WORLD ORGANISATION FOR ANIMAL HEALTH (OIE)

REGIONAL AQUATIC ANIMAL DISEASE YEARBOOK

2014

(Asian and Pacific Region)

PUBLISHED BY THE OIE REGIONAL REPRESENTATION FOR ASIA AND THE PACIFIC

FOOD SCIENCE BLDG. 5F, THE UNIVERSITY OF TOKYO, 1-1-1 YAYOI, BUNKYO-KU, TOKYO 113-8657, JAPAN
(TEL: +81-3-5805-1931; FAX: +81-3-5805-1934 - rr.asiapacific@oie.int - http://www.rr-asia.oie.int)

CONTENTS

1. Reports received by the OIE Regional Representation in Tokyo (by country/territory)

2. Reports received by the OIE Regional Representation in Tokyo (by disease)

1) Finfish diseases

2) Mollusc diseases

a) OIE-listed diseases
b) Non OIE-listed diseases

***

Codes used in the *Yearbook*

+	Disease reported or known to be present
+?	Serological evidence and/or isolation of causative agent but no clinical disease
?	Suspected by reporting officer but presence not confirmed
+( )	Occurrence limited to certain zones
...	No information available
0000	Never reported
-	Not reported (but disease is known to occur)
(year)	Year of last occurrence

AUSTRALIA												
Name of disease	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
DISEASES PREVALENT IN THE REGION												
FINFISH DISEASES												
OIE-listed diseases												
Epizootic haematopoietic necrosis	-(2012)	-(2012)	-(2012)	-(2012)	-(2012)	-(2012)	-(2012)	-(2012)	-(2012)	-(2012)	-(2012)	-(2012)
Infectious haematopoietic necrosis	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Spring viraemia of carp (SVC)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Viral haemorrhagic septicaemia (VHS)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Infection with Aphanomyces invadans (EUS)	-(2013)	-(2013)	-(2013)	-(2013)	-(2013)	-(2013)	-(2013)	-(2013)	-(2013)	-(2013)	+	-(2014)
Red seabream iridoviral disease (RSID)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Koi herpesvirus disease (KHV)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Non OIE-listed diseases												
Grouper iridoviral disease	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Viral encephalopathy and retinopathy	-(2013)	+	+	-(2014)	-(2014)	-(2014)	+	-(2014)	-(2014)	-(2014)	+	+
Enteric septicaemia of catfish	(2011)	(2011)	(2011)	(2011)	(2011)	(2011)	(2011)	(2011)	(2011)	+	(2014)	(2014)
MOLLUSC DISEASES												
OIE-listed diseases												
Infection with Bonamia exitiosa	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Infection with Perkinsus olseni	-(2013)	-(2013)	-(2013)	-(2013)	-(2013)	+	-(2014)	-(2014)	-(2014)	-(2014)	-(2014)	-(2014)
Infection with abalone herpesvirus	-(2011)	-(2011)	-(2011)	-(2011)	-(2011)	-(2011)	-(2011)	-(2011)	-(2011)	-(2011)	-(2011)	-(2011)
Infection with Xenohaliotis californiensis	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Infection with ostreid herpesvirus*	+	+	-(2014)	**-(2014)**	**-(2014)**	**-(2014)**	-(2014)	-(2014)	-(2014)	-(2014)	+	-(2014)
Non OIE-listed diseases												
Infection with Marteilioides chungmuensis	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Acute viral necrosis (in scallops)	***	***	***	***	***	***	***	***	***	***	***	***
CRUSTACEAN DISEASES												
OIE-listed diseases												
Taura syndrome (TS)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
White spot disease (WSD)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Yellowhead disease (YHD)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Infectious hypodermal and haematopoietic necrosis (IHHN)	-(2008)	-(2008)	+	-(2014)	-(2014)	-(2014)	-(2014)	-(2014)	+	-(2014)	-(2014)	-(2014)
Infectious myonecrosis (IMN)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
White tail disease (MrNV)	-(2008)	-(2008)	-(2008)	-(2008)	-(2008)	-(2008)	-(2008)	-(2008)	-(2008)	-(2008)	-(2008)	-(2008)
Necrotising hepatopancreatitis (NHP)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Non OIE-listed diseases												
Monodon slow growth syndrome	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Acute hepatopancreatic necrosis disease (AHPND)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
AMPHIBIAN DISEASES												
OIE-listed diseases												
Infection with Ranavirus	-(2008)	-(2008)	-(2008)	-(2008)	-(2008)	-(2008)	-(2008)	-(2008)	-(2008)	-(2008)	-(2008)	-(2008)
Infection with Batrachochytrium dendrobatidis	-(2013)	-(2013)	-(2013)	-(2013)	-(2013)	-(2013)	-(2013)	-(2013)	-(2013)	-(2013)	-(2013)	-(2013)
ANY OTHER DISEASES OF IMPORTANCE												

Epizootic haematopoietic necrosis

1Q

Epizootic haematopoietic necrosis was not reported this period despite passive surveillance in Victoria (last reported 2012), the Australian Capital Territory (last reported 2011), New South Wales (last reported 2009) and South Australia (last reported 1992). Passive surveillance and never reported in the Northern Territory, Queensland, Tasmania and Western Australia.

2Q

Epizootic haematopoietic necrosis was not reported this period despite passive surveillance in Victoria (last reported 2012), the Australian Capital Territory (last reported 2011), New South Wales (last reported 2009) and South Australia (last reported 1992). Passive surveillance and never reported in the Northern Territory, Queensland, Tasmania and Western Australia.

3Q

Epizootic haematopoietic necrosis was not reported this period despite passive surveillance in Victoria (last reported 2012), the Australian Capital Territory (last reported 2011), New South Wales (last reported 2009) and South Australia (last reported 1992). Passive surveillance and never reported in the Northern Territory, Queensland, Tasmania and Western Australia.

4Q

Epizootic haematopoietic necrosis was not reported this period despite passive surveillance in Victoria (last reported 2012), the Australian Capital Territory (last reported 2011), New South Wales (last reported 2009) and South Australia (last reported 1992). Passive surveillance and never reported in the Northern Territory, Queensland, Tasmania and Western Australia.

Infection with Aphanoyces invadans (EUS)

1Q

Infection with Aphanoyces invadans (EUS) was not reported this period despite passive surveillance in Western Australia (last reported 2013), Queensland (last reported 2013), New South Wales (last reported 2012), the Northern Territory (last reported 2012), Victoria (last reported 2012), and South Australia (last reported 2008). Passive surveillance and never reported in Tasmania. No information available this period in the Australian Capital Territory.

2Q

Infection with *Aphanomyces invadans* (EUS) was not reported this period despite passive surveillance in Western Australia (last reported 2013), Queensland (last reported 2013), New South Wales (last reported 2012), the Northern Territory (last reported 2012), Victoria (last reported 2012), and South Australia (last reported 2008). Passive surveillance and never reported in Tasmania. No information available this period in the Australian Capital Territory.

3Q

Infection with *Aphanomyces invadans* (EUS) was not reported this period despite passive surveillance in Western Australia (last reported 2013), Queensland (last reported 2013), New South Wales (last reported 2012), the Northern Territory (last reported 2012), Victoria (last reported 2012), and South Australia (last reported 2008). Passive surveillance and never reported in Tasmania. No information available this period in the Australian Capital Territory.

4Q

"Infection with *Aphanomyces invadans* (EUS)

1. Reported in Queensland in November – passive surveillance;
2. Species affected – sea mullet (Mugil cephalus);
3. Clinical signs – skin ulcers consistent with clinical infection;
4. Pathogen – *Aphanomyces invadans*;
5. Mortality rate – N/A;
6. Economic loss – N/A;
7. Geographic extent – N/A;
8. Containment measures – not applicable;
9. Laboratory confirmation – N/A;
10. Publications – none.

Epizootic ulcerative syndrome is known to have occurred previously in Western Australia (last reported 2013), New South Wales (last reported 2012), the Northern Territory (last reported 2012), Victoria (last reported 2012), and South Australia (last reported 2008). Passive surveillance and never reported in Tasmania. No information available this period in the Australian Capital Territory."

Viral encephalopathy and retinopathy

1Q

Viral encephalopathy and retinopathy

1. Reported in Queensland in February and March, passive surveillance;
2. Species affected – Gold spot grouper (Epinephelus coiodes) fingerlings, Queensland grouper (Epinephelus lanceolatus) fingerlings, Barramundi (Lates calcarifer) fingerlings;
3. Clinical signs – Lethargy, swimming on sides, mortality;
4. Pathogen – Betanodavirus;
5. Mortality rate – <1%, Typical pathology seen in 80% of Lates calcarifer fingerlings observed from one case;
6. Economic loss – N/A;
7. Geographic extent – Limited to aquaculture facilities;
8. Containment measures – Not applicable;
9. Laboratory confirmation – Histopathology, real time PCR;
10. Publications – None.

Viral encephalopathy and retinopathy is known to have occurred previously in the Northern Territory (last reported 2013), New South Wales (last reported 2010), South Australia (last reported 2010) and Tasmania (last reported 2000). Passive surveillance and never reported in Victoria. No information available this period in the Australian Capital Territory.

2Q

Viral encephalopathy and retinopathy was not reported this period but is known to have occurred previously in Queensland (last reported 2014), Northern Territory (last reported 2013), New South Wales (last reported 2010), South Australia (last reported 2010) and Tasmania (last reported 2000). Passive surveillance and never reported in Victoria. No information available this period in the Australian Capital Territory.

3Q

Viral encephalopathy and retinopathy

1. Reported in Queensland in July, targeted surveillance;
2. Species affected – Moses perch (*Lutjanus russelli*), estuary cod (*Epinephelus coioides*);
3. Clinical signs – subclinical infection of Moses perch and estuary cod;
4. Pathogen – Betanodavirus;
5. Mortality rate – N/A;
6. Economic loss – N/A;
7. Geographic extent – N/A;
8. Containment measures – not applicable;
9. Laboratory confirmation – real time PCR;
10. Publications – none.

Viral encephalopathy and retinopathy is known to have occurred previously in the Northern Territory (last reported 2013), Western Australia (last reported 2013), New South Wales (last reported 2010), South Australia (last reported 2010) and Tasmania (last reported 2000). Passive surveillance and never reported in Victoria. No information available this period in the Australian Capital Territory.

4Q

Viral encephalopathy and retinopathy

1. Reported in Queensland in November and December, targeted surveillance;
2. Species affected – giant grouper (*Epinephelus lanceolatus*);
3. Clinical signs – lethargic and not eating;
4. Pathogen – Betanodavirus;
5. Mortality rate – N/A;
6. Economic loss – N/A;
7. Geographic extent – N/A;
8. Containment measures – not applicable;
9. Laboratory confirmation – histopathology and immunohistochemistry test;
10. Publications – none.

Viral encephalopathy and retinopathy is known to have occurred previously in the Northern Territory (last reported 2013), Western Australia (last reported 2013), New South Wales (last reported 2010), South Australia (last reported 2010) and Tasmania (last reported 2000). Passive surveillance and never reported in Victoria. No information available this period in the Australian Capital Territory."

Enteric septicaemia of catfish

1Q

Enteric septicaemia of catfish was not reported this period and has never been reported from wild fish in Australia. Passive surveillance and reported previously in the Northern Territory in a closed aquarium facility also holding imported ornamental fish (last reported 2011). Passive surveillance and reported previously in Queensland (last reported 2008) and Tasmania (last reported 2001) in imported zebrafish (Brachydanio rerio) held in PC2 containment facilities. Passive surveillance and never reported in New South Wales, South Australia, Victoria or Western Australia. No information available this period in the Australian Capital Territory.

2Q

Enteric septicaemia of catfish was not reported this period and has never been reported from wild fish in Australia. Passive surveillance and reported previously in the Northern Territory in a closed aquarium facility also holding imported ornamental fish (last reported 2011). Passive surveillance and reported previously in Queensland (last reported 2008) and Tasmania (last reported 2001) in imported zebrafish (*Brachydanio rerio*) held in PC2 containment facilities. Passive surveillance and never reported in New South Wales, South Australia, Victoria or Western Australia. No information available this period in the Australian Capital Territory.

3Q

Enteric septicaemia of catfish was not reported this period and has never been reported from wild fish in Australia. Passive surveillance and reported previously in the Northern Territory in a closed aquarium facility also holding imported ornamental fish (last reported 2011). Passive surveillance and reported previously in Queensland (last reported 2008) and Tasmania (last reported 2001) in imported zebrafish (*Brachydanio rerio*) held in PC2 containment facilities. Passive surveillance and never reported in New South Wales, South Australia, Victoria or Western Australia. No information available this period in the Australian Capital Territory.

4Q

Enteric septicaemia of catfish

1. Reported in Queensland in October, targeted surveillance;
2. Species affected – eeltailed catfish (*Tandanus tropicanus*);
3. Clinical signs – subclinical infection;
4. Pathogen – *Edwardsiella ictaluri*;
5. Mortality rate – N/A;
6. Economic loss – N/A;
7. Geographic extent – limited to one river;
8. Containment measures – not applicable;
9. Laboratory confirmation – culture identification, PCR and sequencing;
10. Publications – none.

A survey for *Edwardsiella ictaluri* in wild fish from Northern Australia is ongoing. *E. ictaluri* has been detected in some clinically normal fish from a single river in Queensland. Enteric septicaemia of catfish is known to have occurred previously in the Northern Territory in a closed aquarium facility also holding imported ornamental fish (last reported 2011). Passive surveillance and reported previously in Queensland (last reported 2008) and Tasmania (last reported 2001) in imported zebrafish (*Brachydanio rerio*) held in PC2 containment facilities. Passive surveillance and never reported in New South Wales, South Australia, Victoria or Western Australia. No information available this period in the Australian Capital Territory."

Infection with *Perkinsus olseni*

1Q

Infection with *Perkinsus olseni* was not reported this quarter despite passive surveillance in South Australia (last reported 2013) and New South Wales (last reported 2005). Not reported despite targeted surveillance in Western Australia (last reported 2003). Passive surveillance and never reported in the Northern Territory, Queensland, Tasmania and Victoria. No information available for the Australian Capital Territory (susceptible species not present and no marine water responsibility).

2Q

Infection with *Perkinsus olseni*

1. Reported in Queensland in June from samples collected in August 2013;
2. Species affected – *Anadara trapezia* (Ark cockle or Sydney cockle), clinically normal adults;
3. Clinical signs – None;
4. Pathogen – *Perkinsus olseni*;
5. Mortality rate – Nil;
6. Economic loss – N/A;
7. Geographic extent – Wynnum, Moreton Bay;
8. Containment measures – N/A;
9. Laboratory confirmation – PCR and sequencing;
10. Publications – None

Perkinsus olseni was not reported elsewhere this quarter despite passive surveillance in South Australia (last reported 2013), New South Wales (last reported 2005) and Western Australia (last reported 2003). Passive surveillance and never reported in the Northern Territory, Tasmania and Victoria. No information available for the Australian Capital Territory (susceptible species not present and no marine water responsibility).

3Q

Infection with *Perkinsus olseni* was not reported this period despite passive surveillance in Queensland (last reported 2014), South Australia (last reported 2013), New South Wales (last reported 2005) and Western Australia (last reported 2003). Passive surveillance and never reported in the Northern Territory, Tasmania and Victoria. No information available for the Australian Capital Territory (no marine water responsibility).

4Q

Infection with *Perkinsus olseni* was not reported this period despite passive surveillance in Queensland (last reported 2014), South Australia (last reported 2013), New South Wales (last reported 2005) and Western Australia (last reported 2003). Passive surveillance and never reported in the Northern Territory, Tasmania and Victoria. No information available for the Australian Capital Territory (no marine water responsibility).

Infection with abalone herpesvirus

1Q

Infection with abalone herpesvirus (abalone viral ganglioneuritis) was not reported this period despite targeted surveillance in Tasmania (last reported 2011) and passive surveillance in New South Wales (last reported 2011 and eradicated following detection in contained commercial live-holding facilities) and Victoria (last reported 2010). Passive surveillance and never reported in the Northern Territory, Queensland, South Australia and Western Australia. No information available this period in the Australian Capital Territory (no marine water responsibility).

2Q

Infection with abalone herpesvirus (abalone viral ganglioneuritis) was not reported this period despite targeted surveillance in Tasmania (last reported 2011) and passive surveillance in New South Wales (last reported 2011 and eradicated following detection in contained commercial live-holding facilities) and Victoria (last reported 2010). Passive surveillance and never reported in the Northern Territory, Queensland, South Australia and Western Australia. No information available this period in the Australian Capital Territory (no marine water

responsibility).

3Q

Infection with abalone herpesvirus (abalone viral ganglioneuritis) was not reported this period despite targeted surveillance in Tasmania (last reported 2011) and passive surveillance in New South Wales (last reported 2011 and eradicated following detection in contained commercial live-holding facilities) and Victoria (last reported 2010). Passive surveillance and never reported in the Northern Territory, Queensland, South Australia and Western Australia. No information available this period in the Australian Capital Territory (no marine water responsibility).

4Q

Infection with abalone herpesvirus (abalone viral ganglioneuritis) was not reported this period despite targeted surveillance in Tasmania (last reported 2011) and passive surveillance in New South Wales (last reported 2011 and eradicated following detection in contained commercial live-holding facilities) and Victoria (last reported 2010). Passive surveillance and never reported in the Northern Territory, Queensland, South Australia and Western Australia. No information available this period in the Australian Capital Territory (no marine water responsibility).

Infection with ostreid herpesvirus

1Q

Infection with ostreid herpesvirus

1. Reported in New South Wales in January and February passive surveillance;
2. Species affected – *Crassostrea gigas*, including stock over one year old;
3. Clinical signs – N/A;
4. Pathogen – Ostreid herpesvirus-1 microvariant;
5. Mortality rate – 30-80%;
6. Economic loss – N/A;
7. Geographic extent – January case Hawkesbury River; February case Georges River;
8. Containment measures – Movement of stock and equipment outside of currently infected catchments prohibited;
9. Laboratory confirmation – PCR;
10. Publications – None.

Controls are in place to contain the virus to affected estuaries in New South Wales. Ostreid herpesvirus-1 µ variant has not been detected in any other jurisdictions in Australia. Targeted surveillance in 2011 in Pacific oyster growing areas did return positive tests for the virus. Passive surveillance and never reported in Northern Territory, Queensland, Victoria, Tasmania, South Australia and Western Australia. No information available for Australian Capital Territory (no marine water responsibility).

2Q

Infection with ostreid herpesvirus was not reported this period but was last reported in New South Wales in 2014.Controls are in place to contain the virus to affected estuaries in New South Wales. Ostreid

herpesvirus-1 microvariant has not been detected in any other jurisdictions in Australia. Targeted surveillance in 2011 in Pacific oyster growing areas did not return positive tests for the virus. Passive surveillance and never reported in Northern Territory, Queensland, Victoria, Tasmania, South Australia and Western Australia. No information available for Australian Capital Territory (no marine water responsibility).

3Q

Infection with ostreid herpesvirus was not reported this period but was last reported in New South Wales in 2014.Controls are in place to contain the virus to affected estuaries in New South Wales. Ostreid herpesvirus-1 microvariant has not been detected in any other jurisdictions in Australia. Targeted surveillance in 2011 in Pacific oyster growing areas did not return positive tests for the virus. Targeted surveillance and never reported in Tasmania. Passive surveillance and never reported in Northern Territory, Queensland, Victoria, South Australia and Western Australia. No information available for Australian Capital Territory (no marine water responsibility).

4Q

Infection with ostreid herpesvirus

1. Reported in New South Wales in November, targeted surveillance;
2. Species affected – *Crassostrea gigas*, small spat;
3. Clinical signs – N/A;
4. Pathogen – Ostreid herpesvirus-1 microvariant;
5. Mortality rate – 90% in Georges River, not determinable due to small size of spat in Hawkesbury River;
6. Economic loss – N/A;
7. Geographic extent – Hawkesbury River and Georges River in research populations of Pacific oysters;
8. Containment measures – Movement of stock and equipment outside of currently infected catchments is prohibited;
9. Laboratory confirmation – qPCR (EMAI assay: Georges River and Hawkesbury River samples; Martenot Assay: Georges River);
10. Publications – None.

In New South Wales controls are in place to contain the virus to affected estuaries; targeted surveillance in those areas where OsHV-1 is known to occur, passive surveillance elsewhere. Ostreid herpesvirus-1 microvariant has not been detected in any other jurisdictions in Australia. Targeted surveillance in 2011 in Pacific oyster growing areas did not return positive tests for the virus outside of the affected estuaries. Passive surveillance and never reported in Northern Territory, Queensland, Victoria, Tasmania, South Australia and Western Australia. No information available for Australian Capital Territory (no marine water responsibility).

Infectious hypodermal and haematopoietic necrosis

1Q

Infectious hypodermal and haematopoietic necrosis

1. Reported in Queensland in March, targeted surveillance;
2. Species affected – *Penaeus monodon* adults;
3. Clinical signs – none (health testing);

4. Pathogen – Infectious hypodermal and haematopoietic necrosis virus;
5. Mortality rate – N/A;
6. Economic loss – Nil;
7. Geographic extent – Queensland east coast;
8. Containment measures – Not applicable;
9. Laboratory confirmation – Real time PCR;
10. Publications – None.

Infectious hypodermal and haematopoietic necrosis virus is known to have previously occurred in the Northern Territory (last reported 2003). Passive surveillance and never reported in New South Wales, South Australia, Victoria and Western Australia. No information available this period in the Australian Capital Territory (no marine water responsibility) and Tasmania (susceptible species not present).

2Q

Infectious hypodermal and haematopoietic necrosis virus is known to have occurred previously in Queensland (last reported 2014) and the Northern Territory (last reported 2003). Passive surveillance and never reported in New South Wales, South Australia, Victoria and Western Australia. No information available this period in the Australian Capital Territory (no marine water responsibility) and Tasmania (susceptible species not present).

3Q

Infectious hypodermal and haematopoietic necrosis virus
1. Reported by Queensland in September, passive surveillance;
2. Species affected – *Penaeus monodon* wild caught adults imported from Northern Territory and held in biosecure facilities;
3. Clinical signs – post-transport ill-health;
4. Pathogen – infectious hypodermal and haematopoietic necrosis virus;
5. Mortality rate – nil;
6. Economic loss – nil;
7. Geographic extent – N/A;
8. Containment measures – not applicable;
9. Laboratory confirmation – real time PCR;
10. Publications – none.

Infectious hypodermal and haematopoietic necrosis virus is known to have occurred previously in Queensland (last reported 2014). Passive surveillance and never reported in New South Wales, South Australia, Victoria and Western Australia. No information available this period in the Australian Capital Territory (no marine water responsibility) and Tasmania (susceptible species not present).

4Q

Infectious hypodermal and haematopoietic necrosis virus

Infectious hypodermal and haematopoietic necrosis virus was not reported this period but is known to have occurred previously in Queensland (last reported 2014) and the Northern Territory (last reported 2003). Passive surveillance and never reported in New South Wales, South Australia, Victoria and Western Australia. No information available this period in the Australian Capital Territory (no marine water responsibility) and

Tasmania (susceptible species not present).

White tail disease

1Q

White tail disease was not reported this period despite passive surveillance in Queensland (last reported 2008). Passive surveillance and never reported from the Australian Capital Territory, New South Wales, the Northern Territory, South Australia, Victoria and Western Australia. No information available this period in Tasmania (susceptible species not present).

2Q

White tail disease was not reported this period despite passive surveillance in Queensland (last reported 2008). Passive surveillance and never reported from the Australian Capital Territory, New South Wales, the Northern Territory, South Australia, Victoria and Western Australia. No information available this period in Tasmania (susceptible species not present).

3Q

White tail disease was not reported this period despite passive surveillance in Queensland (last reported 2008). Passive surveillance and never reported from the Australian Capital Territory, New South Wales, the Northern Territory, South Australia, Victoria and Western Australia. No information available this period in Tasmania (susceptible species not present).

4Q

White tail disease was not reported this period despite passive surveillance in Queensland (last reported 2008). Passive surveillance and never reported from the Australian Capital Territory, New South Wales, the Northern Territory, South Australia, Victoria and Western Australia. No information available this period in Tasmania (susceptible species not present).

Infection with ranavirus

1Q

Infection with ranavirus was not reported this period despite passive surveillance in the Northern Territory (last reported 2008, prior to official reporting for ranavirus). Suspected but not confirmed through passive surveillance in Queensland. Passive surveillance and never reported in Tasmania. No information available this period in the Australian Capital Territory, New South Wales, South Australia, Victoria and Western Australia.

2Q

Infection with ranavirus was not reported this period despite passive surveillance in the Northern Territory (last reported 2008, prior to official reporting for ranavirus). Suspected but not confirmed through passive surveillance in Queensland. Passive surveillance and never reported in Tasmania. No information available this period in the Australian Capital Territory, New South Wales, South Australia, Victoria and Western Australia.

3Q

Infection with ranavirus was not reported this period despite passive surveillance in the Northern Territory (last reported 2008, prior to official reporting for ranavirus). Suspected but not confirmed through passive surveillance in Queensland. Passive surveillance and never reported in Tasmania. No information available this period in the Australian Capital Territory, New South Wales, South Australia, Victoria and Western Australia.

4Q

Infection with ranavirus was not reported this period despite passive surveillance in the Northern Territory (last reported 2008, prior to official reporting for ranavirus). Suspected but not confirmed through passive surveillance in Queensland. Passive surveillance and never reported in Tasmania. No information available this period in the Australian Capital Territory, New South Wales, South Australia, Victoria and Western Australia.

Infection with *Batrachochytrium dendrobatidis*

1Q

Infection with *Batrachochytrium dendrobatidis* was not reported this period despite targeted surveillance in Tasmania (last reported 2013), passive surveillance in Victoria (last reported 2011) and passive surveillance in Western Australia (last reported 2008). Suspected but not confirmed through passive surveillance in Queensland. No information available this period in the Australian Capital Territory, New South Wales, the Northern Territory and South Australia.

2Q

Infection with *Batrachochytrium dendrobatidis* was not reported this period despite targeted surveillance in Tasmania (last reported 2013), passive surveillance in Victoria (last reported 2011) and passive surveillance in Western Australia (last reported 2008). Suspected but not confirmed through passive surveillance in Queensland. No information available this period in the Australian Capital Territory, New South Wales, the Northern Territory and South Australia.

3Q

Infection with Batrachochytrium dendrobatidis was not reported this period despite passive surveillance in Tasmania (last reported 2013), Victoria (last reported 2011) and Western Australia (last reported 2008). Suspected but not confirmed through passive surveillance in Queensland. No information available this period in the Australian Capital Territory, New South Wales, the Northern Territory and South Australia.

4Q

Infection with Batrachochytrium dendrobatidis was not reported this period despite passive surveillance in Tasmania (last reported 2013), Victoria (last reported 2011) and Western Australia (last reported 2008). Suspected but not confirmed through passive surveillance in Queensland. No information available this period in the Australian Capital Territory, New South Wales, the Northern Territory and South Australia.

BANGLADESH												
Name of disease	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
DISEASES PREVALENT IN THE REGION												
FINFISH DISEASES												
OIE-listed diseases												
Epizootic haematopoietic necrosis							0000	0000	0000			
Infectious haematopoietic necrosis							0000	0000	0000			
Spring viraemia of carp (SVC)							0000	0000	0000			
Viral haemorrhagic septicaemia (VHS)							0000	0000	0000			
Infection with Aphanomyces invadans (EUS)							-	-	+()			
Red seabream iridoviral disease (RSID)							0000	0000	0000			
Koi herpesvirus disease (KHV)							0000	0000	0000			
Non OIE-listed diseases												
Grouper iridoviral disease							0000	0000	0000			
Viral encephalopathy and retinopathy							0000	0000	0000			
Enteric septicaemia of catfish							0000	0000	0000			
MOLLUSC DISEASES												
OIE-listed diseases												
Infection with Bonamia exitiosa							0000	0000	0000			
Infection with Perkinsus olseni							0000	0000	0000			
Infection with abalone herpesvirus							0000	0000	0000			
Infection with Xenohaliotis californiensis												
Infection with ostreid herpesvirus*							0000	0000	0000			
Non OIE-listed diseases												
Infection with Marteilioides chungmuensis							0000	0000	0000			
Acute viral necrosis (in scallops)							0000	0000	0000			
CRUSTACEAN DISEASES												
OIE-listed diseases												
Taura syndrome (TS)							0000	0000	0000			
White spot disease (WSD)							+()	-	-			
Yellowhead disease (YHD)							0000	0000	0000			
Infectious hypodermal and haematopoietic necrosis							0000	0000	0000			
Infectious myonecrosis (IMN)							0000	0000	0000			
White tail disease (MrNV)							0000	0000	0000			
Necrotising hepatopancreatitis (NHP)												
Non OIE-listed diseases							0000	0000	0000			
Monodon slow growth syndrome							0000	0000	0000			
Acute hepatopancreatic necrosis disease (AHPND)												
AMPHIBIAN DISEASES												
OIE-listed diseases												
Infection with Ranavirus							0000	0000	0000			
Infection with Batrachochytrium dendrobatidis							0000	0000	0000			
ANY OTHER DISEASES OF IMPORTANCE												
1. Grayish white spot of cultured Shing							***	***	***			

EUS

Q3

1. Area affected: reported from Rajshahi district and greater Mymensingh district;
2. Species affected: Koi (Anabas testudineus), Silver barb (Puntius gonionotus) and Silver carp (Hypophthalmichthys molitrix);
3. Clinical signs or lesions: Erratic movement, hemorrhage on body, infection on fin and tail base;
4. Pathogens: Aeromonas sp, Pseudomonas sp and Aphanomyces invadans;
5. Mortality: 20-30%;
6. Control measures: Liming, water exchange, reduced feeding, reduced stocking density

White spot disease (WSD)

Q3

1. Area affected: reported from Khulna and Bhagerhat district;
2. Species affected: Penaeus monodon
3. Clinical signs or lesions: lethargic shrimps were seen, floating on the surface of the pond;
4. Pathogen: White spot syndrome virus (WSSD);
5. Mortality: medium to high;
6. Control measures: Suggested to improve bio-security of farms;

BHUTAN												
Name of disease	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
DISEASES PREVALENT IN THE REGION												
FINFISH DISEASES												
OIE-listed diseases												
Epizootic haematopoietic necrosis	0000	0000	0000	0000	0000	0000						
Infectious haematopoietic necrosis	0000	0000	0000	0000	0000	0000						
Spring viraemia of carp (SVC)	0000	0000	0000	0000	0000	0000						
Viral haemorrhagic septicaemia (VHS)	0000	0000	0000	0000	0000	0000						
Infection with Aphanomyces invadans (EUS)	0000	0000	0000	0000	0000	0000						
Red seabream iridoviral disease (RSID)	0000	0000	0000	0000	0000	0000						
Koi herpesvirus disease (KHV)	0000	0000	0000	0000	0000	0000						
Non OIE-listed diseases												
Grouper iridoviral disease	0000	0000	0000	0000	0000	0000						
Viral encephalopathy and retinopathy	0000	0000	0000	0000	0000	0000						
Enteric septicaemia of catfish	0000	0000	0000	0000	0000	0000						
MOLLUSC DISEASES												
OIE-listed diseases												
Infection with Bonamia exitiosa	0000	0000	0000	0000	0000	0000						
Infection with Perkinsus olseni	0000	0000	0000	0000	0000	0000						
Infection with abalone herpesvirus	0000	0000	0000	0000	0000	0000						
Infection with Xenohaliotis californiensis	0000	0000	0000	0000	0000	0000						
Infection with ostreid herpesvirus*	0000	0000	0000	0000	0000	0000						
Non OIE-listed diseases												
Infection with Marteilioides chungmuensis	0000	0000	0000	0000	0000	0000						
Acute viral necrosis (in scallops)	0000	0000	0000	0000	0000	0000						
CRUSTACEAN DISEASES												
OIE-listed diseases												
Taura syndrome (TS)	0000	0000	0000	0000	0000	0000						
White spot disease (WSD)	0000	0000	0000	0000	0000	0000						
Yellowhead disease (YHD)	0000	0000	0000	0000	0000	0000						
Infectious hypodermal and haematopoietic necrosis (IHHN)	0000	0000	0000	0000	0000	0000						
Infectious myonecrosis (IMN)	0000	0000	0000	0000	0000	0000						
White tail disease (MrNV)	0000	0000	0000	0000	0000	0000						
Necrotising hepatopancreatitis (NHP)	0000	0000	0000	0000	0000	0000						
Non OIE-listed diseases												
Monodon slow growth syndrome	0000	0000	0000	0000	0000	0000						
Acute hepatopancreatic necrosis disease (AHPND)	0000	0000	0000	0000	0000	0000						
AMPHIBIAN DISEASES												
OIE-listed diseases												
Infection with Ranavirus	0000	0000	0000	0000	0000	0000						
Infection with Batrachochytrium dendrobatidis	0000	0000	0000	0000	0000	0000						
ANY OTHER DISEASES OF IMPORTANCE												

CHINA PR												
Name of disease	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
DISEASES PREVALENT IN THE REGION												
FINFISH DISEASES												
OIE-listed diseases												
Epizootic haematopoietic necrosis	0000	0000	0000	0000	0000	0000						
Infectious haematopoietic necrosis	+()	+()	+()	0000	+?()	0000						
Spring viraemia of carp (SVC)	0000	0000	+?()	+?()	+?()	0000						
Viral haemorrhagic septicaemia (VHS)	0000	0000	0000	0000	0000	0000						
Infection with Aphanomyces invadans (EUS)	0000	0000	0000	0000	0000	0000						
Red seabream iridoviral disease (RSID)	0000	0000	0000	0000	0000	0000						
Koi herpesvirus disease (KHV)	***	***	***	***	***	***						
Non OIE-listed diseases												
Grouper iridoviral disease	0000	0000	0000	0000	0000	0000						
Viral encephalopathy and retinopathy	0000	0000	0000	0000	0000	0000						
Enteric septicaemia of catfish	0000	0000	0000	0000	0000	0000						
MOLLUSC DISEASES												
OIE-listed diseases												
Infection with Bonamia exitiosa	0000	0000	0000	0000	0000	0000						
Infection with Perkinsus olseni	0000	0000	0000	0000	0000	0000						
Infection with abalone herpesvirus	0000	0000	0000	0000	0000	0000						
Infection with Xenohaliotis californiensis	0000	0000	0000	0000	0000	0000						
Infection with ostreid herpesvirus*												
Non OIE-listed diseases												
Infection with Marteilioides chungmuensis	0000	0000	0000	0000	0000	0000						
Acute viral necrosis (in scallops)	0000	0000	0000	0000	0000	0000						
CRUSTACEAN DISEASES												
OIE-listed diseases												
Taura syndrome (TS)	***	***	***	***	***	***						
White spot disease (WSD)	0000	0000	+( )	+( )	+( )	+( )						
Yellowhead disease (YHD)	***	***	***	***	***	***						
Infectious hypodermal and haematopoietic necrosis	***	***	***	***	***	***						
Infectious myonecrosis (IMN)	0000	0000	0000	0000	0000	0000						
White tail disease (MrNV)	0000	0000	0000	0000	0000	0000						
Necrotising hepatopancreatitis (NHP)	0000	0000	0000	0000	0000	0000						
Non OIE-listed diseases												
Monodon slow growth syndrome	0000	0000	0000	0000	0000	0000						
Acute hepatopancreatic necrosis disease (AHPND)	0000	0000	0000	0000	0000	0000						
AMPHIBIAN DISEASES												
OIE-listed diseases												
Infection with Ranavirus	0000	0000	0000	0000	0000	0000						
Infection with Batrachochytrium dendrobatidis	0000	0000	0000	0000	0000	0000						
ANY OTHER DISEASES OF IMPORTANCE												
Akoya oyster disease	0000	0000	0000	0000	0000	0000						
Milky haemolymph disease of spiny lobster (Panulirus s	0000	0000	0000	0000	0000	0000						

CHINESE TAIPEI												
Name of disease	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
DISEASES PREVALENT IN THE REGION												
FINFISH DISEASES												
OIE-listed diseases												
Epizootic haematopoietic necrosis	***	***	***	***	***	***	***	***	***	***	***	***
Infectious haematopoietic necrosis	***	***	***	***	***	***	***	***	***	***	***	***
Spring viraemia of carp (SVC)	***	***	***	***	***	***	***	***	***	***	***	***
Viral haemorrhagic septicaemia (VHS)	***	***	***	***	***	***	***	***	***	***	***	***
Infection with Aphanomyces invadans (EUS)	0000	0000	0000	0000	0000	0000	0000	0000	0000	-	-	-
Red seabream iridoviral disease (RSID)	-	-	-	-	-	-	-	-	-	-	-	-
Koi herpesvirus disease (KHV)	+	-	-	-	-	-	-	+	-	-	-	-
Non OIE-listed diseases												
Grouper iridoviral disease	+	+	+	-	+	+	+	+	+	+	+	+
Viral encephalopathy and retinopathy	+	+	+	+	+	+	+	+	+	+	+	+
Enteric septicaemia of catfish	***	***	***	***	***	***	***	***	***	***	***	***
MOLLUSC DISEASES												
OIE-listed diseases												
Infection with Bonamia exitiosa	***	***	***	***	***	***	***	***	***	***	***	***
Infection with Perkinsus olseni	***	***	***	***	***	***	***	***	***	***	***	***
Infection with abalone herpesvirus	-	-	-	-	-	-	-	-	-	-	-	-
Infection with Xenohaliotis californiensis	***	***	***	***	***	***	***	***	***	***	***	***
Infection with ostreid herpesvirus*	***	***	***	***	***	***	***	***	***	***	***	***
Non OIE-listed diseases												
Infection with Marteilioides chungmuensis	***	***	***	***	***	***	***	***	***	***	***	***
Acute viral necrosis (in scallops)	***	***	***	***	***	***	***	***	***	***	***	***
CRUSTACEAN DISEASES												
OIE-listed diseases												
Taura syndrome (TS)	***	***	***	***	***	***	-	-	-	-	-	-
White spot disease (WSD)	+	+	+	+	+	+	+	+	+	+	+	+
Yellowhead disease (YHD)	***	***	***	***	***	***	***	***	***	***	***	***
Infectious hypodermal and haematopoietic necrosis (IHHN)	***	***	***	-	+	-	-	-	-	+	+	-
Infectious myonecrosis (IMN)	***	***	***	***	***	***	***	***	***	***	***	***
White tail disease (MrNV)	-	-	-	-	-	-	-	-	-	-	-	-
Necrotising hepatopancreatitis (NHP)	***	***	***	***	***	***	***	***	***	***	***	***
Non OIE-listed diseases												
Monodon slow growth syndrome	***	***	***	***	***	***	***	***	***	***	***	***
Acute hepatopancreatic necrosis disease (AHPND)	***	***	***	***	***	***	***	***	***	-	+	-
AMPHIBIAN DISEASES												
OIE-listed diseases												
Infection with Ranavirus	+	-	+	-	-	-	-	-	-	-	-	-
Infection with Batrachochytrium dendrobatidis	***	***	***	***	***	***	***	***	***	***	***	***
ANY OTHER DISEASES OF IMPORTANCE												

Koi herpesvirus disease (KHV)

1Q

1 outbreak report from 1 farm.

