2024

Fish Health Laboratory Services

Aquaculture Department, Southeast Asian Fisheries Development Center

SEAFDEC Aquaculture Department. (2024). Fish Health Laboratory Services [Brochure]. Tigbauan, Iloilo, Philippines: Author.

http://hdl.handle.net/10862/6548

References

1 Standard Methods for the Examination of Water and Waste Waters. 2017. American Public Health Association. 23rd ed.

2 Bacteriological Analytical Manual. US FDA. (online) fda.food/gov/laboratory

3 Aflatoxin rapid test kit (Elabscience, 2018)

4 Humason, G. 1972. Animal Tissue Techniques. 3rd ed. WH Freeman and Company, USA p. 34-47.

5 Bell, T. A. and Lightner, D.V. 1998. A Handbook of normal penaeid shrimp histology. The World Aquaculture Society. Allen Press Inc., Lawrence, Kansas

6 IQ2000™ Detection and Prevention System, GeneReach Biotechnology Corp., Taiwan

7 Tang, KFJ and Lightner, DV. 2001. Detection and quantification of infectious hypodermal and hematopoietic necrosis virus in penaeid shrimp by real-time PCR. Diseases of Aquatic Organisms, 44(2):79-85.

8 Durand, SV and Lightner, DV. 2002. Quantitative real time PCR for the measurement of white spot syndrome virus in shrimp. Journal of Fish Diseases, 25: 381–389.

9 Dangtip S.et al., (2015). AP4 method for two-tube nested PCR detection of AHPND isolates of *Vibrio parahaemolyticus*. Aquaculture Reports, 2:158-162.

10 Kurita J, Nakajima K, Hirono I and Aoki T. 1998. Polymerase chain reaction (PCR) amplification of DNA of red sea bream iridovirus (RSIV) Fish Pathol. 33(1):17-23.

11 Dong HT, Siriroob S, Meemetta W, Santimanawong W, Gangnonngiw W, Pirarat N, Khunrae P, Rattanarojpong T, Vanichviriyakit R and Senapin S. 2017. Emergence of tilapia lake virus in Thailand and an alternative semi-nested RT-PCR for detection. Aquaculture 476: 111-118.

12 Sri Widada J, Richard V, Shi Z, Qian D, Bonami JR. Dot-blot hybridization and RT-PCR detection of extra small virus (XSV) associated with white tail disease of prawn *Macrobrachium rosenbergii*. Dis Aquat Organ. 2004 Jan 28;58(1):83-7

13 Hameed ASS, Yoganandhan K, Widada JS and Bonami JR. 2004. Studies on the occurrence of *Macrobrachium rosenbergii* nodavirus and extra small virus-like particles associated with white tail disease of *M. rosenbergii* in India by RT-PCR detection. Aquaculture 238(1–4): pp127-133.

For method of sampling and schedule of sample submission, contact:

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AQUACULTURE DEPARTMENT
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FISH HEALTH LABORATORY SERVICES

- Bacteriology
- Histopathology
- PCR-based pathogen detection

Bacteriology

Bacterial count (for water, crustaceans, fish fingerlings and juveniles, soil)

Test	Fee (per sample)
Aerobic plate count, Luminous bacterial count, and Presumptive Vibrio count [1,2]	Php 300
Vibrio parahaemolyticus, *Vibrio cholerae,* and *Vibrio alginolyticus* [1,2]	Php 150

Test	Fee (per sample)
Aflatoxin detection [3] (feeds, grain, oil, animal tissue)	Php 500
Parasite detection/identification	Php 150
Bacterial identification (conventional method)	Php 750
Shrimp larval monitoring	Php 250

Histopathology

Service	Fee (per slide)
Typical section [4,5]	Php 300
Serial section [4,5]	Php 300

PCR-based pathogen detection

Test	Fee (per sample)
Shrimp pathogens	
White spot syndrome virus (WSSV) [6]	Php 900
Infectious hypodermal and hematopoetic necrosis virus (IHHNV) [6]	Php 900
Taura syndrome virus (TSV) [6]	Php 1,000
Yellow head virus (YHV) [6]	Php 1,000
Gill associated virus (GAV) [6]	Php 1,000
Infectious myonecrosis virus (IMNV) [6]	Php 1,000
Monodon baculovirus (MBV) [6]	Php 900
Hepatopancreatic parvo virus (HPV) [6]	Php 900
White tail disease • Extra small virus like particles (XSV) [12] • *Macrobrachium rosenbergii* nodavirus (MrNV) [13]	Php 900
Shrimp microsporidian parasite • *Enterocytozoon hepatopenaei (*EHP) [6]	Php 900
Quantification of WSSV and IHHNV in soil or tissue [7,8]	Php 3,000
Acute hepatopancreatic necrosis disease (AHPND) [9]	Php 900
Fish pathogens	
Koi herpes virus (KHV) [6]	Php 900
Spring viraemia of carp virus (SVCV) [6]	Php 1,000
Viral nervous necrosis (VNN) [6]	Php 1,000
Iridovirus (red seabream iridovirus/RSIV) [10]	Php 900
Tilapia lake virus (TiLV) [11]	Php 900