



Risk Management Proposal

ORNAMARI.ALL

June 2016

Disclaimer

This risk management proposal does not constitute, and should not be regarded as, legal advice. While every effort has been made to ensure the information in this document is accurate, the Ministry for Primary Industries does not accept any responsibility or liability whatsoever for any error of fact, omission, interpretation or opinion that may be present, however it may have occurred.

Requests for further copies should be directed to:

Ministry for Primary Industries
Standards Branch
Animal Imports
PO Box 2526
WELLINGTON 6140

Email: animalimports@mpi.govt.nz
Telephone: 04 890 0134
Facsimile: 04 894 0733

© Crown Copyright - Ministry for Primary Industries

Contents

Page

1	Purpose	1
2	Background	1
3	Objective	2
4	Options assessment	2
5	Considerations for specific requirements for identified risk organisms	2

1 Purpose

The purpose of this document is to:

- Show how options for the management of risk organisms have been assessed.
- Provide recommendations for import requirements.

2 Background

In November 2005 the Ministry for Primary Industries released a risk analysis (IRA), *Import Risk Analysis: Ornamental Fish*, with the objective of developing an updated import health standard for ornamental fish and marine invertebrates. The 2005 IRA concluded that risk mitigation measures were justifiable for the following 13 disease agents associated with the importation of ornamental fish and marine invertebrates: aquabimaviruses, iridoviruses, grouper necrosis virus, viral haemorrhagic septicaemia virus, *Edwardsiella ictaluri*, *Edwardsiella tarda*, *Lactococcus garvieae*, *Aphanomyces invadans*, *Enteromyxum leii*, *Glugea heraldi*, *Bothriocephalus acheilognathi*, *Capillaria philippinensis* and *Argulus foliaceus*.

Consultation on MPI's 2005 IRA revealed that a number of genera of currently imported animals had not been included, and as a result, it became necessary to conduct a supplementary risk analysis on a further 158 genera of aquatic animals. This 2009 supplementary IRA identified a further six organisms as hazards.

The additional hazards were cyprinid herpesvirus-3 (koi herpesvirus), spring viraemia of carp virus, *Aeromonas salmonicida*, *Flavobacterium psychrophilum*, *Hoferellus carassii* and white spot syndrome virus.

Ornamental fish and marine invertebrates eligible for import, under the Hazardous Substances and New Organisms (HSNO) Act, were those species present in New Zealand before 1 July 1998. This list was then assessed by the Department of Conservation (DOC), the National Institute of Water and Atmospheric Research (NIWA) and the Federation of New Zealand Aquatic Societies (FNZAS). Fish that are potentially harmful to New Zealand (i.e. able to survive in New Zealand and establish a self-sustaining population) were removed from the list. The amended eligible list was finalised in March 2007.

Ornamental fish and marine invertebrates from the eligible list in the import health standard (IHS) must remain in quarantine for not less than four weeks in the case of freshwater fish, and not less than three weeks in the case of marine fish and marine invertebrates.

Permitted 'high-risk' fish and marine invertebrate species (susceptible to one or more of the identified 19 risk organisms) must undergo risk management measures in addition to the above quarantine periods. The risk management options for the hazards are given in the IHS.

In March 2015 MPI received a request to consider allowing trade in ornamental fish and marine invertebrates that have undergone quarantine conducted off-shore in approved facilities, and are then airfreighted directly to New Zealand pet stores with no quarantine required in New Zealand on arrival.

This Risk Management Proposal accompanies the updated *Import Health Standard for Ornamental Fish and Marine Invertebrates*, which includes the option for risk mitigation measures for ornamental fish and marine invertebrates to be met prior to importation to New Zealand. The standard has also been updated in line with MPI's policy to separate regulation and guidance information. The Standard for *Transitional Facilities for Ornamental Fish and Marine Invertebrates* has been updated and that draft will accompany the IHS for consultation.

3 Objective

The objective is to effectively manage biosecurity risks associated with the import of ornamental fish and marine invertebrates, consistent with New Zealand's domestic legislation and international obligations.

4 Options assessment

Under Article 3.3 of the World Trade Organisation Agreement on the Application of Sanitary and Phytosanitary Measures (the SPS Agreement), risk management measures which provide a level of protection greater than provided by international standards may be imposed only when they can be scientifically justified on the basis of a risk assessment.

For a detailed analysis of potential hazards and their risks please refer to the below documents, which contains the relevant risk assessment and an analysis of management options for each risk organism.