Date: (1) Jan 24.

Species: (1) *Cryprinus carpio*.

Total number of death: (1) 0.

3Q

1 outbreak report from 1 farms.

Date: (1) Aug 8.

Species: (1) *Cryprinus carpiod.*

Total number of death: (1) 0.

Grouper iridoviral disease

1Q

18 outbreak reports from 18 farms.

Date: (1), (2) Jan 2; (3) Jan 3; (4) Jan 9; (5) Jan 14; (6) Feb 6; (7) Feb 18; (8), (9) Feb 20; (10), (11) Feb 25; (12) Feb 26; (13) Feb 27; (14), (15), (16) Mar 4; (17) Mar 6; (18) Mar 13.

Species: (1), (2), (3), (4), (5), (7), (8), (9), (11), (12), (13), (16), (17), (18) *Epinephelus awoara*; (6), (10), (14), (15) *Epinephelus lanceolatus*.

Total number of death: (1) 5; (2) 1500; (3) 100; (4), (15), (17) 0; (5), (14) 10; (6) 230; (7), (10), (12) 30; (8) 20; (9) 15; (11) 3; (13) 70; (16) 10500; (18) 4200.

2Q

11 outbreak reports from 9 farms.

Date: (1), (2) May 9; (3) May 14; (4), (5) May 17; (6) May 27; (7) May 29; (8) Jun 1; (9) Jun 8; (10) Jun 9; (11) Jun 12.

Species: (1), (2), (5), (6), (7), (9), (10), (11) *Epinephelus awoara*; (3), (8) *Epinephelus lanceolatus*; (4) *Lethrinus nebulosus*.

Total number of death: (1) 50; (2) 10; (3) 1; (4), (5) 2; (6) 5; (7) 150; (8) 15; (9) 30; (10) 16; (11) 2380.

3Q

21 outbreak reports from 20 farms.

Date: (1) Jul 3; (2) Jul 17; (3) Jul 18; (4) Jul 21; (5) Jul 31; (6) Aug 5; (7) Aug 7; (8) Aug 25; (9) Aug 27; (10), (11) Sep 2; (12) Sep 3; (13), (14) Sep 9; (15) Sep 10; (16), (17) Sep 11; (18) Sep 12; (19) Sep 23; (20) Sep 25; (21) Aug 14.

Species: (1), (2), (3), (5), (6) *Epinephelus awoara*; (4), (12), (15), (18), (21) *Epinephelus malabaricus*; (7), (9) *Epinephelus lanceolatus*; (8), (10), (11), (13), (14), (16), (17), (20) *Epinephelus coioides*; (19) *Epinephelus fuscoguttatus*.

Total number of death: (1), (3); (15); (18) 1; (2) 150; (4) 2; (5) 1440; (6), (17) 600; (7) 14; (8) 15; (9),(12), (21) 0; (10) 3000; (11) 251; (13) 100; (14) 1500; (16) 2300; (19) 1680; (20) 20.

Viral encephalopathy and retinopathy

1Q

21 outbreak reports from 17 farms.

Date: (1) Jan 3; (2) Jan 7; (3) Jan 10; (4) Jan 16; (5) Jan 17; (6) Jan 20; (7) Jan 24; (8) Feb 6; (9), (10), (11) Feb 7; (12) Feb 24; (13) Mar 7; (14) Mar 11; (15), (16) Mar 18; (17) Mar 19; (18), (19) Mar 21; (20) Mar 24; (21) Mar 31.

Species: (1), (2), (4), (5), (8), (9), (10), (11), (12), (15), (19), (21) *Epinephelus awoara*; (3), (6), (7), (13), (14), (16), (17), (18), (20) *Epinephelus lanceolatus*.

Total number of death: (1) 100; (2) 15; (3), (4), (8), (15) 20; (5), (6), (12), (13), (20), (21) 0; (7), (11) 200; (9), (14), (17), (19) 30; (10) 1000; (16), (18) 50.

2Q

33 outbreak reports from 28 farms.

Date: (1) Apr 3; (2) Apr 14; (3) Apr 15; (4) Apr 22; (5) Apr 25; (6), (7), (8), (9) Apr28; (10), (11) Apr 30; (12) May 2; (13) May 5; (14) May 7; (15) May 12; (16) May 13; (17), (18), (19), (20) May 16; (21), (22) May 21; (23) May 23; (24) May 28; (25) May 29; (26) May 30; (27) Jun 3; (28) Jun 6; (29) Jun 9; (30) Jun 10; (31) Jun 11; (32) Jun 17; (33) Jun 24.

Species: (1), (2), (6), (7), (9), (10), (17), (18), (19), (20) *Epinephelus lanceolatus*; (3), (4), (5), (8), (11), (12), (13), (14), (15), (21), (22), (23), (25), (26), (27), (28), (30), (31), (32), (33) *Epinephelus awoara*; (16) *Parapristipoma trilineatum*; (24), (29) *Trachinotus blochii*.

Total number of death: (1) 30; (2), (27) 10; (3) 60; (4), (32), (33) 40; (5), (7) 100; (6), (8), (10), (11), (12), (13), (14), (15), (18), (20), (21), (23), (26), (29), (31) 0; (9), (17), (19) 50; (16) 2; (22) 20; (24) 80; (25) 1; (28) 500; (30) 300.

3Q

42 outbreak reports from 39 farms.

Date: (1), (2), (3) Jul 1; (4), (5), (6) Jul 3; (7) Jul 4; (8), (9), (10), (11), (12) Jul 7; (13) Jul 9; (14) Jul 10; (15) Jul 12; (16), (17), (18), (19) Jul 14; (20) Jul 15; (21), (22) Jul 25; (23), (24), (25), (26) Jul 28; (27), (28) Jul 31; (29), (30) Aug 1; (31) Aug 4; (32) Aug 10; (33) Aug 14; (34) Aug 15; (35) Aug 20; (36) Aug 21; (37) Aug 25; (38) Aug 26; (39) Sep 2; (40) Sep 3; (41) Sep 9; (42) Sep 24.

Species: (1) *Lates calcarifer*; (2), (15), (16), (25), (32), (36), (39), (40) *Epinephelus lanceolatus*; (3), (5), (7), (8), (9), (10), (12), (14), (17), (18), (19), (20), (21), (22), (23), (24), (26), (27), (28), (29), (30), (31), (34) *Epinephelus awoara*; (4) *Rhabdosargus sarba*; (6), (11), (13) *Trachinotus blochii*; (33), (35), (41) *Epinephelus malabaricus*; (37) *Cichlasoma managuense*; (38), (42) *Epinephelus coioides*.

Total number of death: (1), (4), (28), (41) 1; (2), (3), (5), (7), (9), (10), (15), (20), (21), (22), (25), (33), (36), (37), (38), (39), (40), (42) 0; (6), (11), (13) 3; (8), (31) 300; (12), (23) 100; (14), (19), (34) 500; (16) 10; (17), (24), (29) 30; (18), (30) 400; (26) 1500; (27), (32) 20; (35) 58.

White spot disease (WSD)

1Q

7 outbreak reports from 6 farms.

Date: (1) Jan 2; (2) Jan 7; (3) Feb 11; (4) Feb 13; (5) Feb 18; (6) Feb 27; (7) Mar 12.

Species: (1), (4), (5) *Neocarindina denticulate sinensis* var.red; (2), (3), (6) *Caridina japonica*; (7) *Caridina* cf. serrate.

Total number of death: (1), (2), (3), (4), (5), (6), (7) 0.

2Q

14 outbreak reports from 10 farms.

Date: (1) Apr 8; (2) Apr 25; (3) May 1; (4) May 6; (5), (6) May 12; (7) May 21; (8) May 26; (9) May 29; (10) Jun 3; (11) Jun 4; (12) Jun 5; (13) Jun 11; (14) Jun 16.

Species: (1) *Litopenaeus vannamei*; (2), (3), (10), (11), (12), (13), (14) *Neocarindina denticulate sinensis* var.red; (4), (7), (9) *Caridina serrata* var. red; (5), (6), (8) *Caridina japonica*.

Total number of death: (1), (2), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (13), (14) 0.

3Q

16 outbreak reports from 11 farms.

Date: (1) Jul 1; (2) Jul 10; (3) Jul 14; (4) Jul 17; (5) Jul 18; (6) Jul 24; (7) Jul 28; (8) Aug 4; (9) Aug 8; (10) Aug 12; (11) Aug 18; (12) Aug 19; (13) Aug 21; (14), (15), (16) Sep 15.

Species: (1), (6), (7), (8), (11), (14), (15) *Neocarindina denticulate sinensis* var.red; (2), (3), (4), (9), (12), (13), (16) *Litopenaeus vannamei*; (5) *Caridina serrata* var. red; (5), (10) *Caridina japonica*.

Total number of death: (1), (2), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (13), (14), (15) 0; (16) 320.

Infectious hypodermal and haematopoietic necrosis (IHHN)

1Q

1 outbreak report from 1 farm.

Date: (1) May 25.

Species: (1) *Litopenaeus vannamei.*

Total number of death: (1) 0.

Infection with Ranavirus

1Q

3 outbreak reports from 3 farms.

Date: (1) Jan 12; (2), (3) Mar 20.

Species: (1), (2), (3) *Rana catesbeiana*.

Total number of death: (1) 12000; (2), (3) 30.

HONG KONG SR												
Name of disease	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
DISEASES PREVALENT IN THE REGION												
FINFISH DISEASES												
OIE-listed diseases												
Epizootic haematopoietic necrosis	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Infectious haematopoietic necrosis	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Spring viraemia of carp (SVC)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Viral haemorrhagic septicaemia (VHS)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Infection with Aphanomyces invadans (EUS)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Red seabream iridoviral disease (RSID)	-	-	-	-	-	-	-	-	-	-	-	-
Koi herpesvirus disease (KHV)	-	+	-	+	-	-	-	-	-	+	-	-
Non OIE-listed diseases												
Grouper iridoviral disease	-	-	-	-	-	-	-	-	-	-	-	-
Viral encephalopathy and retinopathy	-	-	-	-	-	-	-	-	-	-	-	-
Enteric septicaemia of catfish	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
MOLLUSC DISEASES												
OIE-listed diseases												
Infection with Bonamia exitiosa	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Infection with Perkinsus olseni	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Infection with abalone herpesvirus	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Infection with Xenohaliotis californiensis	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Infection with ostreid herpesvirus*	***	***	***	***	***	***	***	***	***	***	***	***
Non OIE-listed diseases												
Infection with Marteilioides chungmuensis	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Acute viral necrosis (in scallops)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
CRUSTACEAN DISEASES												
OIE-listed diseases												
Taura syndrome (TS)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
White spot disease (WSD)	-	-	-	-	-	-	-	-	-	-	-	-
Yellowhead disease (YHD)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Infectious hypodermal and haematopoietic necrosis (IHHN)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Infectious myonecrosis (IMN)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
White tail disease (MrNV)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Necrotising hepatopancreatitis (NHP)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Non OIE-listed diseases												
Monodon slow growth syndrome	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Acute hepatopancreatic necrosis disease (AHPND)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
AMPHIBIAN DISEASES												
OIE-listed diseases												
Infection with Ranavirus	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Infection with Batrachochytrium dendrobatidis	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
ANY OTHER DISEASES OF IMPORTANCE												

Koi Herpesvirus (KHV)

1Q

Koi herpesvirus disease was detected from three koi fish, presented with haemorrhagic lesion, submitted for disease diagnosis.

2Q

Koi herpesvirus disease was detected from tissue samples of koi fish submitted from a public park.

Koi herpesvirus disease was detected from a group of koi fish submitted for health certificate screening.

4Q

Koi herpesvirus was detected from a group of assorted koi that had been submitted for health certification.

White spot syndrome virus (WSSV)

4Q

White spot syndrome virus (WSSV) was detected in a group of red lobsters which had been submitted for health certification.

INDIA												
Name of disease	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
DISEASES PREVALENT IN THE REGION												
FINFISH DISEASES												
OIE-listed diseases												
Epizootic haematopoietic necrosis	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Infectious haematopoietic necrosis	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Spring viraemia of carp (SVC)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Viral haemorrhagic septicaemia (VHS)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Infection with Aphanomyces invadans (EUS)	-	-	-	-	-	-	-	-	-	-	-	-
Red seabream iridoviral disease (RSID)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Koi herpesvirus disease (KHV)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Non OIE-listed diseases												
Grouper iridoviral disease	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Viral encephalopathy and retinopathy	-	-	-	-	-	-	-	-	-	-	-	-
Enteric septicaemia of catfish	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
MOLLUSC DISEASES												
OIE-listed diseases												
Infection with Bonamia exitiosa	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Infection with Perkinsus olseni	-	-	-	-	-	-	-	-	-	-	-	-
Infection with abalone herpesvirus	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Infection with Xenohaliotis californiensis	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Infection with ostreid herpesvirus*	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Non OIE-listed diseases												
Infection with Marteilioides chungmuensis	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Acute viral necrosis (in scallops)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
CRUSTACEAN DISEASES												
OIE-listed diseases												
Taura syndrome (TS)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
White spot disease (WSD)	+( )	+( )	+( )	+( )	+( )	+( )	+( )	+( )	+( )	+( )	+( )	+( )
Yellowhead disease (YHD)	-	-	-	-	-	-	-	***	***	***	***	***
Infectious hypodermal and haematopoietic necrosis	+( )	+( )	+( )	+( )	+( )	+( )	+( )	+( )	+( )	+( )	+( )	+( )
Infectious myonecrosis (IMN)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
White tail disease (MrNV)	-	-	-	-	-	-	-	-	-	-	-	-
Necrotising hepatopancreatitis (NHP)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Non OIE-listed diseases												
Monodon slow growth syndrome	-	-	-	-	-	-	-	-	-	-	-	-
Acute hepatopancreatic necrosis disease (AHPND)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
AMPHIBIAN DISEASES												
OIE-listed diseases												
Infection with Ranavirus	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Infection with Batrachochytrium dendrobatidis	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
ANY OTHER DISEASES OF IMPORTANCE												

Viral encephalopathy and retinopathy

1Q

Viral encephalopathy and retinopathy was detected in asympatomatic tilapia (*Oreochromis mossambicus*) from Ernakulum District of Kerala on the basis of level III diagnosis.

White spot disease (WSD)

1Q

WSSV was detected *P. monodon* and *L. vannamei* samples from very limited areas in West Godavari and Vijayawada districts of Andhra Pradesh; Udupi district of Karnataka; Thane and Raigad districts of Maharashtra; Nagapattinam, Cuddalore, Thanjavur and Thiruvarur districts of Tamil Nadu during different months under the reporting period, on the basis of level III diagnosis. WSSV was also detected in samples of *P. monodon* and *P. indicus* from Ernakulum and Alleppey districts of Kerala using level I and III diagnosis.

2Q

White Spot Disease (WSD)

i. Area: WSD was reported from Thiruvarur, Nagapattinam, Pudukkottai & Thanjavur, districts of Tamil Nadu, Krishna district of Andhra Pradesh, Kannur district of Kerala and Balasore district of Odisha.

ii. Species affected: *Litopenaeus vannamei* (15-50 DOC), *Penaeus monodon*

iii. Clinical signs: Lethargic shrimps were seen; some were dead, floating on the surface of the pond.

iv. Pathogen: White spot syndrome virus (WSSV)

v. Mortality rate: medium to high.

Control measures: Farmers were advised to improve biosecurity of farms.

3Q

WSSV was detected in *Penaeus monodon* and *Litopenaeus vannamei* samples from limited areas of West Godawari and Krishna Districts of Andhra Pradesh; Uttar Kannada District of Karnataka; Thane District of Maharashtra; Thoothukudi and Nagapattinam districts of Tamil Nadu, Navsari and Surat districts of Gujarat; Bhadrak district of Odisha and Ernakulum, Thrissur and Kannur districts of Kerala during different months under reporting period on the basis of level III diagnosis.

4Q

WSSV was detected in *Litopenaeus vannamei* samples from limited areas of Coddalore, Nagapattinam and Thanjavur districts of Tamil Nadu, Navsari district of Gujarat, Raigad district of Maharashtra, Guntur district of Andhra Pradesh, Uttar Kannada district of Karnataka and also detected in *Penaeus monodon* samples from Kannur and Ernakulum districts of Kerala and samples of *Panulirus homarus* from Nagapattinam district of Tamil Nadu during different months under reporting period on the basis of level III diagnosis.

Infectious Hypodermal and Haematopoietic Necrosis (IHHN)

1Q

IHHNV was detected in *P. monodon* samples from Paravoor Block of Ernakulum district of Kerala and in *L. vannamei* samples from Kanchipuram and Thiruvallur districts of Tamil Nadu on the basis of level III diagnosis.

2Q

i. Area: Reported from Kanchipuram, Thiruvallur and Thanjavur districts of Tamil Nadu, and Gudur and Krishna districts of Andhra Pradesh.

ii. Species affected: *Litopenaeus vannamei*

iii. Clinical signs: Reduced feed consumption, slow growth but no mortality.

iv. Pathogen: IHHNV

v. Mortality rate: No mortality in the shrimp with IHHNV positive

vi. Economic loss: Nil

vii. Laboratory Diagnosis: PCR

3Q

WSSV was detected in *Penaeus monodon* and *Litopenaeus vannamei* samples from limited areas of West Godawari and Krishna Districts of Andhra Pradesh; Uttar Kannada District of Karnataka; Thane District of Maharashtra; Thoothukudi and Nagapattinam districts of Tamil Nadu, Navsari and Surat districts of Gujarat; Bhadrak district of Odisha and Ernakulum, Thrissur and Kannur districts of Kerala during different months under reporting period on the basis of level III diagnosis.

4Q

IHHNV was detected in *P. monodon* samples from Ernakulum district of Kerala and *L. vannamei* samples from Kanchipuram and Thirivallur districts of Tamil Nadu and Nellore district of Andhra Pradesh on the basis of level III diagnosis.

Taura Syndrome (TS), Yellow Head Disease (YHD), Infectious Myonecrosis Necrosis (IMN)

2Q

TSV, YHV and IMNV were not detected in the samples of *Litopenaeus vannamei* collected from shrimp farms in Nagapattinam, Thanjavur and Thiruvarur districts of Tamil Nadu and tested using PCR.

Acute hepatopancreatic necrosis disease (AHPND)

2Q

AHPND was not detected in samples collected from the region of Nagapattinam. Thanjavur and Thiruvarur districts of Tamil Nadu.

INDONESIA												
Name of disease	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
DISEASES PREVALENT IN THE REGION												
FINFISH DISEASES												
OIE-listed diseases												
Epizootic haematopoietic necrosis	0000	0000	0000	0000	0000	0000	0000	0000	0000			
Infectious haematopoietic necrosis	0000	0000	0000	0000	0000	0000	0000	0000	0000			
Spring viraemia of carp (SVC)	0000	0000	0000	0000	0000	0000	0000	0000	0000			
Viral haemorrhagic septicaemia (VHS)	0000	0000	0000	0000	0000	0000	0000	0000	0000			
Infection with Aphanomyces invadans (EUS)	0000	0000	0000	0000	0000	0000	0000	0000	0000			
Red seabream iridoviral disease (RSID)	***	***	***	***	***	+()	+()	***	+()			
Koi herpesvirus disease (KHV)	***	+()	***	***	***	***	+()	+()	***			
Non OIE-listed diseases												
Grouper iridoviral disease	+()	+()	***	+()	+()	+()	***	+()	+()			
Viral encephalopathy and retinopathy	+()	+()	***	+()	***	+()	+()	***	+()			
Enteric septicaemia of catfish	***	+()	***	***	***	***	***	***	***			
MOLLUSC DISEASES												
OIE-listed diseases												
Infection with Bonamia exitiosa	0000	0000	0000	0000	0000	0000	0000	0000	0000			
Infection with Perkinsus olseni	0000	0000	0000	0000	0000	0000	0000	0000	0000			
Infection with abalone herpesvirus	0000	0000	0000	0000	0000	0000	0000	0000	0000			
Infection with Xenohaliotis californiensis	0000	0000	0000	0000	0000	0000	0000	0000	0000			
Infection with ostreid herpesvirus*	0000	0000	0000	0000	0000	0000	0000	0000	0000			
Non OIE-listed diseases												
Infection with Marteilioides chungmuensis	0000	0000	0000	0000	0000	0000	0000	0000	0000			
Acute viral necrosis (in scallops)	0000	0000	0000	0000	0000	0000	0000	0000	0000			
CRUSTACEAN DISEASES												
OIE-listed diseases												
Taura syndrome (TS)	***	+()	0000	0000	0000	0000	+()	0000	0000			
White spot disease (WSD)	+()	+()	+()	***	+()	+()	+()	+()	+()			
Yellowhead disease (YHD)	***	***	***	***	***	***	***	***	***			
Infectious hypodermal and haematopoietic necrosis	***	***	***	***	***	***	***	***	***			
Infectious myonecrosis (IMN)	+()	+()	***	***	***	+()	+()	+()	+()			
White tail disease (MrNV)	0000	0000	0000	0000	0000	0000	0000	0000	0000			
Necrotising hepatopancreatitis (NHP)	0000	0000	0000	0000	0000	0000	0000	0000	0000			
Non OIE-listed diseases												
Monodon slow growth syndrome	0000	0000	0000	0000	0000	0000	0000	0000	0000			
Acute hepatopancreatic necrosis disease (AHPND)	0000	0000	0000	0000	0000	0000	0000	0000	0000			
AMPHIBIAN DISEASES												
OIE-listed diseases												
Infection with Ranavirus	0000	0000	0000	0000	0000	0000	0000	0000	0000			
Infection with Batrachochytrium dendrobatidis	0000	0000	0000	0000	0000	0000	0000	0000	0000			
ANY OTHER DISEASES OF IMPORTANCE												

Red seabream irridovial disease (RSID)

2Q

1) Origin of the disease or pathogen: Ambon (Maluku Province at June)
2) Species affected: *Cromileptes altivelis* size 7 – 10 cm and 600gram
3) Clinical sign: weak conditions, severe anemia in the internal organs,
4) Pathogen: Iridovirus
5) Mortality rate: <30%
6) Death toll (Economic loss): Rp 1,000,000.-
7) Name of infected areas: West Seram District
8) Preventive control measures taken: Vitamin C, reduce feeding, reduce the density
9) Laboratory for confirmation: Mariculture Development Center Ambon Laboratory
10) Not published:-
11) Unknown diseases:-

3Q

Red Seabream irridoviral disease

1) Origin of the disease or pathogen : Batam, Riau island Province atJuly.
2) Species affected : (I) *Trochinotus blochii (21 Epinephelus fuscoguttotus (31 Lutianus orgentimoculotus , (41 Lates calcarifer.*
3) Diseases charateristic : (1) *Trachinotus blochii* : swim weak, darker body color; (2) *Epinephelus fuscoguttatus* : no clinical sign; (3) *Lutjonus orgentimoculatus* :swim weak, decreased appetite, (4) *Lates colcorifer* : swim weak, darker body color, decreased appetite.
4) Pathogen : iridovirus
5) Mortality rate:Trachinotus blochii, Epinephelusfuscoguttotus, Lutianus argentimoculotus, Lotes calcarifer : <30%.
6) Death toll (economic loss, etc) : (Il Trachinotus blochii : no mortality, (Z) tpinephelus fuscoguttotus i no information about economic loss, (3) Lutjanus orgentimoculotus : 10 fish died, (4) Lates colcorifer : 15 fish died.
7) Names of infected areas : Batam, Riau island Province.
8) preventive/control measures taken: The addition of Vitamin C in feed, water quality management
9) Laboratory for confirmation: Mariculture Development Center Batam Laboratory.
10) Published paper: -
11) Unknown deseases: -

Koi Herpesvirus (KHV)

1Q

1) Origin of the disease or pathogen: Banjar and Tabalong (South Kalimantan Province)
2) Species affected: Cyprinus carpio
3) Clinical sign: gill rot. Red spots on the body surface. Decreased appetite, wounds on the body surface
4) Pathogen: KHV, multi infection with Aeromonas hydrophila. Bordetella sp.
5) Mortality rate: >70%
6) Death toll (Economic loss): >Rp 15,000,000.- (South Kalimantan Peovince)

7) Name of infected areas: Banjar, Hulu sungai utara, Amuntai (South Kalimantan Province)
8) Preventive control measures taken:-
9) Laboratory for confirmation: Fresh Water Aquaculture Development Center Mandiiangin
10) Not published:-
11) Unkown diseases:-

Q3

Koi Hervesvirus Disease (KHV)

1) Origin of the disease or pathogen : (1) Sukabumi (West Java Provinces) at July; (2) Sukamandi (West Java Provinces) at Augusq (3) Hulu Sungai Tengah district (South Kalimantan Provinces) at July.
2) Species affected : Cyprinus corpio.
3) Diseases charateristic : (1) Sukabumi : haemorrhage, lession and gill necrosis; (2) Hulu Sungai Tengah district :fish mortality every day; (3) Hulu Sungai tengah : -;
4) Pathogen : KHV.
5) Mortality rate : 30% -70%in Sukabumi and < 30% in Sukamandi; <50%in Hulu Sungai Tengah district;
6) Death toll (Economic loss) :(1) Sukabumi : IDR 6,7 milllion on July; (2) Sukamandi : -; (3) Hulu Sungai Tengah : more than IDR 1 million.
7) Name of infected areas : Sukabumi districU Subang district; Hulu SungaiTengah district.
8) Preventive/control measures taken: Vitamin C, Biosecurity'
9) Laboratory for confirmation: Main Center Freshwater Aquaculture Devolopment Sukabumi Laboratory, Freshwater Aquaculture Development Center Mandiangin Laboratory, Center of Fish Diseases and Environment Investigation Serang - Banten Laboratory.
10) Published paper: -
11) Unknown diseases: -

Grouper iridoviral disease

Q1

1) Origin of the disease or pathogen: Backyard Situbundo (East Java Province) Pesawaran (Lampung Province), Teluk Akas (West Nusatenggara Province)
2) Species affected: Chromileptes altivelis and Lates calcarifer Bloch (Lampung Province)
3) Disease characteristics: Lethargic swimming rapid operculum movements and dashing to the surface air darkened body color, pale gills and enlarged spleen (West Nusatenggara Province)
4) Pathogen: Ranavirus Iridovirus (West Nusatenggara Province)
5) Mortality rate: Mortality rate: 30%- 50% (WestNusatenggara Province)
6) Death toll (Economic loss, etc): 3,500,000IDR – 8000,000IDR (West Nusatenggara Province)
7) Name of infected areas: hatchery Lombok (MDC) Teluk Akas (West Nusa Tenggara). Pesawaran (Lampung Province)
8) Preventive control measures taken: Vitamin, water treatment, Quarantine, feed management
9) Laboratory for confirmation: Mariculture Development Center Lombok Laboratory. Main Center Mariculture Development Lampung Laboratory. Brakhiswater Aquaculture Development Center Situbondo laboratory
10) Published paper : -
11) Unkown diseases : -

2Q

1) Origin of the disease or pathogen: Ambon (Maluku Province at April), Bali Province and Central Lombok (West Nusatenggara Province at June)
2) Species affected: *Chromileptes altivelis*
3) Disease characteristics: Bleeding in the gills, spleen enlargement, (Maluku Province) poradic protrusion on the hand. (West Nusa Tenggara Province)
4) Pathogen: Iridovirus
5) Mortality rate: Mortality rate: -30%- 60% (West Nusa Tenggara Province)
6) Death toll (Economic loss, etc): 100,000IDR (Maluku Province) 6.500.000 IDR(West Nusa Nusa Tenggara)
7) Names of infected areas: Floating net cage (Saparua – Maluku Province), East Lombok (West Nusa Tenggara Province)
8) Preventive/control measures taken: Vitamin C, Imunovit, water quality control and adding Vitamin C on feeds (West Nusa Tenggara Province)
9) Laboratory for confirmation: Mariculture Development Center Ambon Laboratory. Mariculture Development Center Lombok Laboratory.
10) Published paper : -
11) Unkown diseases : -

3Q

Grouper Iridoviral Diseases (GIV)

1) Origin of the disease or pathogen:(1) Hatchery Lombok (West Nusa Tenggara Provinces) atAugust, (2) Floating net in Batam (Riau Island Province) at September; (3) Teluk Harun (Province Lampung) in September.

2) Species affected : (1) Lombok '. Chromileptes oltivelis , (2) Batam '. Trachinotus blochii size 2 inchi, (3) Teluk Harun, Lampung Province '. Lutjonus argentimoculatus, Lotes calcarifer, Cromileptes altivelis, E pi n e phel u s fu scog uttotu s.

3) Diseases charateristic : (1) Lombok : Swimming on the surface water, mortality, pale body color, (2) Batam : abnormal body color (partly blackish), decreased appetite, swim slower, separated from the group; (3) Teluk harun :changes in the macroscopis and microscopis anatomic pathologis.

4) Pathogen : iridovirus;

5) Mortality rate : (L) Lombok : <30%; (2) Batam :30% - 70%; (3) Teluk harun :30% -70%.

6) Deathtoll (Economic loss, etc) : (1) Lombok: -; (2) Batam: IDR 6 million; (3) Teluk Harun:unknown

7) Names of infected areas : Sekotong West Lombok, West Nusa Tenggara Province; Tanjung Banon Kota Batam; Teluk Harun.

8) Preventive/control measures taken : (1) Lombok : Vitamin C in feeds, water quality control; (2) gatam : Adding vitamin C in feed, (3) Teluk Harun : Adding vitamin C, good feed management'

9) Laboratory for confirmation: Mariculture Devolopment Center Lombok Laboratory, Mariculture Development Center Batam Laboratory, Main Center of Mariculture Development Lampung.

10) Published paper: -

111) unknown deseases: -

Viral encephalopathy and retinopathy

Q1

1) Origin of the disease or pathogen: Origin of the disease or pathogen: (Maluku Province) Situbondo (East Java Province). Lhokseumawe (Aceh Province), Jepara (Central Java Province), Sekotong Lombok MADC (West Nusatenggara Peovince)
2) Species affected: Chroomileptes alivelis (Maluku Province and East java Province and Central Java province) Lates calcalifer (Aceh Province and West Nusatenggara Province)
3) Disease characteristics: dark coclor, abnormal swimming, (Maluku Province and East Java Province,Aceh Province), Erratic swimming behavior (spiral, whirling, or belly-up rest) and vacuolation of the central nervous tissue. Usually there us also vacuolation of the nuclear layers of retina (Jepara Central Java Province), confirmed the diagnosis of egg Lates calcalefer (West Nusatenggara Province)
4) Pathogen: VNN, (Ambon and Aceh) NNV (Siitubondo), Betanodaviirus RGNNV (West Nusatengara Province)
5) Mortality rate: >70% (Maaluku Province, Jepara Central Java Province). <30% (East Java Province and (West Nusa Tenggara Province)
6) Death toll (Economic loss, etc): Rp. 10,000,000 (Maluku Province), 5000,000IDR (Wesr Nusatengara Province)
7) Name of infected areas: Nusery pond (Mariculture Development Center Maluku Province) Situbondo (East Jav Province) Lhokeumawe (Aceh Province), Jepara (Central java Province)
8) Preventive control measures taken: eradication (Ambon), Bioseculity (Situbondo and Jepara). Early Harves (Aceh)
9) Laboratory for confirmation: Mariculture Development Center Ambon Laboratory. Brakhiswater Aquaculture Development Center Situbondo Laboratory and Center of Fish Diseases and Environment Investigation Banten laboratory. Brakhiswater Aquaculture Development Center Ujung Batee Acel Laboratory. Main Center Brackishwater Aquaculture Development Jepara Laboratory. Mariculture Development Center Lombok Laboratory.
10) Published Paper: -
11) Unkown diseases: -

Q2

1) Origin of the disease or pathogen: Nursery (Maluku Province at April), Hatchery (Marine Culture Development Center Lombok (West Nusa Tenggara Province at April), Yogya karta Province at June
2) Species affected: *Chroomileptes alivelis* (Maluku Province) *Lates calcalifer* (West Nusa Tenggara Province) *Epinephelus fuscoguttatus* –juvenile (Yogyakarta Province)
3) Disease characteristics: Dark color, swim weakly (Maluku Province), lethargy, sporadic protrusion of head from water (West Nusa Tenggara Province), swimming weakly, vacuolation of the central nervous tissue. Usually there is also vacuolation of nuclear layer of the retina (Yogyakarta Province)
4) Pathogen: VNN
5) Mortality rate: < 30% (Maaluku Province), 30% - 50% (West Nusa Tenggara Province), 50% - 70%

(Yogyakarta Province)

6) Death toll (economic loss, etc): Rp. 5,000,000 (Maluku Province),

7) Name of infected areas: Nusery (Mariculture Development Center Maluku Province), Sekotong Sub District West Lombok District (West Nusa Tenggara Province), (Yogyakarta Province)

8) Preventive / control measures taken: Vitamin *C, inroflox* (Maluku Province), Water quality control, adding vitamin C on feed (West Nusa Tenggara Province), Vitamin C, Imunostimulan, Application Formalin on the water (Yogyakarta Province)

9) Laboratory for confirmation: Mariculture Development Center Ambon Laboratory. Main Center Brackishwater Aquaculture Development Jepara Laboratory. Mariculture Development Center Lombok Laboratory.

