



2. Infection with <i>Batrachochytrium dendrobatidis</i>	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	
3. Infection with <i>Batrachochytrium salamandrivorans</i>	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	

**Prepared by:**

Name: DR. KUA BENG CHU  
Position: DEPUTY SENIOR DIRECTOR (RESEARCH)  
Date: 16 FEBRUARY 2025

**ANY OTHER DISEASES OF IMPORTANCE**

1														
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

<sup>a/</sup> 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)		

<sup>b/</sup> 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	<p><b>Infection with spring viremia of carp virus</b>            No positive case was detected (PCR) during DoF active surveillance programme.            Infection with spring viremia of carp virus was not reported in the country.</p>
2	<p><b>Infection with <i>Aphanomyces invadans</i> (EUS)</b>            No positive case was detected during DoF active surveillance programme.            Infection with <i>Aphanomyces invadans</i> was not reported in the country.</p>
3	<p><b>Infection with red sea bream iridovirus</b>            No positive case was detected (PCR) during DoF active surveillance programme.            Infection with red sea bream iridovirus was not reported in the country.</p>
4	<p><b>Koi herpesvirus disease (KHV)</b>            1) Reported from DOF active surveillance;            2) Species affected: <i>Cyprinus carpio</i>            3) Disease signs: Bleeding gills, sunken eyes, and pale patches on the skin.            4) Pathogen: Koi herpesvirus            5) Mortality rate: Unreported;            6) Economic loss: Unreported;            7) Names of infected areas: Perak (May and September)            8) Preventive/control measures taken: Undergoes break cycle by early harvest, drying of ponds, cleaning and disinfection of infected ponds and farming tools, farmer was advised to implement biosecurity measures and stocking with KHV negative seeds in the next cropping;            9) Laboratory confirmation: Selangor Fisheries Biosecurity Centre            10) Publications: None            Koi herpesvirus is known to occur previously in the states of Perak (last reported 2022).</p>
5	<p><b>Viral encephalopathy and retinopathy (VER)/ (VNN)</b>            No positive case was detected (PCR) during DoF active surveillance programme.            Infection with red sea bream iridovirus was last reported in the states of Johor and Terengganu (2024).</p>
6	<p><b>Tilapia lake virus (TiLV)</b>            1) Reported from DOF passive surveillance;            2) Species affected: <i>Oreochromis spp.</i>            3) Disease signs: Skin erosion, ruptured eye            4) Pathogen: Tilapia lake virus            5) Mortality rate: Unreported;            6) Economic loss: Unreported;            7) Names of infected areas: Perak (February)            8) Preventive/control measures taken: Undergoes break cycle by early harvest, drying of ponds, cleaning and disinfection of infected ponds and farming tools, farmer was advised to implement biosecurity measures and stocking with TiLV negative seeds in the next cropping;            9) Laboratory confirmation: Selangor Fisheries Biosecurity Centre            10) Publications: None            The disease is known to have occurred previously in Kedah (June 2017), Perlis (July 2017), Sarawak (July 2017), Negeri Sembilan (October 2017), Kedah and Sarawak (March 2018), and Terengganu (July 2018).</p>
7	<p><b>Infection with <i>Perkinsus olseni</i></b>            No positive case was detected (PCR) during DoF active surveillance programme.            Infection with <i>Perkinsus olseni</i> was suspected to occur in 2016, but not confirmed in a zone.</p>

