwivedi, Sunil Kumar Singh, Bhavana Singh Chauhan, Sarika Gunjan and Renu Tripathi

1557

Glycogen Synthase Kinase-3 is involved in glycogen metabolism control and embryogenesis of *Rhodnius prolixus*

Flávia B. Mury, Magda D. Lugon, Rodrigo Nunes da Fonseca, Jose R. Silva, Mateus Berni, Helena M. Araujo, Marcio Ribeiro Fontenele, Leonardo Araujo de Abreu, Marília Dansa, Glória Braz, Hatisaburo Masuda and Carlos Logullo

1569

Gill monogenean communities (Platyhelminthes, Monogenea, Dactylogyridae) of butterflyfishes from tropical Indo-West Pacific Islands

Miriam Reverter, Scott C. Cutmore, Rodney Bray, Thomas H. Cribb and Pierre Sasal

1580

Central European parasitic flatworms of the family Renicolidae Dollfus, 1939 (Trematoda: Plagiorchiida): molecular and comparative morphological analysis rejects the synonymization of *Renicola pinguis* complex suggested by Odening

Petr Heneberg, Jiří Sitko, Jiří Bizoš and Elizabeth C. Horne

1592

Mutual dilution of infection by an introduced parasite in native and invasive stream fishes across Hawaii

Roderick B. Gagne, David C. Heins, Peter B. McIntyre, James F. Gilliam and Michael J. Blum

1605

Treatment with synthetic lipophilic tyrosyl ester controls *Leishmania major* infection by reducing parasite load in BALB/c mice

Rabiaa M. Sghaier, Imen Aissa, Hanène Attia, Aymen Bali, Pablo A. Leon Martinez, Ghada Mkannez, Fatma Z. Guerfali, Youssef Gargouri and Dhafer Laouini

1615

Molecular prevalence and genetic characterization of piroplasms in dogs from Tunisia

Mohamed R. Rjeibi, Safa Amairia, Mariem Rouatbi, Fatma Ben Salem, Moez Mabrouk and Mohamed Gharbi

1622

Corilagin ameliorates schistosomiasis hepatic fibrosis through regulating IL-13 associated signal pathway *in vitro* and *in vivo*

Hua-Rong Li, Gang Li, Man Li, Shu-Ling Zhang, Heng Wang, Tao Luo, Fei Wu, Ji-Hua Dong, Yuan-Jin Guo and Lei Zhao

1629

Molecular and morphological variation of *Paragonimus westermani* in Vietnam with records of new second intermediate crab hosts and a new locality in a northern province

N. Pham Doanh, A. Luu Tu, T. Dung Bui, T. Ho Loan, Nariaki Nonaka, Yoichiro Horii, David Blair and Yukifumi Nawa

1639

Diet-induced obesity promotes systemic inflammation and increased susceptibility to murine visceral leishmaniasis

Glênia Daros Sarnáglia, Luciana Polaco Covre, Fausto Edmundo Lima Pereira, Herbert Leonel de Matos Guedes, Ana Maria Caetano Faria, Reynaldo Dietze, Rodrigo Ribeiro Rodrigues, Tatiani Uceli Maioli and Daniel Cláudio Oliveira Gomes

1647

Evaluation of the immunodiagnostic potential of a recombinant surface protein domain from *Acanthamoeba castellanii*

Alemao G. Carpinteyro Sánchez, Veridiana Gomes Virginio, Vinicius José Maschio, Henrique Bunselmeyer Ferreira and Marlise Brittes Rott

1656

Larvicidal activity of *Bacillus thuringiensis* var. *israelensis* Cry11Aa toxin against *Haemonchus contortus*

Ana Paula de Souza Stori de Lara, Lucas Bigolin Lorenzon, Ana Muñoz Vianna, Francisco Denis Souza Santos, Luciano Silva Pinto, María Elisabeth Aires Berne and Fábio Pereira Leivas Leite

1665

Establishment of a murine model of cerebral malaria in KunMing mice infected with *Plasmodium berghei* ANKA

Yan Ding, Wenyue Xu, Taoli Zhou, Taiping Liu, Hong Zheng and Yong Fu

1672

CORRIGENDUM

Triggering and modulation of the host-parasite interplay by *Echinococcus multilocularis*: a review - CORRIGENDUM

Naceur Mejri, Andrew Hemphill and Bruno Gottstein

1681