



**Prepared by:**

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ANY OTHER DISEASES OF IMPORTANCE															
1 Infection with Scale Drop Disease Virus	+	(2021)	(2021)	(2021)	(2021)	(2021)	(2021)	(2021)	(2021)	+	(2021)	(2021)	(2021)	III	2
2 Infection with Big Belly bacterium	+	(2021)	(2021)	(2021)	(2021)	(2021)	(2021)	(2021)	(2021)	+	(2021)	(2021)	(2021)	II	2
3 Infection with Lymphocystis virus	0000	0000	+	(2021)	(2021)	(2021)	(2021)	(2021)	(2021)	(2021)	(2021)	(2021)	(2021)	III	3
4 Infection with <i>Nocardia</i> sp.	(2018)	(2018)	(2018)	+	+	+	(2021)	(2021)	(2021)	(2021)	(2021)	(2021)	(2021)	III	4,6
5 Infection with <i>Streptococcus iniae</i>	(2020)	(2020)	(2020)	+	(2021)	+	(2021)	(2021)	(2021)	(2021)	(2021)	(2021)	(2021)	III	4,6,8
6 Infection with <i>Tenacibaculum</i> sp.	(2019)	(2019)	(2019)	(2019)	(2019)	+	(2021)	(2021)	(2021)	+	(2021)	(2021)	(2021)	II	7
7 Infection with Lates Calcarifer Herpesvirus	(2020)	(2020)	(2020)	(2020)	(2020)	(2020)	(2020)	(2020)	(2020)	+	(2021)	(2021)	(2021)	III	2

**DISEASES PRESUMED EXOTIC TO THE REGION<sup>b</sup>**

**LISTED BY THE OIE**

**Finfish:** Infection with HPR-deleted or HPR0 salmon anaemia virus; Infection with salmon pancreas disease virus; Infection with *Gyrodactylus salaris*.

**Molluscs:** Infection with *Marteilia refringens*; *Perkinsus marinus*.

**NOT LISTED BY THE OIE**

**Finfish:** Channel catfish virus disease

a/ Please use the following occurrence code:

<u>Occurrence code and symbol</u>	<u>Definition</u>	<u>Occurrence code and symbol</u>	<u>Definition</u>
Disease present +	The disease is present with clinical signs in the whole country (in domestic species or wildlife)	Disease absent -	The disease was absent in the country during the reporting period (in domestic species or wildlife).
Disease limited to one or more zones +()	The disease is present with clinical signs, and limited to one or more zones/compartments (in domestic species or wildlife)	Never reported 0000	The disease has "never been reported" (historically absent) for the whole country in domestic species and wildlife.
Infection/infestation +?	Confirmed infestation or infection using diagnostic tests, but no clinical signs observed (in domestic species or wildlife)	No information ***	No information is available regarding the presence or the absence of this disease during the reporting period (in domestic species or wildlife).
Infection/infestation limited to one or more zones +?()	Confirmed infestation or infection using diagnostic tests, but no clinical signs observed and limited to one or more zones/compartments (in domestic species or wildlife)		
Disease suspected ?	The presence of the disease was suspected but not confirmed (in domestic species or wildlife)		
Disease suspected but not confirmed and limited to one or more zones ?()	The presence of the disease was suspected but not confirmed and limited to one or more zones/compartments (in domestic species or wildlife)		

b/ If there is any changes on historical data, please highlight in RED

**1. Epidemiological comments:**

(Comments should include: 1) Origin of the disease or pathogen (history of the disease); 2) Species affected; 3) Disease characteristics (unusual clinical signs or lesions); 4) Pathogen (isolated/sero-typed); 5) Mortality rate (high/low; decreasing/increasing); 6) Death toll (economic loss, etc); 7) Size of infected areas or names of infected areas; 8) Preventive/control measures taken; 9) Samples sent to national or international laboratories for confirmation (indicate the names of laboratories); 10) Published paper (articles in journals/website, etc). and 11) Unknown diseases: describe details as much as possible.)