Ornamental Fish- Risk Analysis (November 2005)

<https://www.mpi.govt.nz/document-vault/2754>

Tropical, subtropical and temperate freshwater and marine ornamental fish and marine molluscs and crustaceans - Import risk analysis: Review of submissions on import risk analysis: Ornamental fish, and supplementary risk analysis (June 2009)

<https://www.mpi.govt.nz/document-vault/2753>

Tropical, subtropical and temperate freshwater and marine ornamental fish and marine molluscs and crustaceans - Import risk assessment review of submissions (May 2010)

<https://www.mpi.govt.nz/document-vault/2752>

5 Considerations for specific requirements for identified risk organisms

The following 19 organisms are classified as hazards in the combined risk assessments:

- aquabirnaviruses
- iridoviruses
- grouper nervous necrosis virus
- viral haemorrhagic septicaemia virus
- *Edwardsiella ictaluri*
- *Edwardsiella tarda*
- *Lactococcus garvieae*
- *Aphanomyces invadans*
- *Enteromyxum leii*
- *Glugea heraldi*
- *Bothriocephalus acheilognathi*
- *Capillaria philippinensis*
- *Argulus foliaceus*.
- cyprinid herpesvirus-3 (koi herpesvirus)
- spring viraemia of carp virus
- *Aeromonas salmonicida*
- *Flavobacterium psychrophilum*
- *Hofereilus carassii*
- white spot syndrome virus

Flavobacterium psychrophilum was reported to be present in New Zealand and is no longer considered to be a hazard.

Risk management measures for the remaining 18 hazard as listed in the 2009 *supplementary risk analysis for tropical, subtropical and temperate freshwater and marine ornamental fish and marine molluscs and crustaceans* are as follows and must be applied to all ornamental species and marine invertebrates eligible for import that are susceptible to the diseases.

5.1 AQUABIRNAVIRUSES

5.1.1 Risk management measures presented in the IRA: Tropical, subtropical and temperate freshwater and marine ornamental fish and marine molluscs and crustaceans (2009).

- a) **Subtropical species:** Quarantine for 4 weeks with investigation of batches displaying clinical signs of septicaemia or sudden unexplained mortality.
- b) **Temperate species:** Batch or source population testing for aquabirnaviruses with negative results.

5.2 IRIDOVIRUSES

5.2.1 Risk management measures presented in the IRA: Tropical, subtropical and temperate freshwater and marine ornamental fish and marine molluscs and crustaceans (2009).

- a) **Tropical species:** Quarantine for 4 weeks with investigation of batches displaying clinical signs of septicaemia or sudden unexplained mortality.
- b) **Subtropical and Temperate species:** Batch or source population testing for iridoviruses with negative results.

5.2.2 Updated risk management measures (2016) for importation of goldfish

In the current *Import Health Standard (IHS) for Ornamental Fish and Marine Invertebrates* (April 2011), Goldfish (*Carassius auratus*) requires testing for iridoviruses. This decision was based on the MPI's initial ornamental fish- risk analysis (November 2005) which lists a scientific reference that supported the scientific basis for this requirement (Berry ES, Shea TB, Gabliks J (1983). Two iridovirus isolates from *Carassius auratus* L. *JFish Dis* 6: 501-510).

Australia's Department of Agriculture and Water Resources (DAWR) noted that the paper only tentatively identified an unknown virus in goldfish as an iridovirus and that the identity of the presumed iridovirus was not confirmed by PCR methods.

There have been no further studies that indicate goldfish are susceptible to iridovirus; therefore goldfish will not be required to meet risk measures for iridovirus.

5.3 GROUPEL NERVOUS NECROSIS VIRUS

5.3.1 Risk management measures presented in the IRA: Tropical, subtropical and temperate freshwater and marine ornamental fish and marine molluscs and crustaceans (2009).

- a) **Tropical species:** Quarantine for 4 weeks with investigation of batches displaying clinical signs of septicaemia or sudden unexplained mortality.
- b) **Subtropical and Temperate species:** Batch or source population testing for grouper nervous necrosis virus with negative results.

5.4 VIRAL HAEMORRHAGIC SEPTICAEMIA VIRUS

5.4.1 Risk management measures presented in the IRA: Tropical, subtropical and temperate freshwater and marine ornamental fish and marine molluscs and crustaceans (2009).

- a) **Subtropical and Temperate species:** Batch or source population testing for VHSV with negative results.

5.5 CYPRINID HERPESVIRUS-3 (KOI HERPESVIRUS)

5.5.1 Risk management measures presented in the IRA: Tropical, subtropical and temperate freshwater and marine ornamental fish and marine molluscs and crustaceans (2009).

- a) **Temperate species:** Verifiable certification of continuous separation from *Cyprinus carpio* species; otherwise batch or source population testing with negative results.

5.6 SPRING VIRAEMIA OF CARP VIRUS

5.6.1 Risk management measures presented in the IRA: Tropical, subtropical and temperate freshwater and marine ornamental fish and marine molluscs and crustaceans (2009).

- a) **Temperate species:** Verifiable certification of continuous separation from *Cyprinus carpio* species; otherwise batch or source population testing with negative results.

5.7 EDWARDSIELLA ICTALURI

5.7.1 Risk management measures presented in the IRA: Tropical, subtropical and temperate freshwater and marine ornamental fish and marine molluscs and crustaceans (2009).