10) Published Paper: -

11) Unkown diseases: -

Q3

Viral encephalopathy and retinopathy

1) Origin of the disease or pathogen : (1) Sekotong, West Nusa Tenggara Provinces in July; (2) Batam, Riau island Province in Agustus and September; (3) Bali Provinces at September.

2) Species affected : (1) West Lombok, West Nusa Tenggara Provinces '. Lates calcarifer, (2) Batam : Trochinotus blochii rate size 5 cm (in August) and Epinephelus fuscoguttotussizeT cm (in September); (3) Bali : seed of Trachinatus blochii.

3) Diseases charateristic : : (1) Sekotong : body color change become pale, swimming on the surface water, hyperactivity and high mortality, (2) Batam : no clinical sign, darken body color, lack of appetite, (3) Bali : fish swimming round, most fish die.

4) Pathogen : viral encephalopathy and retinopathy noda virus.

5) Mortalityrate:(1) Sekotong 50%inmonth; (2) Batam: Trachinatusblochii :<30%inAugust, Epinephelus fuscoguttatus: 30% - 70% in September

6) Death toll (economic loss) : (1) Batam : IDR 80 million in August and IDR 4,8 million in September; (2) Sekotong : -

7) Names of infected areas : West Lombok Regency (West Nusa Tenggara Province); Batam (Riau island province).

8) Preventive/control measures taken : (1) Sekotong : Adding vitamin C in feeds, water quality control, (2) Batam : Eradication for fish seed, Vitamin C in feeds, and water quality management; (3) Bali : water quality management.

9) Laboratory for confirmation : Mariculture Development Center Batam Laboratory, Mariculture Devolopment Center Lombok Laboratory, and Aquaculture Bussines Development Center Laboratory Karawang.

10) Published paper: -

11) Unknown diseases: -

Enteric septicaemia of catfish

Q1

1) Origin of the disease or pathogen: fingering Pangasiuus sp. From Bogor (West Java province) and

Palangkaraya Town (Cerntral Kalimantan Province)

2) Species affected: Pangasius sp.
3) Disease characteristics: red spots, a lot of white spots on the kidneys and other internal organs swim to the surface.
4) Pathogen: Edwardsiiella ichtaluri
5) Mortality rate: <30%
6) Death toll (Economic loss): >Rp.5,000,000,-
7) Name of infected areas: Palangkaraya (Central Kalimantan Province)
8) Preventive/control measures taken: vitamin C
9) Laboratory for confirmation: Fresh Water Aquaculture Development Center Mandiangin laboratory.
10) Published Paper: -
11) Unkown diseases: -

Taura syndrome

Q1

1) Origin of the disease or pathogen: Situ Bondo (East Java Province)
2) Species affected: L. vannamei
3) Clinical sign:
4) Pathogen: TSV
5) Mortality rate: <30%
6) Death toll (Economic loss): -
7) Name of infected areas: Situbondo (East Java Province)
8) Preventive control measures taken: Biosecurity
9) Laboratory for confirmation: Brakhiswater Aquaculture Development Center Situbondo Laboratory and Center of Fish Diseases and Environment Investigation Banten laboratory.
10) Published Paper:-
11) Unkown diseases:-

Q3

Taura Syndrome (TS)

1) Origin of the disease or pathogen : Rembang (Central Java Province at July)
2) Species affected : L. vonomei
3) Disease characteristics: red body color, massal mortality, empty digestive tract
4) Pathogen: TSV
5) Mortality rate: 85%
6) Death toll (economic loss, etc) : -
7) Names of infected areas : Rembang (Central Java Provinces)
8) Preventive/control measures taken: (1)Water Quality Management such : probiotik, biofloc; (2) Sanitation for all equipment and worker in production process, and (3) Immunostimultan.
9) Laboratory for confirmation: Main Center Brackishwater Aquaculture Development Jepara Laboratory
L0) Published paper: -
11) Unknown deseases: -

White spot disease

Q1

1) Origin of the disease or pathogen: Jepara. Pati, Kendal (Central Java Province at June), Cipucuk Karawang (West Java Propine at Mei and June)
2) Species affected: *L. vanname, Penaeus monodon* (Central Java Province), *L. vanname* (West Java Province),
3) Disease characteristics : White spot on carapace becoming weak, and infected shrimp, shrimp swimming on the surface water (Central Java Province), reddish, decrease of feed consumption (West Java Province)
4) Pathogen: WSSV
5) Mortality rate: 80% - 100% (Central Java Province), > 40% (West Java Province),
6) Death toll (Economic loss): Rp..75,000,000 (Central Java Province)
7) Names of infected areas: Jepara, Pati, Kendal (Central Java Province), Karawang (West Java Province)
8) Preventive / control measures taken: Biosequrity, Vitamin C, imunosimulan, biofloc, application of probiotic, grinting grass extracts (*Cynodon dactylon*)(Central Java Province), Early harvest, disinfection pond (Karawang West Java Province)
9) Laboratory for confirmation: Brakhiswater Aquaculture Development Jepara Laboratory. Aquaculture Business Development Center Karawang Laboratory.
10) Published Paper: -
11) Unkown diseases: -

Infectious myonecrosis (IMN)

Q1

1) Origin of the disease or pathogen: Situbondo, (East Java Province) Kendal, Jepara (Central java). Hatchery in Sumbawa (West Nusa Teggara Province)
2) Species affected: *L. vanamei*
3) Disease characteristics: swimming on the water surface, Decreased appetite, the red color on the tail(Situbondo (East java Province), in the acute phase of IMN disease present white necrotic areas in striated (skeletal) muscles, especially in the abdominal and tail, which can became necrotic and reddened (Jepara central Java Province), highly pigmented expskeleton (West Nusa Teggara province).
4) Pathogen: IMNV
5) Mortality rate: < 30% (East Java Province and West Nusa Tenggara Province), > 50% (Jepara Central java)
6) Death toll (Economic loss): 5000.00 IDR (West Nusa Teggara Province)
7) Name of infected areas: Situbondo (East Java Province), Kendal, Jepara (Central Java Province), Sumbawa Regency (West Nusa Tenggara Province), Kendal Jepara (Centraal Java Province),Sumbawa Regency (West Nusa Tenggara Province)
8) Preventive control measures taken: Biosequrity, Vitamin C, Probiotik Water Managemnet control use SPF of IMNV seeds
9) Laboratory for confirmation: Brakhiswater Aquaculture Development Center Situbondo Laboratory and Center of Fish Disease and Environment Investigation Banten laboratory, Main Center Brackishwater Aquaculture Development Japara Laboratory, Mariculture Development Center Lombok Laboratory

10) Published Paper: -
11) Unkown diseases: -

Q2

1) Origin of the disease or pathogen: Pati, Kendal (Central java Province)
2) Species affected: *L. vanamei*
3) Disease characteristics: Shrimp in the acute phase phase of IMN disease will present focal extensive white necrotic areas in striated (skeletal) muscles, especially in the distal abdominal segments and tail, which can become necrotic and reddened in some individual shrimp (Central Java Province)
4) Pathogen: IMNV
5) Mortality rate: 60% (Central Java Province)
6) Death toll (economic loss, etc): -
7) Name of infected areas: Pati, Kendal (Central Java Province)
8) Preventive control measures taken: Biosequrity, Vitamin C, Probiotik, Biofloc
9) Laboratory for confirmation: Main Center Brakhiswater Aquaculture Development Japara Laboratory,
10) Published Paper: -
11) Unkown diseases: -

IRAN												
Name of disease	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
DISEASES PREVALENT IN THE REGION												
FINFISH DISEASES												
OIE-listed diseases												
Epizootic haematopoietic necrosis	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Infectious haematopoietic necrosis	-	-	-	-	-	-	-	-	-	-	-	-
Spring viraemia of carp (SVC)	-	-	-	-	-	-	-	-	-	-	-	-
Viral haemorrhagic septicaemia (VHS)	+	+	+	+	-	-	-	+	+	+	+	+
Infection with Aphanomyces invadans (EUS)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Red seabream iridoviral disease (RSID)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Koi herpesvirus disease (KHV)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Non OIE-listed diseases												
Grouper iridoviral disease	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Viral encephalopathy and retinopathy	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Enteric septicaemia of catfish	***	***	***	***	***	***	***	***	***	***	***	***
MOLLUSC DISEASES												
OIE-listed diseases												
Infection with Bonamia exitiosa	***	***	***	***	***	***	0000	0000	0000	0000	0000	0000
Infection with Perkinsus olseni	***	***	***	***	***	***	0000	0000	0000	0000	0000	0000
Infection with abalone herpesvirus	***	***	***	***	***	***	0000	0000	0000	0000	0000	0000
Infection with Xenohaliotis californiensis	***	***	***	***	***	***	0000	0000	0000	0000	0000	0000
Infection with ostreid herpesvirus*							0000	0000	0000	0000	0000	0000
Non OIE-listed diseases												
Infection with Marteilioides chungmuensis	***	***	***	***	***	***	0000	0000	0000	0000	0000	0000
Acute viral necrosis (in scallops)	***	***	***	***	***	***	0000	0000	0000	0000	0000	0000
CRUSTACEAN DISEASES												
OIE-listed diseases												
Taura syndrome (TS)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
White spot disease (WSD)	-	-	-	-	-	-	-	+	-	-	-	-
Yellowhead disease (YHD)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Infectious hypodermal and haematopoietic necrosis	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Infectious myonecrosis (IMN)	***	***	***	***	***	***	***	***	***	0000	0000	0000
White tail disease (MrNV)	***	***	***	***	***	***	***	***	***	***	***	***
Necrotising hepatopancreatitis (NHP)	***	***	***	***	***	***	***	***	***	0000	0000	0000
Non OIE-listed diseases												
Monodon slow growth syndrome	***	***	***	***	***	***	***	***	***	***	***	***
Acute hepatopancreatic necrosis disease (AHPND)	***	***	***	***	***	***	***	***	***	***	***	***
AMPHIBIAN DISEASES												
OIE-listed diseases												
Infection with Ranavirus	***	***	***	***	***	***	***	***	***	***	***	***
Infection with Batrachochytrium dendrobatidis	***	***	***	***	***	***	***	***	***	***	***	***
ANY OTHER DISEASES OF IMPORTANCE												
Akoya oyster disease	***	***	***	***	***	***				***	***	***
Milky haemolymph disease of spiny lobster (Panulirus s	***	***	***	***	***	***				***	***	***

Viral haemorrhagic septicaemia (VHS)

1Q

VHS reported in some provinces, 3 farms of the fish culture in chaharmahal bakhtiari ,2 farms in lorestan,1 farm in kordestan .

1 – The Origin of disease still is unknown, but it is under study

2 – Affected species were *O. mykiss*

3-The disease occured in october 2013.

4-Clinical signs were pinpoint haemorrhages in fatty tissue, and pale gills, swollen stomach and 'pop eye'exophthalmia, bleeding under skin around base of pectoral and pelvic fins.

5 – The pathogen were detected by Real time PCR, Elisa, Histopathology and nested-PCR in CVL and Mashhad PCR Lab.

6- Morbidity rate was near to 20-30 %.

7-Mortality rate was more than 70%

8-Age of affected fishes were 2-3 months

9-Economic loss is under study.

10-All of the farms, were disinfected with quaternary ammonia 10 PPM, and all of infected fishes were eradicated.

2Q

VHS was reported in two provinces, 1 fish farm in Hamadan and another one in Esfahan.

1 – The Origin of the disease still remains unknown, the case is under investigation

2 – The affected species was *Oncorhynchus Mykiss*

3-The disease occurred in April 2014.

4-Clinical signs were pinpoint haemorrhages in visceral organs and pale gills, Ascites and 'pop eye'exophthalmia, bleeding under skin around base of pectoral and pelvic fins.

5 – The pathogen was detected by Real time PCR, ELISA, histopathology and Nested-PCR in CVL and Mashhad PCR Lab.

6- Morbidity rate was unknown.

7-Mortality rate was more than 70%

8-Age of affected fishes were 2-3 months

9-Economic loss has not been calculated yet.

10-Emergency harvesting, stamping out of juvenile and fallowing were carried out.

3Q

VHS was reported in two provinces,2 fish farm in Kohgiloye&Boirahmad and another one fish farm in Kermanshah .

1 – The Origin of the disease still remains unknown,the case is under investigation

2 – The Affected species was Oncorhynchus Mykiss

3-The disease occured in October,November and December 2014.

4-Clinical signs were pinpoint haemorrhages in visceral organs and pale gills,Ascite and 'pop eye'exophthalmia,bleeding under skin around base of pectoral and pelvic fins.

5 – The pathogen was detected by Real time PCR,ELISA,Histopathology and Nested-PCR in CVL and Mashhad PCR Lab.

6- Morbidity rate was unknown.

7-Mortality rate was around 25%

8-Age of affected fishes were 5 months

9-Economic loss has not been calculated yet.

10-Emergency harvesting , stamping out of juvenile and fallowing were carried out.

JAPAN												
Name of disease	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
DISEASES PREVALENT IN THE REGION												
FINFISH DISEASES												
OIE-listed diseases												
Epizootic haematopoietic necrosis	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Infectious haematopoietic necrosis	+	+	+	+	+	+	+	+	+	+	+	-(2014)
Spring viraemia of carp (SVC)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Viral haemorrhagic septicaemia (VHS)	+	+	+	+	+	+	-(2014)	-(2014)	-(2014)	-(2014)	-(2014)	-(2014)
Infection with Aphanomyces invadans (EUS)	-(2013)	-(2013)	-(2013)	-(2013)	+()	-(2014)	+	-(2014)	-(2014)	-(2014)	-(2014)	-(2014)
Red seabream iridoviral disease (RSID)	-(2013)	-(2013)	-(2013)	-(2013)	+	+	+	+	+	+	+	-(2014)
Koi herpesvirus disease (KHV)	-(2013)	-(2013)	-(2013)	-(2013)	+	+	+	+	+	+	-(2014)	-(2014)
Non OIE-listed diseases												
Grouper iridoviral disease	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Viral encephalopathy and retinopathy	+	+	-(2014)	-(2014)	-(2014)	+?()	+	-(2014)	+	+	+	-(2014)
Enteric septicaemia of catfish	-(2010)	-(2010)	-(2010)	-(2010)	-(2010)	-(2010)	-(2010)	-(2010)	-(2010)	-(2010)	-(2010)	-(2010)
MOLLUSC DISEASES												
OIE-listed diseases												
Infection with Bonamia exitiosa	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Infection with Perkinsus olseni	-(2007)	-(2007)	-(2007)	-(2007)	-(2007)	-(2007)	-(2007)	-(2007)	-(2007)	-(2007)	-(2007)	-(2007)
Infection with abalone herpesvirus	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Infection with Xenohaliotis californiensis	-(2013)	-(2013)	-(2013)	-(2013)	-(2013)	+?	-(2014)	+?	+?	-(2014)	-(2014)	-(2014)
Infection with ostreid herpesvirus*	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Non OIE-listed diseases												
Infection with Marteilioides chungmuensis	+	+	+	-(2014)	-(2014)	-(2014)	-(2014)	-(2014)	-(2014)	-(2014)	+	+
Acute viral necrosis (in scallops)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
CRUSTACEAN DISEASES												
OIE-listed diseases												
Taura syndrome (TS)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
White spot disease (WSD)	-(2013)	-(2013)	-(2013)	-(2013)	+?	-(2014)	+?	+	+	-(2014)	-(2014)	-(2014)
Yellowhead disease (YHD)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Infectious hypodermal and haematopoietic necrosis (IHHN)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Infectious myonecrosis (IMN)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
White tail disease (MrNV)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Necrotising hepatopancreatitis (NHP)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Non OIE-listed diseases												
Monodon slow growth syndrome	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Acute hepatopancreatic necrosis disease (AHPND)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
AMPHIBIAN DISEASES												
OIE-listed diseases												
Infection with Ranavirus	-(2012)	-(2012)	-(2012)	-(2012)	-(2012)	-(2012)	-(2012)	-(2012)	-(2012)	-(2012)	-(2012)	-(2012)
Infection with Batrachochytrium dendrobatidis	-(2009)	-(2009)	-(2009)	-(2009)	-(2009)	-(2009)	-(2009)	-(2009)	-(2009)	-(2009)	-(2009)	-(2009)
ANY OTHER DISEASES OF IMPORTANCE												
Crayfish plague (Aphanomyces astaci)				0000	+?()	-(2014)	-(2014)	-(2014)	-(2014)	-(2014)	-(2014)	-(2014)

Infections haematopoietic necrosis

2Q

Infectious haematopoietic necrosis

1) Reported in 14 prefectures

2) Species affected: Amago (*Oncorhynchus rhodurus*), masou (*O. masou*), rainbow trout (*O.mykiss*), hybrid of rainbow trout and brown trout (*O.mykiss* × *Salmo trutta*), biwamasu (*O. masou rhodurus*)

3) Disease characteristics: Mortality; lethargy; pale gills, liver and kidney (anemia); threadbare gills; darkening of the skin; exophthalmia; petechial haemorrhages internally and externally; ascites; distended abdomen.

4) Pathogen: Infectious haematopoietic necrosis virus

5) Mortality rate: 0.3-100%

6) Economic loss: —

7) Names of infected areas: Honshu, Kyushu

8) Preventive/control measures taken: Disinfection of rearing water, equipment and tanks, use of virus-free juveniles, culling of infected fish, movement control, feed restriction, early harvest

9) Laboratories for confirmation: Gross clinical observation, PCR and/or isolation of the virus by prefectural research laboratories

10) Publications: None

3Q

Infectious haematopoietic necrosis

1) Reported in 12 prefectures

2) Species affected: Amago (Oncorhynchus rhodurus), masou (O. masou), rainbow trout (O.mykiss), Iwana (Salvelinus leucomaenis)

3) Disease characteristics: Mortality; lethargy; pale gills, liver and kidney (anemia); threadbare gills; darkening of the skin; exophthalmia; petechial haemorrhages internally and externally; ascites

4) Pathogen: Infectious haematopoietic necrosis virus

5) Mortality rate: 0.08-80%

6) Economic loss: —

7) Names of infected areas: Hokkaido, Honshu

8) Preventive/control measures taken: Disinfection of equipment and tanks; use of disinfected eggs; Culling of infected eggs and fish; movement control; feed restriction; early harvest

9) Laboratories for confirmation: Gross clinical observation, PCR and/or isolation of the virus by prefectural research laboratories

10) Publications: None

4Q

Infectious haematopoietic necrosis

1) Reported in 8 prefectures

2) Species affected: Amago (Oncorhynchus rhodurus), masou (O. masou), rainbow trout (O.mykiss)

3) Disease characteristics: Mortality, lethargy, pale gills, liver and kidney (anemia), threadbare fins, darkening of the skin, exophthalmia, petechial haemorrhages internally

4) Pathogen: Infectious haematopoietic necrosis virus

5) Mortality rate: 2.6-50%

6) Economic loss: —

7) Names of infected areas: Honshu, Kyushu

8) Preventive/control measures taken: Disinfection of equipment and tanks; removal of dead fish

9) Laboratories for confirmation: Gross clinical observation, RT-PCR and/or isolation of the virus by prefectural research laboratories

10) Publications: None

Viral haemorrhagic septicaemia (VHS)

2Q

1) Reported in 2 prefectures

2) Species affected: Olive flounder (*Paralichthys olivaceus*)

3) Disease characteristics: Mortality, abnormal swimming, haemorrhages in the gills, ascites

4) Pathogen: Viral haemorrhagic septicaemia virus

5) Mortality rate: 0.07-90%

6) Economic loss: —

7) Names of infected areas: Kyushu

8) Preventive/control measures taken: Culling of infected fish, improvement of rearing condition

9) Laboratory confirmation: PCR by National Research Institute of Aquaculture or prefectural research laboratories

10) Publications: None

Infection with Aphanomyces invadans (EUS)

2Q

1) Reported in 1 prefecture

2) Species affected: Ayu (*Plecoglossus altivelis*)

3) Disease characteristics: Mortality, red spots on the body,

4) Pathogen: Aphanomyces invadans

5) Mortality rate: 10 fish/day

6) Economic loss: —

7) Names of infected areas: Kyushu

8) Preventive/control measures taken: Removal of dead fish

9) Laboratory confirmation: Gross clinical observation and histopathology by the prefectural research laboratory

10) Publications: None

Red seabream iridoviral disease (RSIVD)

2Q

1) Reported in 3 prefectures

2) Species affected: Japanese amberjack (*Seriola quinqueradiata*), greater amberjack (*Seriola dumerili*), yellowtail amberjack (*Seriola lalandi*)

3) Disease characteristics: Mortality, enlargement of the kidney and spleen, pale gills, petechiae in the gills

4) Pathogen: Red sea bream iridovirus

5) Mortality rate: 0-0.6%

6) Economic loss: —

7) Names of infected areas: Kyushu

8) Preventive/control measures taken: Removal of dead fish

9) Laboratory confirmation: FAT, IFATor PCR by prefectural research laboratories

10) Publications: None

3Q

Red seabream iridoviral disease (RSIVD)

1) Reported in 9 prefectures

2) Species affected: Japanese amberjack (Seriola quinqueradiata), greater amberjack (Seriola dumerili), yellowtail amberjack (Seriola lalandi), red sea bream (Pagrus major), Japanese parrotfish (Oplegnathus fasciatus), Malabar grouper (Epinephelus malabaricus), chicken grunt (Parapristipoma trilineatum)

3) Disease characteristics: Mortality; enlargement of the kidney and spleen; pale gills; petechiae in the gills

4) Pathogen: Red sea bream iridovirus

5) Mortality rate: 0.2-15%

6) Economic loss: —

7) Names of infected areas:Honshu, Shikoku, Kyushu

8) Preventive/control measures taken: Vaccine, feed restriction, removal of dead fish, prohibition of fish transfer from infected cages, culling of infected fish

9) Laboratory confirmation: Histopathology by the prefectural research laboratory; IFATor PCR by the fisheries cooperative and prefectural research laboratories

10) Publications: None

4Q

Red seabream iridoviral disease (RSIVD)

1) Reported in 5 prefectures

2) Species affected: red sea bream (Pagrus major), chicken grunt (Parapristipoma trilineatum), striped jack (Pseudocaranx dentex), Japanese parrotfish (Oplegnathus fasciatus)

3) Disease characteristics: Mortality, petechiae in the gills

4) Pathogen: Red sea bream iridovirus

5) Mortality rate: 0.2-1%

6) Economic loss: —

7) Names of infected areas:Honshu, Shikoku, Kyushu

8) Preventive/control measures taken: Feed restriction, removal of dead fish, prohibition of fish transfer from infected cages

9) Laboratory confirmation: Histopathology, IFATor PCR by the fisheries cooperative and prefectural research laboratories

10) Publications: None

Koi herpesvirus disease (KHV)

2Q

1) Reported in 7 prefectures

2) Species affected: Koi carp (*Cyprinus carpio*)
3) Disease characteristics: pale gills, mortality
4) Pathogen: Koi herpesvirus
5) Mortality rate: 0-90%
6) Economic loss: —
7) Names of infected areas: Honshu, Shikoku
8) Preventive/control measures taken: Prohibition of fish transfer from infected ponds, culling of infected groups of fish, disinfection of rearing water, equipment and ponds, suspension of the release of rearing water
9) Laboratory confirmation: PCR by National Research Institute of Aquaculture and prefectural research laboratories
10) Publications: website of Ministry of Agriculture, Forestry and Fisheries (MAFF) and prefectures

3Q

Koi herpesvirus disease (KHV)
1) Reported in 8 prefectures
2) Species affected: Koi carp (Cyprinus carpio), common carp (C. carpio)
3) Disease characteristics: pale gills, mortality, enophthlmia
4) Pathogen: Koi herpesvirus
5) Mortality rate: 0-90%
6) Economic loss: —
7) Names of infected areas: Honshu
8) Preventive/control measures taken: Prohibition of fish transfer from infected ponds; culling of infected groups of fish; disinfection of rearing water, equipment and ponds; suspension of the release of rearing water
9)Laboratory confirmation: PCR by National Research Institute of Aquaculture and prefectural research laboratories
10) Publications: website of Ministry of Agriculture, Forestry and Fisheries (MAFF) and prefectures

4Q

Koi herpesvirus disease (KHV)
1) Reported in 1 prefecture
2) Species affected: Koi carp (Cyprinus carpio), common carp (C. carpio)
3) Disease characteristics: mortality
4) Pathogen: Koi herpesvirus
5) Mortality rate: 11-90%
6) Economic loss: —
7) Names of infected areas: Honshu
8) Preventive/control measures taken: Prohibition of fish transfer from infected ponds, culling of infected fish, suspension of the release of rearing water
9)Laboratory confirmation: PCR by the prefectural research laboratory
10) Publications: website of Ministry of Agriculture, Forestry and Fisheries (MAFF) and the prefecture

Viral encephalopathy and retinopathy

2Q

1) Reported in 1 prefecture
2) Species affected: Kelp grouper (*Epinephelus moara*)
3) Disease characteristics: None
4) Pathogen: Betanodavirus
5) Mortality rate: 0%
6) Economic loss: —
7) Names of infected areas: Honshu
8) Preventive/control measures taken: Isolation of broodstocks, disinfection of eggs from infected broodstocks
9) Laboratory confirmation: PCR by the prefectural research laboratory
10) Publications: None

3Q

Viral encephalopathy and retinopathy
1) Reported in 3 prefectures
2) Species affected: Kelp grouper (Epinephelus moara), Malabar grouper (Epinephelus malabaricus)
3) Disease characteristics: None
4) Pathogen: Betanodavirus
5) Mortality rate: 0.3-95%
6) Economic loss: —
7) Names of infected areas: Honshu, Kyushu
8) Preventive/control measures taken: Prohibition of fish transfer from infected tanks and cages; culling of infected fish
9) Laboratory confirmation: PCR or RT-PCR by prefectural research laboratories
10) Publications: None

4Q

Viral encephalopathy and retinopathy
1) Reported in 2 prefectures
2) Species affected: Kelp grouper (Epinephelus moara), Malabar grouper (Epinephelus malabaricus), convict grouper (Epinephelus septemfasciatus)
3) Disease characteristics: Mortality, abnormal swimming, lethargy
4) Pathogen: Betanodavirus
5) Mortality rate: 0.008-40%
6) Economic loss: —
7) Names of infected areas: Honshu, Kyushu
8) Preventive/control measures taken: Feed restriction, control of rearing water temperature, vaccine
9) Laboratory confirmation: PCR by the prefectural research laboratory
10) Publications: None

Infection with *Xenohaliotis californiensis*

2Q

1) Reported in 1 prefecture
2) Species affected: *Haliotis diversicolor diversicolor*

3) Disease characteristics: None
4) Pathogen: *Xenohaliotis californiensis*
5) Mortality rate: 0%
6) Economic loss: —
7) Names of infected areas: Honshu
8) Preventive/control measures taken: Disinfection of infected broodstocks (not for human consumption) with OTC
9) Laboratory confirmation: PCR by the prefectural research laboratory, sequencing by National Research Institute of Aquaculture
10) Publications: None

White spot disease (WSD)

2Q

1) Reported in 2 prefectures
2) Species affected: Kuruma prawn (*Penaeus japonicus*)
3) Disease characteristics: None
4) Pathogen: White spot syndrome virus
5) Mortality rate: 0%
6) Economic loss: —
7) Names of infected areas: Honshu
8) Preventive/control measures taken: Culling of infected broodstocks, disinfection of equipment and facilities
9) Laboratory confirmation: LAMP or PCR by prefectural research laboratories
10) Publications: None

Crayfish plague (*Aphanomyces astaci*)

2Q

Crayfish plague (*Aphanomyces astaci*) was first reported in Japan.
1) Origin of the disease or pathogen: Unknown. However, considering the situation, the pathogen, Aphanomyces astaci, might have existed in Japan for a long time with the Louisiana swamp crayfish, *Procambarus clarkii*, since the time when the crayfish was introduced from the U.S.
2) Species affected: Louisiana swamp crawfish (*P. clarkii*)
3) Disease characteristics: No crayfish showing any clinical signs was found. It is considered that the population of *P. clarkii* harbours the pathogen without clinical disease, which is consistent with the OIE manual for crayfish plague.
4) Pathogen: *A. astaci*
5) Mortality rate: 0%
6) Economic loss: None. Although there are a few small farms of crayfish in Japan, there has not been any report of outbreak of the disease until now. The cultured crayfish, *P. clarkii*, is not exported abroad and the pathogen is not considered to be a major threat.
7) Names of infected areas: Hokkaido
8) Preventive/control measures taken: Not applicable

9) Laboratory confirmation: 30 specimens of *P. clarkii* were sampled from the creek and 4 specimens were positive for *A. astaci* with PCR according to the OIE manual by National Research Institute of Aquaculture.
10) Published paper: None

Infection with Marteilioides chungmuensis

4Q

1) Reported in 1 prefecture
2) Species affected: Pacific oyster (Crassostrea gigas)
3) Disease characteristics: Irregular enlargement of the ovary
4) Pathogen: Marteilioides chungmuensis
5) Mortality rate: 0%
6) Economic loss: —
7) Names of infected areas: Honshu
8) Preventive/control measures taken: None
9) Laboratory confirmation: Gross clinical observation by the prefectural research laboratory
10) Publications: None

KOREA												
Name of disease	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
DISEASES PREVALENT IN THE REGION												
FINFISH DISEASES												
OIE-listed diseases												
Epizootic haematopoietic necrosis	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Infectious haematopoietic necrosis	-	+	-	-	-	-	-	-	-	-	-	-
Spring viraemia of carp (SVC)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Viral haemorrhagic septicaemia (VHS)	+	-	-	+	-	+	-	-	-	-	+	-
Epizootic ulcerative syndrome (EUS)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Red seabream iridoviral disease (RSID)	-	-	-	-	-	-	-	+	+	+	+	+
Koi herpesvirus disease (KHV)	-	-	-	-	-	+	+	-	-	+	-	-
Non OIE-listed diseases												
Grouper iridoviral disease	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Viral encephalopathy and retinopathy	-	-	-	-	-	-	-	-	-	-	-	-
Enteric septicaemia of catfish	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
MOLLUSC DISEASES												
OIE-listed diseases												
1. Infection with *Bonamia exitiosa*	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
2. Infection with *Perkinsus olseni*	-	-	-	-	-	-	-	-	-	-	-	-
3. Infection with abalone herpes-like virus	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
4. Infection with *Xenohaliotis californiensis*	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Non OIE-listed diseases												
5. Infection with *Marteilioides chungmuensis*	-	-	-	-	-	-	-	-	-	-	-	-
6. Acute viral necrosis (in scallops)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
7. Akoya oyster disease	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
CRUSTACEAN DISEASES												
OIE-listed diseases												
1. Taura syndrome (TS)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
2. White spot disease (WSD)	-	-	-	-	-	+	-	+	+	-	-	-
3. Yellowhead disease (YHD)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
4. Infectious hypodermal and haematopoietic necrosis (IHHN)	-	-	-	-	-	-	-	-	-	-	-	-
5. Infectious myonecrosis (IMN)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
6. White tail disease (MrNV)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
7. Necrotising hepatopancreatitis (NHP)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Non OIE-listed diseases												
8. Milky haemolymph disease of spiny lobster (*Panulirus* spp.)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
9. *Monodon* slow growth syndrome	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
10. Acute hepatopancreatic necrosis syndrome (AHPNS)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
AMPHIBIAN DISEASES												
OIE-listed diseases												
1. Infection with Ranavirus	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
2. Infection with *Batrachochytrium dendrobatidis*				?	?	?	?	?	?	?	?	?
Crayfish plague (Aphanomyces astaci)												

Infectious hematopoietic necrosis (IHN)

1Q

Infectious haematopoietic necrosis (IHN) was reported ;

1. in Pyeongchang, Youngwol and Jeongsun of Gangwon -do in February,
2. rainbow trout (*Oncorhynchus mykiss*)
3. Clinical signs; exophthalmus, hepatorrhagia
4. IHNV
5. Mortality rate; 50% in Pyeongchang, 0% in Youngwol and Jeongsun
6. Death total; information not available
7. Geographic extent; limited to one province
8. Control measures; self - disinfection of equipment and facilities
9. Laboratory Confirmation; PCR method and sequencing by National Fisheries Research and Development Institute (NFRDI)
10. Publication; None

2Q

Viral haemorrhagic septicaemia (VHS) was reported ;

1. in Seogwipo of Jeju-do in January
2. Olive flounder (Paralichthys olivaceus)
3. Clinical signs; Darkness, Ascites
4. VHSV
5. Mortality rate; low(0.23~11.3%), decreasing
6. Death total; 20,100 fishes
7. Geographic extent; limited to one area
8. Control measures; prohibition of movement, disinfection of equipment and facilities
9. Laboratory Confirmation; PCR method and sequencing by National Fisheries Research and Development Institute (NFRDI)
10. Publication; None

Viral haemorrhagic septicaemia (VHS)

1Q

1. in Seogwipo of Jeju-do in January
2. Olive flounder (*Paralichthys olivaceus*)
3. Clinical signs; -
4. VHSV
5. Mortality rate; low(≤1%), decreasing
6. Death total; 1,500 fishes
7. Geographic extent; limited to one farm
8. Control measures; prohibition of movement, disinfection of equipment and facilities
9. Laboratory Confirmation; PCR method and sequencing by National Fisheries Research and Development Institute (NFRDI)
10. Publication; None

Koi herpesvirus disease (KHV)

2Q

Koi herpesvirus disease (KHV)was reported ;

1. in Wanju-gun of Jeollabuk-do in January
2. Koi carp (Cyprinus carpio)
3. Clinical signs; -
4. KHV
5. Mortality rate; -
6. Death total; -
7. Geographic extent; limited to one farm
8. Control measures; prohibition of movement, disinfection of equipment and facilities
9. Laboratory Confirmation; PCR method and sequencing by National Fishery products Quality management Service (FIQ)
10. Publication; None

3Q

Koi herpesvirus disease (KHV) was reported ;

1. In Chuncheon-si, Gangwon-do in July
2. Koi carp (Cyprinus carpio)
3. Clinical signs; -
4. KHV
5. Mortality rate; -
6. Death total; -
7. Geographic extent; limited to one farm
8. Control measures; prohibition of movement, disinfection of equipment and facilities
9. Laboratory Confirmation; PCR method and sequencing by National Fisheries Research and Development Institute (NFRDI)
10. Publication; None

4Q

Koi herpesvirus disease (KHV) was reported ;

1. In Chuncheon-si, Gangwon-do in October

2. Koi carp (Cyprinus carpio)
3. Clinical signs; -
4. KHV
5. Mortality rate; low
6. Death total; -
7. Geographic extent; limited to one farm
8. Control measures; prohibition of movement, disinfection of equipment and facilities
9. Laboratory Confirmation; PCR method and sequencing by National Fisheries Research and Development Institute (NFRDI)
10. Publication; None

White spot disease (WSD)

2Q

White spot disease (WSD) was reported ;

1. in Taean-gun of Chungchungnam-do in June
2. Whiteleg Shrimp(Lipopenaeus vanamei)
3. Clinical signs; -
4. WSSV
5. Mortality rate; High(80%)
6. Death total; 9.6 Tones
7. Geographic extent; limited to one farm
8. Control measures; prohibition of movement, disinfection of equipment and facilities
9. Laboratory Confirmation; PCR method and sequencing by National Fisheries Research and Development Institute (NFRDI)
10. Publication; None