Comment No.	
1	White Spot Syndrome Virus (WSSV) DNA was detected by real-time PCR in a batch of ornamental crayfish imported by a local ornamental fish trading facility. All specimens of the affected batch were culled. The premises were inspected by the competent animal health authority and found to have good biosecurity practices.

2	<p>In January, Scale Drop Disease Virus (SDDV) was detected through a combination of PCR and histopathology in a batch of diseased Asian seabass (<i>Lates calcarifer</i>) submitted by a commercial offshore flow-through farming system. In 1 fish, histopathology analysis of the intestine also detected evidence of Big Belly bacterium (BB) infection. A disease investigation was conducted jointly by the competent animal health authority and farm staff, and identified the growout tanks as being a reservoir of pathogens. The farm was advised to consider vaccinating the nursery fish and shifting the growout stages to flow-through netcages.</p> <p>In September 2021, SDDV was detected through a combination of PCR and histopathology in a separate batch of diseased Asian seabass (<i>Lates calcarifer</i>) submitted by another commercial offshore flow-through farming system. Concurrently, a second batch of Asian seabass from the same premises had Lates Calcarifer Herpesvirus (LCHV) detected via PCR. The farm's attending veterinarian was informed of the detections.</p> <p>In September 2021, BB was detected again, this time in a batch of diseased Asian Seabass fingerlings submitted by another offshore commercial aquaculture system. The farm was informed of the detection.</p>
3	<p>Lymphocystis virus was detected via a combination of PCR and histopathology in a batch of diseased Red snapper submitted by a commercial offshore netcage farm. The fish presented with black wart-like lesions on the skin. The farm was advised on the mode of fish to fish transmission and management of this virus.</p>
4	<p><i>Nocardia seriolae</i> infection was detected by a combination of histopathology, culture and sequencing in two batches of diseased threadfin submitted by an offshore commercial netcage farm in April and May respectively. Concurrently, fish from the April submission also showed histopathologic evidence of gram-positive cocci infection, which was supported by culture and PCR confirming the aetiological agent as <i>Streptococcus iniae</i>. The farm was informed of the detection and advised on the results of <i>in vitro</i> antibiotic sensitivity tests to inform their selection of antimicrobial treatment. The farm also adopted frequent removal of dead and moribund fish to reduce shedding of pathogen into the water column.</p>
5	<p>Viral Nervous Necrosis Virus (VNNV) was detected via a combination of PCR and histopathology in a batch of diseased pompano and two batches of diseased grouper, all submitted by the same offshore netcage farm, in May. VNNV was detected from a separate batch of diseased pompano from the same farm, in June. The farm's attending veterinarian was informed of the detection.</p> <p>VNNV was detected via a combinatoin of PCR and histopathology in two batches of diseased coral trout submitted by a land-based commercial recirculating aquaculture system farm, in November. The farm's fish health personnel were informed of the detection and advised on management measures.</p>
6	<p><i>Nocardia</i> sp. infection was detected by a combination of histopathology, culture and isolation in a batch of diseased red snapper submitted by an offshore netcage farm in June. Concurrently, the same batch of snapper also showed histopathologic evidence of gram-positive cocci infection, which was supported by culture, PCR and sequencing confirming the aetiological agent as <i>Streptococcus iniae</i>. The farm's attending veterinarian was informed of the detection and advised on the results of <i>in vitro</i> antibiotic sensitivity tests to inform their selection of antimicrobial treatment. The farm also adopted frequent removal of dead and moribund fish to reduce shedding of pathogen into the water column.</p>
7	<p>Histopathologic findings compatible with Tenacibaculosis were detected in a batch of diseased pompano fingerlings submitted in June and a separate batch of diseased coral trout submitted in September. In both cases, the farm's attending fish health manager was promptly informed of the diagnosis.</p>
8	<p><i>Streptococcus iniae</i> infection was detected by a combination of histopathology, culture and PCR in a batch of diseased red snapper submitted by an offshore farm in June. Concurrently the fish had a significant infestation with <i>Benedenia</i> sp. The farm's attending veterinarian was promptly informed of the diagnosis.</p>

**2. New aquatic animal health regulations introduced within past six months (with effective date):**

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