8	<p><b>Infection with Taura syndrome virus (TSV)</b>  No positive case was detected (PCR) during DoF active surveillance programme.  Infection with Taura syndrome virus was not reported in the country.</p>
9	<p><b>Infection with white spot syndrome virus</b>  1) Reported from DOF passive surveillance;  2) Species affected: <i>Penaeus vannamei</i>  3) Disease signs: White spot found on carapace  4) Pathogen: White spot syndrome virus  5) Mortality rate: Unreported;  6) Economic loss: Unreported;  7) Names of infected areas: Johor (October)  8) Preventive/control measures taken: Undergoes break cycle by early harvest, drying of ponds, cleaning and disinfection of infected ponds and farming tools, farmer was advised to implement biosecurity measures and stocking with white spot disease negative seeds in the next cropping;  9) Laboratory confirmation: Johor Fisheries Biosecurity Centre  10) Publications: None  The disease is known to have occurred previously in Sarawak (2024).</p>
10	<p><b>Infection with yellow head virus genotype 1</b>  1) Reported from DOF active surveillance;  2) Species affected: <i>Penaeus monodon</i>  3) Disease signs: Yellowing of the cephalothorax  4) Pathogen: Yellow head virus genotype 1  5) Mortality rate: Unreported;  6) Economic loss: Unreported;  7) Names of infected areas: Selangor (May)  8) Preventive/control measures taken: Undergoes break cycle by early harvest, drying of ponds, cleaning and disinfection of infected ponds and farming tools, farmer was advised to implement biosecurity measures and stocking with yellow head virus genotype 1 negative seeds in the next cropping;  9) Laboratory confirmation: Selangor Fisheries Biosecurity Centre  10) Publications: None</p>
11	<p><b>Infection with infectious hypodermal and haematopoietic necrosis virus (IHHNV)</b>  No positive case was detected (PCR) during DoF active surveillance programme.  IHHNV was known to occur previously in several states (last reported 2022) and Perak (2023).</p>
12	<p><b>Infection with Infectious myonecrosis virus (IMNV)</b>  1) Reported from DOF active and passive surveillance;  2) Species affected: <i>Penaeus monodon</i>, <i>Penaeus vannamei</i>  3) Disease signs: No significant sign;  4) Pathogen: Infectious myonecrosis virus;  5) Mortality rate: Unreported;  6) Economic loss: Unreported;  7) Names of infected areas: Selangor (May), Penang (June)  8) Preventive/control measures taken: Undergoes break cycle by early harvest, drying of ponds, cleaning and disinfection of infected ponds and farming tools, farmer was advised to implement biosecurity measures and stocking with IMNV negative seeds in the next cropping;  9) Laboratory confirmation: Selangor Fisheries Biosecurity Centre and National Fish Health Research Centre (NaFlsH)  10) Publications: None  IMNV was last reported in Johor (2024).</p>

13	<p><b>Acute hepatopancreatic necrosis disease (AHPND)</b></p> <p>1) Reported from DOF passive surveillance;</p> <p>2) Species affected: <i>Penaeus vannamei</i></p> <p>3) Disease signs: Shrunken hepatopancrease, empty stomach</p> <p>4) Pathogen: <i>Vibrio parahaemolyticus</i></p> <p>5) Mortality rate: Unreported;</p> <p>6) Economic loss: Unreported;</p> <p>7) Names of infected areas: Penang (June)</p> <p>8) Preventive/control measures taken: Undergoes break cycle by early harvest, drying of ponds, cleaning and disinfection of infected ponds and farming tools, farmer was advised to implement biosecurity measures and stocking with AHPND negative seeds in the next cropping;</p> <p>9) Laboratory confirmation: National Fish Health Research Centre (NaFISH)</p> <p>10) Publications: None</p> <p>AHPND was known to occur previously in Sabah and Perak (2024)</p>
14	<p>Hepatopancreatic microsporidiosis caused by <i>Enterocytozoon hepatopenaei</i> (HPM-EHP)</p> <p>1) Reported from DOF active surveillance;</p> <p>2) Species affected: <i>Penaeus vannamei</i> and <i>Litopenaeus monodon</i>;</p> <p>3) Disease signs: No significant sign;</p> <p>4) Pathogen: <i>Enterocytozoon hepatopenaei</i>;</p> <p>5) Mortality rate: Unreported;</p> <p>6) Economic loss: Unreported;</p> <p>7) Names of infected areas: Negeri Sembilan (June and November), Johor (May and June), Kedah (June, October and November), Pahang (June), Sabah (May), Perak (October), Selangor (October), Terengganu (July)</p> <p>8) Preventive/control measures taken: Undergoes break cycle by early harvest, drying of ponds, cleaning and disinfection of infected ponds and farming tools, farmer was advised to implement biosecurity measures and stocking with EHP negative seeds in the next cropping;</p> <p>9) Laboratory confirmation: Kedah Fisheries Biosecurity Center, Johor Fisheries Biosecurity Centre and Selangor Fisheries Biosecurity Centre;</p> <p>10) Publications: None</p> <p>HPM-EHP was last reported in 2024 in the states of Negeri Sembilan, Melaka, Perak, Terengganu, Johor, Selangor, Kedah and Sarawak.</p>
<p><b>2. New aquatic animal health regulations introduced within past six months (with effective date):</b></p>	