3Q

White spot disease (WSD) was reported ;

1. in Gangwha-gun, Incheon-si in June from August to September
2. Whiteleg Shrimp(Lipopenaeus vanamei)
3. Clinical signs; -
4. WSSV

5. Mortality rate; -
6. Death total; -
7. Geographic extent; limited to one area
8. Control measures; prohibition of movement, disinfection of equipment and facilities
9. Laboratory Confirmation; PCR method and sequencing by National Fisheries Research and Development Institute (NFRDI)
10. Publication; None

Red seabream iridoviral disease (RSID)

3Q

Red seabream iridoviral disease (RSID) was reported;

1. in Sacheon-si and Namhae-gun, Gyeongsangnam-do/ Jangheung-gun and Yeosu-si, Jeollanam-do from August to September
2. Rock bream(Oplegnathus fasciatus), Mullet(Mugil cephalus), Olive f lounder(Paralichthys olivaceus)
3. Clinical signs; Severe anemia, enlargement of the spleen
4. Red seabream iridovirus
5. Mortality rate; low(≤1%) ~ Moderate
6. Death total; 0~100,000
7. Geographic extent; limited to a few areas
8. Control measures; prohibition of movement, disinfection of equipment and facilities
9. Laboratory Confirmation; PCR method and sequencing by National Fisheries Research and Development Institute (NFRDI)
10. Publication; None

4Q

Red seabream iridoviral disease (RSID) was reported;

1. in Tongyoung-si, Gyeongsangnam-do/ Yeosu-si, Jeollanam-do/ Seogwipo-si of Jeju-do from October to December
2. Rock bream(Oplegnathus fasciatus), Red seabream(Pagrus major), Rockfish(Sebastes schlegeli)
3. Clinical signs; Severe anemia, enlargement of the spleen
4. Red seabream iridovirus

5. Mortality rate; low~ high(0~96%)
6. Death total; 1,645,000fishes
7. Geographic extent; limited to three areas
8. Control measures; prohibition of movement, disinfection of equipment and facilities
9. Laboratory Confirmation; PCR method and sequencing by National Fisheries Research and Development Institute (NFRDI)
10. Publication; None

Viral haemorrhagic septicaemia (VHS)

4Q

Viral haemorrhagic septicaemia (VHS) was reported ;

1. in Seogwipo of Jeju-do in Nobember
2. Olive flounder (Paralichthys olivaceus)
3. Clinical signs; Darkness, Ascites
4. VHSV
5. Mortality rate; moderate (30%)
6. Death total; 60,000 fishes
7. Geographic extent; limited to one farm
8. Control measures; prohibition of movement, disinfection of equipment and facilities
9. Laboratory Confirmation; PCR method and sequencing by National Fisheries Research and Development Institute (NFRDI)
10. Publication; None

LAOS												
Name of disease	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
DISEASES PREVALENT IN THE REGION												
FINFISH DISEASES												
OIE-listed diseases												
Epizootic haematopoietic necrosis	0000	0000	0000							***	***	***
Infectious haematopoietic necrosis	0000	0000	0000							***	***	***
Spring viraemia of carp (SVC)	0000	0000	0000							***	***	***
Viral haemorrhagic septicaemia (VHS)	0000	0000	0000							***	***	***
Infection with Aphanomyces invadans (EUS)	0000	0000	0000							***	***	***
Red seabream iridoviral disease (RSID)	0000	0000	0000							***	***	***
Koi herpesvirus disease (KHV)	0000	0000	0000							***	***	***
Non OIE-listed diseases												
Grouper iridoviral disease	0000	0000	0000							***	***	***
Viral encephalopathy and retinopathy	0000	0000	0000							***	***	***
Enteric septicaemia of catfish	0000	0000	0000							***	***	***
MOLLUSC DISEASES												
OIE-listed diseases												
Infection with Bonamia exitiosa	0000	0000	0000							***	***	***
Infection with Perkinsus olseni	0000	0000	0000							***	***	***
Infection with abalone herpesvirus	0000	0000	0000							***	***	***
Infection with Xenohaliotis californiensis	0000	0000	0000							***	***	***
Infection with ostreid herpesvirus*	0000	0000	0000							***	***	***
Non OIE-listed diseases												
Infection with Marteilioides chungmuensis	0000	0000	0000							***	***	***
Acute viral necrosis (in scallops)	0000	0000	0000							***	***	***
CRUSTACEAN DISEASES												
OIE-listed diseases												
Taura syndrome (TS)	0000	0000	0000							***	***	***
White spot disease (WSD)	0000	0000	0000							***	***	***
Yellowhead disease (YHD)	0000	0000	0000							***	***	***
Infectious hypodermal and haematopoietic necrosis (IHHN)	0000	0000	0000							***	***	***
Infectious myonecrosis (IMN)	0000	0000	0000							***	***	***
White tail disease (MrNV)	0000	0000	0000							***	***	***
Necrotising hepatopancreatitis (NHP)	0000	0000	0000							***	***	***
Non OIE-listed diseases												
Monodon slow growth syndrome	0000	0000	0000							***	***	***
Acute hepatopancreatic necrosis disease (AHPND)	0000	0000	0000							***	***	***
AMPHIBIAN DISEASES	0000	0000	0000									
OIE-listed diseases												
Infection with Ranavirus	0000	0000	0000							***	***	***
Infection with Batrachochytrium dendrobatidis	0000	0000	0000							***	***	***
ANY OTHER DISEASES OF IMPORTANCE												

MALAYSIA												
Name of disease	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
DISEASES PREVALENT IN THE REGION												
FINFISH DISEASES												
OIE-listed diseases												
Epizootic haematopoietic necrosis	0000	0000	0000									
Infectious haematopoietic necrosis	0000	0000	0000									
Spring viraemia of carp (SVC)	0000	0000	0000									
Viral haemorrhagic septicaemia (VHS)	0000	0000	0000									
Infection with Aphanomyces invadans (EUS)	-1986	-1986	-1986									
Red seabream iridoviral disease (RSID)	-	-	-									
Koi herpesvirus disease (KHV)	+	+	-									
Non OIE-listed diseases												
Grouper iridoviral disease	-	-	-									
Viral encephalopathy and retinopathy	-	-	-									
Enteric septicaemia of catfish	0000	0000	0000									
MOLLUSC DISEASES												
OIE-listed diseases												
Infection with Bonamia exitiosa	0000	0000	0000									
Infection with Perkinsus olseni	0000	0000	0000									
Infection with abalone herpesvirus	0000	0000	0000									
Infection with Xenohaliotis californiensis												
Infection with ostreid herpesvirus*												
Non OIE-listed diseases												
Infection with Marteilioides chungmuensis	0000	0000	0000									
Acute viral necrosis (in scallops)	0000	0000	0000									
CRUSTACEAN DISEASES												
OIE-listed diseases												
Taura syndrome (TS)	-	-	-									
White spot disease (WSD)	+	-	+									
Yellowhead disease (YHD)	-	-	-									
Infectious hypodermal and haematopoietic necrosis	-	-	-									
Infectious myonecrosis (IMN)	-	-	-									
White tail disease (MrNV)	-	-	-									
Necrotising hepatopancreatitis (NHP)	-	-	-									
Non OIE-listed diseases												
Monodon slow growth syndrome	0000	0000	0000									
Acute hepatopancreatic necrosis disease (AHPND)	-	-	+									
AMPHIBIAN DISEASES												
OIE-listed diseases												
Infection with Ranavirus	-	-	-									
Infection with Batrachochytrium dendrobatidis	0000	0000	0000									
ANY OTHER DISEASES OF IMPORTANCE												
Hepatopancreatic parvo virus disease	-	+	-									
Akoya oyster disease	0000	0000	0000									
Milky haemolymph disease of spiny lobster (Panulirus s	-	-	-									

Spring viraemia of carp (SVC)

1Q

1. No positive cases were detected (PCR) during DoF active surveillance programme

Koi herpesvirus disease (KHV)

1Q

1.One (1) positive case was detected (PCR) during DoF active surveillance programme in January.

Grouper Iridoviral disease (GIV)

1Q

1. No positive cases were reported.

Viral encephalopathy and retinopathy

1Q

1. No positive cases were reported (PCR) during DoF active surveillance programme.

Taura syndrome (TS)

1Q

Taura syndrome virus (TSV) (*Penaeus monodon, Litopenaeus vannamei*)

1. No positive cases were reported (PCR) during DoF active surveillance programme and monitoring programme by private laboratory.

White spot disease (WSD)

1Q

White Spot Syndrome Virus (WSSV)

1. Two (2) positive cases were reported (PCR) from fish disease notification by DoF laboratory analysis.

Yellowhead disease (YHD)

1Q

Yellow head disease (YHV) (*Penaeus monodon, Litopenaeus vannamei*)

1. No positive cases were reported (PCR) during DoF active surveillance programme and monitoring programme by private laboratory.

Infectious hypodermal and haematopoietic necrosis (IHHN)

1Q

Infectious hypodermal and haematopoietic necrosis virus (IHHNV) (*Macrobrachium rosenbergi, Penaeus monodon, Litopenaeus vannamei*)

1. No positive cases were reported (PCR) during DoF active surveillance programme and monitoring programme by private laboratory.

Infectious myonecrosis (IMN)

1Q

Infectious Myonecrosis (IMNV)

1. No positive cases were reported (PCR) during DoF active surveillance programme and monitoring programme by private laboratory.

White tail disease (MrNV)

1Q

Macrobrachium rosenbergii Nodavirus (MrNV)

1. No samples were tested for MrNV

Necrotising hepatopancreatitis (NHP)

1Q

Necrotising hepatopancreatitis (NHPB) no sample

1. No samples were tested for NHPB

Acute Hepatopancreatic Necrosis Disease (AHPND)

1Q

1. One (1) positive cases was reported (PCR) during monitoring programme by Private Laboratory.

Hepatopancreatic parvo virus disease (HPV)

1Q

(*Penaeus monodon, Litopenaeus vannamei*)

1. One (1) positive cases was reported (PCR) during monitoring programme by Private Laboratory.

MALDIVES												
Name of disease	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
DISEASES PREVALENT IN THE REGION												
FINFISH DISEASES												
OIE-listed diseases												
Epizootic haematopoietic necrosis	***	***	***				***	***	***	***	***	***
Infectious haematopoietic necrosis	***	***	***				***	***	***	***	***	***
Spring viraemia of carp (SVC)	***	***	***				***	***	***	***	***	***
Viral haemorrhagic septicaemia (VHS)	***	***	***				***	***	***	***	***	***
Infection with Aphanomyces invadans (EUS)	***	***	***				***	***	***	***	***	***
Red seabream iridoviral disease (RSID)	***	***	***				***	***	***	***	***	***
Koi herpesvirus disease (KHV)	***	***	***				***	***	***	***	***	***
Non OIE-listed diseases												
Grouper iridoviral disease	***	***	***				***	***	***	***	***	***
Viral encephalopathy and retinopathy	***	***	***				***	***	***	***	***	***
Enteric septicaemia of catfish	***	***	***				***	***	***	***	***	***
MOLLUSC DISEASES												
OIE-listed diseases												
Infection with Bonamia exitiosa	***	***	***				***	***	***	***	***	***
Infection with Perkinsus olseni	***	***	***				***	***	***	***	***	***
Infection with abalone herpesvirus	***	***	***				***	***	***	***	***	***
Infection with Xenohaliotis californiensis	***	***	***				***	***	***	***	***	***
Infection with ostreid herpesvirus*	***	***	***				***	***	***	***	***	***
Non OIE-listed diseases												
Infection with Marteilioides chungmuensis	***	***	***				***	***	***	***	***	***
Acute viral necrosis (in scallops)	***	***	***				***	***	***	***	***	***
CRUSTACEAN DISEASES												
OIE-listed diseases												
Taura syndrome (TS)	***	***	***				***	***	***	***	***	***
White spot disease (WSD)	***	***	***				***	***	***	***	***	***
Yellowhead disease (YHD)	***	***	***				***	***	***	***	***	***
Infectious hypodermal and haematopoietic necrosis	***	***	***				***	***	***	***	***	***
Infectious myonecrosis (IMN)	***	***	***				***	***	***	***	***	***
White tail disease (MrNV)	***	***	***				***	***	***	***	***	***
Necrotising hepatopancreatitis (NHP)	***	***	***				***	***	***	***	***	***
Non OIE-listed diseases												
Monodon slow growth syndrome	***	***	***				***	***	***	***	***	***
Acute hepatopancreatic necrosis disease (AHPND)	***	***	***				***	***	***	***	***	***
AMPHIBIAN DISEASES												
OIE-listed diseases												
Infection with Ranavirus	***	***	***				***	***	***	***	***	***
Infection with Batrachochytrium dendrobatidis	***	***	***				***	***	***	***	***	***
ANY OTHER DISEASES OF IMPORTANCE												

Mongolia												
Name of disease	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
DISEASES PREVALENT IN THE REGION												
FINFISH DISEASES												
OIE-listed diseases												
Epizootic haematopoietic necrosis				0000	0000	0000						
Infectious haematopoietic necrosis				0000	0000	0000						
Spring viraemia of carp (SVC)				0000	0000	0000						
Viral haemorrhagic septicaemia (VHS)				0000	0000	0000						
Infection with Aphanomyces invadans (EUS)				0000	0000	0000						
Red seabream iridoviral disease (RSID)				0000	0000	0000						
Koi herpesvirus disease (KHV)				0000	0000	0000						
Non OIE-listed diseases												
Grouper iridoviral disease				0000	0000	0000						
Viral encephalopathy and retinopathy				0000	0000	0000						
Enteric septicaemia of catfish				0000	0000	0000						
MOLLUSC DISEASES												
OIE-listed diseases												
Infection with Bonamia exitiosa				0000	0000	0000						
Infection with Perkinsus olseni				0000	0000	0000						
Infection with abalone herpesvirus				0000	0000	0000						
Infection with Xenohaliotis californiensis				0000	0000	0000						
Infection with ostreid herpesvirus*				0000	0000	0000						
Non OIE-listed diseases												
Infection with Marteilioides chungmuensis				0000	0000	0000						
Acute viral necrosis (in scallops)				0000	0000	0000						
CRUSTACEAN DISEASES												
OIE-listed diseases												
Taura syndrome (TS)				0000	0000	0000						
White spot disease (WSD)				0000	0000	0000						
Yellowhead disease (YHD)				0000	0000	0000						
Infectious hypodermal and haematopoietic necrosis				0000	0000	0000						
Infectious myonecrosis (IMN)				0000	0000	0000						
White tail disease (MrNV)				0000	0000	0000						
Necrotising hepatopancreatitis (NHP)				0000	0000	0000						
Non OIE-listed diseases												
Monodon slow growth syndrome				0000	0000	0000						
Acute hepatopancreatic necrosis disease (AHPND)				0000	0000	0000						
AMPHIBIAN DISEASES												
OIE-listed diseases												
Infection with Ranavirus				0000	0000	0000						
Infection with Batrachochytrium dendrobatidis				0000	0000	0000						
ANY OTHER DISEASES OF IMPORTANCE												

MYANMAR												
Name of disease	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
DISEASES PREVALENT IN THE REGION												
FINFISH DISEASES												
OIE-listed diseases												
Epizootic haematopoietic necrosis	***	***	***	***	***	***	***	***	***	***	***	***
Infectious haematopoietic necrosis	***	***	***	***	***	***	***	***	***	***	***	***
Spring viraemia of carp (SVC)	***	***	***	***	***	***	***	***	***	***	***	***
Viral haemorrhagic septicaemia (VHS)	***	***	***	***	***	***	***	***	***	***	***	***
Infection with Aphanomyces invadans (EUS)	***	***	***	***	***	***	***	***	***	***	***	***
Red seabream iridoviral disease (RSID)	***	***	***	***	***	***	***	***	***	***	***	***
Koi herpesvirus disease (KHV)	***	***	***	***	***	***	***	***	***	***	***	***
Non OIE-listed diseases												
Grouper iridoviral disease	***	***	***	***	***	***	***	***	***	***	***	***
Viral encephalopathy and retinopathy	***	***	***	***	***	***	***	***	***	***	***	***
Enteric septicaemia of catfish	***	***	***	***	***	***	***	***	***	***	***	***
MOLLUSC DISEASES												
OIE-listed diseases												
Infection with Bonamia exitiosa												
Infection with Perkinsus olseni												
Infection with abalone herpesvirus												
Infection with Xenohaliotis californiensis												
Infection with ostreid herpesvirus*												
Non OIE-listed diseases												
Infection with Marteilioides chungmuensis												
Acute viral necrosis (in scallops)												
CRUSTACEAN DISEASES												
OIE-listed diseases												
Taura syndrome (TS)	-	-	-	-	-	-	-	-	-	-	-	-
White spot disease (WSD)	-	-	-	-	-	-	-	-	-	-	-	-
Yellowhead disease (YHD)	-	-	-	-	-	-	-	-	-	-	-	-
Infectious hypodermal and haematopoietic necrosis	-	-	-	-	-	-	-	-	-	-	-	-
Infectious myonecrosis (IMN)	***	***	***	***	***	***	***	***	***	***	***	***
White tail disease (MrNV)	***	***	***	***	***	***	***	***	***	***	***	***
Necrotising hepatopancreatitis (NHP)	***	***	***	***	***	***	***	***	***	***	***	***
Non OIE-listed diseases												
Monodon slow growth syndrome	***	***	***	***	***	***	***	***	***	***	***	***
Acute hepatopancreatic necrosis disease (AHPND)												
AMPHIBIAN DISEASES												
OIE-listed diseases												
Infection with Ranavirus												
Infection with Batrachochytrium dendrobatidis												
ANY OTHER DISEASES OF IMPORTANCE												
Milky haemolymph disease of spiny lobster (Panulirus s	***	***	***	***	***	***	***	***	***	***	***	***

Myanmar

Taura syndrome (TS)

1Q

During this period, we have received 6 samples of shrimps, (8 frozen and 1 alive shrimp and soft shell crab for export) for testing, WWSV, IHHNV and TSV and found that all are negative.

2Q

During this period, we have received 9 samples of shrimps, (4 frozen shrimp, soft shell crab and 2 Alive shrimp for export) for testing, WWSV, IHHNV and TSV and found that all are negative.

3Q

During this period, we have received 11 samples of shrimps, (9 frozen shrimp, soft shell crab and 2 Alive shrimp for export) for testing, WWSV, YHV and TSV and found that 9 samples are negative and 2 samples are positive for WSSV and YHV.

White Spot Syndrome Virus

3Q

During this period, we have received 11 samples of shrimps, (9 frozen shrimp, soft shell crab and 2 Alive shrimp for export) for testing, WWSV, YHV and TSV and found that 9 samples are negative and 2 samples are positive for WSSV and YHV.

4Q

During this period, we have received 7 samples of shrimps, (4 frozen shrimp, soft shell crab and 3 Alive shrimp for export) for testing and found that one WSSV and two YHV are positive.

Yellow Head Virus

3Q

During this period, we have received 11 samples of shrimps, (9 frozen shrimp, soft shell crab and 2 Alive shrimp for export) for testing, WWSV, YHV and TSV and found that 9 samples are negative and 2 samples are positive for WSSV and YHV.

4Q

During this period, we have received 7 samples of shrimps, (4 frozen shrimp, soft shell crab and 3 Alive shrimp for export) for testing and found that one WSSV and two YHV are positive.

Parasitic disease

1Q

Visited some fish farms in Yangon and Ayeyarwaddy Regions during this period. Due to poor water quality, parasitic disease (*Ergasilus* spp.;, *Dactylogyrus* spp.; and *Trichodina* spp.;) was found at some farm.

2Q

Visited some fish farms in Yangon and Bago Regions during this period. Due to poor water quality, parasitic disease (*Dactylogyrus* spp.; and *Trichodina* spp.;) was found at some farm.

3Q

Visited some fish farms in Yangon and Ayeyarwaddy Regions during this period. Due to poor water quality, parasitic disease (*Dactylogyrus spp; Ergasilus spp:*) was found at some farm.

4Q

Visited some fish farms in Yangon, Mandalay and Ayeyarwaddy Regions during this period. Due to poor water quality, parasitic disease (*Dactylogyrus spp; Ergasilus spp: Argulus spp; Trichodina spp, Protozoan spp;*) and bacterial disease (*Streptococcus spp;*) was found at some farm.

NEPAL												
Name of disease	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
DISEASES PREVALENT IN THE REGION												
FINFISH DISEASES												
OIE-listed diseases												
Epizootic haematopoietic necrosis	0000	0000	0000	0000	0000	0000						
Infectious haematopoietic necrosis	0000	0000	0000	0000	0000	0000						
Spring viraemia of carp (SVC)	0000	0000	0000	0000	0000	0000						
Viral haemorrhagic septicaemia (VHS)	0000	0000	0000	0000	0000	0000						
Infection with Aphanomyces invadans (EUS)	-	-	-	0000	0000	0000						
Red seabream iridoviral disease (RSID)	0000	0000	0000	0000	0000	0000						
Koi herpesvirus disease (KHV)	0000	0000	0000	0000	0000	0000						
Non OIE-listed diseases												
Grouper iridoviral disease	0000	0000	0000	0000	0000	0000						
Viral encephalopathy and retinopathy	0000	0000	0000	0000	0000	0000						
Enteric septicaemia of catfish	0000	0000	0000	0000	0000	0000						
MOLLUSC DISEASES												
OIE-listed diseases												
Infection with Bonamia exitiosa	***	***	***	***	***	***						
Infection with Perkinsus olseni	***	***	***	***	***	***						
Infection with abalone herpesvirus	***	***	***	***	***	***						
Infection with Xenohaliotis californiensis	***	***	***	***	***	***						
Infection with ostreid herpesvirus*												
Non OIE-listed diseases												
Infection with Marteilioides chungmuensis	***	***	***	***	***	***						
Acute viral necrosis (in scallops)	***	***	***	***	***	***						
CRUSTACEAN DISEASES												
OIE-listed diseases												
Taura syndrome (TS)	***	***	***	***	***	***						
White spot disease (WSD)	***	***	***	***	***	***						
Yellowhead disease (YHD)	***	***	***	***	***	***						
Infectious hypodermal and haematopoietic necrosis	***	***	***	***	***	***						
Infectious myonecrosis (IMN)	***	***	***	***	***	***						
White tail disease (MrNV)	***	***	***	***	***	***						
Necrotising hepatopancreatitis (NHP)	***	***	***	***	***	***						
Non OIE-listed diseases												
Monodon slow growth syndrome	***	***	***	***	***	***						
Acute hepatopancreatic necrosis disease (AHPND)	***	***	***	***	***	***						
AMPHIBIAN DISEASES												
OIE-listed diseases												
Infection with Ranavirus	***	***	***	***	***	***						
Infection with Batrachochytrium dendrobatidis	***	***	***	***	***	***						
ANY OTHER DISEASES OF IMPORTANCE												
Akoya oyster disease	***	***	***	***	***	***						
Milky haemolymph disease of spiny lobster (Panulirus s	***	***	***	***	***	***						

Nepal

Epizootic ulcerative syndrome (EUS)

1Q

1) seen in rupandehi and Parsa Districts during November. 2) Mostly Indian carps in Those Districts. Same symptoms appear like before month in terai. 4) Eye observation, Sample collection for Lab Test and water quality check-up. 5) 150- 400gm Indian carps. 6) 500 kg lime used and Suprina W.S. 20kg per hac. 7. Disease control after 15 days of chemical treatment. 8) reported 1 Ton loss in Terai. 9) No publications but internally reported.

Others

2Q

This period not seen any kinds of disease. Some small fry and Fingerlings seen mortality due to the cause of oxygen difficiency. Controlled by water exchange and aeration.

3Q

This period not seen any kinds of sevior diseases but in Rupandehi and Bautahat District has seen some disease and ecto parasites which observed in laboratory and eye observation in field. No losses.

Conduct 1 Aquatic animal health campelon in Bautahat District. More than 200 farmers benefited.

NEW CALEDONIA												
Name of disease	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
DISEASES PREVALENT IN THE REGION												
FINFISH DISEASES												
OIE-listed diseases												
Epizootic haematopoietic necrosis	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Infectious haematopoietic necrosis	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Spring viraemia of carp (SVC)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Viral haemorrhagic septicaemia (VHS)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Infection with Aphanomyces invadans (EUS)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Red seabream iridoviral disease (RSID)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Koi herpesvirus disease (KHV)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Non OIE-listed diseases												
Grouper iridoviral disease	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Viral encephalopathy and retinopathy	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Enteric septicaemia of catfish	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
MOLLUSC DISEASES												
OIE-listed diseases												
Infection with Bonamia exitiosa	0000/ -(2013)	0000/ -(2013)	0000/ -(2013)	+	0000/ -(2014)	0000/ -(2014)	0000/ -(2013)	0000/ -(2013)	0000/ -(2013)	+	0000/ -(2014)	0000/ -(2014)
Infection with Perkinsus olseni	-(2013)	-(2013)	-(2013)	+	-(2014)	-(2014)	-(2013)	-(2013)	-(2013)	+	-(2014)	-(2014)
Infection with abalone herpesvirus	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Infection with Xenohaliotis californiensis	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Infection with ostreid herpesvirus*	-(2010)	-(2010)	-(2010)	-(2010)	-(2010)	-(2010)	-(2010)	-(2010)	-(2010)	-(2010)	-(2010)	-(2010)
Non OIE-listed diseases												
Infection with Marteilioides chungmuensis	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Acute viral necrosis (in scallops)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
CRUSTACEAN DISEASES												
OIE-listed diseases												
Taura syndrome (TS)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
White spot disease (WSD)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Yellowhead disease (YHD)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Infectious hypodermal and haematopoietic necrosis (IHHN)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Infectious myonecrosis (IMN)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
White tail disease (MrNV)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Necrotising hepatopancreatitis (NHP)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Non OIE-listed diseases												
Monodon slow growth syndrome	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Acute hepatopancreatic necrosis disease (AHPND)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
AMPHIBIAN DISEASES												
OIE-listed diseases												
Infection with Ranavirus	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Infection with Batrachochytrium dendrobatidis	-(2010)	-(2010)	-(2010)	-(2010)	-(2010)	-(2010)	-(2010)	-(2010)	-(2010)	-(2010)	-(2010)	-(2010)
ANY OTHER DISEASES OF IMPORTANCE												

New Caledonia

Finfish diseases

1Q

Finfish diseases: there is no finfish breeding in New Caledonia so no disease never reported

2Q

Finfish diseases: there is no finfish breeding in New Caledonia so no disease never reported

Mollusc diseases

1Q

A mollusc diseases surveillance is in progress on the only farm of New Caledonia

2Q

A mollusc diseases surveillance is in progress on the only farm of New Caledonia. (samples have been collected and testing are still in progress)

3Q

A mollusc diseases surveillance is in progress on the only farm of New Caledonia (samples have been collected and testing are still in progress)

4Q

The mollusc diseases surveillance conducted on the only oysters farm of New Caledonia gave negative result (by histology) for *Martiella refringens, Perkinsus marinus, Perkinsus olseni, Bonamia exitiosa, Bonamia ostereae*. *OsHV1* was tested by PCR, a few samples gave positive results (with maximum of 1525 UG/ 50mg). No clinical signs have ever been observed in New Caledonia. The spat imported from France with negative result for OsHV1 by PCR. The wild animals tested (*Saccostrea cucullta tuberculata, Saccostrea cucullta echinata, Pinctada margaritifera*) gave negative results.

Infection hypodermal and haematopoietic necrosis (IHHN)

2Q

No IHHNv detected since august 2013

3Q

No IHHNv detected since august 2013 (neither by histology or PCR)

4Q

No IHHNv detected since august 2013 (neither by histology or PCR)

New Zealand												
Name of disease	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
DISEASES PREVALENT IN THE REGION												
FINFISH DISEASES												
OIE-listed diseases												
Epizootic haematopoietic necrosis	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Infectious haematopoietic necrosis	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Spring viraemia of carp (SVC)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Viral haemorrhagic septicaemia (VHS)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Infection with Aphanomyces invadans (EUS)	-2002	-2002	-2002	-(2002)	-(2002)	-(2002)	-2002	-2002	-2002	-(2002)	-(2002)	-(2002)
Red seabream iridoviral disease (RSID)	***	***	***	****	****	****	****	****	****	0000	0000	0000
Koi herpesvirus disease (KHV)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Non OIE-listed diseases												
Grouper iridoviral disease	-2008	-2008	-2008	-(2008)	-(2008)	-(2008)	-2008	-2008	-2008	-(2008)	-(2008)	-(2008)
Viral encephalopathy and retinopathy	+	-	+	+	+	+	+	+	+	+	-	-
Enteric septicaemia of catfish	***	***	***	****	****	****	****	****	****	****	****	****
MOLLUSC DISEASES												
OIE-listed diseases												
Infection with Bonamia exitiosa	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Infection with Perkinsus olseni	0000	0000	0000	0000	0000	0000	0000	0000	0000	****	****	****
Infection with abalone herpesvirus	***	***	***	****	****	****	****	****	****	0000	0000	0000
Infection with Xenohaliotis californiensis	***	***	***	****	****	****	****	****	****	0000	0000	0000
Infection with ostreid herpesvirus*							0000	0000	0000	0000	0000	0000
Non OIE-listed diseases												
Infection with Marteilioides chungmuensis	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Acute viral necrosis (in scallops)	***	***	***	****	****	****	****	****	****	0000	0000	0000
CRUSTACEAN DISEASES												
OIE-listed diseases												
Taura syndrome (TS)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
White spot disease (WSD)	+	+	+	+	+	+	+	+	+	+	+	+
Yellowhead disease (YHD)	-1999	-1999	-1999	-(1999)	-(1999)	-(1999)	-1999	-1999	-1999	-(1999)	-(1999)	-(1999)
Infectious hypodermal and haematopoietic necrosis (IHHN)	+	+	+	+	+	+	+	+	+	+	-	+
Infectious myonecrosis (IMN)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
White tail disease (MrNV)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Necrotising hepatopancreatitis (NHP)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Non OIE-listed diseases												
Monodon slow growth syndrome	***	***	***	****	****	****	****	****	****	****	****	****
Acute hepatopancreatic necrosis disease (AHPND)	?	?	?	?	?	?	? ( )	+ ( )	+ ( )	-	-	+ ( )
AMPHIBIAN DISEASES												
OIE-listed diseases												
Infection with Ranavirus	***	***	***	****	****	****	****	****	****	****	****	****
Infection with Batrachochytrium dendrobatidis	***	***	***	****	****	****	****	****	****	****	****	****
ANY OTHER DISEASES OF IMPORTANCE												

Infection with *Bonamia exitiosa*

1Q

The Bonamia that occurs in New Zealand is *Bonamia exitiosa. Bonamia ostreae* has never been reported in New Zealand. *B. exitiosa* occurs in commercial beds in Foveaux Strait, where it is highly prevalent and associated with mortalities in mid to late summer. It occurs intermittently around the South Island and in Wellington Harbour (bottom of the North Island), and has been previously reported in *Ostrea* sp. from Tauranga, North Island. Annual monitoring of the presence of *B. exitiosa* infection is undertaken in the dredge oyster (*O. chilensis*) population in the Foveaux Strait.

2Q

The *Bonamia* that occurs in New Zealand is *Bonamia exitiosa*. *Bonamia ostreae* has never been reported in New Zealand. *B. exitiosa* occurs in commercial beds in Foveaux Strait, where it is highly prevalent and associated with mortalities in mid to late summer. It occurs intermittently around the South Island and in Wellington Harbour (bottom of the North Island), and has been previously reported in *Ostrea* sp. from Tauranga, The Marlborough Sounds and Wellington Harbour. Annual monitoring of the presence of *B. exitiosa* infection is undertaken in the dredge oyster (*O. chilensis*) population in the Foveaux Strait.

3Q

The Bonamia that occurs in New Zealand is Bonamia exitiosa. Bonamia ostreae has never been reported in New Zealand. B. exitiosa occurs in commercial oyster beds in Foveaux Strait, where it is highly prevalent and associated with mortalities in mid to late summer. It occurs intermittently around the South Island and in Wellington Harbour (bottom of the North Island), and has been previously reported in Ostrea sp. from Tauranga, The Marlborough Sounds and Wellington Harbour. Annual monitoring of the presence of B. exitiosa infection is undertaken in the dredge oyster (O. chilensis) population in the Foveaux Strait.

4Q

The Bonamia that occurs in New Zealand is Bonamia exitiosa. Bonamia ostreae has never been reported in New Zealand. B. exitiosa occurs in commercial oyster beds in Foveaux Strait, where it is highly prevalent and associated with mortalities in mid to late summer. It occurs intermittently around the South Island and in Wellington Harbour (bottom of the North Island), and has been previously reported in Ostrea sp. from Tauranga, The Marlborough Sounds and Wellington Harbour. Annual monitoring of the presence of B. exitiosa infection is undertaken in the dredge oyster (O. chilensis) population in the Foveaux Strait.

Infection of *Perkinsus olseni*

1Q

Perkinsus olseni was detected in New Zealand paua (*Haliotis iris*) in July 2013. This is the first report of P. olseni in this species, and also the first report in farmed animals in New Zealand. *P. olseni* occurs in wild populations of New Zealand cockles, *Austrovenus stutchburyi* (Veneridae) and 3 other bivalve species, *Macomona liliana* (Tellinidae), *Barbatia novae-zelandiae* (Arcidae), and *Paphies australis* (Mesodesmatidae). These mollusc species occur widely around the coast of New Zealand. Affected locations are from Waitemata Harbour (Auckland) northwards. The single infected farm was a semi-closed land-based system in the same region. Clinical signs (mantle retraction in shell) and gross pathology (nodules) were observed in animals greater than 72mm during routine checks and at harvest. Mortality in the affected farm was not elevated.

2Q

Perkinsus olseni was detected in New Zealand abalone (*Haliotis iris*) in July 2013. This was the first report of *P. olseni* in this host species, and also the first report in farmed animals in New Zealand. Mortality in the affected farm was not elevated. In 2014 *P. olseni* was detected in healthy wild abalone. *P olseni* was first detected in New Zealand in wild bivalves in 1986 and is known to occur in populations of four wild bivalve species: New Zealand cockles, *Austrovenus stutchburyi* (Veneridae), *Macomona liliana* (Tellinidae), *Barbatia novae-zelandiae* (Arcidae), and *Paphies australis* (Mesodesmatidae). These mollusc species occur widely around the coast of New Zealand, however, *P. olseni* has only been reported from northern parts of the country and has not been detected south of the Waitemata Harbour (Auckland).

3Q

Perkinsus olseni was detected in New Zealand green lipped mussels (Perna canaliculus), in a land based aquaculture facility in September 2014. This was the first report of P. olseni in this host species, and also the first report in any species in the South Island (the finding was in the Marlborough region). No mortality event was associated with the finding. P. olseni was detected in healthy wild abalone in 2014 and detected in farmed abalone (Haliotis iris) in July 2013. Both these detections were in Northern New Zealand. P olseni is known to occur in populations of four wild bivalve species: New Zealand cockles, Austrovenus stutchburyi (Veneridae), Macomona liliana (Tellinidae), Barbatia novae-zelandiae (Arcidae), and Paphies australis (Mesodesmatidae). These mollusc species occur widely around the coast of New Zealand, but to date P.olseni has only been detected in these species Auckland and northwards.

4Q

Perkinsus olseni was detected in wild New Zealand Scallops (Pecten Novaezealandiae) in November 2014. This was the first report of P. olseni in this host species. Perkinsus olseni was also detected in New Zealand green lipped mussels (Perna canaliculus) in a land based aquaculture facility in September 2014. Both of these the findings were in the Marlborough region, and were incidental and not associated with mortality events. P. olseni was detected in healthy wild abalone (Haliotis iris) in 2014 and detected in farmed abalone in July 2013. Both these detections were in Northern New Zealand. P. olseni is known to occur in populations of four wild bivalve species: New Zealand cockles, Austrovenus stutchburyi (Veneridae), Macomona liliana (Tellinidae), Barbatia novae-zelandiae (Arcidae), and Paphies australis (Mesodesmatidae). These mollusc species occur widely around the coast of New Zealand, but to date P.olseni has only been detected in these species Auckland and northwards.

