Accepted Manuscript

Bentonite clay supplemented diet on immunity in stinging catfish, *Heteropneustes* fossilis against *Aeromonas hydrophila*

Sundaram Jawahar, Adil Nafar, Bilal Ahmad Paray, Mohammad K. Al-Sadoon, Chellam Balasundaram, Ramasamy Harikrishnan

PII: S1050-4648(18)30049-4

DOI: 10.1016/j.fsi.2018.01.049

Reference: YFSIM 5103

To appear in: Fish and Shellfish Immunology

Received Date: 19 July 2017

Revised Date: 22 January 2018 Accepted Date: 28 January 2018

Please cite this article as: Jawahar S, Nafar A, Paray BA, Al-Sadoon MK, Balasundaram C, Harikrishnan R, Bentonite clay supplemented diet on immunity in stinging catfish, *Heteropneustes fossilis* against *Aeromonas hydrophila*, *Fish and Shellfish Immunology* (2018), doi: 10.1016/j.fsi.2018.01.049.

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

- 1 Bentonite clay supplemented diet on immunity in stinging catfish,
- 2 Heteropneustes fossilis against Aeromonas hydrophila

3

- 4 Sundaram Jawahar^a, Adil Nafar^a, Bilal Ahmad Paray^b, Mohammad K. Al-Sadoon^b,
- 5 Chellam Balasundaram^c, Ramasamy Harikrishnan^{d,*}

6

- ^aDepartment of Biotechnology, Bharath College of Science and Management, Thanjavur 613
- 8 005, Tamil Nadu, India
- 9 bZoology Department, College of Science, King Saud University, PO Box 2455, Riyadh
- 10 11451, Saudi Arabia
- ^cDepartment of Herbal and Environmental Science, Tamil University, Thanjavur 613 005,
- 12 Tamil Nadu, India
- d Department of Zoology, Pachaiyappa's College for Men, Kanchipuram 631 501, Tamil
- 14 Nadu, India

15

16

17

18

19

20

21

22

23

24

25

Abstract

The effect of Sodium Bentonite (SB) enriched diet on growth performance, innate immune response, and disease resistance in stinging catfish, *Heteropneustes fossilis* against *Aeromonas hydrophila* is reported. The infected fish fed with 5% SB had the maximum weight gain diet (PWG %) and specific growth rate (SGR %) were 26% and 29% when compared to 14% and 17% with 10% diet. Similarly the phagocytic activity increased significantly when infected fish were fed with 5% or 10% SB diets during the experimental period; the complement, respiratory burst and lysozyme activities were also significantly enhanced on weeks 2 and 4. The lower cumulative mortality (10% and 15%) was observed

Download English Version:

https://daneshyari.com/en/article/8498636

Download Persian Version:

https://daneshyari.com/article/8498636

<u>Daneshyari.com</u>