

Japan's Comments on

The Aquatic Commission Report of the October 2015 meeting

Japan would like to express its appreciation to the Aquatic Animal Health Standards Commission (AAHSC) for all the works they have done and for giving us the opportunity of offering comments on proposed revisions to the Aquatic Animal Health Codes and Manual of Diagnostic Tests for Aquatic Animals.

1. Glossary

VECTOR

means any living organism that transports an infectious agent to a susceptible individual or its food or immediate surroundings. The organism may or may not pass through a development cycle within the vector.

CARRIER

means susceptible organism that shows no clinical signs but harbors the infectious agent of a disease and can transmit the infectious agent to other susceptible organisms (or its food or immediate surroundings).

Rationale

“Carrier” is used in a lot of chapters of Aquatic code and manual and the definition should be added in Glossary to clarify the difference from “vector”.

2. Criteria for the inclusion of diseases in the OIE list (Chapter 1.2.)

Article 1.2.2.

The criteria for the inclusion of a disease in the OIE list are as follows:

- 1) International spread of the agent (via aquatic animals, aquatic

animal products or fomites) is likely.

AND

- 2) At least one country or a country with a zone ~~may demonstrated is considered to be free freedom~~ from the disease in susceptible aquatic animals, ~~based on provisions of Chapter 1.4.~~

AND

- 3) A precise case definition is available and a reliable means of detection and diagnosis exist.

AND

4)

- a) Natural transmission to humans has been proven, and human infection is associated with severe consequences.

OR

- b) The disease has been shown to affect the health of cultured aquatic animals at the level of a country or a zone resulting in significant consequences e.g. production losses, morbidity and mortality at a zone or country level.

OR

- c) The disease has been shown to, or scientific evidence indicates that it would, affect the health of wild aquatic animals resulting in significant consequences e.g. production losses, morbidity and mortality at a population level, and ecological impacts.

Rationale

Japan agrees the amendment of criterion 2 but suggests the deletion of “may “and “based on provisions of Chapter 1.4.” to clarify the criterion. In criterion 4-c, “production losses” should be added because wild aquatic animals are caught as commercial products.

3. Acute Hepatopancreatic Necrosis Disease (new Chapter 9.X.)

Article 9.X.1.

For the purposes of the Aquatic Code, acute hepatopancreatic necrosis disease (AHPND) means infection with strains of the bacteria *Vibrio parahaemolyticus* and *Vibrio harveyi* carrying one or more extrachromosomal plasmid(s) that encode for a toxin (Pirvp) that induces AHPND histopathological changes in the hepatopancreas (VpAHPND). *V. parahaemolyticus* is classified as a member of the *V. harveyi* clade.

Rationale

Kondo et al. (2015) reported that AHPND is caused by not only *Vibrio parahaemolyticus* but a strain of *Vibrio harveyi*.

Kondo H., Van P.T., Dang L.T., & Hirono I. (2015). Draft Genome Sequence of Non-*Vibrio parahaemolyticus* Acute Hepatopancreatic Necrosis Disease Strain KC13.17.5, Isolated from Diseased Shrimp in Vietnam. *Genome Announc.* September/October 2015 3:e00975-15; doi:10.1128/genomeA.00975-15

4. Infection with yellow head virus genotype 1 (Chapter 2.2.8.)

2.2.2. Species with incomplete evidence for susceptibility

Species for which there is incomplete evidence to fulfil the criteria for listing a species as susceptible to infection with YHV1 according to Chapter 1.5 of the Aquatic Code include: Sunda river prawn (*Macrobrachium sintangense*), yellow shrimp (*Metapenaeus brevicornis*), Carpenter prawn (*Palaemon serrifer*), Pacific blue prawn (*Palaemon styliferus*), northern brown shrimp (*Penaeus aztecus*), pink shrimp (*Penaeus duorarum*), kuruma prawn (*Penaeus japonicus*), white banana prawn (*Penaeus merguensis*) and northern white shrimp (*Penaeus setiferus*).

(Text partly omitted)

Rationale

The scientific name is wrong.

4.3.1.2.3.1 Reverse-transcription polymerase chain reaction (RT-PCR)

(Text partly omitted)

The sequences of RT-PCR primers generic for GAV and YHV (GY) or specific for GAV (G) or YHV (Y) are as follows:

GY1: 5'-GAC-ATC-ACT-CCA-GAC-AAC-ATC-TG-3'

GY2: 5'-CAT-CTG-TCC-AGA-AGG-CGT-CTA-TGA-3'

GY4: 5'-GTG-AAG-TCC-ATG-TGT-GTG-AGA-CG-3'

GY5: 5'-GAG-CTG-GAA-TTC-AGT-GAG-AGA-ACA-3'

Y3: 5'-ACG-CTC-TGT-GAC-AAG-CAT-GAA-GTT-3'

G6: 5'-GTA-GTA-GAG-ACG-AGT-GAC-ACC-TAT-3'

The primer GY2 is not completely generic for GAV. For GAV, the 7th base from left (T) is substituted for C so that the primer sequence for GAV should be 5'-CAT-CTG-CCC-AGA-AGG-CGT-CTA-TGA-3', according to the sequence data of the GAV genome (database accession numbers, NC_010306.1 and AF227196.2).

(Text partly omitted)

Rationale

Additional information

5. Other comments

In Japan's Comments on The Aquatic Commission Report of the March 2015 meeting, Japan suggested the following amendment. Please inform the response to the comment.

A comment on the chapter 2.2.6. "White spot disease", article 2.2.7. "Known or suspected wild aquatic animal carriers"

The word "molluscs" should be removed from the following sentence: "Other marine molluscs, polychaete worms (Vijayan et al., 2005), as well as can mechanically carry the virus without evidence of infection (Lo & Kou, 1998)."

This is because no such evidence supporting the presence of molluscan vectors has actually been obtained even in the two papers referred to in this sentence. Vijayan et al. (2005) only reports polychaete worms as vectors for the virus, and Lo & Kou (1998) describes crustaceans and some

arthropods as reservoirs, but none of the authors mentions molluscs.