Infection of ostereid herpesvirus

1Q

In November 2010 the Ministry for Primary Industries (MPI) investigated a syndrome of increased mortality in Pacific oysters (*Crassostrea gigas*) reported to be more severe in younger oysters at warmer water temperatures. Baseline mortality on farms is reported to be between 5 and 10 percent – but during the outbreak, losses of between 50 to 80 percent of all spat (baby oysters) were observed. The die-back was only observed in farmed oysters and has not been found in wild populations, including populations of Bluff oysters (*Ostrea chilensis*). Polymerase chain reaction and DNA sequencing identified the presence of ostreid herpesvirus-1 (OsHV-1) in association with affected farming areas. Identification was further confirmed by repeat molecular testing at an independent reference laboratory in Australia.

2Q

In November 2010 the Ministry for Primary Industries (MPI) investigated a syndrome of increased mortality in Pacific oysters (*Crassostrea gigas*) reported to be more severe in younger oysters at warmer water temperatures. Baseline mortality on farms is reported to be between 5 and 10 percent – but during the outbreak, losses of between 50 to 80 percent of all spat (baby oysters) were observed. The die-back was only observed in farmed oysters and has not been found in wild populations, including populations of Bluff oysters (*Ostrea chilensis*) surveyed in the Foveaux Strait. Polymerase chain reaction and DNA sequencing identified the presence of ostreid herpesvirus-1 (OsHV-1) in association with affected farming areas. Identification was further confirmed by repeat molecular testing at an independent reference laboratory in Australia.

3Q

In November 2010 the Ministry for Primary Industries (MPI) investigated increased mortalities in Pacific oysters (Crassostrea gigas). Mortalities were reported to be more severe in juvenile oysters and associated with warmer water temperatures. The baseline mortality on farms is reported to be between 5 and 10 % – but during the outbreak, losses of between 50 to 80 % of all spat (baby oysters) were observed. The die-back was only observed in farmed pacific oysters and has not been found in wild pacific oyster populations or populations of Bluff oysters (Ostrea chilensis) surveyed in the Foveaux Strait. Polymerase chain reaction and DNA sequencing identified the presence of ostreid herpesvirus-1 (OsHV-1) in association with affected farming areas. Identification was further confirmed by repeat molecular testing at an independent reference laboratory in Australia.

4Q

In November 2010 the Ministry for Primary Industries (MPI) investigated increased mortalities in Pacific oysters (Crassostrea gigas). Mortalities were reported to be more severe in juvenile oysters and associated with warmer water temperatures. The baseline mortality on farms is reported to be between 5 and 10 % – but during the outbreak, losses of between 50 to 80 % of all spat (baby oysters) were observed. The die-back was only observed in farmed pacific oysters and has not been found in wild pacific oyster populations or populations of Bluff oysters (Ostrea chilensis) surveyed in the Foveaux Strait. Polymerase chain reaction and DNA sequencing identified the presence of ostreid herpesvirus-1 (OsHV-1) in association with affected farming areas. Identification was further confirmed by repeat molecular testing at an independent reference laboratory in Australia.

Infection with *Batrachochytrium dendrobatidis*

1Q

The first isolation of *Batrachochytrium dendrobatidis* was made in 1999 in New Zealand. Since then the fungus has been detected both on the North and South Islands in both native and introduced frog species. It is not certain what level of population decline if any, is associated with the presence of the fungus in native frogs.

2Q

The first isolation of *Batrachochytrium dendrobatidis* was made in 1999 in New Zealand. Since then the fungus has been detected both on the North and South Islands in both native and introduced frog species. It is not certain what level of population decline if any, is associated with the presence of the fungus in native frogs.

3Q

The first isolation of Batrachochytrium dendrobatidis was made in 1999 in New Zealand. Since then the fungus has been detected both on the North and South Islands in both native and introduced frog species. It is not certain what level of population decline if any, is associated with the presence of the fungus in native frogs.

4Q

The first isolation of Batrachochytrium dendrobatidis was made in 1999 in New Zealand. Since then the fungus has been detected both on the North and South Islands in both native and introduced frog species. It is not certain what level of population decline if any, is associated with the presence of the fungus in native frogs.

PHILIPPINES												
Name of disease	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
DISEASES PREVALENT IN THE REGION												
FINFISH DISEASES												
OIE-listed diseases												
Epizootic haematopoietic necrosis	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Infectious haematopoietic necrosis	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Spring viraemia of carp (SVC)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Viral haemorrhagic septicaemia (VHS)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Infection with Aphanomyces invadans (EUS)	-2002	-2002	-2002	-(2002)	-(2002)	-(2002)	-2002	-2002	-2002	-(2002)	-(2002)	-(2002)
Red seabream iridoviral disease (RSID)	***	***	***	****	****	****	****	****	****	0000	0000	0000
Koi herpesvirus disease (KHV)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Non OIE-listed diseases												
Grouper iridoviral disease	-2008	-2008	-2008	-(2008)	-(2008)	-(2008)	-2008	-2008	-2008	-(2008)	-(2008)	-(2008)
Viral encephalopathy and retinopathy	+	-	+	+	+	+	+	+	+	+	-	-
Enteric septicaemia of catfish	***	***	***	****	****	****	****	****	****	****	****	****
MOLLUSC DISEASES												
OIE-listed diseases												
Infection with Bonamia exitiosa	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Infection with Perkinsus olseni	0000	0000	0000	0000	0000	0000	0000	0000	0000	****	****	****
Infection with abalone herpesvirus	***	***	***	****	****	****	****	****	****	0000	0000	0000
Infection with Xenohaliotis californiensis	***	***	***	****	****	****	****	****	****	0000	0000	0000
Infection with ostreid herpesvirus*							0000	0000	0000	0000	0000	0000
Non OIE-listed diseases												
Infection with Marteilioides chungmuensis	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Acute viral necrosis (in scallops)	***	***	***	****	****	****	****	****	****	0000	0000	0000
CRUSTACEAN DISEASES												
OIE-listed diseases												
Taura syndrome (TS)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
White spot disease (WSD)	+	+	+	+	+	+	+	+	+	+	+	+
Yellowhead disease (YHD)	-1999	-1999	-1999	-(1999)	-(1999)	-(1999)	-1999	-1999	-1999	-(1999)	-(1999)	-(1999)
Infectious hypodermal and haematopoietic necrosis (IHHN)	+	+	+	+	+	+	+	+	+	+	-	+
Infectious myonecrosis (IMN)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
White tail disease (MrNV)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Necrotising hepatopancreatitis (NHP)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Non OIE-listed diseases												
Monodon slow growth syndrome	***	***	***	****	****	****	****	****	****	****	****	****
Acute hepatopancreatic necrosis disease (AHPND)	?	?	?	?	?	?	? ( )	+ ( )	+ ( )	-	-	+ ( )
AMPHIBIAN DISEASES												
OIE-listed diseases												
Infection with Ranavirus	***	***	***	****	****	****	****	****	****	****	****	****
Infection with Batrachochytrium dendrobatidis	***	***	***	****	****	****	****	****	****	****	****	****
ANY OTHER DISEASES OF IMPORTANCE												

Philippines

Infection with *Aphanomyces invadans* (EUS)

1Q

Sixty (60) samples of *Anguilla* spp. were negative for Infection with Aphanomyces invadans (EUS) by gross morphological examination. Samples were from Bicol and Laguna. Examination was conducted by the Bureau of Fisheries and Aquatic Resources (BFAR) Central Office Fish Health Laboratory.

2Q

One hundred fifty (150) samples of *Anguilla* spp. were negative for Infection with *Aphanomyces invadans* (EUS) by gross morphological examination. Samples were from Pila, Laguna. Examination was conducted by the Bureau of Fisheries and Aquatic Resources (BFAR) Central Office Fish Health Laboratory.

3Q

Eighty eight (88) samples of Anguilla spp. from Pila, Laguna were negative for EUS by gross morphological examination

4Q

Sixty (60) samples of Anguilla spp. were negative for Infection with Aphanomyces invadans (EUS) by gross morphological examination. Samples were from Laguna. Examinations were conducted by the Bureau of Fisheries and Aquatic Resources (BFAR) Central Office Fish Health Laboratory.

Red seabream iridoviral disease (RSID)

1Q

Three (3) samples- (1 *L. calcarifer*, 1 *T. blochii* and 1 *L. argentimaculatus*) were analyzed using PCR test. All samples were negative for Red Seabream Iridoviral Disease. Samples were collected from Sarangani Province. Examination was conducted by SEAFDEC/AQD Laboratory.

3Q

Thirty one (31) samples (4 L.argentimaculatus, 2 T.blochii, 20 grouper and 5 blue cod) were analyzed using PCR test. All samples showed negative results for RSID. Samples were collected from Sorsogon, Sarangani Province and Palawan. Examination was conducted by BFAR Central Office and SEAFDEC/AQD Laboratories.

4Q

Thirty (30) samples (10 E.fuscoguttatus, 15 Trachinotus spp. and 5 blue cod) were analyzed using PCR test. All samples showed negative results for Red Seabream Iridoviral Disease. Samples were collected from Puerto Galera and Palawan. Examinations were conducted by BFAR Central Office Laboratory.

Koi Herpes Virus (KHV)

3Q

Four samples of common carp (Cyprinus carpio) collected from Agusan del Sur showed negative results for KHV. Examination conducted by BFAR Central Office Laboratory.

Viral encephalopathy and retinopathy

1Q

Ten (10) samples- (2 *E. fuscoguttatus*, 5 *S. guttatus*, 1 *L. calcarifer*, 1 *T. blochii*, 1 *L. argentimaculatus*) were

analyzed using PCR test. Three (1 *L. calcarifer*, 1 *E. fuscoguttatus* and 1 *S. guttatus*) showed positive results for Viral Encephalopathy and Retinopathy. The positive samples were collected from Sarangani Province and Iloilo. Examination was conducted by Southeast Asian Fisheries and Development Center / Aquaculture Department (SEAFDEC/AQD) Laboratory.

2Q

Twenty nine (29) samples (8 *Epinephelus* spp, 5 *L. calcarifer*, 5 *T. blochii*, 3 *L. argentimaculatus*, 4 *E. coioides* and 4 *S. guttatus*) were analyzed using PCR test. Twelve (1 *L. calcarifer*, 2 *T. blochii*, 2 *L. argentimaculatus*, 3 *E. coioides* and 4 *S. guttatus*) showed positive results for Viral Encephalopathy and Retinopathy. The positive samples were collected from Sarangani Province and Iloilo. Examination was conducted by BFAR Central Office and SEAFDEC/AQD Laboratories.

3Q

Thirty six (36) samples (1 L.calcarifer, 5 L.argentimaculatus,5 T.blochii, 20 grouper and 5 blue cod) were analyzed using PCR test. Six (1 grouper, 1 L.argentimaculatus, 3 T.blochii, 1 L.calcarifer) showed positive results for VER. The positive samples were collected from Palawan and Iloilo. Examination was conducted by BFAR Central Office and SEAFDEC/AQD Laboratories.

4Q

Thirty (30) samples (10 E.fuscoguttatus, 15 Trachinotus spp. and 5 blue cod) were analyzed using PCR test. One sample of brown Marble Grouper (E.fuscoguttatus) showed positive results for Viral Encephalopathy and Retinopathy. The positive sample was collected from Palawan. Examinations were conducted by BFAR Central Office Laboratory.

Taura syndrome (TS)

1Q

Twenty four (24) samples-(20 *P. vannamei* and 4 *P. monodon*) of different stages (broodstock, adult, fry and juvenile) were analyzed using PCR test. All samples showed negative results for Taura Syndrome. The samples were collected from Bohol and Cebu. Examination was conducted by SEAFDEC/AQD Laboratory.

2Q

Forty eight (48) samples-(47 *P. vannamei* and 1 *P. monodon*) of different stages (broodstock, adult, fry and juvenile) were analyzed using PCR test. All samples showed negative results for Taura Syndrome. The samples were collected from Negros Occidental, Bohol and Cebu. Examination was conducted by SEAFDEC/AQD Laboratory.

3Q

Seventy nine (79) samples-(55 P.vannamei, 18 P.monodon, 2 S.serrata and 4 shrimp) of different stages (broodstock, adult, fry and juvenile) were analyzed using PCR test. All samples showed negative results for Taura Syndrome. The samples were collected from Bohol, Zamboanga City, Cebu, Negros Occidental, Capiz and General Santos City. Examination was conducted by BFAR Central Office and SEAFDEC/AQD Laboratories.

4Q

Seventy five (75) samples-(57 P.vannamei, 17 P.monodon, 1 M.rosenbergii) of different stages (brood stock, adult, fry and juvenile) were analyzed using PCR test. All samples showed negative results for Taura Syndrome. The samples were collected from Zambales, Lanao del Norte, Batangas, Surigao del Sur, Dagupan, Davao del

Sur, Davao del Norte, Bulacan, Catanduanes, Sarangani Province, General Santos, Malabon, Pampanga, Bataan, Camarines Norte and Zamboanga del Norte. Other samples are imported from Hawaii, U.S.A. Examinations were conducted by BFAR Central Office Laboratory.

White spot disease (WSD)

1Q

Five hundred (500) samples of *P. vannamei*, *P. monodon, S. serrata, Metapaneaus* spp.,*M. rosenbergii*, wild shrimps and crabs of different stages (fry, juvenile, adult and brood stock) were tested using PCR. One hundred three (45 *P. vannamei*, 21 *P. monodon* and 2 *Metapenaeus* spp., 7 *M.r osenbergii*, 11 shrimp and 17 crabs) were positive for White Spot Syndrome Virus. The positive samples were from Sarangani, General Santos City, Paranaque City, Zambales, Ilocos, Zamboanga City, Negros Occidental, Negros Oriental, Surigao del Sur, Davao del Sur, Masbate, Iloilo, Aklan, Cebu, Capiz, Agusan del Norte, Maguindanao and Bataan. Examinations were conducted by BFAR Central Office, SEAFDEC/AQD and Negros Prawn Producers Cooperative (NPPC) Laboratories.

2Q

Three hundred fourteen (314) samples of *P. vannamei*, *P. monodon, P. indicus*, *S. serrata*, *M. rosenbergii*, wild shrimp and crabs, of different stages (fry, juvenile, adult and brood stock) were tested using PCR. Fifty seven (18 *P. vannamei*, 36 *P. monodon*, 2 *M. rosenbergii* and 1 wild shrimp) were positive for White Spot Syndrome Virus. The positive samples were from Davao del Sur, Sorsogon, Negros Occidental, Negros Oriental, Sarangani, Tacloban City, Rizal, Iloilo, Aklan, Masbate, Cebu, Misamis Occidental, Bataan and Zamboanga. Examinations were conducted by BFAR Central Office SEAFDEC/AQD Laboratories.

3Q

A total of 648 samples of P.vannamei, P.monodon, S.serrata, wild shrimp and crabs, of different stages (fry, juvenile, adult and brood stock) were tested using PCR. One hundred nine (30 P.vannamei, 66 P.monodon, 2 S.serrata, 6 hermit crab and 5 wild shrimp) were positive for WSD. The positive samples were from Zamboanga City, Bohol, Dapitan, Camarines Sur, Misamis Occidental, Davao del Sur, Bacolod City, Maguindanao, Leyte, Tacloban City, Pangasinan, Daguapan, Iloilo, Negros Occidental, Capiz and Batangas. Examinations were conducted by BFAR Central Office SEAFDEC/AQD and NPPC Laboratories.

4Q

Two hundred sixty five (265) samples of P.vannamei, P.monodon, and M.rosenbergii of different stages (fry, juvenile, adult and brood stock) were tested using PCR. Seventy one (71) were positive for White Spot Syndrome Virus. The positive samples were from Davao Oriental, Leyte, Surigao del Sur, Dagupan, General Santos, Malabon, Bulacan, Pampanga, Bataan, Davao del Sur and Zambales. Examinations were conducted by BFAR Central Office and Negros Prawn Producers Cooperative (NPPC) Laboratories.

Yellowhead disease (YHD)

2Q

Two (2) samples (1 *P. vannamei* and 1 *P. monodon*) in juvenile stage were analyzed using PCR test. All samples showed negative results for Yellowhead Disease. The samples were collected from Bohol and Cebu. Examination was conducted by SEAFDEC/AQD Laboratory.

3Q

Fifty six (56) samples (27 P.vannamei, 23 P.monodon, 2 S.serrata and 4 wild shrimp) in different stages were analyzed using PCR test. All samples showed negative results. The samples were collected from Zamboanga City, Bohol,Cebu, Iloilo, Capiz and General Santos City. Examination was conducted by BFAR Central Office and SEAFDEC/AQD Laboratories.

Infectious hypodermal and haematopoietic necrosis (IHHN)

1Q

One hundred fifty (150) samples of *P. vannamei*, *P. monodon*, *Metapaneaus* spp., *M. rosenbergii* and wild shrimp of different stages (broodstock, adult, fry and juvenile) were analyzed using PCR test. Twelve (6 *P. vannamei,* 5 *P. monodon* and 1 *Metapanaeus* spp.) samples showed positive results for Infectious hypodermal and haematopoietic necrosis (IHHN). The samples were collected from Paranaque City, Ilocos Norte, Surigao del Sur, Zamboanga City, Agusan del Norte and Maguindanao. Examination was conducted by BFAR Central Office and SEAFDEC/AQD Laboratories.

2Q

One hundred thirty one (131) samples of *P. vannamei*, *P. monodon*, *P. indicus* and *M. rosenbergii* of different stages (broodstock, adult, fry and juvenile) were analyzed using PCR test. Twenty seven (14 *P. vannamei*, 11 *P. monodon* and 2 *M. rosenbergii*) samples showed positive results for Infectious hypodermal and haematopoietic necrosis (IHHN). The samples were collected from Sorsgon, Misamis Oriental, Rizal, Iloilo, Aklan, Argao, Cebu, Lanao del Norte, Batangas, Pangasinan and Zamboanga City. Examination was conducted by BFAR Central Office and SEAFDEC/AQD Laboratories.

3Q

A total of 118 samples of P.vannamei, P.monodon, S.serrata, wild shrimp of different stages (broodstock, adult, fry and juvenile) from Zamboanga City, Iloilo and Dapitan were analyzed using PCR test. Fourteen (12 P.monodon and 2 wild shrimp) samples showed positive results. Examination was conducted by BFAR Central Office and SEAFDEC/AQD Laboratories.

Infectious myonecrosis (IMN)

1Q

Thirty three (33) samples-(29 *P. vannamei* and 4 *P. monodon*) of different stages (broodstock, adult, fry and juvenile) were analyzed using PCR test. All samples showed negative results for Infectious myonecrosis (IMNV). The samples were collected from Bohol and Cebu. Examination was conducted by SEAFDEC/AQD Laboratory.

2Q

Forty eight (48) samples (47 *P. vannamei* and 1 *P. monodon*) of different stages (post larvae and juvenile) were analyzed using PCR test. All samples showed negative results for Infectious myonecrosis (IMNV). The samples were collected from Bohol and Cebu and Negros Occidental. Examination was conducted by SEAFDEC/AQD Laboratory.

3Q

A total of 76 samples (55 P.vannamei, 14 P.monodon, 1 P.indicus, 2 S.serrata and 4 shrimp) of different stages from Zamboanga City, Zamboanga Sibugay, Cebu, General Santos City, Negros Occidental, Iloilo and Bohol were analyzed using PCR test. All samples showed negative results... Examination was conducted by

BFAR Central Office and SEAFDEC/AQD Laboratories.

4Q

Sixty five (65) samples (51 P.vannamei, 13 P.monodon, 1 M.rosenbergii) of different stages were analyzed using PCR test. All samples showed negative results for Infectious myonecrosis (IMNV). The samples were collected from Zambales, Lanao del Norte, Batangas, Surigao del Sur, Dagupan, Davao del Sur, Bulacan, Catanduanes, Davao City, Sarangani Province, General Santos, Malabon, Pampanga, Bataan and Camarines Norte. Other samples are imported from Hawaii, U.S.A. Examinations were conducted by BFAR Central Office Laboratory.

Acute hepatopancreatic necrosis disease (AHPND)

1Q

P. vannamei (five pieces) from grow-out pond fixed in Davidson's and sent to the laboratory of Dr. D.V. Lightner was examined histologically. Two shrimp out of five examined presented with heapatopancreas lesions reminiscent of those observed of AHPND/EMS. Due to marginal fixation and lack of parallel samples fixed in 95% ethanol for second confirmatory test the disease could not be confirmed. Other *P. vannamei* samples from grow-out pond (64 days of culture) fixed in Davidson's fixative submitted by shrimp grower to BFAR Fish Health laboratory and sent to Dr. D.V. Lightner was examined histologically, showed signs/possible terminal stage of AHPND. Due to harvest, no available samples were fixed in 95% ethanol for PCR test. Sample collection by BFAR in shrimp producing areas is on-going for bacteriological, histological and PCR examinations.

3Q

P. vannamei samples taken from grow-out pond in Bohol with clinical signs observed such as inappetence, rapid mortality, empty hepatopancreas and white feces showed positive results for AHPND in the PCR test conducted by BFAR VII Fish Health lab. The affected pond was disinfected after emergency harvest.

Some P. vannamei and P. monodon samples collected in selected sites in the province of Bataan. Bulacan and Pampanga in Central Luzon were detected PCR positive for AHPND in the examination conducted by the Department of Biological Science, College of Science, University of Santo Tomas, Manila. Samples sent to other laboratory (Tokyo University of Marine Science and Technology, Japan) for confirmation also showed positive for AHPND. No samples were examined for histology.

4Q

Sixty one (61) samples of P.vannamei, P.monodon, of different stages (fry, juvenile and adult) and polychaete worm were tested using PCR. Ten (4 P.vannamei, 5 P.monodon and 1 polychaete worm) were positive for Acute Hepatocpancreatic Necrosis Disease. The positive samples were from Bulacan, Pampanga, Quezon and Pangasinan. Examinations were conducted by BFAR Central Office Laboratory.

Necrotising hepatopancreatitis (NHP)

3Q

Forty six (46) samples (23 P.vannamei, 19 P.monodon and 4 shrimp) of different stages were analyzed using PCR test. All samples showed negative results. The samples were collected from Zamboanga City, Zamboanga del Sur, Batangas, Pangasinan, Bohol, Zambales and Camarines Sur. Examination was conducted by BFAR Central Office and SEAFDEC/AQD Laboratory.

Singapore												
Name of disease	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
DISEASES PREVALENT IN THE REGION												
FINFISH DISEASES												
OIE-listed diseases												
Epizootic haematopoietic necrosis	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Infectious haematopoietic necrosis	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Spring viraemia of carp (SVC)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Viral haemorrhagic septicaemia (VHS)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Infection with Aphanomyces invadans (EUS)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Red seabream iridoviral disease (RSID)	+	+	+	(2014)	(2014)	(2014)	(2014)	(2014)	(2014)	(2014)	(2014)	(2014)
Koi herpesvirus disease (KHV)	(2012)	(2012)	(2012)	(2012)	(2012)	(2012)	(2012)	(2012)	(2012)	(2012)	(2012)	(2012)
Non OIE-listed diseases												
Grouper iridoviral disease	+	+	(2014)	(2014)	(2014)	(2014)	(2014)	(2014)	(2014)	(2014)	(2014)	(2014)
Viral encephalopathy and retinopathy	+	+	+	+	+	(2014)	+	(2014)	(2014)	(2014)	(2014)	+
Enteric septicaemia of catfish	***	***	***	***	***	***	***	***	***	***	***	***
MOLLUSC DISEASES												
OIE-listed diseases												
Infection with Bonamia exitiosa	***	***	***	***	***	***	***	***	***	***	***	***
Infection with Perkinsus olseni	***	***	***	***	***	***	***	***	***	***	***	***
Infection with abalone herpesvirus	***	***	***	***	***	***	***	***	***	***	***	***
Infection with Xenohaliotis californiensis	***	***	***	***	***	***	***	***	***	***	***	***
Infection with ostreid herpesvirus*							***	***	***	***	***	***
Non OIE-listed diseases	***	***	***	***	***	***						
Infection with Marteilioides chungmuensis	***	***	***	***	***	***	***	***	***	***	***	***
Acute viral necrosis (in scallops)	***	***	***	***	***	***	***	***	***	***	***	***
CRUSTACEAN DISEASES												
OIE-listed diseases												
Taura syndrome (TS)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
White spot disease (WSD)	(2013)	(2013)	(2013)	(2013)	(2013)	(2013)	(2013)	(2013)	(2013)	(2013)	(2013)	(2013)
Yellowhead disease (YHD)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Infectious hypodermal and haematopoietic necrosis	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Infectious myonecrosis (IMN)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
White tail disease (MrNV)	***	***	***	***	***	***	***	***	***	***	***	***
Necrotising hepatopancreatitis (NHP)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Non OIE-listed diseases												
Monodon slow growth syndrome	***	***	***	***	***	***	***	***	***	***	***	***
Acute hepatopancreatic necrosis disease (AHPND)	***	***	***	***	***	***	0000	0000	0000	0000	0000	0000
AMPHIBIAN DISEASES	0000	0000	0000	0000	0000	0000						
OIE-listed diseases												
Infection with Ranavirus							***	***	***	***	***	***
Infection with Batrachochytrium dendrobatidis	***	***	***	***	***	***	(2014)	(2014)	(2014)	(2014)	(2014)	(2014)
ANY OTHER DISEASES OF IMPORTANCE												
Infectious spleen and kidney necrosis virus	+	(2014)	(2014)	+	(2014)	(2014)						
Aeromonas salmonicida (in goldfish)							(2014)	(2014)	(2014)	(2014)	(2014)	(2014)
Akoya oyster disease	+	+	(2014)	+	+	+	0000	0000	0000	0000	0000	0000
Milky haemolymph disease of spiny lobster (Panulirus	0000	0000	0000	0000	0000	0000						

Red seabream iridovirus disease (RSID)

1Q

Red sea bream iridovirus (RSIV) was detected by qPCR and histopathology in 5 differant batches of seabass fingerlings from a landbased seabass nursery. RSIV was last detected in fish from the nursery in June 2013. The fish had been imported every month between November 2013 and March 2014, and co-infection with Big Belly pathogen was observed in earlier batches. Fish with white faecal casts, swollen abdomen and gut necrosis was seen in all 5 batches. In addition to the vaccination of clinically healthy fish, the nursery has implemented additional animal husbandry and management control measures so as to control RSIVD. RSIV has not been detected in farmed marine fish from other farming sites in Singapore.

3Q

Red seabream iridovirus (RSIV) and Infectious spleen and kidney necrosis virus (ISKNV) was not detected in 17 batches of diseased marine food fish this quarter by PCR. Megalocytivirus inclusion bodies were not seen on histopathological examination of organs from these fish. There were no ornamental fish submitted for disease investigations this quarter.

4Q

Red seabream iridovirus (RSIV) and Infectious spleen and kidney necrosis virus (ISKNV) was not detected in 26 batches of diseased marine food fish this quarter by PCR. There were no ornamental fish submitted for disease investigations this quarter.

Koi herpesvirus disaese (KHV)

1Q

Koi herpesvirus (KHV) was not detected in 50 batches of ornamental koi this quarter by qPCR. Fish tested were from surveillance programs on imported and locally farmed ornamental fish.

2Q

Koi herpesvirus (KHV) was not detected in 52 batches of ornamental koi this quarter by qPCR. Fish tested were from surveillance programs on imported and locally farmed ornamental fish.

3Q

Koi herpesvirus (KHV) was not detected in 38 batches of ornamental koi this quarter by qPCR. Fish tested were from surveillance programs on imported and locally farmed ornamental fish. There has been no detection of KHV in all consignments of imported koi and locally farmed koi since September 2012.

4Q

Koi herpesvirus (KHV) was not detected in 43 batches of ornamental koi this quarter by qPCR. Fish tested were from surveillance programs on imported and locally farmed ornamental fish. There has been no detection of KHV in all consignments of imported koi and locally farmed koi for more than 2 years. The last detection was in September 2012.

Infectious spleen and kidney necrosis virus (ISKNV) (marine & ornamental fish)

1Q

Infectious Spleen and Kidney Necrosis Virus (ISKNV) was detected by qPCR and histopathology in a batch of diseased hybrid groupers from a local land-based nursery. The fish had been imported on 4 Nov 2013, and had ulcerated bodies, enlarged spleens, pale kidneys and pus in the abdominal cavity. Infection with Viral

nervous necrosis (VNNV) was confirmed by histopathological findings and PCR in these fish (see comment 4). *Vibrio* spp., *Shewanella putrefaciens* and *Photobacterium damselae* were isolated from the fish.

2Q

Infectious Spleen and Kidney Necrosis Virus (ISKNV) was detected by qPCR and histopathology in a batch of diseased black grouper fingerling from a floating netcage farm with pale gills and no other overt clinical signs. ISKNV was also detected in a batch of diseased mullet and pompano from 2 grow-out farms in March and June, and a batch of pompano fingerlings from a landbased farm in April. There was co-infection with VNNV in these pompano fingerlings, which had darkened bodies and abnormal swimming. Co-infection with Streptococcus agalactiae was observed in the pompano on the grow-out farm, which exhibited abnormal swimming behaviour and no other clinical signs.

Viral encephalopathy and retinopathy

1Q

Viral nervous necrosis virus (VNNV) was detected in a batch of diseased hybrid grouper in January (see comment 3) and a second batch in February. In the same month, VNNV was detected in 4 out of 17 batches of marine fish from coastal fish farms in the west and east Johore Straits, submitted following a fish kill event which started on 8 February. This resulted in estimated mortalities of more than 50% of standing fish stock for all farms. The main species of fish affected by the fish kill were Grouper varieties, Asian seabass and Giant Trevally. Pathology in the gills, kidney and intestines were observed in the Grouper and Seabass examined. VNNV was also detected by PCR and histopathology in one batch of coral trout in March 2014. The fish had been imported in November 2013, weighed ~70g and the farm had experienced 100% mortality in its stock.

2Q

Viral nervous necrosis virus (VNNV) was detected in diseased hybrid grouper and pompano from a landbased farm in April and May respectively via PCR and histopathology. Both batches of fish had abnormal swimming behaviour (spiralling) and darkened bodies.

3Q

Viral nervous necrosis virus (VNNV) was detected in a batch of imported coral grouper from a landbased farm 6 days post-arrival via PCR and histopathology. The fish were clincally healthy and no significant abnormalities were observed on post-mortem examination of the fish. The virus was not detected in 22 batches of diseased marine food fish this quarter.

4Q

Viral nervous necrosis virus (VNNV) was detected via histopathology in a batch of diseased seabass fry from a landbased hatchery with up to 90% mortality observed at onset. All affected and in-contact fry were culled and the hatchery disinfected. Clinical signs suggestive of VNNV infection were seen in a batch of seabass fry from a landbased nursery. These were culled without confirmatory testing. A batch of diseased juvenile black grouper from a floating net cage farm was found to be infected with VNNV via RT-PCR and histopathology. The virus was not detected in 15 batches of diseased marine food fish submitted this quarter.

White spot disease (WSD)

1Q

White spot syndrome virus (WSSV) was not detected by qPCR in 28 batches of ornamental crustaceans submitted from targeted surveillance programs and in approximately 141 Litopaneus vannamei submitted from a local broodstock farm this quarter.

2Q

White spot syndrome virus (WSSV) was not detected by qPCR in 9 batches of ornamental crustaceans submitted from targeted surveillance programs, 1 batch of crabs from a disease investigation and in approximately 190 *Litopaneus vannamei* submitted from a local broodstock farm this quarter.

3Q

White spot syndrome virus (WSSV) was not detected by qPCR in 14 batches of ornamental crustaceans (shrimp and crayfish) submitted from targeted surveillance programs, and in 320 Litopaneus vannamei submitted from a local broodstock farm this quarter.

4Q

White spot syndrome virus (WSSV) was not detected by qPCR in 16 batches of imported and locally farmed ornamental crustaceans (shrimp and crayfish) submitted from targeted surveillance programs, and in 125 Litopaneus vannamei submitted from a local broodstock farm this quarter.

Infection with *Batrachochytrium dendrobatidis*

1Q

Two hundred and twenty-two samples of frog skin swabs (both pooled and individual) submitted between 4 Jun 2013 and 22 Apr 2014 were tested for *Batrachochytrium dendrobatidis* (Bd) by qPCR (Hyatt et al., 2007). Samples were submitted from a zoological collection, and 5 local frog farms and traders. *Batrachochytrium dendrobatidis* (Bd) DNA was detected in 59 out of 222 samples by qPCR, and was not detected in 162 out of 222 samples by qPCR. Indeterminate result was obtained with 1 sample. Samples in which Bd DNA were detected were obtained from bullfrogs that were imported for human consumption. *Batrachochytrium dendrobatidis* was not detected in samples taken from locally farmed bullfrogs.

2Q

Batrachochytrium dendrobatidis (Bd) was detected by qPCR in 1 out of 2 batches of imported bullfrogs, but not in 1 batch of locally farmed bull frogs, from samples submitted in April as part of the validation process for the qPCR, as reported in the previous quarter. There were no swab samples submitted for Bd qPCR in May and June.

3Q

Batrachochytrium dendrobatidis (Bd) was not detected by qPCR in all 3 batches of imported ornamental frogs and 1 batch of local food frogs from landbased farms this quarter.

4Q

Batrachochytrium dendrobatidis (Bd) was not detected by qPCR in 1 batch of imported ornamental frogs this quarter.

Aeromonas salmonicida (in goldfish)

1Q

Aeromonas salmonicida was not detected this quarter in 13 batches of goldfish submitted under a targeted surveillance program for goldfish exported to Australia.

2Q

Aeromonas salmonicida was not detected this quarter in 3 batches of goldfish submitted under a targeted surveillance program for goldfish exported to Australia.

3Q

Aeromonas salmonicida was not detected this quarter in 15 batches of goldfish submitted under a targeted surveillance program to meet Australia's export requirements. As A. salmonicida has not been detected in 149 batches of goldfish since surveillance for this pathogen started in 2010, sampling numbers for this pathogen will be reduced from 60 to 30 goldfish per batch at an assumed prevalence of 10%, as of December 2014.

4Q

Aeromonas salmonicida was not detected in 2 batches of goldfish submitted under a targeted surveillance program to meet Australia's import requirements this quarter.

