

THE KOREAN JOURNAL OF
PARASITOLOGY

Vol. 54 No. 1 February 2016

CONTENTS

Original Articles

- 1 An Improved PCR-RFLP Assay for Detection and Genotyping of Asymptomatic *Giardia lamblia* Infection in a Resource-Poor Setting
Yoursry Hawash, M. M. Ghonaim, S. S. Al-Shehri
- 9 Tamoxifen Induces Apoptosis of *Leishmania major* Promastigotes in Vitro
Masoud Doroodgar, Mahdi Delavari, Moein Doroodgar, Ali Abbasi, Ali Akbar Taherian, Abbas Doroodgar
- 15 Isolation and Genotyping of *Toxoplasma gondii* Strains in Ovine Aborted Fetuses in Khorasan Razavi Province, Iran
Leila Danehchin, Gholamreza Razmi, Abolghasem Naghibi
- 21 A Novel Polyclonal Antiserum against *Toxoplasma gondii* Sodium Hydrogen Exchanger 1
Bin Xiao, Zhenzhan Kuang, Yanli Zhan, Daxiang Chen, Yang Gao, Ming Li, Shuhong Luo, Wenbo Hao
- 31 Afatinib Reduces STAT6 Signaling of Host ARPE-19 Cells Infected with *Toxoplasma gondii*
Zhaoshou Yang, Hye-Jin Ahn, Young-Hoon Park, Ho-Woo Nam
- 39 Validation of Reference Genes for Quantitative Real-Time PCR in Bovine PBMCs Transformed and Non-transformed by *Theileria annulata*
Hongxi Zhao, Junlong Liu, Youquan Li, Congshan Yang, Shuaiyang Zhao, Juan Liu, Aihong Liu, Guangyuan Liu, Hong Yin, Guiquan Guan, Jianxun Luo
- 47 Animal Models for *Echinostoma malayanum* Infection: Worm Recovery and Some Pathology
Jiraporn Songsri, Ratchadawan Aukkanimart, Thidarut Boonmars, Panaratana Ratanasuwan, Porntip Laummaunwai, Pranee Sriraj, Panupan Sripan
- 55 Genotype and Phenotype of *Echinococcus granulosus* Derived from Wild Sheep (*Ovis orientalis*) in Iran
Ali Eslami, Behnam Meshgi, Fatemeh Jalousian, Shima Rahmani, Mohammad Ali Salari
- 61 In Vitro Scolicidal Effects of *Salvadora persica* Root Extract against Protoscolices of *Echinococcus granulosus*
Abdel-Azeem S. Abdel-Baki, Esam Almalki, Lamjed Mansour, Saleh Al-Quarishy

Case Report

- 67 Infection of *Taenia asiatica* in a Bai Person in Dali, China
Li Wang, Xuenong Luo, Junling Hou, Aijiang Guo, Shaohua Zhang, Hailong Li, Xuepeng Cai

Brief Communications

- 71 Influence of 120 kDa Pyruvate:Ferredoxin Oxidoreductase on Pathogenicity of *Trichomonas vaginalis*
Hyun-Ouk Song
- 75 Prevalence of *Trichomonas vaginalis* in Women Visiting 2 Obstetrics and Gynecology Clinics in Daegu, South Korea
Youn-Kyoung Goo, Won-Sik Shin, Hye-Won Yang, So-Young Joo, Su-Min Song, Jae-Sook Ryu, Won-Myung Lee, Hyun-Hee Kong, Won-Ki Lee, Sang-Eun Lee, Won-Ja Lee, Dong-Il Chung, Yeonchul Hong
- 81 Molecular Characterization of *Enterocytozoon bienersi* in Domestic Rabbits (*Oryctolagus cuniculus*) in Northeastern China
Xiao-Xuan Zhang, Jing Jiang, Ya-Nan Cai, Chun-Feng Wang, Peng Xu, Gui-Lian Yang, Quan Zhao

CONTENTS CONTINUED

THE KOREAN JOURNAL OF PARASITOLOGY

Vol. 54, No. 1: 1-122 February 2016

THE KOREAN JOURNAL OF
PARASITOLOGY

Vol. 54 No. 1 February 2016



Editor: Jong-Yil Chai

Associate Editors: Sung-Jong Hong, Dongmi Kwak, Young-Ha Lee, Min Seo, Myeong Heon Shin, Woon-Mok Sohn, Hyun-Jong Yang, Tai-Soon Yong

Manuscript Editor: So-Jung Lee

Editorial Board			
Young-An Bae	Sun Huh	Hae-Seon Nam	Seobo Sim
Min-Ho Choi	Jin Kim	Yukifumi Nawa <i>Japan</i>	Takafumi Tsuboi <i>Japan</i>
Keeseon S. Eom	Terry A. Klein <i>USA</i>	Hyun Park	Jitra Waikagul <i>Thailand</i>
Eun-Taek Han	Hyun-Hee Kong	Soon-Jung Park	Jae-Ran Yu
Kenji Hirayama <i>Japan</i>	Won-Ja Lee	Jae-Sook Ryu	Hak Sun Yu
Yeonchul Hong	Santiago Mas-Coma <i>Spain</i>	Eun-Hee Shin	Xiaonong Zhou <i>China</i>

The Korean Journal of Parasitology is the official journal (paperless, on-line publication after Vol. 53, 2015) of The Korean Society for Parasitology and Tropical Medicine. Abbreviated title is 'Korean J Parasitol'. It was launched in 1963. It contains original articles, case reports, brief communications, reviews or mini-reviews, book reviews, and letters to the editor on parasites of humans and animals, vectors, host-parasite relationships, zoonoses, and tropical medicine. It is published bimonthly in February, April, June, August, October, and December each year. Supplement numbers are at times published. All of the manuscripts are peer-reviewed.

