



## Infection with *Marteilia refringens* continued

### Host range

Molluscs known to be susceptible to the disease:

American oyster*	( <i>Crassostrea virginica</i> )
common cockle*	( <i>Cardium edule</i> )
European flat oyster*	( <i>Ostrea edulis</i> )
New Zealand dredge oyster*	( <i>Ostrea chilensis</i> )
Olympia oyster*	( <i>Ostrea conchaphila</i> )
rock oyster*	( <i>Saccostrea cucullata</i> )
Argentinian flat oyster	( <i>Ostrea puelchana</i> )
calico scallop	( <i>Argopecten gibbus</i> )
mussels	( <i>Mytilus edulis</i> , <i>Mytilus galloprovincialis</i> )
Pacific oyster	( <i>Crassostrea gigas</i> )
southern mud oyster	( <i>Ostrea angasi</i> )

A closely related protozoan, *Marteilia* sp, has been associated with disease in *Saccostrea cucullata* in Western Australia.

### Presence in Asia–Pacific

EXOTIC — has not been officially reported in the Asia–Pacific region under the NACA–FAO–OIE quarterly aquatic animal disease reporting program.

### Epidemiology

- Infection with *Marteilia refringens* produces high mortality, associated with sporulation in the epithelial cells of the digestive tubules.
- Earlier stages of sporulation occur in epithelia of the digestive ducts and, possibly, gills.
- An intermediate host or a free-living stage is thought to be required in the lifecycle of this parasite.
- *Marteilia refringens* can occur in some oysters without causing disease.
- The factors triggering a pathogenic host response are not clearly established, but may include environmental stresses or stock differences in disease resistance.

### 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.

\* naturally susceptible (other species have been shown to be experimentally susceptible)