- a) **Subtropical species:** Quarantine for 4 weeks with investigation of batches displaying clinical signs of septicaemia or sudden unexplained mortality.
- b) **Temperate species:** Batch or source population testing for *E. ictaluri* with negative results.

5.8 EDWARDSIELLA TARDA

5.8.1 Risk management measures presented in the IRA: Tropical, subtropical and temperate freshwater and marine ornamental fish and marine molluscs and crustaceans (2009).

- a) **Subtropical species:** Quarantine for 4 weeks with investigation of batches displaying clinical signs of septicaemia or sudden unexplained mortality.
- b) **Temperate species:** Batch or source population testing for *E. tarda* with negative results.

5.9 LACTOCOCCUS GARVIAE

5.9.1 Risk management measures presented in the IRA: Tropical, subtropical and temperate freshwater and marine ornamental fish and marine molluscs and crustaceans (2009).

- a) **Tropical/Subtropical species:** Quarantine for 4 weeks with investigation of batches displaying clinical signs of septicaemia or sudden unexplained mortality.
- b) **Temperate species:** Batch or source population testing for *L. garviae* with negative results.

5.10 AEROMONAS SALMONICIDA

5.10.1 Risk management measures presented in the IRA: Tropical, subtropical and temperate freshwater and marine ornamental fish and marine molluscs and crustaceans (2009).

- a) **Temperate species:** Batch or source population testing for *A. salmonicida* with negative results.

5.11 APHANOMYCES INVADANS

5.11.1 Risk management measures presented in the IRA: Tropical, subtropical and temperate freshwater and marine ornamental fish and marine molluscs and crustaceans (2009).

- a) **Tropical/Subtropical/Temperate species:** Quarantine for 4 weeks with investigation of batches displaying clinical signs of ulcerated or congested skin lesions.

5.12 ENTEROMYXUM LEEI

5.12.1 Risk management measures presented in the IRA: Tropical, subtropical and temperate freshwater and marine ornamental fish and marine molluscs and crustaceans (2009).

- a) **All species:** Quarantine for 6 weeks with investigation of batches displaying clinical signs of septicaemia or sudden unexplained mortality.

5.13 HOFERELLUS CARASSII

5.13.1 Risk management measures presented in the IRA: Tropical, subtropical and temperate freshwater and marine ornamental fish and marine molluscs and crustaceans (2009).

- a) **Temperate:** Quarantine for 4 weeks with investigation of batches displaying clinical signs of enlarged abdomen and ad-hoc screening of any samples submitted to the diagnostic laboratory for other reasons.

5.14 *BOTHRIOCEPHALUS ACHEILOGNATHI*

5.14.1 Risk management measures presented in the IRA: Tropical, subtropical and temperate freshwater and marine ornamental fish and marine molluscs and crustaceans (2009).

- a) **Tropical/subtropical:** Pre-security clearance treatment with praziquantel at ≥ 1 mg/L for 24 hours or ≥ 4 mg/L for 12 hours to be completed 96 hours before clearance or 40 mg/kg fenbendazole orally on two occasions 4 days apart.

5.15 *ARGULUS FOLIACEUS*

5.15.1 Risk management measures presented in the IRA: Tropical, subtropical and temperate freshwater and marine ornamental fish and marine molluscs and crustaceans (2009).

- a) **Subtropical/Temperate:** Quarantine for 4 weeks, with visual inspections. If inspections reveals infestation, ectoparasiticide to be used, and fish visually inspected to be clear before biosecurity clearance issued. Quarantine period maybe extended if required until fish are free of parasites.

5.16 *GLUGEA HERALDI*

5.16.1 Risk management measures presented in the IRA: Tropical, subtropical and temperate freshwater and marine ornamental fish and marine molluscs and crustaceans (2009).

- a) **Subtropical/Temperate:** Quarantine for 4 weeks with investigation of batches displaying clinical signs of grey, proliferative skin lesions.

5.17 *CAPILLARIA PHILIPPINENSIS*

5.17.1 Risk management measures presented in the IRA: Tropical, subtropical and temperate freshwater and marine ornamental fish and marine molluscs and crustaceans (2009).

- a) **Subtropical:** Pre-security clearance treatment with levamisole bath (1 mg/L) for 24 hours.

5.18 WHITE SPOT SYNDROME VIRUS

5.18.1 Risk management measures presented in the IRA: Tropical, subtropical and temperate freshwater and marine ornamental fish and marine molluscs and crustaceans (2009).

- a) **All species:** Quarantine for 4 weeks. All mortalities to be recorded and notified to the supervisor. All mortalities to be retained (frozen) and representative number subjected to nested PCR test for WSSV. Samples maybe pooled if required. Nested PCR test to be negative before biosecurity clearance.

5.18.2 Updated risk management measures from *the IRA: Tropical, subtropical and temperate freshwater and marine ornamental fish and marine molluscs and crustaceans, review of submissions on supplementary risk analysis.*

3-week quarantine period with investigation of batches showing clinical signs of white spot syndrome.