Diseases of molluscs

Parasitic diseases—Infection with Marteilioides chungmuensis

Signs of disease

Important: animals with disease may show one or more of the signs below, but disease may still be present in the absence of any signs.

Clinical signs of disease in an infected animal

spawning failure

Gross signs of disease in an infected animal

• infects mature oocytes and the infected eggs are released or retained within the follicle, leading to a visible distention of the mantle surface.

Disease agent

Marteilioides chungmuensis is responsible for oocyte infections of Pacific oysters.

Host range

Molluscs known to be susceptible to infection with Marteilioides chungmuensis:

Pacific oyster* (Crassostrea gigas)

Presence in Asia-Pacific

Infection with Marteilioides chungmuensis has been officially reported from Japan and the Republic of Korea.

Epidemiology

- M. chungmuensis infects the cytoplasm of mature oocytes, and significant proportions of eggs can be affected.
- Prevalences of up to 8.3% have been reported from the Republic of Korea
- Modes of transmission are unknown.

Differential diagnosis

The differential diagnostic table and the list of similar diseases appearing at the bottom of each disease page refer only to the diseases covered by this field guide. Gross signs observed might well be representative of a wider range of diseases not included here. Therefore, these diagnostic aids should not be read as a guide to a definitive diagnosis, but rather as a tool to help identify the listed diseases that most closely account for the gross signs.

There are no known similarities to other molluscan diseases listed in this field guide.

Department of Agriculture. Fisheries and Forestry

* naturally susceptible

Sourced from AGDAFF-NACA (2007) Aquatic Animal Diseases Significant to Asia-Pacific: Identification Field Guide. Australian Government Department of Agriculture, Fisheries and Forestry. Canberra.



Australian Government

Infection with Marteilioides chungmuensis continued

Sample collection

Because of uncertainty in differentiating diseases using only gross signs, and because some aquatic animal disease agents might pose a risk to humans, you should not try to collect samples unless you have been trained. Instead, you should phone your national hotline number and report your observations. If samples have to be collected, the agency taking the call will advise you on what you need to do. Local or district fisheries/veterinary authorities could advise you on sampling.

Emergency disease hotline

For your national emergency disease hotline number, see Whom to contact if you suspect a disease.

Further reading

The currently accepted procedures for a conclusive diagnosis of *Marteiliodes chungmuensis* are summarised in Asia *Diagnostic Guide to Aquatic Animal Diseases*, FAO Fisheries Technical Paper 402/2, 144–146

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