

PARASITOLOGY

CONTENTS

REVIEW ARTICLE

Helminth-induced apoptosis: a silent strategy for immunosuppression

Amin Zakeri

1663

RESEARCH ARTICLES

Modelling the spatial distribution of *Fasciola hepatica* in bovines using decision tree, logistic regression and GIS query approaches for Brazil

S.C. Bennema, M.B. Molento, R.G. Scholte, O.S. Carvalho and I. Pritsch

1677

QTL mapping of a natural genetic polymorphism for long-term parasite persistence in *Daphnia* populations

Michelle Krebs, Jarkko Routtu and Dieter Ebert

1686

Functional characterization of single-domain cystatin-like cysteine proteinase inhibitors expressed by the trematode *Fasciola hepatica*

Martín Cancela, Ileana Corvo, Editeuza Da Silva, Aline Teichmann, Leda Roche, Alvaro Díaz, José Francisco Tort, Henrique B. Ferreira and Arnaldo Zaha

1695

Migration of *Fasciola hepatica* newly excysted juveniles is inhibited by high-mannose and oligomannose-type N-glycan-binding lectins

Andres Garcia-Campos, Alan W. Baird and Grace Mulcahy

1708

Studies *in vitro* on infectivity and sensitivity to antileishmanial drugs in New World *Leishmania* species transfected with the green fluorescent protein [pIR3(-)-eGFP]

Genesis Palacios, Adriana Parodi, Yulieth A. Upegui, Andres Montoya, Sergio Pulido, Iván D. Vélez and Sara M. Robledo

1718

Molecular characterization and distribution of *Plasmodium matutinum*, a common avian malaria parasite

Gediminas Valkiūnas, Mikas Ilgūnas, Dovilė Bukauskaitė, Vaidas Palinauskas, Rasa Bernotienė and Tatjana A. Iezhova

1726

The impact of socio-cultural factors on transmission of *Taenia* spp. and *Echinococcus granulosus* in Kosovo

M. Alishani, K. Sherifi, A. Rexhepi, A. Hamidi, M. T. Armua-Fernandez, F. Grimm, D. Hegglin and P. Deplazes

1736

Use of a real-time PCR to explore the intensity of *Plasmodium* spp. infections in native, endemic and introduced New Zealand birds

D.C. Sijbranda, B.D. Gartrell, Z.L. Grange and L. Howe

1743

Signatures of mito-nuclear discordance in *Schistosoma turkestanicum* indicate a complex evolutionary history of emergence in Europe

Scott P. Lawton, Lauren I. Bowen, Aidan M. Emery and Gábor Majoros

1752

New parasitological findings for pre-Hispanic camelids

V. Taglioretti, M.H. Fugassa, D. Rindel and N.H. Sardella

1763

Lipid-core nanocapsules increase the oral efficacy of quercetin in cutaneous leishmaniasis

A.J. Sousa-Batista, F.S. Poletto, C.I.M.S. Philpon, S.S. Guterres, A.R. Pohlmann and B. Rossi-Bergmann

1769

Parasites as prey: the effect of cercarial density and alternative prey on consumption of cercariae by four non-host species

Jennifer E. Welsh, Caroline Liddell, Jaap Van Der Meer and David W. Thielgtes

1775

In vitro antileishmanial activity and iron superoxide dismutase inhibition of arylamine Mannich base derivatives

Alvaro Martín-Montes, Mery Santivañez-Veliz, Elsa Moreno-Viguri, Rubén Martín-Escolano, Carmen Jiménez-Montes, Catalina Lopez-Gonzalez, Clotilde Marín, Carmen Sanmartín, Ramón Gutiérrez Sánchez, Manuel Sánchez-Moreno and Silvia Pérez-Silanes

1783

The first detection of *Toxoplasma gondii* DNA in environmental air samples using gelatine filters, real-time PCR and loop-mediated isothermal (LAMP) assays: qualitative and quantitative analysis

Anna Lass, Beata Szostakowska, Krzysztof Korzeniewski and Panagiotis Karanis

1791

Antiprotozoal effects of metal nanoparticles against *Ichthyophthirius multifiliis*

Mona Saleh, Abdel-Azeem Abdel-Baki, Mohamed A. Dkhil, Mansour El-Matbouli and Saleh Al-Quraishy

1802

Cryptosporidium in fish: alternative sequencing approaches and analyses at multiple loci to resolve mixed infections

Andrea Papparini, Rongchang Yang, Linda Chen, Kaising Tong, Susan Gibson-Kueh, Alan Lymbery and Una M. Ryan

1811

First detection of *Echinococcus multilocularis* in rodent intermediate hosts in Turkey

Hamza Avcioğlu, Esin Guven, Ibrahim Balkaya, Ridvan Kirman, Mohammed Mebarek Bia, Hatice Gulbeyen, Ali Kurt, Sali Yaya and Sadik Demirtas

1821

Speciation in the genus *Cloacina* (Nematoda: Strongylida): species flocks and intra-host speciation

N.B. Chilton, M.A. Shuttleworth, F. Huby-Chilton, A.V. Koehler, A. Jabbar, R.B. Gasser and I. Beveridge

1828

OBITUARY

Obituary of Professor Keith Vickerman FRS: Professor Keith Vickerman 1931–2016

Francis Cox

1841