Sri Lanka												
Name of disease	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
DISEASES PREVALENT IN THE REGION												
FINFISH DISEASES												
OIE-listed diseases												
Epizootic haematopoietic necrosis	***	***	***	***	***	***	***	***	***	***	***	***
Infectious haematopoietic necrosis	***	***	***	***	***	***	***	***	***	***	***	***
Spring viraemia of carp (SVC)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Viral haemorrhagic septicaemia (VHS)	***	***	***	***	***	***	***	***	***	***	***	***
Infection with Aphanomyces invadans (EUS)	***	***	***	***	***	***	***	***	***	***	***	***
Red seabream iridoviral disease (RSID)	***	***	***	***	***	***	***	***	***	***	***	***
Koi herpesvirus disease (KHV)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Non OIE-listed diseases												
Grouper iridoviral disease	***	***	***	***	***	***	***	***	***	***	***	***
Viral encephalopathy and retinopathy	***	***	***	***	***	***	***	***	***	***	***	***
Enteric septicaemia of catfish	***	***	***	***	***	***	***	***	***	***	***	***
MOLLUSC DISEASES												
OIE-listed diseases												
Infection with Bonamia exitiosa	***	***	***	***	***	***	***	***	***	***	***	***
Infection with Perkinsus olseni	***	***	***	***	***	***	***	***	***	***	***	***
Infection with abalone herpesvirus	***	***	***	***	***	***	***	***	***	***	***	***
Infection with Xenohaliotis californiensis	***	***	***	***	***	***	***	***	***	***	***	***
Infection with ostreid herpesvirus*	***	***	***	***	***	***	***	***	***	***	***	***
Non OIE-listed diseases												
Infection with Marteilioides chungmuensis	***	***	***	***	***	***	***	***	***	***	***	***
Acute viral necrosis (in scallops)	***	***	***	***	***	***	***	***	***	***	***	***
CRUSTACEAN DISEASES												
OIE-listed diseases												
Taura syndrome (TS)	***	***	***	***	***	***	***	***	***	***	***	***
White spot disease (WSD)	+()	+()	+()	+()	+()	+()	+()	+()	+()	+()	+()	+()
Yellowhead disease (YHD)	?()	?()	?()	?()	?()	?()	?()	?()	?()	?()	?()	?()
Infectious hypodermal and haematopoietic necrosis	?()	?()	?()	?()	?()	?()	?()	?()	?()	?()	?()	?()
Infectious myonecrosis (IMN)	***	***	***	***	***	***	***	***	***	***	***	***
White tail disease (MrNV)	***	***	***	***	***	***	***	***	***	***	***	***
Necrotising hepatopancreatitis (NHP)	***	***	***	***	***	***	***	***	***	***	***	***
Non OIE-listed diseases												
Monodon slow growth syndrome	***	***	***	***	***	***	***	***	***	***	***	***
Acute hepatopancreatic necrosis disease (AHPND)	***	***	***	***	***	***	***	***	***	***	***	***
AMPHIBIAN DISEASES												
OIE-listed diseases												
Infection with Ranavirus	***	***	***	***	***	***	***	***	***	***	***	***
Infection with Batrachochytrium dendrobatidis	***	***	***	***	***	***	***	***	***	***	***	***
ANY OTHER DISEASES OF IMPORTANCE												
Laem singh virus disease (LSV)	?()	?()	?()	?()	?()	?()	?()	?()	?()	?()	?()	?()
Monodon Baculovirus disease (MBV)	?()	?()	?()	+()	?()	?()	?()	?()	?()	+()	?()	?()

Epizootic haematopoietic necrosis

3Q

PCR has been established for EHN at Central Veterinary Investigation Center (CVIC) at Veterinary Research Institute.

Spring viraemia of carp (SVC)

1Q

A total no. of 42 samples including guppy -19, Koi carp -07 Carp -13, Molly -03 were tested at Veterinary Research Institute (VRI) and all the samples gave negative reaction. There were from export and import samples.

2Q

At the Veterinary Research Institute (VRI) during three months period 54 nos. of samples including Carp 06, Guppy 32, Koi carp 10 & Gold fish 02 were tested for Spring Viraemia of carp & all the samples gave negative results. There were the export Samples from Western and import Samples from Western, North western and Cebtral provinces

3Q

For SVC 70 nos. of export and import samples (carp-33, Guppy-25, platy-03, Gold fish-09) have been tested at CVIC by PCR and all gave negative reaction. Surveillance were carried out in 35 nos. of Gold fish from fish breeding station ((Rambodagalla, Panagamuwa) belonging to National Aquaculture Development Authority and found negative.

4Q

A total number of 101 samples were tested at CVIC for Spring Viraemia of carp. Samples include 23 no. of carps, 74 no. of guppy and 04 no. of platy. Testing has been carried out during the months of October and November and all gave negative result.

Red seabream iridoviral disease

1Q

CVIC is in the process of establishing the testing facility for RSID.

Koi herpesvirus disease (KHV)

1Q

Testing of export and import samples have been carried out in VRI and Centre for Aquatic Disease Diagnosis and Research (CADDAR). 21 nos of carps and 05 nos of guppies were tested and all were found negative.

2Q

Testing of export and import samples have been carried out in VRI and Centre for Aquatic Disease Diagnosis and Research (CADDAR). A total no. of 40 samples including 06 nos of carps, 20 nos of koi carp, 04 nos of sword tail and 10 nos. of gold fish were tested and all were found negative. These samples were received from North western, Western and Central provinces.

3Q

For KHV 80 samples were tested and all the samples found negative by PCR. It includes carp-45, koi-carp-05 guppy-17, goldfish-10 and platy-03. The testing has been carried out in CCVIC and Center for Aquatic Disease Diagnosis and Research (CADDAR)

4Q

For KHV 55 samples were tested and all the samples found negative by PCR. It includes carp-32, guppy-29.

The testing has been carried out in CCVIC and Center for Aquatic Disease Diagnosis and Research (CADDAR)

White spot disease (WSD)

1Q

During three months period 568 nos. of samples gave positive reaction out of 998 samples by PCR. Testing has been carried out in the laboratories of NARA and National Aquaculture Development Authority (NAQDA). Spp. *P. monodon* in North Western province.

2Q

A total no. of 998 samples were tested for White spot and 530 samples were positive by PCR. Testing has been carried out in the laboratories of National Aquatic resource and research Agency (NARA) and National Aquaculture Development Authority (NAQDA) and CADDAR. Spp. *P. monodon*. Samples from North Western province.

3Q

A total no. of 1382 samples were tested for WSSV the laboratories of National Aquatic resource and research Agency (NARA) and National Aquaculture Development Authority (NAQDA) and CADDAR and 283 samples were found positive. Spp. *P. monodon.*

4Q

Testing has been carried out for WSSV in the laboratories of National Aquatic Resources Research and Development Agency (NARA) and National Aquaculture Development Authority (NAQDA) and 102 samples were found positive out of 437 samples. Spp. *P. monodon.*

Yellow head disease (YHD)

1Q

24 samples of *P. monodon* have been tested in the laboratory of NARA and none of the samples gave positive reaction.

2Q

30 samples of *P. monodon* have been tested in the laboratory of NARA for YHD and none of the samples gave positive reaction.

3Q

None of the sample gave positive reaction out of 45 samples for YHD. Testing has been carried out by PCR in the laboratory of NARA. Spp. *P. monodon.*

4Q

None of the sample gave positive reaction out of 36 samples for YHD. Testing has been carried out by PCR in the laboratory of NARA. Spp. *P. monodon.*

Infectious hypodermal and hematopoietic necrosis (IHHN)

1Q

There were no positive reaction detected out of 24 samples. Spp. *P. monodon.* Testing was carried out in the laboratory of NARA.

2Q

There were no positive reaction detected for IHHN out of 30 samples. Spp. *P. monodon.* Testing was carried out in the laboratory of NARA.

3Q

During three months period no positive reaction were detected for IHHNV by PCR. 45 no. of samples have been tested in the laboratory of NARA. Spp. *P. monodon.*

4Q

During three months period no positive reaction were detected for IHHNV by PCR. 36 no. of samples have been tested in the laboratory of NARA. Spp. *P. monodon.*

Laem singh virus disease (LSV)

1Q

In the laboratory of NARA 24 samples have been tested and no sample were found positive. Spp. *P. monodon*.

2Q

In the laboratory of NARA 30 samples have been tested for LSV and no sample were found positive. Spp. *P. monodon*.

3Q

During three months period 36 no. of samples were tested for LSV and found negative.

4Q

During three months period 36 no. of samples were tested for LSV and found negative.

Monodon Baclovirus disease (MBV)

1Q

There were no positive reaction detected out of 40 samples. Spp. P. monodon. Testing was carried out in the laboratory of NARA and NAQDA.

2Q

During three months period 34 samples have been tested. In the month of April only one positive reaction detected by PCR. Spp. *P. monodon*. Testing was carried out in the laboratory of NARA and NAQDA.

3Q

A total of 45 samples have been tested for MBV and was found negative by PCR. Spp. *P. monodon.* Laboratories of NARA and NAQDA performed this testing.

4Q

A total of 36 samples have been tested for MBV and it was found negative by PCR. Spp. *P. monodon.* The testing has been carried out in the laboratories of NARA.

Epizootic Haematopoietic Necrosis Virus (EHNV)

4Q

PCR has been establiushed for EHN at Central Veterinary Investigation Center (CVIC) at Veterinary Research Institute (VRI)

Megalocytivirus

4Q

PCR technique has been developed for Megalocytivirus in CVIC

THAILAND												
Name of disease	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
DISEASES PREVALENT IN THE REGION												
FINFISH DISEASES												
OIE-listed diseases												
Epizootic haematopoietic necrosis	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Infectious haematopoietic necrosis	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Spring viraemia of carp (SVC)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Viral haemorrhagic septicaemia (VHS)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Infection with Aphanomyces invadans (EUS)	(2009)	(2009)	(2009)	(2009)	(2009)	(2009)	(2009)	(2009)	(2009)	(2009)	(2009)	(2009)
Red seabream iridoviral disease (RSID)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Koi herpesvirus disease (KHV)	(2011)	(2011)	(2011)	(2011)	(2011)	(2011)	(2011)	(2011)	(2011)	(2011)	(2011)	(2011)
Non OIE-listed diseases												
Grouper iridoviral disease	***	***	***	***	***	***	***	***	***	***	***	***
Viral encephalopathy and retinopathy	-	-	-	-	-	-	-	-	-	-	-	-
Enteric septicaemia of catfish	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
MOLLUSC DISEASES												
OIE-listed diseases												
Infection with Bonamia exitiosa	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Infection with Perkinsus olseni	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Infection with abalone herpesvirus	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Infection with Xenohaliotis californiensis	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Infection with ostreid herpesvirus*	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Non OIE-listed diseases												
Infection with Marteilioides chungmuensis	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Acute viral necrosis (in scallops)	***	***	***	***	***	***	***	***	***	***	***	***
CRUSTACEAN DISEASES												
OIE-listed diseases												
Taura syndrome (TS)	-	+()	-	-	-	-	-	-	-	-	-	-
White spot disease (WSD)	+()	+()	+()	-	-	+()	-	+()	-	-	-	+()
Yellowhead disease (YHD)	+()	+()	+()	-	-	+()	-	+()	+()	-	-	+()
Infectious hypodermal and haematopoietic necrosis (IHHN)	+()	+()	+()	-	-	-	+()	+()	-	-	-	-
Infectious myonecrosis (IMN)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
White tail disease (MrNV)	-	-	-	-	-	-	-	-	-	-	-	-
Necrotising hepatopancreatitis (NHP)	***	***	***	***	***	***	***	***	***	***	***	***
Non OIE-listed diseases												
Monodon slow growth syndrome	***	***	***	***	***	***	***	***	***	***	***	***
Acute hepatopancreatic necrosis disease (AHPND)	-	+()	+()	+()	+()	+()	***	***	***	+()	+()	+()
AMPHIBIAN DISEASES												
OIE-listed diseases												
Infection with Ranavirus	(2011)	(2011)	(2011)	(2011)	(2011)	(2011)	(2011)	(2011)	(2011)	(2011)	(2011)	(2011)
Infection with Batrachochytrium dendrobatidis	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
ANY OTHER DISEASES OF IMPORTANCE												

Thailand

Taura Syndrome (TS)

1Q

A total of 687 shrimp samples from shrimp farms had been tested at PCR Laboratories of the DOF under active surveillance. 3 specimens or 0.44% recorded as PCR positive or carrying TSV genes. Shrimp farm with positive testing results is subjected to health improvement, movement control, eradication and /or farm disinfection.

White spot disease (WSD)

1Q

A total of 729 shrimp samples from shrimp farms had been tested at PCR Laboratories of the DOF under active surveillance.11 specimens or 1.51% recorded as PCR positive or carrying WSSV genes. Shrimp farm with positive testing results is subjected to health improvement, movement control, eradication and /or farm disinfection.

2Q

A total of 623 shrimp samples from shrimp farms had been tested at PCR laboratories of the DOF under active surveillance. 5 specimens or 0.8% recorded as PCR positive or carrying WSSV genes. Shrimp farm with positive testing results is subjected to health improvement, movement control, eradication and /or farm disinfection.

4Q

A total of 254 shrimp samples from shrimp farms had been tested at PCR Laboratories of the DOF under active surveillance. 1 specimens or 0.39 % recorded as PCR positive or carrying WSSV genes. Shrimp farm with positive testing results is subjected to health improvement, movement control, eradication and/or farm disinfection.

Yellowhead disease (YHD)

1Q

A total of 732 shrimp samples from shrimp farms had been tested at PCR Laboratories of the DOF under active surveillance. 21 specimens or 2.87% recorded as RT-PCR positive or carrying YHV genes. Shrimp farm with positive testing results is subjected to health improvement, movement control, eradication and /or farm disinfection.

2Q

A total of 678 shrimp samples from shrimp farms had been tested at PCR Laboratories of the DOF under active surveillance. 9 specimens or 1.33% recorded as RT-PCR positive or carrying YHV genes. Shrimp farm with positive testing results is subjected to health improvement, movement control, eradication and /or farm disinfection.

4Q

A total of 216 shrimp samples from shrimp farms had been tested at PCR Laboratories of the DOF under active surveillance. 3 specimens or 1.39 % recorded as RT-PCR positive or carrying YHV genes. Shrimp farm

with positive testing results is subjected to health improvement, movement control, eradication and/or farm disinfection.

Infectious hypodermal and haematopoietic necrosis (IHHN)

1Q

A total of 875 shrimp samples from shrimp farms had been tested at PCR Laboratories of the DOF under active surveillance. 33 specimens or 3.77% recorded as PCR positive or carrying IHHNV genes. Shrimp farm with positive testing results is subjected to health improvement, movement control, eradication and /o r farm disinfection.

2Q

A total of 819 shrimp samples from shrimp farms had been tested at PCR Laboratories of the DOF under active surveillance. 6 specimens or 0.73% recorded as PCR positive or carrying IHHNV genes. Shrimp farm with positive testing results is subjected to health improvement, movement control, eradication and /o r farm disinfection.

Acute hepatopancreatic necrosis disease (AHPND)

1Q

A total of 511 shrimp samples from shrimp farms had been tested at PCR Laboratories of the DOF under active surveillance. 9 specimens or 1.76% recorded AHPND positives. Shrimp farm with positive testing results is subjected to health improvement, movement control, eradication and /or farm disinfection.

4Q

A total of 1,568 shrimp samples from shrimp farms had been tested by PCR assay at the DOF's laboratories under active surveillance, 256 specimens or 16.33 % recorded as PCR positive for AHPND. Shrimp farms with positive testing results have been subjected to shrimp health management control and pond improvement.

VANUATU												
Name of disease	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
DISEASES PREVALENT IN THE REGION												
FINFISH DISEASES												
OIE-listed diseases												
Epizootic haematopoietic necrosis				0000	0000	0000				0000	0000	0000
Infectious haematopoietic necrosis				0000	0000	0000				0000	0000	0000
Spring viraemia of carp (SVC)				0000	0000	0000				0000	0000	0000
Viral haemorrhagic septicaemia (VHS)				0000	0000	0000				0000	0000	0000
Infection with Aphanomyces invadans (EUS)				0000	0000	0000				0000	0000	0000
Red seabream iridoviral disease (RSID)				***	***	***				***	***	***
Koi herpesvirus disease (KHV)				0000	0000	0000				0000	0000	0000
Non OIE-listed diseases												
Grouper iridoviral disease				0000	0000	0000				0000	0000	0000
Viral encephalopathy and retinopathy				0000	0000	0000				0000	0000	0000
Enteric septicaemia of catfish				0000	0000	0000				0000	0000	0000
MOLLUSC DISEASES												
OIE-listed diseases												
Infection with Bonamia exitiosa				0000	0000	0000				0000	0000	0000
Infection with Perkinsus olseni				***	***	***				***	***	***
Infection with abalone herpesvirus				0000	0000	0000				0000	0000	0000
Infection with Xenohaliotis californiensis				0000	0000	0000				0000	0000	0000
Infection with ostreid herpesvirus*				0000	0000	0000				0000	0000	0000
Non OIE-listed diseases												
Infection with Marteilioides chungmuensis				0000	0000	0000				0000	0000	0000
Acute viral necrosis (in scallops)				0000	0000	0000				0000	0000	0000
CRUSTACEAN DISEASES												
OIE-listed diseases												
Taura syndrome (TS)				0000	0000	0000				0000	0000	0000
White spot disease (WSD)				0000	0000	0000				0000	0000	0000
Yellowhead disease (YHD)				0000	0000	0000				0000	0000	0000
Infectious hypodermal and haematopoietic necrosis				0000	0000	0000				0000	0000	0000
Infectious myonecrosis (IMN)				0000	0000	0000				0000	0000	0000
White tail disease (MrNV)				0000	0000	0000				0000	0000	0000
Necrotising hepatopancreatitis (NHP)				0000	0000	0000				0000	0000	0000
Non OIE-listed diseases												
Monodon slow growth syndrome				0000	0000	0000				0000	0000	0000
Acute hepatopancreatic necrosis disease (AHPND)				0000	0000	0000				0000	0000	0000
AMPHIBIAN DISEASES												
OIE-listed diseases												
Infection with Ranavirus				0000	0000	0000				0000	0000	0000
Infection with Batrachochytrium dendrobatidis				0000	0000	0000				0000	0000	0000
ANY OTHER DISEASES OF IMPORTANCE												

VIET NAM												
Name of disease	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
DISEASES PREVALENT IN THE REGION												
FINFISH DISEASES												
OIE-listed diseases												
Epizootic haematopoietic necrosis	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Infectious haematopoietic necrosis	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Spring viraemia of carp (SVC)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Viral haemorrhagic septicaemia (VHS)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Epizootic ulcerative syndrome (EUS)	-	-	-	-	-	-	-	-	-	-	-	-
Red seabream iridoviral disease (RSID)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Koi herpesvirus disease (KHV)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Non OIE-listed diseases												
Grouper iridoviral disease	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Viral encephalopathy and retinopathy	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Enteric septicaemia of catfish	-	-	-	-	-	-	-	-	-	-	-	-
MOLLUSC DISEASES												
OIE-listed diseases												
Infection with *Bonamia exitiosa*	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Infection with *Perkinsus olseni*	-	-	-	-	-	-	-	-	-	-	-	-
Infection with abalone herpesvirus	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Infection with *Xenohaliotis californiensis*	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Non OIE-listed diseases												
Infection with *Marteilioides chungmuensis*	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Acute viral necrosis (in scallops)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Akoya oyster disease	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
CRUSTACEAN DISEASES												
OIE-listed diseases												
Taura syndrome (TS)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
White spot disease (WSD)	+	+	+	+	+	+	+	+	+	+	+	+
Yellowhead disease (YHD)	-	-	+	+	+	+	+	+	+	+	+	+
Infectious hypodermal and haematopoietic necrosis	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Infectious myonecrosis (IMN)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
White tail disease (MrNV)	-	-	-	-	-	-	-	-	-	-	-	-
Necrotising hepatopancreatitis (NHP)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Non OIE-listed diseases												
Milky haemolymph disease of spiny lobster	-	-	-	-	-	-	-	-	-	-	-	-
Monodon slow growth syndrome	-	-	-	-	-	-	-	-	-	-	-	-
Acute hepatopancreatic necrosis syndrome (AHPNS)	+	+	+	+	+	+	+	+	+	+	+	+
AMPHIBIAN DISEASES												
OIE-listed diseases												
Infection with Ranavirus	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Infection with *Batrachochytrium dendrobatidis*	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
ANY OTHER DISEASES OF IMPORTANCE												
1												
2												

White spot disease (WSD)

1Q

Pathogen: White Spot Syndrome Virus (WSSV).

Affected species: black tiger shrimp (*Penaeus monodon*) and white leg shrimp (*Litopeneaus vannamei*).

The disease was reported in 17 provinces, including Hai Phong, Nghe An, Ha Tinh, Quang Tri, Quang Binh, Quang Ngai, Thua Thien Hue, Phu Yen, Binh Dinh, Ho Chi Minh, Tien Giang, Ben Tre, Tra Vinh, Dong Nai, Kien Giang, Soc Trang, and Ca Mau. Shrimps were affected from 11-75 days after stocking in the total areas of 3,210 ha.

Mortality rate: average to high, in some cases 100% after 10 days.

Clinical signs: Lethargic or moribund shrimps aggregated at the pond surfaces or edges, slow to erratic swimming behavior. The color of shrimps became reddish. Minute to large (0.5-2 mm diameter) white spots embedded in the cuticle layers.

Control measures: Early harvest, strict isolation applied to infected ponds from movement; strengthening control of transportation. Disinfection of infected ponds by calcium hypochlorite (chlorine).

2Q

Pathogen: White Spot Syndrome Virus (WSSV).

Affected species: black tiger shrimp (*Penaeus monodon*) and white leg shrimp (*Litopeneaus vannamei*).

The disease was reported in 18 provinces, including Hai Phong, Quang Ninh, Nghe An, Ha Tinh, Quang Tri, Quang Binh, Quang Ngai, Thua Thien Hue, Phu Yen, Binh Dinh, Ho Chi Minh, Long An, Tien Giang, Ben Tre, Tra Vinh, Soc Trang, Bac Lieu and Ca Mau. Shrimps were affected from 10-85 days after stocking in the total areas of 7,279 ha.

Mortality rate: average to high, in some cases 100% after 10 days.

Clinical signs: Lethargic or moribund shrimps aggregated at the pond surfaces or edges, slow to erratic swimming behavior. The color of shrimps became reddish. Minute to large (0.5-2 mm diameter) white spots embedded in the cuticle layers.

Control measures: Early harvest, strict isolation applied to infected ponds from movement; strengthening control of transportation. Disinfection of infected ponds by calcium hypochlorite (chlorine).

3Q

Pathogen: White Spot Syndrome Virus (WSSV).

Affected species: black tiger shrimp (Penaeus monodon) and white leg shrimp (Litopeneaus vannamei).

The disease was reported in 15 provinces, including Quang Ninh, Nghe An, Quang Binh, Phu Yen, Khanh Hoa, Binh Dinh, Ho Chi Minh, Long An, Tien Giang, Ben Tre, Tra Vinh, Kien Giang, Soc Trang, Bac Lieu and Ca Mau. Shrimps were affected from 10-100 days after stocking in the total areas of 5,638 ha.

Mortality rate: average to high, in some cases 100% after 10 days.

Clinical signs: Lethargic or moribund shrimps aggregated at the pond surfaces or edges, slow to erratic swimming behaviour. The colour of shrimps became reddish. Minute to large (0.5-2 mm diameter) white spots embedded in the cuticle layers.

Control measures: Early harvest, strict isolation applied to infected ponds from movement; strengthening control of transportation. Disinfection of infected ponds by calcium hypochlorite (chlorine).

4Q

Pathogen: White Spot Syndrome Virus (WSSV).

Affected species: black tiger shrimp (Penaeus monodon) and white leg shrimp (Litopeneaus vannamei).
The disease was reported in 12 provinces, including Nghe An, Quang Binh, Binh Dinh, Ba Ria-Vung Tau, Ho Chi Minh, Long An, Tien Giang, Ben Tre, Tra Vinh, Soc Trang, Bac Lieu and Ca Mau. Shrimps were affected from 10-100 days after stocking in the total areas of 3433 ha.
Mortality rate: average to high, in some cases 100% after 10 days.
Clinical signs: Lethargic or moribund shrimps aggregated at the pond surfaces or edges, slow to erratic swimming behaviour. The colour of shrimps became reddish. Minute to large (0.5-2 mm diameter) white spots embedded in the cuticle layers.
Control measures: Early harvest, strict isolation applied to infected ponds from movement; strengthening control of transportation. Disinfection of infected ponds by calcium hypochlorite (chlorine).

Yellowhead disease (YHD)

1Q

Pathogen: Yellowhead Virus (YHV).
Affected species: white leg shrimp (*Litopeneaus vannamei*)
The disease was reported in Quang Tri province with 1.42 ha affected.
Clinical signs: Shrimps suddenly showed increasing feeding ability and abnormal growth, then they lost appetite, aggregated near the surfaces or at the edges of the ponds and followed by mortalities. The bodies were discolored; the cephalothorax hepatopancreas were swollen and turned into yellowish or brown. The tissues of most organizations (including gill, hepatopancreas and gut epidermis) were necrotic; the cell nuclears were degenerated to condense or broken into many specimens.
Shrimps were most susceptible at the age of 20-70 days (no infection in shrimp under 15 days old). The fast transmission speed was seen in shrimps aged from 20-30 days, the mortality rate could reach 100% in a period of 2-5 day infection
Control measures: disinfection and discharge of contaminated water, movement and transportation control.

2Q

Pathogen: Yellowhead Virus (YHV).
Affected species: white leg shrimp (*Litopeneaus vannamei*.
The disease was reported in Quang Tri, Thua Thien Hue and Bac Lieu province with 35.67 ha affected.
Clinical signs: Shrimps suddenly showed increasing feeding ability and abnormal growth, then they lost appetite, aggregated near the surfaces or at the edges of the ponds and followed by mortalities. The bodies were discoloured, the cephalothorax hepatopancreas were swollen and turned into yellowish or brown. The tissues of most organizations (including gill, hepatopancreas, gut epidermis) were necrotic, the cell nuclears were degenerated to condense or broken into many specimens.
Shrimps were most susceptible at the age of 20-70 days (no infection in shrimp under 15 days old). The fast transmission speed was seen in shrimps aged from 20-30 days, the mortality rate could reach 100% in a period of 2-5 day infection
Control measures: disinfection and discharge of contaminated water, movement and transportation control.

3Q

Pathogen: Yellowhead Virus (YHV).
Affected species: white leg shrimp (Litopeneaus vannamei.

The disease was reported in Ho Chi Minh and Bac Lieu province with 19.3 ha affected.

Clinical signs:Shrimps suddenly showed increasing feeding ability and abnormal growth, then they lost appetite, aggregated near the surfaces or at the edges of the ponds and followed by mortalities. The bodies were discoloured, the cephalothorax hepatopancreas were swollen and turned into yellowish or brown. The tissues of most organizations (including gill, hepatopancreas, gut epidermis) were necrotic, the cell nuclears were degenerated to condense or broken into many specimens.

Shrimps were most susceptible at the age of 20-70 days (no infection in shimp under 15 days old). The fast transmission speed was seen in shrimps aged from 20-30 days, the mortality rate could reach 100% in a period of 2-5 day infection

Control measures: disinfection and discharge of contaminated water, movement and transportation control.

4Q

Pathogen: Yellowhead Virus (YHV).

Affected species: white leg shrimp (Litopeneaus vannamei.

The disease was reported in Bac Lieu province with 2 ha affected.

Clinical signs:Shrimps suddenly showed increasing feeding ability and abnormal growth, then they lost appetite, aggregated near the surfaces or at the edges of the ponds and followed by mortalities. The bodies were discoloured, the cephalothorax hepatopancreas were swollen and turned into yellowish or brown. The tissues of most organizations (including gill, hepatopancreas, gut epidermis) were necrotic, the cell nuclears were degenerated to condense or broken into many specimens.

Shrimps were most susceptible at the age of 20-70 days (no infection in shimp under 15 days old). The fast transmission speed was seen in shrimps aged from 20-30 days, the mortality rate could reach 100% in a period of 2-5 day infection

Control measures: disinfection and discharge of contaminated water, movement and transportation control.

Acute hepatopancreatic necrosis syndrome (AHPNS)

1Q

Pathogen: *Vibrio parahaemolytics* with Phage A3

The disease occurred in 11 provinces and caused losses in the shrimp culture areas of 673 ha including Nghe An, Ha Tinh, Quang Tri, Phu Yen, Ho Chi Minh, Tien Giang, Ben Tre, Tra Vinh, Kien Giang, Soc Trang, and Ca Mau provinces. The high mortality observed at 10-45 days post stocking in both *P. monodon* and *L. vanamei* shrimps. The mortality rate could reach 95% in intensive and semi-intensive farming systems.

Disease characteristics: lethargy; soft, darken shells, and mottling of the carapaces; these symptoms were only observed in hepatopancreas organs.

Control measures: Strict isolation of infected ponds from movements and transportation control. Using calcium hypochlorite (chlorine) to disinfect infected ponds.

2Q

Pathogen: *Vibrio parahaemolytics* with Phage A3

The disease occurred in 18 provinces and caused losses in the shrimp culture areas of 2,125 ha including Nam Dinh, Hai Phong, Quang Ninh, Nghe An, Ha Tinh, Quang Tri, Quang Binh, Phu Yen, Khanh Hoa, Ho Chi Minh, Dong Nai, Long An, Tien Giang, Ben Tre, Tra Vinh, Soc Trang, Bac Lieu and Ca Mau province. The high

mortality observed at 10-45 days post stocking in both *P. monodon* and *L. vanamei* shrimps.The mortality rate could reach 95% in intensive and semi-intensive farming systems.

Disease characteristics: lethargy; soft, darken shells, and mottling of the carapaces; these symptoms were only observed in hepatopancreas organs.

Control measures: Strict isolation of infected ponds from movements and transportation control. Using calcium hypochlorite (chlorine) to disinfect infected ponds.

3Q

Pathogen: Yellowhead Virus (YHV).

Affected species: white leg shrimp (Litopeneaus vannamei.

The disease was reported in Bac Lieu province with 2 ha affected.

Clinical signs:Shrimps suddenly showed increasing feeding ability and abnormal growth, then they lost appetite, aggregated near the surfaces or at the edges of the ponds and followed by mortalities. The bodies were discoloured, the cephalothorax hepatopancreas were swollen and turned into yellowish or brown. The tissues of most organizations (including gill, hepatopancreas, gut epidermis) were necrotic, the cell nuclears were degenerated to condense or broken into many specimens.

Shrimps were most susceptible at the age of 20-70 days (no infection in shimp under 15 days old). The fast transmission speed was seen in shrimps aged from 20-30 days, the mortality rate could reach 100% in a period of 2-5 day infection

Control measures: disinfection and discharge of contaminated water, movement and transportation control.

4Q

Pathogen: Vibrio parahaemolytics with Phage A3

The disease occurred in 10 provinces and caused losses in the shrimp culture areas of 641ha including Ba Ria-Vung Tau, Ho Chi Minh, Ninh Thuan, Dong Nai, Long An, Tien Giang, Ben Tre, Kien Giang, Bac Lieu and Ca Mau province. The high mortality observed at 10-45 days post stocking in both P. monodon and L. vanamei shrimps.The mortality rate could reach 95% in intensive and semi-intensive farming systems.

Disease characteristics:lethargy; soft, darken shells, and mottling of the carapaces; these symptoms were only observed in hepatopancreas organs.

Control measures: Strict isolation of infected ponds from movements and transportation control. Using calcium hypochlorite (chlorine) to disinfect infected ponds.

FRENCH POLYNESIA												
Name of disease	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
DISEASES PREVALENT IN THE REGION												
FINFISH DISEASES												
OIE-listed diseases												
Epizootic haematopoietic necrosis							***	***	***			
Infectious haematopoietic necrosis							***	***	***			
Spring viraemia of carp (SVC)							***	***	***			
Viral haemorrhagic septicaemia (VHS)							***	***	***			
Infection with Aphanomyces invadans (EUS)							***	***	***			
Red seabream iridoviral disease (RSID)							0000	0000	0000			
Koi herpesvirus disease (KHV)							***	***	***			
Non OIE-listed diseases												
Grouper iridoviral disease							***	***	***			
Viral encephalopathy and retinopathy							(2005)	(2005)	(2005)			
Enteric septicaemia of catfish							***	***	***			
MOLLUSC DISEASES												
OIE-listed diseases												
Infection with Bonamia exitiosa							0000	0000	0000			
Infection with Perkinsus olseni							+	+	+			
Infection with abalone herpesvirus												
Non OIE-listed diseases												
Infection with Marteilioides chungmuensis							0000	0000	0000			
Acute viral necrosis (in scallops)												
Akoya oyster disease							0000	0000	0000			
CRUSTACEAN DISEASES												
OIE-listed diseases												
Taura syndrome (TS)							0000	0000	0000			
White spot disease (WSD)							0000	0000	0000			
Yellowhead disease (YHD)							0000	0000	0000			
Infectious hypodermal and haematopoietic necrosis							(2008)	(2008)	(2008)			
Infectious myonecrosis (IMN)							0000	0000	0000			
White tail disease (MrNV)							0000	0000	0000			
Necrotising hepatopancreatitis (NHP)							0000	0000	0000			
Non OIE-listed diseases												
Milky haemolymph disease of spiny lobster (*Panulirus sp.*)							0000	0000	0000			
Monodon slow growth syndrome												
AMPHIBIAN DISEASES												
OIE-listed diseases												
Infection with Ranavirus												
Infection with Batrachochytrium dendrobatidis												
ANY OTHER DISEASES OF IMPORTANCE												

Infection with *Bonamia Exitosa*, Infection with *Perkinsus olseni*, Infection with *Marteiliodes chungmuensis*

Q3

Bonamiosis and Marteiliosis diseases : no reported in French Polynesia since the start of active surveillance network in 2003, in *Pinctada margaritifera*. Since January 2012, pearl oyster network has been extended to giant clam and *Perkinsus olseni* was revealed on wild specimen of Tridacna maxima by PCR (PYF 06-12-12 OIE Alert). *Perkinsus olseni* was also detected in *Pinctada margaritifera* by PCR (OIE Report 13451, May 14th 2013).

Akoya oyster disease

Q3

Not reported in French Polynesia since the start of active surveillance network in 2003, in *Pinctada margaritifera.*

Viral encephalopathy and retinopathy

Q3

The disease was diagnosed first in the breedings of *Lates calacarifer* (1989). In 2004 the disease causes mass mortality in *Platax orbicularis* and *Polydactylus sexifilis* breeding. Since 2005 the experimental hatchery of Platax orbicularis is biosecured. Only unhurt broodstock (wild origin) of nodavirus are maintained. An annual check of all broodstock and larvae is made. Since 2005, no sample is positive.

Taura syndrome (TS), White spot disease (WSD), Yellowhead disease (YHD), Infectious hypodermal and haematopoietic necrosis (IHHN), Infectious myonecrosis (IMN), White tail disease (MrNV), Necrotising hepatopancreatitis (NHP)

Q3

In 2008 and 2010, a survey including all production units was conducted and samples (30 per unit) were sent out for analysis to Aquaculture Pathology Laboratory University of Arizona (PrLighthner). None of those viruses was detected. Positive isolation was last reported in 2001 on *Penaeus vannamei*, a non indigeneous specie no longer cultivated in French Polynesia and extinct since 2005. For 2011 and 2012, the same survey will be done. In 2013 some analyses (for TS, WSDand IHHN) were realized in French Polynesia laboratory, they are all negative. We did not observe abnormal mortalities of the livestocks of *Litopenaeus stylirostris* during all this period.

Monodon slow growth syndrome, Infection with Ranavirus, Infection with *Batrachochytrium dendrobatidis*

Q3

Susceptible species are not present in French Polynesia.