Total or a part of the articles in this Journal are abstracted in *Biological Abstracts*, *CAB International*, *Chemical Abstract*, *DOI/Crossref*, *Excerpta Medica (EMBASE)*, *Google Scholar*, *Helminthological Abstracts*, *Index Medicus/Medline/PubMed/PubMed Central*, *KoMCI*, *KoreaMed*, *KoreaMed Synapse*, *Protozoological Abstracts*, *Review of Medical and Veterinary Entomology*, *Science Citation Index Expanded*, *Scopus*, *Tropical Diseases Bulletin*, *WPRIM*, and *Zoological Record*.

Full text is freely available from: <http://parasitol.or.kr/kjp/>. This journal was supported by the National Research Foundation of Korea Grant and the Korean Federation of Science and Technology Societies Grant funded by the Korean Government (MEST).

Manuscripts should be submitted via the online Manuscript Central website (<http://mc.manuscriptcentral.com/kjp>, <http://www.parasitol.kr>). Other correspondences can be sent by an e-mail to the Editor, Dr. Jong-Yil Chai, Department of Parasitology and Tropical Medicine, Seoul National University College of Medicine, Seoul 03080, Korea (Tel: +82-2-740-8342, Fax: +82-2-765-6142, e-mail: cjy@snu.ac.kr, kjp.editor@gmail.com).

Correspondence concerning business matters should be addressed to Secretary-Treasurer, Dr. Hyun-Jong Yang, Department of Parasitology, School of Medicine, Ewha Womans University, Seoul 07985, Korea (Tel: +82-2-2650-5750, Fax: +82-2-2650-5791, e-mail: parayang@ewha.ac.kr).

Staff of The Korean Society for Parasitology and Tropical Medicine (2016-2017)

President	Young-Ha Lee, M.D., Ph.D.
Vice-President	Won-Ja Lee, B.S., Ph.D.
Secretary-Treasurer	Hyun-Jong Yang, M.D., Ph.D.
Secretary for Academic Affairs	Eun-Taek Han, B.S., Ph.D.
Secretary for Social Affairs	Hak Sun Yu, B.S., Ph.D.

© 2016, Korean Society for Parasitology and Tropical Medicine
© It is identical to Creative Commons Non-Commercial License.
Ⓢ This paper meets the requirements of KS X ISO 9706, ISO 9706-1994 and ANSI/NISO Z39.48-1992 (Permanence of Paper).
Printed on 29 February 2016 by Academya Publishing Co., Anyang, Korea

Cover: *Macroorchis spinulosus* from Jeollanam-do Province, Korea (the crayfish intermediate host, a metacercaria, and a young adult fluke), p 110 of this issue.

- 87 Prevalence of *Anaplasma* and *Bartonella* spp. in Ticks Collected from Korean Water Deer (*Hydropotes inermis argyropus*)
Jun-Gu Kang, Sungjin Ko, Heung-Chul Kim, Sung-Tae Chong, Terry A. Klein, Jeong-Byoung Chae, Yong-Sun Jo, Kyoung-Seong Choi, Do-Hyeon Yu, Bae-Keun Park, Jinho Park, Joon-Seok Chae
- 93 Seroprevalence of *Toxoplasma gondii* infection among HIV/AIDS Patients in Eastern China
Guoqiang Shen, Xiaoming Wang, Hui Sun, Yaying Gao
- 97 Serological Detection of *Borrelia burgdorferi* among Horses in Korea
Seung-Hun Lee, Sun-Hee Yun, Eunsang Choi, Yong-Soo Park, Sang-Eun Lee, Gil-Jae Cho, Oh-Deog Kwon, Dongmi Kwak
- 103 Effects of Disinfectants on Larval Development of *Ascaris suum* Eggs
Ki-Seok Oh, Geon-Tae Kim, Kyu-Sung Ahn, Sung-Shik Shin
- 109 Molecular Description of *Macroorchis spinulosus* (Digenea: Nanophyetidae) Based on ITS1 Sequences
Eun Jeong Won, Deok-Gyu Kim, Jaeun Cho, Bong-Kwang Jung, Min-Jae Kim, Yong Woon Yun, Jong-Yil Chai, Dong Wook Ryang
- 113 Environmental Contamination by *Echinococcus granulosus* sensu lato Eggs in Relation to Slaughterhouses in Urban and Rural Areas in Tunisia
Raja Chaâbane-Banaoues, Myriam Oudni-M'rad, Selim M'rad, Habib Mezhoud, Hamouda Babba
- 119 Instructions for Authors