Accepted Manuscript

Expression of immune-related genes of Nile tilapia *Oreochromis niloticus* after *Gyrodactylus cichlidarum* and *Cichlidogyrus sclerosus* infections demonstrating immunosupression in coinfection

Tingting Zhi, Xiangli Xu, Jinsong Chen, Yingying Zheng, Shuai Zhang, Jian Peng, Christopher L. Brown, Tingbao Yang

PII: \$1050-4648(18)30330-9

DOI: 10.1016/j.fsi.2018.05.060

Reference: YFSIM 5341

To appear in: Fish and Shellfish Immunology

Received Date: 27 February 2018

Revised Date: 10 May 2018
Accepted Date: 30 May 2018

Please cite this article as: Zhi T, Xu X, Chen J, Zheng Y, Zhang S, Peng J, Brown CL, Yang T, Expression of immune-related genes of Nile tilapia *Oreochromis niloticus* after *Gyrodactylus cichlidarum* and *Cichlidogyrus sclerosus* infections demonstrating immunosupression in coinfection, *Fish and Shellfish Immunology* (2018), doi: 10.1016/j.fsi.2018.05.060.

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



ACCEPTED MANUSCRIPT

Expression of immune-related genes of Nile tilapia
 Oreochromis niloticus after Gyrodactylus cichlidarum
 and Cichlidogyrus sclerosus infections demonstrating
 immunosupression in coinfection

Tingting Zhi¹, Xiangli Xu¹, Jinsong Chen¹, Yingying Zheng¹, Shuai Zhang¹, Jian Peng¹, Christopher L. Brown², Tingbao Yang¹*

¹ State Key Laboratory of Biocontrol, Guangdong Provincial Key Laboratory for Improved Variety Reproduction of Aquatic Economic Animals, and Center for Parasitic Organisms, School of Life Sciences, Sun Yat-sen University, Guangzhou, China

² World Fisheries University, Pukyong National University, Busan, South Korea

^{*}Correspondence: Tingbao Yang, State Key Laboratory of Biocontrol, Guangdong Provincial Key Laboratory for Improved Variety Reproduction of Aquatic Economic Animals, and Center for Parasitic Organisms, School of Life Sciences, Sun Yat-Sen University, Guangzhou 510275, P.R. China. Tel: 0086 20 84115126. Fax: 0086 20 84115126. E-mail: lssytb@mail.sysu.edu.cn

Download English Version:

https://daneshyari.com/en/article/8498237

Download Persian Version:

https://daneshyari.com/article/8498237

<u>Daneshyari.com</u>