Epizootic haematopoietic necrosis

Country/territory	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
AUSTRALIA	-(2012)	-(2012)	-(2012)	-(2012)	-(2012)	-(2012)	-2012	-2012	-2012	-(2012)	-(2012)	-(2012)
BANGLADESH							0000	0000	0000			
BHUTAN							0000	0000	0000	0000	0000	0000
CHINA, PEOPLE'S REPUBLIC OF	0000	0000	0000	0000	0000	0000						
CHINESE TAIPEI	***	***	***	***	***	***	***	***	***			
HONG KONG SAR, CHINA	0000	0000	0000				0000	0000	0000	0000	0000	0000
INDIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
INDONESIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
IRAN	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
JAPAN	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
KOREA, REPUBLIC OF	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
LAOS	0000	0000	0000				***	***	***	***	***	***
MALAYSIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
MYANMAR	***	***	***	***	***	***	***	***	***	***	***	***
NEPAL	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
NEW CALEDONIA	***	***	***	***	***	***	***	***	***	***	***	***
NEW ZEALAND	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
PHILIPPINES	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
SINGAPORE	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
SRI LANKA	***	***	***	0000	0000	0000	0000	0000	0000	0000	0000	0000
THAILAND	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
VIETNAM	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
FRENCH POLYNESIA							***	***	***	***	***	***

Infectious haematopoietic necrosis

Country/territory	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
AUSTRALIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
BANGLADESH							0000	0000	0000			
BHUTAN							0000	0000	0000	0000	0000	0000
CHINA, PEOPLE'S REPUBLIC OF	***	***	***	0000	+()	+()						
CHINESE TAIPEI	***	***	***	***	***	***	***	***	***			
HONG KONG SAR, CHINA	0000	0000	0000				0000	0000	0000	0000	0000	0000
INDIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
INDONESIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
IRAN	-	-	-	-	-	-	-	-	-	-	-	-
JAPAN	+	+	+	+	+	+	+	+	+	+	+	+
KOREA, REPUBLIC OF	-	-	-	-	-	-	-	-	-	-	-	-
LAOS	0000	0000	0000				***	***	***	***	***	***
MALAYSIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
MYANMAR	***	***	***	***	***	***	***	***	***	***	***	***
NEPAL	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
NEW CALEDONIA	***	***	***	***	***	***	***	***	***	***	***	***
NEW ZEALAND	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
PHILIPPINES	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
SINGAPORE	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
SRI LANKA	***	***	***	***	***	***	***	***	***	***	***	***
THAILAND	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
VIETNAM	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
FRENCH POLYNESIA							***	***	***	***	***	***

Spring viraemia of carp (SVC)

Country/territory	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
AUSTRALIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
BANGLADESH							0000	0000	0000			
BHUTAN							0000	0000	0000	0000	0000	0000
CHINA, PEOPLE'S REPUBLIC OF	***	***	***	+?()	+?()	+?()						
CHINESE TAIPEI	***	***	***	***	***	***	***	***	***			
HONG KONG SAR, CHINA	0000	0000	0000				0000	0000	0000	0000	0000	0000
INDIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
INDONESIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
IRAN	-	-	-	-	-	-	-	-	-	-	-	-
JAPAN	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
KOREA, REPUBLIC OF	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
LAOS	0000	0000	0000				***	***	***	***	***	***
MALAYSIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
MYANMAR	***	***	***	***	***	***	***	***	***	***	***	***
NEPAL	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
NEW CALEDONIA	***	***	***	***	***	***	***	***	***	***	***	***
NEW ZEALAND	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
PHILIPPINES	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
SINGAPORE	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
SRI LANKA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
THAILAND	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
VIETNAM	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
FRENCH POLYNESIA							***	***	***	***	***	***

Viral haemorrhagic septicaemia (VHS)

Country/territory	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
AUSTRALIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
BANGLADESH							0000	0000	0000			
BHUTAN							0000	0000	0000	0000	0000	0000
CHINA, PEOPLE'S REPUBLIC OF	0000	0000	0000	0000	0000	0000						
CHINESE TAIPEI	***	***	***	***	***	***	***	***	***			
HONG KONG SAR, CHINA	0000	0000	0000				0000	0000	0000	0000	0000	0000
INDIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
INDONESIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
IRAN	-	-	-	-	-	-	-	-	-	-	-	+
JAPAN	+	+	+	+	—	—	—	—	—	—	—	—
KOREA, REPUBLIC OF	-	-	+	-	+	+	-	-	-	-	-	+
LAOS	0000	0000	0000				***	***	***	***	***	***
MALAYSIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
MYANMAR	***	***	***	***	***	***	***	***	***	***	***	***
NEPAL	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
NEW CALEDONIA	***	***	***	***	***	***	***	***	***	***	***	***
NEW ZEALAND	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
PHILIPPINES	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
SINGAPORE	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
SRI LANKA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
THAILAND	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
VIETNAM	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
FRENCH POLYNESIA							***	***	***	***	***	***

Epizootic ulcerative syndrome (EUS)

Country/territory	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
AUSTRALIA	-(2012	-(2012)	-(2012)	-(2012)	-(2012)	-(2012)	-2012	+	-2013	+	-(2013)	+
BANGLADESH							-	-	+()			
BHUTAN							0000	0000	0000	0000	0000	0000
CHINA, PEOPLE'S REPUBLIC OF	0000	0000	0000	0000	0000	0000						
CHINESE TAIPEI	0000	0000	0000	0000	0000	0000	0000	0000	0000			
HONG KONG SAR, CHINA	0000	0000	0000				0000	0000	0000	0000	0000	0000
INDIA	-	-	-	-	-	-	-	-	-	-	-	-
INDONESIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
IRAN	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
JAPAN	-	-	-	—	+	—	—	—	+	—	—	—
KOREA, REPUBLIC OF	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
LAOS	0000	0000	0000				***	***	***	***	***	***
MALAYSIA	(1986)	(1986)	(1986)	(1986)	(1986)	(1986)	(1986)	(1986)	(1986)	(1986)	(1986)	(1986)
MYANMAR	***	***	***	***	***	***	***	***	***	***	***	***
NEPAL	-	-	-	-	-	-	-	-	-	-	-	-
NEW CALEDONIA	***	***	***	***	***	***	***	***	***	***	***	***
NEW ZEALAND	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
PHILIPPINES	- (2002)	- (2002)	- (2002)	- (2002)	- (2002)	- (2002)	- (2002)	- (2002)	- (2002)	- (2002)	- (2002)	- (2002)
SINGAPORE	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
SRI LANKA	***	***	***	***	***	***	***	***	***	***	***	***
THAILAND	-2009	-2009	-2009	-2009	-2009	-2009	-2009	-2009	-2009	-2009	-2009	-2009
VIETNAM	-	-	-	-	-	-	-	-	-	-	-	-
FRENCH POLYNESIA							***	***	***	***	***	***

Red seabream iridoviral disease (RSID)

Country/territory	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
AUSTRALIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
BANGLADESH							0000	0000	0000			
BHUTAN							0000	0000	0000	0000	0000	0000
CHINA, PEOPLE'S REPUBLIC OF	0000	0000	0000	0000	0000	0000						
CHINESE TAIPEI	+	-	-	-	+	-	+	+	-			
HONG KONG SAR, CHINA	-	-	-				-	+	-	-	-	-
INDIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
INDONESIA	***	***	***	***	***	***	0000	0000	0000	+ ( )	****	****
IRAN	***	***	***	***	***	***	***	***	***	***	***	***
JAPAN	-	-	-	—	—	+	+	+	+	+	+	+
KOREA, REPUBLIC OF	-	-	-	-	-	-	-	+	+	+	-	-
LAOS	0000	0000	0000				***	***	***	***	***	***
MALAYSIA	-	-	-	-	-	-	-	-	-	-	-	+
MYANMAR	***	***	***	***	***	***	***	***	***	***	***	***
NEPAL	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
NEW CALEDONIA	***	***	***	***	***	***	***	***	***	***	***	***
NEW ZEALAND	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
PHILIPPINES	***	***	***	***	***	***	***	***	***	***	***	***
SINGAPORE	(2012)	(2012)	(2012)	(2012)	(2012)	+	(2013)	(2013)	(2013)	(2013)	(2013)	(2013)
SRI LANKA	***	***	***	***	***	***	***	***	***	***	***	***
THAILAND	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
VIETNAM	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
FRENCH POLYNESIA							***	***	***	0000	0000	0000

Koi herpesvirus disease (KHV)

Country/territory	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
AUSTRALIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
BANGLADESH							0000	0000	0000			
BHUTAN							0000	0000	0000	0000	0000	0000
CHINA, PEOPLE'S REPUBLIC OF	***	***	***	0000	+()	0000						
CHINESE TAIPEI	+	-	-	-	-	-	+	+	-			
HONG KONG SAR, CHINA	+	-	-				-	-	-	-	-	-
INDIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
INDONESIA	+( )	+( )	***	+( )	***	+( )	+( )	+( )	+( )	+ ( )	+ ( )	****
IRAN	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
JAPAN	-	+	-	—	+	+	+	+	+	+	+	+
KOREA, REPUBLIC OF	-	-	-	-	-	-	-	-	-	-	-	-
LAOS	0000	0000	0000				***	***	***	***	***	***
MALAYSIA	-	-	-	-	-	-	-	-	-	-	-	-
MYANMAR	***	***	***	***	***	***	***	***	***	***	***	***
NEPAL	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
NEW CALEDONIA	***	***	***	***	***	***	***	***	***	***	***	***
NEW ZEALAND	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
PHILIPPINES	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
SINGAPORE	(2012)	(2012)	(2012)	(2012)	(2012)	(2012)	(2012)	(2012)	(2012)	(2012)	(2012)	(2012)
SRI LANKA				0000	0000	0000	0000	0000	0000	0000	0000	0000
THAILAND	(2011)	-2011	-2011	(2011)	-2011	-2011	-2011	-2011	-2011	-2011	-2011	-2011
VIETNAM	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
FRENCH POLYNESIA							***	***	***	***	***	***

Grouper iridoviral disease

Country/territory	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
AUSTRALIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
BANGLADESH							0000	0000	0000			
BHUTAN							0000	0000	0000	0000	0000	0000
CHINA, PEOPLE'S REPUBLIC OF	0000	0000	0000	0000	0000	0000						
CHINESE TAIPEI	-	+	+	+	+	+	+	+	+			
HONG KONG SAR, CHINA	-	-	-				-	-	-	-	-	-
INDIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
INDONESIA	+( )	+( )	+( )	+( )	***	***	+( )	+( )	+( )	+ ( )	****	+ ( )
IRAN	***	***	***	***	***	***	***	***	***	***	***	***
JAPAN	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
KOREA, REPUBLIC OF	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
LAOS	0000	0000	0000				***	***	***	***	***	***
MALAYSIA	-	-	-	-	-	-	-	-	-	+	-	+
MYANMAR	***	***	***	***	***	***	***	***	***	***	***	***
NEPAL	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
NEW CALEDONIA	***	***	***	***	***	***	***	***	***	***	***	***
NEW ZEALAND	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
PHILIPPINES	- (2008)	- (2008)	- (2008)	- (2008)	- (2008)	- (2008)	- (2008)	- (2008)	- (2008)	- (2008)	- (2008)	- (2008)
SINGAPORE	(2012)	(2012)	+	(2012)	(2012)	+	(2013)	+	(2013)	+	(2013)	(2013)
SRI LANKA	***	***	***	***	***	***	***	***	***	***	***	***
THAILAND	-	-	-	-	-	-	-	-	-	***	***	***
VIETNAM	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
FRENCH POLYNESIA							***	***	***	***	***	***

Viral encephalopathy and retinopathy

Country/territory	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
AUSTRALIA	-(2012)	-(2012)	+	-(2013)	-(2013)	+	-2013	-2013	-2013	-(2013)	-(2013)	+
BANGLADESH							0000	0000	0000			
BHUTAN							0000	0000	0000	0000	0000	0000
CHINA, PEOPLE'S REPUBLIC OF	0000	0000	0000	0000	0000	0000						
CHINESE TAIPEI	+	+	+	+	+	+	+	+	+			
HONG KONG SAR, CHINA	-	-	-				-	-	-	-	-	-
INDIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
INDONESIA	***	***	***	+( )	***	***	***	+( )	***	+ ( )	****	****
IRAN	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
JAPAN	-	-	-	—	—	—	—	+	+	+	+	—
KOREA, REPUBLIC OF	-	-	-	-	-	-	-	-	-	-	-	-
LAOS	0000	0000	0000				***	***	***	***	***	***
MALAYSIA	-	-	-	-	-	-	-	-	-	-	-	+
MYANMAR	***	***	***	***	***	***	***	***	***	***	***	***
NEPAL	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
NEW CALEDONIA	***	***	***	***	***	***	***	***	***	***	***	***
NEW ZEALAND	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
PHILIPPINES	- (2007)	- (2007)	- (2007)	+	+	+	+	+	+	+	-	+
SINGAPORE	(2012)	(2012)	+	(2012)	+	+	+	+	+	+	(2013)	(2013)
SRI LANKA	***	***	***	***	***	***	***	***	***	***	***	***
THAILAND	-	-	-	-	-	-	-	-	-	-	-	-
VIETNAM	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
FRENCH POLYNESIA							(2005)	(2005)	(2005)	-2005	-2005	-2005

Enteric septicaemia of catfish

Country/territory	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
AUSTRALIA	(2011)	(2011)	(2011)	(2011)	(2011)	(2011)	-2011	-2011	-2011	(2011)	(2011)	(2011)
BANGLADESH							0000	0000	0000			
BHUTAN							0000	0000	0000	0000	0000	0000
CHINA, PEOPLE'S REPUBLIC OF	0000	0000	0000	0000	0000	0000						
CHINESE TAIPEI	***	***	***	***	***	***	***	***	***			
HONG KONG SAR, CHINA	0000	0000	0000				0000	0000	0000	0000	0000	0000
INDIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
INDONESIA	***	***	***	***	***	***	***	***	***	****	+ ( )	****
IRAN	***	***	***	***	***	***	***	***	***	***	***	***
JAPAN	-	-	-	—	—	—	—	—	—	—	—	—
KOREA, REPUBLIC OF	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
LAOS	0000	0000	0000				***	***	***	***	***	***
MALAYSIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
MYANMAR	***	***	***	***	***	***	***	***	***	***	***	***
NEPAL	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
NEW CALEDONIA	***	***	***	***	***	***	***	***	***	***	***	***
NEW ZEALAND	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
PHILIPPINES	***	***	***	***	***	***	***	***	***	***	***	***
SINGAPORE	***	***	***	***	***	***	***	***	***	***	***	***
SRI LANKA	***	***	***	***	***	***	***	***	***	***	***	***
THAILAND	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
VIETNAM	-	-	-	-	-	-	-	-	-	-	-	-
FRENCH POLYNESIA							***	***	***	***	***	***

Infection with *Bonamia exitiosa*

Country/territory	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
AUSTRALIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
BANGLADESH							0000	0000	0000			
BHUTAN							0000	0000	0000	0000	0000	0000
CHINA, PEOPLE'S REPUBLIC OF	0000	0000	0000	0000	0000	0000						
CHINESE TAIPEI	***	***	***	***	***	***	***	***	***			
HONG KONG SAR, CHINA	0000	0000	0000				0000	0000	0000	0000	0000	0000
INDIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
INDONESIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
IRAN	***	***	***	***	***	***	***	***	***	***	***	***
JAPAN	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
KOREA, REPUBLIC OF	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
LAOS	0000	0000	0000				***	***	***	***	***	***
MALAYSIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
MYANMAR												
NEPAL	***	***	***	***	***	***	***	***	***	***	***	***
NEW CALEDONIA	***	***	***	***	***	***	***	***	***	***	***	***
NEW ZEALAND	0000/-(2012)	0000/-(2012)	0000/-(2012)	0000/-(2013)	0000/-(2013)	0000/-(2013)	0000/-(2013)	0000/-(2013)	0000/-(2013)	0000/-(2013)	0000/-(2013)	0000/-(2013)
PHILIPPINES	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
SINGAPORE	***	***	***	***	***	***	***	***	***	***	***	***
SRI LANKA	***	***	***	***	***	***	***	***	***	***	***	***
THAILAND	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
VIETNAM	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
FRENCH POLYNESIA							0000	0000	0000	0000	0000	0000

Infection with *Perkinsus olseni*

Country/territory	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
AUSTRALIA	-(2011)	-(2011)	-(2011)	-(2011)	+	-(2013)	-2013	-2013	-2013	-(2013)	-(2013)	-(2013)
BANGLADESH							0000	0000	0000			
BHUTAN							0000	0000	0000	0000	0000	0000
CHINA, PEOPLE'S REPUBLIC OF	0000	0000	0000	0000	0000	0000						
CHINESE TAIPEI	***	***	***	***	***	***	***	***	***			
HONG KONG SAR, CHINA	0000	0000	0000				0000	0000	0000	0000	0000	0000
INDIA	-	-	-	-	-	-	-	-	-	-	-	-
INDONESIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
IRAN	***	***	***	***	***	***	***	***	***	***	***	***
JAPAN	-	-	-	—	—	—	—	—	—	—	—	—
KOREA, REPUBLIC OF	0000	0000	0000	0000	0000	0000	0000	0000	0000	-	-	-
LAOS	0000	0000	0000				***	***	***	***	***	***
MALAYSIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
MYANMAR												
NEPAL	***	***	***	***	***	***	***	***	***	***	***	***
NEW CALEDONIA	***	***	***	***	***	***	***	***	***	***	***	***
NEW ZEALAND	0000/-(2002)	0000/-(2002)	0000/-(2002)	0000/-(2002)	0000/-(2002)	0000/-(2002)	+( )	-(2013)	-(2013)	0000/-(2013)	0000/-(2013)	0000/-(2013)
PHILIPPINES	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
SINGAPORE	***	***	***	***	***	***	***	***	***	***	***	***
SRI LANKA	***	***	***	***	***	***	***	***	***	***	***	***
THAILAND	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
VIETNAM	0000	0000	0000	+()	-	-	-	-	-	-	-	-
FRENCH POLYNESIA							+	+	+	+	+	+

Infection with abalone herpes-like virus

Country/territory	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
AUSTRALIA	-(2011)	-(2011)	-(2011)	-(2011)	-(2011)	-(2011)	-2011	-2011	-2011	-(2011)	-(2011)	-(2011)
BANGLADESH							0000	0000	0000			
BHUTAN							0000	0000	0000	0000	0000	0000
CHINA, PEOPLE'S REPUBLIC OF	0000	0000	0000	0000	0000	0000						
CHINESE TAIPEI	-	-	-	-	-	-	-	-	-			
HONG KONG SAR, CHINA	0000	0000	0000				0000	0000	0000	0000	0000	0000
INDIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
INDONESIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
IRAN	***	***	***	***	***	***	***	***	***	***	***	***
JAPAN	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
KOREA, REPUBLIC OF	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
LAOS	0000	0000	0000				***	***	***	***	***	***
MALAYSIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
MYANMAR												
NEPAL	***	***	***	***	***	***	***	***	***	***	***	***
NEW CALEDONIA	***	***	***	***	***	***	***	***	***	***	***	***
NEW ZEALAND	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
PHILIPPINES	***	***	***	***	***	***	***	***	***	***	***	***
SINGAPORE	***	***	***	***	***	***	***	***	***	***	***	***
SRI LANKA	***	***	***	***	***	***	***	***	***	***	***	***
THAILAND	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
VIETNAM	-	-	-	0000	0000	0000	0000	0000	0000	0000	0000	0000
FRENCH POLYNESIA												

Infection with Xenohaliotis californiensis

Country/territory	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
AUSTRALIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
BANGLADESH												
BHUTAN							0000	0000	0000	0000	0000	0000
CHINA, PEOPLE'S REPUBLIC OF	0000	0000	0000	0000	0000	0000						
CHINESE TAIPEI	***	***	***	***	***	***	***	***	***			
HONG KONG SAR, CHINA							0000	0000	0000	0000	0000	0000
INDIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
INDONESIA				0000	0000	0000	0000	0000	0000	0000	0000	0000
IRAN	***	***	***	***	***	***	***	***	***	***	***	***
JAPAN				+?( )	+?( )	—	+?( )	+?( )	—	—	—	—
KOREA, REPUBLIC OF	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
LAOS	0000	0000	0000				***	***	***	***	***	***
MALAYSIA												
MYANMAR												
NEPAL				***	***	***	***	***	***	***	***	***
NEW CALEDONIA	***	***	***	***	***	***	***	***	***	***	***	***
NEW ZEALAND	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
PHILIPPINES	***	***	***	***	***	***	***	***	***	***	***	***
SINGAPORE	***	***	***	***	***	***	***	***	***	***	***	***
SRI LANKA	***	***	***	***	***	***	***	***	***	***	***	***
THAILAND	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
VIETNAM	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
FRENCH POLYNESIA												

Infection with *Marteilioides chungmuensis*

Country/territory	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
AUSTRALIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
BANGLADESH							0000	0000	0000			
BHUTAN							0000	0000	0000	0000	0000	0000
CHINA, PEOPLE'S REPUBLIC OF	0000	0000	0000	0000	0000	0000						
CHINESE TAIPEI	***	***	***	***	***	***	***	***	***			
HONG KONG SAR, CHINA	0000	0000	0000				0000	0000	0000	0000	0000	0000
INDIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
INDONESIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
IRAN	***	***	***	***	***	***	***	***	***	***	***	***
JAPAN	-	+	-	—	—	—	—	—	—	—	—	—
KOREA, REPUBLIC OF	-	-	-	-	-	-	-	-	-	-	-	-
LAOS	0000	0000	0000				***	***	***	***	***	***
MALAYSIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
MYANMAR												
NEPAL	***	***	***	***	***	***	***	***	***	***	***	***
NEW CALEDONIA	***	***	***	***	***	***	***	***	***	***	***	***
NEW ZEALAND	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
PHILIPPINES	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
SINGAPORE	***	***	***	***	***	***	***	***	***	***	***	***
SRI LANKA	***	***	***	***	***	***	***	***	***	***	***	***
THAILAND	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
VIETNAM	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
FRENCH POLYNESIA							0000	0000	0000	0000	0000	0000

Acute viral necrosis (in scallops)

Country/territory	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
AUSTRALIA	***	***	***	***	***	***	***	***	***	***	***	***
BANGLADESH							0000	0000	0000			
BHUTAN							0000	0000	0000	0000	0000	0000
CHINA, PEOPLE'S REPUBLIC OF	0000	0000	0000	0000	0000	0000						
CHINESE TAIPEI	***	***	***	***	***	***	***	***	***			
HONG KONG SAR, CHINA	0000	0000	0000				0000	0000	0000	0000	0000	0000
INDIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
INDONESIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
IRAN	***	***	***	***	***	***	***	***	***	***	***	***
JAPAN	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
KOREA, REPUBLIC OF	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
LAOS	0000	0000	0000				***	***	***	***	***	***
MALAYSIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
MYANMAR												
NEPAL	***	***	***	***	***	***	***	***	***	***	***	***
NEW CALEDONIA	***	***	***	***	***	***	***	***	***	***	***	***
NEW ZEALAND	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
PHILIPPINES	***	***	***	***	***	***	***	***	***	***	***	***
SINGAPORE	***	***	***	***	***	***	***	***	***	***	***	***
SRI LANKA	***	***	***	***	***	***	***	***	***	***	***	***
THAILAND	***	***	***	***	***	***	***	***	***	***	***	***
VIETNAM	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
FRENCH POLYNESIA												

Akoya oyster disease

Country/territory	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
AUSTRALIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
BANGLADESH												
BHUTAN							0000	0000	0000	0000	0000	0000
CHINA, PEOPLE'S REPUBLIC OF	0000	0000	0000	0000	0000	0000						
CHINESE TAIPEI	***	***	***	***	***	***	***	***	***			
HONG KONG SAR, CHINA	0000	0000	0000				0000	0000	0000	0000	0000	0000
INDIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
INDONESIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
IRAN	***	***	***	***	***	***	***	***	***	***	***	***
JAPAN	-	-	-	—	—	—	—	—	—	—	—	—
KOREA, REPUBLIC OF	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
LAOS	0000	0000	0000				***	***	***	***	***	***
MALAYSIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
MYANMAR												
NEPAL	***	***	***	***	***	***	***	***	***	***	***	***
NEW CALEDONIA	***	***	***	***	***	***	***	***	***	***	***	***
NEW ZEALAND	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
PHILIPPINES	***	***	***	***	***	***	***	***	***	***	***	***
SINGAPORE	***	***	***	***	***	***	***	***	***	***	***	***
SRI LANKA	***	***	***	***	***	***	***	***	***	***	***	***
THAILAND	***	***	***	***	***	***	***	***	***	***	***	***
VIETNAM	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
FRENCH POLYNESIA							0000	0000	0000	0000	0000	0000

Taura syndrome (TS)

Country/territory	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
AUSTRALIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
BANGLADESH							0000	0000	0000			
BHUTAN							0000	0000	0000	0000	0000	0000
CHINA, PEOPLE'S REPUBLIC OF	***	***	***	+()	+()	+()						
CHINESE TAIPEI	-	-	-	+	-	-	-	-	-			
HONG KONG SAR, CHINA	0000	0000	0000				0000	0000	0000	0000	0000	0000
INDIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
INDONESIA	+( )	***	+( )	***	***	***	+( )	+( )	+( )	****	****	****
IRAN	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
JAPAN	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
KOREA, REPUBLIC OF	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
LAOS	0000	0000	0000				***	***	***	***	***	***
MALAYSIA	-	-	-	-	-	-	-	-	-	-	-	-
MYANMAR	-	-	-	-	-	-	-	-	-	-	-	-
NEPAL	***	***	***	***	***	***	***	***	***	***	***	***
NEW CALEDONIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
NEW ZEALAND	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
PHILIPPINES	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
SINGAPORE	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
SRI LANKA	***	***	***	***	***	***	***	***	***	***	***	***
THAILAND	-	-	-	+()	-	-	+()	-	-	-	-	-
VIETNAM	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
FRENCH POLYNESIA							0000	0000	0000	0000	0000	0000

White spot disease (WSD)

Country/territory	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
AUSTRALIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
BANGLADESH							+()	-	-			
BHUTAN							0000	0000	0000	0000	0000	0000
CHINA, PEOPLE'S REPUBLIC OF	+( )	+( )	+( )	+()	+()	+()						
CHINESE TAIPEI	+	-	+	+	+	-	+	+	+			
HONG KONG SAR, CHINA	-	-	-				-	-	-	-	-	-
INDIA	+( )	+( )	+( )	+( )	+( )	+( )	+( )	+( )	+( )	+( )	+( )	+( )
INDONESIA	+( )	+( )	+( )	+( )	***	***	+( )	+( )	+( )	+ ( )	+ ( )	****
IRAN	-	-	-	-	-	+?	-	-	+	-	-	-
JAPAN	-	-	-	+	+	+	+	+	+	—	—	—
KOREA, REPUBLIC OF	-	-	-	-	+	-	+	-	-	-	-	-
LAOS	0000	0000	0000				***	***	***	***	***	***
MALAYSIA	-	+	+	-	+	+	-	+	+	-	-	-
MYANMAR	-	-	-	-	-	-	-	-	-	-	-	-
NEPAL	***	***	***	***	***	***	***	***	***	***	***	***
NEW CALEDONIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
NEW ZEALAND	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
PHILIPPINES	+	+	+	+	+	+	+	+	+	+	+	+
SINGAPORE	(2012)	(2012)	(2012)	(2012)	(2012)	+	(2013)	(2013)	(2013)	(2013)	(2013)	+
SRI LANKA	+( )	+( )	+( )	+( )	+( )	+( )	+( )	+( )	+( )	+( )	+( )	+( )
THAILAND	+()	+()	+()	+()	+()	+()	+()	+()	+()	-	+()	+()
VIETNAM	+	+	+	+	+	+	+	+	+	+	+	+
FRENCH POLYNESIA							0000	0000	0000	0000	0000	0000

Yellowhead disease (YHD)

Country/territory	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
AUSTRALIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
BANGLADESH							0000	0000	0000			
BHUTAN							0000	0000	0000	0000	0000	0000
CHINA, PEOPLE'S REPUBLIC OF	0000	0000	0000	+()	0000	0000						
CHINESE TAIPEI	-	-	-	-	-	-	-	-	-			
HONG KONG SAR, CHINA	0000	0000	0000				0000	0000	0000	0000	0000	0000
INDIA	***	***	***	***	***	***	***	***	***	***	***	***
INDONESIA	***	***	***	***	***	***	0000	0000	0000	****	****	****
IRAN	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
JAPAN	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
KOREA, REPUBLIC OF	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
LAOS	0000	0000	0000				***	***	***	***	***	***
MALAYSIA	-	-	-	-	-	-	-	-	-	-	-	-
MYANMAR	-	-	-	-	-	-	-	-	-	-	-	-
NEPAL	***	***	***	***	***	***	***	***	***	***	***	***
NEW CALEDONIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
NEW ZEALAND	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
PHILIPPINES	- (1999)	- (1999)	- (1999)	- (1999)	- (1999)	- (1999)	- (1999)	- (1999)	- (1999)	- (1999)	- (1999)	- (1999)
SINGAPORE	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
SRI LANKA	?( )	?( )	?( )	+( )	?( )	?( )	?( )	?( )	?( )	?( )	+( )	?( )
THAILAND	+()	+()	+()	+()	+()	+()	+()	-	-	-	+()	+()
VIETNAM	-	-	-	-	-	-	-	-	-	-	-	-
FRENCH POLYNESIA							0000	0000	0000	0000	0000	0000

Infectious hypodermal and haematopoietic necrosis (IHHN)

Country/territory	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
AUSTRALIA	-(2008)	-(2008)	-(2008)	-(2008)	-(2008)	-(2008)	-2008	-2008	-2008	-(2008)	-(2008)	-(2008)
BANGLADESH							0000	0000	0000			
BHUTAN							0000	0000	0000	0000	0000	0000
CHINA, PEOPLE'S REPUBLIC OF	0000	0000	0000	+()	+()	+()						
CHINESE TAIPEI	-	-	-	-	-	-	-	-	-			
HONG KONG SAR, CHINA	0000	0000	0000				0000	0000	0000	0000	0000	0000
INDIA	***	***	***	***	***	***	***	***	***	***	+( )	+( )
INDONESIA	+( )	+( )	+( )	***	***	***	+( )	***	+( )	+ ( )	+ ( )	+ ( )
IRAN	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
JAPAN	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
KOREA, REPUBLIC OF	-	-	-	-	-	-	-	-	-	-	-	-
LAOS	0000	0000	0000				***	***	***	***	***	***
MALAYSIA	+	+	-	+	+	-	+	+	-	-	-	-
MYANMAR	-	-	-	-	-	-	-	-	-	-	-	-
NEPAL	***	***	***	***	***	***	***	***	***	***	***	***
NEW CALEDONIA	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?	+?
NEW ZEALAND	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
PHILIPPINES	-	+	+	+	-	+	+	+	+	+	+	+
SINGAPORE	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
SRI LANKA	?( )	?( )	?( )	?( )	?( )	?( )	+( )	+( )	+( )	?( )	?( )	?( )
THAILAND	+()	+()	+()	+()	+()	+()	+()	+()	+()	-	+()	+()
VIETNAM	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
FRENCH POLYNESIA							(2008)	(2008)	(2008)	-2008	-2008	-2008

Infectious myonecrosis (IMN)

Country/territory	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
AUSTRALIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
BANGLADESH							0000	0000	0000			
BHUTAN							0000	0000	0000	0000	0000	0000
CHINA, PEOPLE'S REPUBLIC OF	0000	0000	0000	0000	0000	0000						
CHINESE TAIPEI	***	***	***	***	***	***	***	***	***			
HONG KONG SAR, CHINA	0000	0000	0000				0000	0000	0000	0000	0000	0000
INDIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
INDONESIA	+( )	+( )	+( )	+( )	***	***	+( )	***	+( )	+ ( )	+ ( )	+ ( )
IRAN	***	***	***	***	***	***	***	***	***	***	***	***
JAPAN	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
KOREA, REPUBLIC OF	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
LAOS	0000	0000	0000				***	***	***	***	***	***
MALAYSIA	-	-	-	-	-	-	-	-	-	-	-	-
MYANMAR	***	***	***	***	***	***	***	***	***	***	***	***
NEPAL	***	***	***	***	***	***	***	***	***	***	***	***
NEW CALEDONIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
NEW ZEALAND	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
PHILIPPINES	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
SINGAPORE	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
SRI LANKA	***	***	***	***	***	***	***	***	***	***	***	***
THAILAND	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
VIETNAM	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
FRENCH POLYNESIA							0000	0000	0000	0000	0000	0000

White tail disease (MrNV)

Country/territory	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
AUSTRALIA	-(2008)	-(2008)	-(2008)	-(2008)	-(2008)	-(2008)	-2008	-2008	-2008	-(2008)	-(2008)	-(2008)
BANGLADESH							0000	0000	0000			
BHUTAN							0000	0000	0000	0000	0000	0000
CHINA, PEOPLE'S REPUBLIC OF	0000	0000	0000	+()	0000	0000						
CHINESE TAIPEI	-	-	-	-	-	-	-	-	-			
HONG KONG SAR, CHINA	0000	0000	0000				0000	0000	0000	0000	0000	0000
INDIA	-	-	-	-	-	-	-	-	-	-	-	-
INDONESIA	0000	0000	0000	0000	0000	0000	***	***	***	0000	0000	0000
IRAN	***	***	***	***	***	***	***	***	***	***	***	***
JAPAN	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
KOREA, REPUBLIC OF	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
LAOS	0000	0000	0000				***	***	***	***	***	***
MALAYSIA	-	-	-	-	-	-	-	-	-	-	-	-
MYANMAR	***	***	***	***	***	***	***	***	***	***	***	***
NEPAL	***	***	***	***	***	***	***	***	***	***	***	***
NEW CALEDONIA	***	***	***	***	***	***	***	***	***	***	***	***
NEW ZEALAND	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
PHILIPPINES	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
SINGAPORE	***	***	***	***	***	***	***	***	***	***	***	***
SRI LANKA	***	***	***	***	***	***	***	***	***	***	***	***
THAILAND	+()	000	+()	+()	-	+()	+()	-	+()	+()	-	-
VIETNAM	-	-	-	-	-	-	-	-	-	-	-	-
FRENCH POLYNESIA							0000	0000	0000	0000	0000	0000

Necrotising hepatopancreatitis (NHP)

Country/territory	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
AUSTRALIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
BANGLADESH							0000	0000	0000			
BHUTAN							0000	0000	0000	0000	0000	0000
CHINA, PEOPLE'S REPUBLIC OF	0000	0000	0000	0000	0000	0000						
CHINESE TAIPEI	***	***	***	***	***	***	***	***	***			
HONG KONG SAR, CHINA	0000	0000	0000				0000	0000	0000	0000	0000	0000
INDIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
INDONESIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
IRAN	***	***	***	***	***	***	***	***	***	***	***	***
JAPAN	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
KOREA, REPUBLIC OF	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
LAOS	0000	0000	0000				***	***	***	***	***	***
MALAYSIA	-	-	-	-	-	-	-	-	-	-	-	-
MYANMAR	***	***	***	***	***	***	***	***	***	***	***	***
NEPAL	***	***	***	***	***	***	***	***	***	***	***	***
NEW CALEDONIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
NEW ZEALAND	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
PHILIPPINES	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
SINGAPORE	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
SRI LANKA	***	***	***	***	***	***	***	***	***	***	***	***
THAILAND	***	***	***	***	***	***	***	***	***	***	***	***
VIETNAM	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
FRENCH POLYNESIA							0000	0000	0000	0000	0000	0000

Milky haemolymph disease of spiny lobster (*Panulirus* spp.)

Country/territory	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
AUSTRALIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
BANGLADESH												
BHUTAN							0000	0000	0000	0000	0000	0000
CHINA, PEOPLE'S REPUBLIC OF	0000	0000	0000	0000	0000	0000						
CHINESE TAIPEI	***	***	***	***	***	***	***	***	***			
HONG KONG SAR, CHINA	0000	0000	0000				0000	0000	0000	0000	0000	0000
INDIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
INDONESIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
IRAN	***	***	***	***	***	***	***	***	***	***	***	***
JAPAN	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
KOREA, REPUBLIC OF	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
LAOS	0000	0000	0000				***	***	***	***	***	***
MALAYSIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
MYANMAR	***	***	***	***	***	***	***	***	***	***	***	***
NEPAL	***	***	***	***	***	***	***	***	***	***	***	***
NEW CALEDONIA	***	***	***	***	***	***	***	***	***	***	***	***
NEW ZEALAND	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
PHILIPPINES	***	***	***	***	***	***	***	***	***	***	***	***
SINGAPORE	***	***	***	***	***	***	***	***	***	***	***	***
SRI LANKA	***	***	***	***	***	***	***	***	***	***	***	***
THAILAND	***	***	***	***	***	***	***	***	***	***	***	***
VIETNAM	-	-	-	-	-	-	-	-	-	-	-	-
FRENCH POLYNESIA							0000	0000	0000	0000	0000	0000

Monodon slow growth syndrome

Country/territory	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
AUSTRALIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
BANGLADESH							0000	0000	0000			
BHUTAN							0000	0000	0000	0000	0000	0000
CHINA, PEOPLE'S REPUBLIC OF	0000	0000	0000	0000	0000	0000						
CHINESE TAIPEI	***	***	***	***	***	***	***	***	***			
HONG KONG SAR, CHINA	0000	0000	0000				0000	0000	0000	0000	0000	0000
INDIA	-	-	-	-	-	-	-	-	-	-	-	-
INDONESIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
IRAN	***	***	***	***	***	***	***	***	***	***	***	***
JAPAN	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
KOREA, REPUBLIC OF	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
LAOS	0000	0000	0000				***	***	***	***	***	***
MALAYSIA	-	-	-	-	-	-	-	-	-	-	-	-
MYANMAR	***	***	***	***	***	***	***	***	***	***	***	***
NEPAL	***	***	***	***	***	***	***	***	***	***	***	***
NEW CALEDONIA	***	***	***	***	***	***	***	***	***	***	***	***
NEW ZEALAND	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
PHILIPPINES	***	***	***	***	***	***	***	***	***	***	***	***
SINGAPORE	***	***	***	***	***	***	***	***	***	***	***	***
SRI LANKA	***	***	***	***	***	***	***	***	***	***	***	***
THAILAND	***	***	***	***	***	***	***	***	***	***	***	***
VIETNAM	-	-	-	-	-	-	-	-	-	-	-	-
FRENCH POLYNESIA							0000	0000	0000			

Acute hepatopancreatic necrosis syndrome (AHPNS)

Country/territory	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
AUSTRALIA	***	***	***	***	***	***	***	***	***	***	***	***
BANGLADESH							0000	0000	0000			
BHUTAN							0000	0000	0000	0000	0000	0000
CHINA, PEOPLE'S REPUBLIC OF	0000	0000	0000	?()	0000	0000						
CHINESE TAIPEI	***	***	***	***	***	***	***	***	***			
HONG KONG SAR, CHINA							0000	0000	0000	0000	0000	0000
INDIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
INDONESIA				0000	0000	0000	0000	0000	0000	0000	0000	0000
IRAN	***	***	***	***	***	***	***	***	***	***	***	***
JAPAN				0000	0000	0000	0000	0000	0000	0000	0000	0000
KOREA, REPUBLIC OF	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
LAOS	0000	0000	0000				***	***	***	***	***	***
MALAYSIA	+	-	-	+	-	-	+	-	-	+	+	+
MYANMAR												
NEPAL				***	***	***	***	***	***	***	***	***
NEW CALEDONIA	***	***	***	***	***	***	***	***	***	***	***	***
NEW ZEALAND	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
PHILIPPINES	?	?	?	?	?	?	? ( )	+ ( )	+ ( )	-	-	+ ( )
SINGAPORE	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
SRI LANKA	***	***	***	***	***	***	***	***	***	***	***	***
THAILAND	?	+()	+()	+()	+()	+()	+()	+()	+()	-	+()	+()
VIETNAM	+	+	+	+	+	+	+	+	+	+	+	+
FRENCH POLYNESIA												

Infection with Ranavirus

Country/territory	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
AUSTRALIA	-(2008)	-(2008)	-(2008)	-(2008)	-(2008)	-(2008)	-2008	-2008	-2008	-(2008)	-(2008)	-(2008)
BANGLADESH							0000	0000	0000			
BHUTAN							0000	0000	0000	0000	0000	0000
CHINA, PEOPLE'S REPUBLIC OF	0000	0000	0000	0000	0000	0000						
CHINESE TAIPEI	***	***	***	***	***	***	***	***	***			
HONG KONG SAR, CHINA	0000	0000	0000				0000	0000	0000	0000	0000	0000
INDIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
INDONESIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
IRAN	***	***	***	***	***	***	***	***	***	***	***	***
JAPAN	-	-	-	—	—	—	—	—	—	—	—	—
KOREA, REPUBLIC OF	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
LAOS	0000	0000	0000				***	***	***	***	***	***
MALAYSIA	-	-	-	-	-	-	-	-	-	-	-	-
MYANMAR												
NEPAL	***	***	***	***	***	***	***	***	***	***	***	***
NEW CALEDONIA	***	***	***	***	***	***	***	***	***	***	***	***
NEW ZEALAND	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
PHILIPPINES	***	***	***	***	***	***	***	***	***	***	***	***
SINGAPORE	***	***	***	***	***	***	***	***	***	***	***	***
SRI LANKA	***	***	***	***	***	***	***	***	***	***	***	***
THAILAND	(2011)	(2011)	-2011	(2011)	(2011)	-2011	-2011	-2011	-2011	-2011	-2011	-2011
VIETNAM	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
FRENCH POLYNESIA												

Infection with *Batrachochytrium dendrobatidis*

Country/territory	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
AUSTRALIA	-(2012)	-(2012)	-(2012)	-(2012)	+	-(2013)	-2013	-2013	-2013	-(2013)	-(2013)	-(2013)
BANGLADESH							0000	0000	0000			
BHUTAN							0000	0000	0000	0000	0000	0000
CHINA, PEOPLE'S REPUBLIC OF	0000	0000	0000	0000	0000	0000						
CHINESE TAIPEI	***	***	***	***	***	***	***	***	***			
HONG KONG SAR, CHINA	0000	0000	0000				0000	0000	0000	0000	0000	0000
INDIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
INDONESIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
IRAN	***	***	***	***	***	***	***	***	***	***	***	***
JAPAN	-	-	-	—	—	—	—	—	—	—	—	—
KOREA, REPUBLIC OF	?	?	?	?	?	?	?	?	?	?	?	?
LAOS	0000	0000	0000				***	***	***	***	***	***
MALAYSIA	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
MYANMAR												
NEPAL	***	***	***	***	***	***	***	***	***	***	***	***
NEW CALEDONIA	***	***	***	***	***	***	***	***	***	***	***	***
NEW ZEALAND	- (2010)	- (2010)	- (2010)	- (2010)	- (2010)	- (2010)	- (2010)	- (2010)	- (2010)	- (2010)	- (2010)	- (2010)
PHILIPPINES	***	***	***	***	***	***	***	***	***	***	***	***
SINGAPORE	(2011)	(2011)	(2011)	(2011)	(2011)	(2011)	+?	+?	+?	+?	+?	+?
SRI LANKA												
THAILAND	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
VIETNAM	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
FRENCH POLYNESIA												

Other diseases of importance

Country/territory	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Virus isolated from Atlantic salmon												
AUSTRALIA				-(2012)	-(2012)	+	-2013	-2013	+			
Grayish white spot of cultured Shing (*Heteropnestes fossilis*)												
BANGLADESH							***	***	***			
Hepatopancreatic parvo virus disease												
MALAYSIA	-	+	+	-	+	+	-	+	+	+	+	+
Monodon Baculovirus												
PHILIPPINES				+	-	-	-	-	-			
Monodon Baculovirus (MBV)												
SRI LANKA	+( )	?( )	?( )	?( )	?( )	+( )	+( )	?( )	?( )	+( )	-	+( )
Infectious spleen and kidney necrosis virus (ISKNV) (marine & ornamental fish)												
SINGAPORE	(2012)	(2012)	+	(2012)	(2012)	+	+	+	+	+	(2013)	(2013)
Aeromonas salmonicida (in goldfish)												
SINGAPORE	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
Laem Singh Virus (LSV)												
SRI LANKA	?( )	?( )	?( )	?( )	?( )	?( )	?( )	?( )	?( )	?( )	?( )	?( )

LIST OF DELEGATES AND VETERINARY CONTACTS IN ASIA AND THE PACIFIC
(as of 15 April 2015)

Australia
Dr Mark Schipp
Chief Veterinary Officer
Australian Government Department of
Agriculture, Fisheries and Forestry (AFFA)
G.P.O. Box 858, Canberra, ACT 2601
Tel: 61 262 724 644
Fax: 61 262 723 150
E-mail: mark.schipp@daff.gov.au
oieaustralia@daff.gov.au

Bangladesh
Dr Jatindra Nath Das
Director,
Livestock Research Institute
Department of Livestock Services
Ministry of Fisheries & Livestock
Mohakhali, Dhaka
Tel: +88 02 8821991
Fax: +88 02 9898896
E-mail: jatindradas2011@gmail.com

Bhutan
Dr Tashi Samdup
Director
Department of Livestock
BUTH Ministry of Agriculture and Forests
P. O. Box 113, Thimphu
Tel: 975-2-323146
Fax: 975-2-322094
E-mail: tashi_samdup2001@moaf.gov.bt
tashi_samdup2001@yahoo.com

Brunei
Dr Abdul Latif Sani
Acting Assistant Director
Department of Agriculture and Agrifood
Ministry of Industry and Primary Resources
Old Airport Berakas
Bandar Seri Begawan BB3510
Brunei Darussalam
Tel: 673-2-388071, 388004, 380095
Fax: 673-2-382226, 380340
E-mail: latif.san@agriculture.gov.bn
latifsani44@gmail.com

Cambodia
Dr Sen Sovann
Deputy Secretary General
Ministry of Agriculture, Forestry and Fisheries
200 Preah Norodom Blvd.,
Sangkat Tonle Basak
Khan Chamkarmon Blvd.
Phnom Penh-3
(P. O. Box 2447, Phnom Penh 3)
Tel: 855-1688 0047
Fax: 855-2321 9663
E-mail: sen.sovann88@gmail.com
ssovann@online.com.kh

China, People's Republic of
Dr Zhang Zhongqiu
Director General
Veterinary Bureau
Ministry of Agriculture
No. 11 Nongzhanguan Nanli
Chaoyang District, Beijing 100125
Tel: 86-10-5919 2828/1852
Fax: 86-10-5919 2845
E-mail: chinadelegate@agri.gov.cn

Chinese Taipei
Dr Ping-Cheng Yang
Vice President
Agricultural Technology Research Institute
No.1, Ln. 51, Dahu Road, Xiangshan District, Hsinchu City, 300,
Taiwan (R.O.C.)
Tel: 886-3-5185023/37-585777
Fax: 886-3-5185030/37-585665
E-mail: delegate@mail.baphiq.gov.tw

Hong Kong SAR, China
Dr Thomas Sit
Assistant Director (Inspection and Quarantine)
Agriculture, Fisheries & Conservation Dept.
7F Cheung Sha Wan Government Offices
303 Cheung Sha Wan Road, Kowloon
Tel: 852-21506602
Fax: 852-21997050
E-mail: thcsit@afcd.gov.hk

Fiji
Mr Tomasi Tunabuna
Director
Animal Health and Production Division
Department of Agriculture
Ministry of Primary Industries
G. P. O. Box 15829, Suva
Tel: 679-338 3155
Fax: 679-3301 368
E-mail: tomasi.tunabuna@govnet.gov.fj

India
Mr Anup Kumar Thakur
Secretary, Government of India
Department of Animal Husbandry, Dairying & Fisheries
Room N°231, Krishi Bhawan, Dr Rajendra Prasad Road,
New Delhi-110001, INDIA
E-mail: secyahd@nic.in

Indonesia
Dr Syukur Iwantoro
Director General of Livestock
and Animal Health Services
Ministry of Agriculture
6th Floor C Building Room 609
Harsono RM Street No. 3
Pasar Minggu - Jakarta 12550
Tel: 62-21-781-5580
Fax: 62-21-781-5580
E-mail: syukur.deptan@gmail.com
pudjiatmoko1@yahoo.com

Iran
Dr Mehdi Khalaj
Head of Iran Veterinary Organization
Ministry of Jihad-e-Agriculture
P.O. Box 14155-6349 Tehran
Tel: 98-21-88 98 73 91
98-21-88 95 70 07
Fax: 98-21 88 95 72 52
E-mail: ivohead@ivo.org.ir
int.affairs@ivo.ir

Japan
Dr Toshiro Kawashima
Member of the OIE Council
Director, Animal Health Division
Food Safety and Consumer Affairs Bureau
Ministry of Agriculture, Forestry and Fisheries
2-1, Kasumigaseki 1-chome
Chiyoda-ku, Tokyo 100-8950
Tel: 81-3-3502-8295
Fax: 81-3-3502-3385
E-mail: toshiro_kawashima@nm.maff.go.jp
animal_health88@nm.maff.go.jp

Korea, Democratic People's Republic of
Dr Ri Kyong Gun
Director
Veterinary and Anti-Epizootic Department
Ministry of Agriculture
Jungsong-Dong, Sungri Street
Central District, Pyongyang
Tel: 850-2-181 11 (Ext 381 827)
Fax: 850-2-381-3451
E-mail: moaecd@silibank.net.kp
dl.korea-pdr@unesco-delegations.org

Korea, Republic of
Dr Oh Soon-Min
Director - Chief Veterinary Officer
General Animal Health Division
Ministry of Agriculture, Food and Rural Affairs (MAFRA)
94 Dasom 2-RO
Sejong-Si 339-012
Postal code 339-710
Tel: 82-44 201 2351
Fax: 82 44 868 0628
E-mail: ceo0210@korea.kr
animalhealth@korea.kr

Laos
Dr Syseng Khounsy
Deputy Director General
Department of Livestock and Fisheries
Ministry of Agriculture and Forestry
PO Box 6644
Vientiane
Tel: 856 21 215 242/218 367
Fax: 856 21 215 141
E-mail: s.khounsy@gmail.com

Malaysia
Dr Mohamad Azmie Zakaria
Director General
Chief Veterinary Officer
Department of Veterinary Services
Malay Ministry of Agriculture and Agro-Based Industry
Podium Block 4G1 Wisma Tani, N°28 Persiaran, Perdana, Presint 4,
62630 Putrajaya
MALAYSIA
Tel: 60-3-8870 2202
Fax: 60-3-8888 8685
E-mail: azmie.dvs@1govuc.gov.my
azmie@dvs.gov.my

Maldives
Dr. Aminath Shafia
Director General
Ministry of Fisheries and Agriculture
Valaanaage, 7th Floor
Ameer Ahmed Magu,
Male' 20096, Republic of Maldives
Tel: 960-3322625
Fax: 960-3326558
E-mail: shafia.aminath@fishagri.gov.mv

Micronesia, Federated States of
Ms Marlyter P. Silbanuz
Deputy Assistant Secretary
Agriculture Unit
Department of Resources and Development
P. O. Box PS12
National Government
Palikir, Pohnpei, FM96941
Tel: 691-320-5133
Fax: 691-320-5854 / 4969
E-mail: msilbanuz@fsmrd.fm
marlyterpohnpei@gmail.com

Mongolia
Dr Bolortuya Purevsuren
Chief Veterinary Officer of Mongolia
Deputy Director
Department of Veterinary and Animal Breeding service
Government building # 9
Enkhtaivan Avenue 16a
Bayanzurkh district
Ulaanbaatar
Tel: 976 (51) 261640
Fax: 976 (51) 261635
E mail: vetsermongolia@magicnet.mn,
bolortuya@dvab.gov.mn

Myanmar
Dr Myint Than
Director General
Livestock Breeding and Veterinary Department
Building 36, Nay Pyi Taw
Tel: 95-67 408056/408020
Fax: 95-67-408342
E-mail: lbvd@mptmail.net.mm
dg-lbvd@mail4u.com.mm
dg-lbvd@mptmail.net.mm

Nepal
Dr Keshav Prasad Premy
Director General of
Department of Livestock Services
Ministry of Agriculture Development
Harihar Bhavan
Lalitpur
NEPAL

Tel: 977-1-5549567(直通)
977-1-5522056, 977-1-5521610
Dr Rajwar's Mobile: 977-98-4133-4018
Fax: 977-1-5542915
E-mail: premy_np@yahoo.com dgdls@ntc.net.np
cc: vetnpjoshi@yahoo.com

New Caledonia
Dr Christian Desoutter,
Directeur
Affaires Veterinaires Alimentaires et Rurales
(AVAR)
209 rue Auguste Benebig, HT - Magenta
B.P. 256, 98845 Noumea Cedex
Tel: 687-255107
Fax: 687-255129
E-mail: christian.desoutter@gouv.nc
stephanie.sourget@gouv.nc
sivap.davar@gouv.nc

New Zealand
Dr Matthew Stone
Director, Animal and Animal Products
NZ Ministry for Primary Industries
Pastral House 25 The Terrace
P.O. Box 2526, Wellington
Tel: 64-22-108-7007
64-45-68-53-50
Fax: 64-48-94-07-28
E-mail: matthew.stone@mpi.govt.nz
stuart.macdiarmid@mpi.govt.nz

Pakistan
Dr Qurban Ali
Animal Husbandry Commissioner
Chief Veterinary Officer
Ministry of National Food Security and Research
8th Floor, Shaheed-e-Millat Secretariat
M. A Jinnah Road (Blue Area)
Islamabad, 44000
PAKISTAN
Tel: 92-51-922 1357
Fax: 92-51-920 6303
E-mail: drqurban@yahoo.com

Papua New Guinea*
Dr Nime Kapo
Chief Veterinary Officer
National Agricultural Quarantine
and Inspection Authority (NAQIA)
P. O. Box 741
National Capital District, Port Moresby
Tel: 675- 3112100
Fax: 675- 3251673
E-mail: nkapo@naqia.gov.pg
gibasaasiba@datec.net.pg

Philippines
Dr Rubina Cresencio
Chief Veterinary Officer
Director of BAI
Livestock Development Division (LDD)
Bureau of Animal Industry
Visayas Avenue, Diliman
Quezon City 1100
Tel: +63 2926 6883
Fax: +63 2925 9228
E-mail: BAI_Dir@yahoo.com
rubina.cresencio@gmail.com

Singapore
Dr Siang Thai Chew
Director General
Agri-Food and Veterinary Authority
of Singapore
5 Maxwell Road #04-00
Tower Block, MND Complex
Singapore 069110
Tel: 65-6325 7600
Fax: 65-6220 6068
E-mail chew_siang_thai@ava.gov.sg
yap_him_hoo@ava.gov.sg
chua_tze_hoong@ava.gov.sg

Sri Lanka
Dr Dugganna Ralalage Tissa Gamini Ratnayake
Director General
Department of Animal Production and Health
Ministry of Livestock & Rural Community Development
P.O. Box 13, Getambe
Peradeniya
E-mail: dgdaph@sltnet.lk

Thailand
Dr. Ayudh Harintharanon
Director General
Department of Livestock Development
69/1 Phaya Thai Road, Ratchatewi,
Bangkok 10400
Tel: 66 2 653 4444
Fax: 66 2 653 4900
E-mail: dg@dld.go.th
Cc: foreign@dld.go.th

Timor Leste
Dr Antonino do Karmo
National Veterinary Officer
Head, Animal Health Department
Ministry of Agriculture and Fisheries
MAF Comoro Building
Rua Presidente Nicolau Lobato No 5
Comoro, Dilí
Tel: 670 723 3792 (mobile)
Fax: 670 33 25 121
E-mail: antonino1073@gmail.com
dilivetclinic@gmail.com

Vanuatu
Dr Sina Moala
Livestock and Quarantine
Vanuatu Ministry of AgricultureQuarantine
Forestry and Fisheries
PMB 9095, Port Vila
Tel: 678-23519
Fax: 678-23185
E-mail: smoala@vanuatu.gov.vu
sinamoala@gmail.com

Vietnam
Dr Dong Pham Van
Director General
Chief Veterinary Officer
Animal Health Department
Ministry of Agriculture and Rural Development
15 Lane 78 Giai Phong Road
Dong Da - Hanoï
Tel: 84 4 38 69 42 08
Fax: 84 4 38 69 1311
E-mail: dongpv@dah.gov.vn
dongdah@yahoo.com

SPC MEMBERS

American Samoa
Dr Leoleoga Leituala
Territorial Veterinarian
Department of Agriculture
P. O. Box 7075
Pago Pago 96799
Tel: 684-699 9272
Fax: 684-699 4031
E-mail: leituala@samoatelco.com
Leituala13954@yahoo.com

Cook Islands
Mr Tiria N. Rere
Chief Livestock Officer
Ministry of Agriculture
P. O. Box 96
Rarotonga
Tel: 682-28 711
Fax: 682-21 881
E-mail: tiria@agriculture.gov.ck
cimoa@oyster.net.ck

French Polynesia
Dr Valerie Antrans
Chef, Département de la Qualité Alimentaire et de l'Action Vétérinaire
B. P. 100, Papeete, Tahiti 2444-001
Tel: 689-423524/423530
Fax: 689-420831
E-mail: valerie.antras@rural.gov.pf

Guam
Dr Thomas Pool
Territorial Veterinarian
Department of Agriculture
163 Dairy Road
Mangilao, Guam 96913
Tel: 1-671-734 3942
Fax: 1-671-734 6569
E-mail: guamvet@gmail.com

Kiribati
Mr Nautonga Anterea
Head, Livestock & Animal Health
Ministry of Environment, Lands & Agriculture Development
P. O. Box 267
Bikenibeu, Tarawa
Tel: 686-28108/28096
Fax: 686-28121
E-mail: agriculture@tskl.net.ki
mamarau@gmail.com

Marshall Islands
Mr Henry Capelle
Chief of Agriculture/Quarantine
Ministry of Resources and Development
P. O. Box 1727
Majuro, MH 96960
Tel: 692-625 3206
Fax: 692-625 7471
E-mail: kikurto@yahoo.com
mofat@ntamar.com

Nauru
Mr Frankie Ribauw
Ministry of Justice & Border Control
Government Buildings
Yaren
Tel: 674-444-3133
Fax: 674-444-31

Niue
Mr Poimatagi Tafatu Okesene
Senior Livestock/Crops Research Officer
Department of Agriculture, Forestry and Fisheries
P. O. Box 74, Alofi
Tel: 683-4032
Fax: 683-4079
E-mail: fisheries@mail.gov.nu

Northern Mariana Islands
Dr Ignacio T. dela Cruz
CNMI Secretary/Veterinarian
Animal Health & Industry
Division of Agriculture
Department of Lands & Natural Resources
P. O. Box 10007, Lower Base
Saipan, MP 96950
Tel: 1-670-322-9830
Fax: 1-670-322-2633
E-mail: ltdlcruz@pticom.com
dlnrsec@cnmidlnr.com

Palau
Mr Constantino Remeliik
Livestock Program Manager
Bureau of Agriculture
P. O. Box 460
Koror 96940
Tel: 680-488 2504
Fax: 680-488 1475
E-mail: ffms@Palaunet.com

Pitcairn Island
Mr G. D. Harraway
District Officer
Office of the Governor of Pitcairn
c/o British Consulate-General
Private Bag 92014
Auckland, New Zealand
Tel: 64-9-366 0186
Fax: 64-9-303 1836

Samoa
Mr Laumata Leota Pelesa
Assistant Chief Executive Officer
Animal Production & Health Division
Ministry of Agriculture & Fisheries
P. O. Box 1874, Apia
Tel: 685-21052
Fax: 685-26532
E-mail: fttev@lesamoa.net
leota.pelesa@maf.gov.ws

Solomon Islands
Ms Barnabas Keqa
Director
Livestock& Veterinary Services
Ministry of Agriculture& Livestock
Department of Agriculture & Livestock
P. O. Box G13, Honiara
Tel: 677-23007/20226
Fax: 677-28365
E-mail: brnkq29@gmail.com

Tokelau
Mr Mose Pelasio, Director
Department of Economic Development,
Natural Resource & Environment
Tel: 690-3127
Fax: 690-3108

Tonga
Mr Mikaele Puli Saipaia
Acting Head - Livestock Division
Ministry of Agriculture, Food, Forests & Fisheries
P. O. Box 14, Nuku'alofa
Tel: 676-29715
Fax: 676-23093
E-mail: mikasaipaia@gmail.com

Tuvalu
Mr Itaia Lausaveve
Director of Agriculture
Ministry of Natural Resources
Private Mail Bag, Vaiaku, Funafuti
Tel: 688-20836
E-mail: itaialausaveve@gmail.com

Wallis and Futuna
Dr François Perinet
Directeur du Service d'Etat de l'Agriculture,
de la Forêt et de la Pêche
Chef des Services Territoriaux
des Affaires Rurales et de la Pêche
BP 19 Mata'utu 98600
Tel: 681 72 04 00
681 72 04 09
Fax 681 72 04 04
E-mail: ecoru@mail.wf

National Coordinators

Australia
(**OIE Focal Point**)
Dr Brett HERBERT
Senior Scientist
Office of the Chief Veterinary Officer
Biosecurity Services Group
Department of Agriculture
GPO Box 858
Canberra ACT 2611
Tel: 61-2-6272-5402
E-mail: Brett.Herbert@agriculture.gov.au

Bangladesh
(**OIE Focal Point**)
Dr Md. Forhadul Alam
Assistant Director (Animal Health)
Department of Livestock Services
Ministry of Fisheries and Livestock
Prani Sampad Bhaban, Krishikhamar Sarak
Farmgate, Dhaka 1215
Tel: 880-2911-5968
E-mail: forhadul1961@gmail.com

Bhutan
(**OIE Focal Point**)
Mr Karma Tenzin
Livestock Officer
Livestock Production Division
Department of Livestock
Ministry of Agriculture and Forests
Royal Government of Bhutan
Post Box No. 113
Thimphu
Tel: 975-2-322418
Fax: 975-2-355167
E-mail: karmatenzin@gmail.com

Brunei
(**OIE Focal Point**)
Mr Haji Hallidi Salleh
Acting Director of Fisheries
Department of Fisheries
Ministry of Industry and Primary Resources
Menteri Besar Road BB3610
Brunei Darussalam
Fax: 673-2383067/ 673-2382068
Fax: 6732382069
E-mail: halidi.salleh@fisheries.gov.bn

Cambodia
(**OIE Focal Point**)
Dr Chin Da
Director of the Aquatic Division of the Fisheries Administration of Cambodia
P.O.Box: 2447, Phnom Penh-3
Tel: 855 23 996 380
E-mail: chinda77@yahoo.com

China, People's Republic of
(**OIE Focal Point**)
Dr Feng Dongyue
Engineer
National Fishery Technical Extension Center
Building 18, Maizidian Street
Chaoyang District Center
Beijing 100125
Tel: 86-138-119-564-67
E-mail: fengdy76@sina.com

Chinese Taipei
(**OIE Focal Point**)
Dr Heng-Yi Wu
Specialist, Bureau of Animal & Plant Health Inspection and Quarantine, Council of Agriculture, Executive Yuan
10 F. N° 100, Sec. 2;
Heping W. Rd., Zhong xheng Dist. Taipei City 10070,
Tel: 886-2-8978-7925
E-mail: hanker@mail.bahiq.gov.tw

Hong Kong SAR, China
Ms Joanne On-on Lee
Fisheries Officer (Aquaculture Management) 2
Agriculture, Fisheries and Conservation Department 8/F, Cheng Sha Wan Government Offices 303 Cheng Sha Wan Road, Kowloon, Hong Kong SAR
Tel: +852 21526808
Fax: +852 21520383
E-mail: joanne_oo_lee@afcd.gov.hk

Dr Geraldine LUK
Senior Veterinary Officer (Veterinary Laboratory)

India
(**OIE Focal Point**)
Dr Raja Sekhar Vundru
Joint Secretary (Fisheries) Department of Animal Husbandry, Dairying and Fisheries Ministry of Agriculture
Room No. 221-A, Krishi Bhawan
Dr. Rajendra Prasad Road
New Delhi 110001
Tel: 91-11-23381994
Fax: 91-11-23070370
E-mail: vundru@yahoo.com
jsfy@nic.in

Indonesia
(**OIE Focal Point**)
Dr Maskur Maskur
Director of Fish Health and Environment
Directorate General of Aquaculture, Ministry of Marine Affairs and Fisheries
Menara 165 Lantai 15, Jl. TB. Simatupang Kav. 1, Jakarta
Tel: 62-08129773474
Tel: 62-021 7827844
E-mail: maskurfish@gmail.com

Iran
(**OIE Focal Point**)
Dr Kazem Abdi Khazineh Jadid
Director General
Aquatic Animal Health & Disease Department
Sayed Jamaledin Asad Abadi St, Vali-Asr Ave.
P.O. Box 14155-6349, Tehran
Tel: 98-21-88-96-23-03
Fax: 98-21-88-96-23-03
Email: kazemabdy@yahoo.com

Japan
(**OIE Focal Point**)
Mr Toshiyuki Kubodera
Director
Fish and Fishery Products Safety Office
Animal Products Safety Division
Food Safety and Consumer Affairs Bureau
Ministry of Agriculture, Foresty and Fisheries
1-2-1 Kasumigaseki, Chiyoda-ku
Tokyo 100-8950
Tel: 81-3-6744-2105
Fax: 81-3-3502-8275
E-mail: toshiyuki_kubodera@nm.maff.go.jp

Korea, Democratic People's Republic of
(**OIE Focal Point**)
Dr Yun Ki Man
Veterinary Expert
Veterinary and Anti-Epizootic Department
Ministry of Agriculture
Jungsong-Dong, Sungri Street
Central District, Pyongyang
Tel: 850-21-811-138-182-78
E-mail: MOAECD@silibank.com

Korea, Republic of
(**OIE Focal Point**)
Dr Myoung Ae Park
Director, Pathology Division
National Fisheries Research and Development Institute,
152-1, Haeanro, Gijang-up
Gijang-gun, Busan 619-705 Korea
Tel: 82-51-7202470
E-mail: mapark@nfrdi.go.kr

Dr Sungha Yoon
Quarantine Officer
National Fisheries Products
Quality Management Services
106 Haaulmeaulro, Ilsandong-gu
Goyang-si
Tel: 82-31-929-4692
E-mail: ysha78@korea.kr

Laos
(**OIE Focal Point** also **NACA National Coordinator**)
Dr Thongphoun Theungphachan
Chief of Animals and Animal Products Quality Assurance Unit
National Animal Health Centre
Department of Livestock and Fisheries
Ministry of Agriculture and Forestry
Souphanouvong Road
Vientiane Capital, P.O.Box 6644
Tel: 856-21-216380
E-Mail: theungphachan@yahoo.com

Malaysia
(**OIE Focal Point**)
Ms Marlinda Hanin Binti Marham
Fisheries officer
Fisheries Biosecurity Division
Ministry of Agriculture and Agro based Industry
3rd floor, Podium block
4G2, Wisma Tani
No 30 Persiaran Perdana
Precint t4
Federal Government Administrative Center
62628 Putrajaya
Tel: 60 38 870 4671
E-mail: merlinda@dof.gov.my

Maldives
(**OIE Focal Point**)
Dr Shafiya Naeem
Senior Research Officer
Marine Research Center
Ministry of Fisheries and Agriculture
H. White Wave, Moonlight Higun
Male' - 20096
Tel: 960-332-2242
Fax: 960-332-6558
E-mail: snaeem@mrc.gov.mv
shafiyanaeem@gmail.com

Micronesia, Fed. States of
(**OIE Focal Point**)
Mr Valentin MARTIN
Deputy Assistant Secretary
Marine Resources Unit
Department of Resources & Development
FSM Government
P.O Box PS-12
Palikir
Phonpei, FM96941
Tel: 691-320-2620/5133/2646
Fax: 691-320-5854
E-mail: fsmmrd@mail.fm

Mongolia
(**OIE Focal Point**)
Dr Sengee Sugir
State Central Veterinary Laboratory
Khan-uul district, Zaisan
P.O. Box 53/03
Ulaanbaatar 210153
Tel: 976-341651-18
Fax: 976-11-70111050
E-mail: ssugar352000@yahoo.com

Myanmar
(**OIE Focal Point**)
Dr Myin Winn
Deputy Director
Livestock Breeding & Veterinary dept.
Ministry of Livestock, Fisheries and Rural Development
Building 36, Nay Pyi Taw
E-mail: paingphyo2007@gmail.com
dg-lbvd@mptmail.net.mm

Nepal
(**OIE Focal Point** also **NACA National coordinator**)
Mr Ram Prasad Panta
Senior Fisheries Development Officer
Central Fisheries Laboratory
Central Fisheries Building
Balaju, Machhapokhari, Kathmandu
Tel: 997-1-4385854
Fax: 997-1-4350833
E-mail: rppanta13@gmail.com

New Caledonia
(**OIE Focal Point**)
Dr Stéphanie Sourget
Veterinarian
Veterinary, Food and Rural Affairs Department
Veterinary, Food and Phytosanitary Service
B.P. 256, 98845 Noumea
Tel: 687-24-37-45 / 79-83-64
Fax: 687-25-11-12
E-mail: Stephanie.sourget@gouv.nc

New Zealand
(**OIE Focal Point**)
Mr Brendan Gould
Manager Surveillance and Incursion Investigation
PO Box 2526, Wellington 6120
Tel: 64 4 894 0548
E-mail: Brendan.Gould@mpi.govt.nz

Dr Mary van Andel
Incursion Investigator

Pakistan
(**OIE Focal Point**)
Dr Mansoor Hussan Khan
Research Officer
Ministry of National Food Security and research
E-mail: khurshid_65@hotmail.com

Papua New Guinea
(**OIE Focal Point**)
Mr Wani Jacob Aruma
Advisor
Aquaculture and Inland Fisheries Unit
National Fisheries Authority
P.O.Box 2016
Port Moresby, National Capital District
Tel: 675-3090-444
Fax: 675-320-2061
E-mail: gwani@fisheries.gov.pg

Philippines
(**OIE Focal Point** also **NACA National Coordinator**)
Dr Joselito R. Somga
Senior Aquaculturist,
Bureau of Fisheries and Aquatic Resources
860, Quezon Avenue, Quezon City, Metro Manila 1003
Tel: 63-2-372 3878, local 206
63-2-410 9988-89
Fax: 63-2-372 5055/410 9987
E-mail: jsomga@bfar.da.gov.ph
josomga@yahoo.com

Singapore
(**OIE Focal Point** also **NACA National Coordinator**)
Dr Diana Chee
Agri-food and Veterinary Authority
Animal and Plant Health Centre 6 Perahu Road,
Singapore 718827
Tel: 65-63165140
Fax: 65-63161090
E-mail: Diana_Chee@AVA.gov.sg

Sri Lanka
(**OIE Focal Point** also **NACA National Coordinator**)
Dr Rajapaksa Arachilage Geetha Ramani
Veterinary Investigation Officer
Veterinary Investigation Centre
Department of Animal Production and Health Welisara
Tel: 94 112 958 213
Mobile: 94 714 932 169
E-mail: vic_welisara@yahoo.com

Thailand
(**OIE Focal Point** also **NACA National Coordinator**)
Ms Jaree Polchana
Fishery Biologist, Professional Level
Inland Aquatic Animal Health Research Institute
(IAAHRI)
Inland Fishery Research and Development Bureau
Department of Fisheries, Kaset Klang, Chatuchak
Bangkok 10900
Tel: 66-2-5794122
Fax: 66-2-5613993
E-mail: j_polchana@yahoo.com

Timor-Leste
(OIE Focal Point)
Dr Felisiano DA CONCEIÇÃO
National Directorate and Veterinary Services
Ministry of Agriculture and Fisheries
Rua de Presidente Nicolau Lobato No.5
Comoro, Dili
Tel: 670-331-0518
Mobile: 670-772-68-637
E-mail: maularavets@yahoo.com
alvabetha@gmail.com

Vanuatu
(**OIE Focal Point**)
Mr Lency Dick
Senior Aquaculture Officer Vanuatu Department of
Fisheries PMB 9045 Port Vila
Tel: 678 23 174
Fax: 678 23641
Email: Inc.kukan@gmail.com

Vietnam
(**OIE Focal Point**)
Dr Van Long Nguyen
Deputy Head
Aquatic Animal Health Division
Department of Animal Health
Ministry of Agriculture and Rural Development
15, Lane 78, Giai Phong Road
Dong Da, Hanoi
Tel: 84-4-36290284
Fax: 84-4-36290286
E-mail: long.dahvn@gmail.com