



First steps towards a risk assessment of the introduction and spread of fish and amphibian ranaviruses into the EU

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Introduction

Ranaviruses are a group of systemic iridoviruses associated with systemic disease in mainly erythropoietic tissue, potentially causing high mortalities in affected animals. Ranaviruses have been isolated from fish, amphibians and reptiles in Austral-Asia, North America and Europe, and experimental trials indicate that some ranaviruses can be transmitted from amphibians to fish.

The epidemiological attributes of the viruses (their world-wide distribution and their ability to affect poikilothermic animals across classes) have caused initiation of the RANA-project¹ with the aim of developing a risk assessment model for determining the risk of entrance and spread of ranaviruses into the EU.

Methodology

The first step in the risk assessment procedure was to gather ranavirus-experts from the RANAproject-consortium and from countries where ranaviruses are present for a two day workshop. The aim was to follow the four stages described in the OIE-manual on import-risk analysis². Critical for the Risk assessment was to identify which virus(es) should be assessed, and the possible pathway for introduction and spread into the EU.

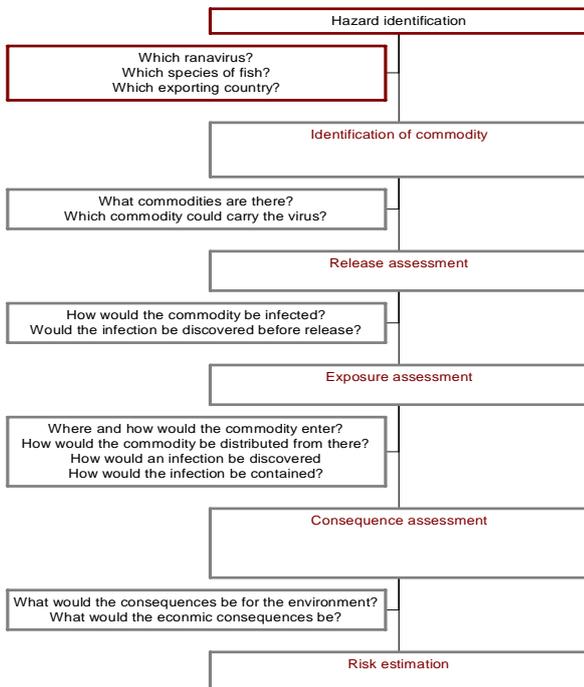
Distribution of ranaviruses

The map and table show selected isolates and their distribution.

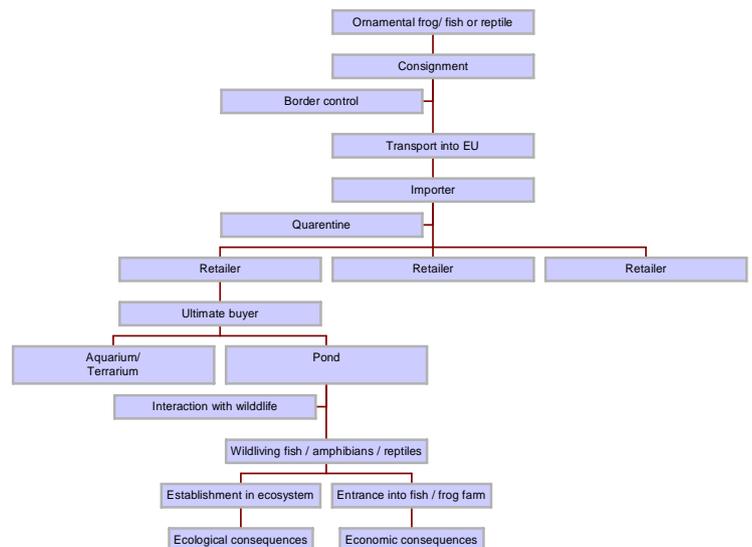
Virus:	Abbreviation:	Natural hosts:
Epizootic haematopoietic necrosis virus	EHN ¹ ●	Redfin perch, Rainbow trout?
European Catfish/Sheatfish virus	ECV / ES ² ●	Catfish / Sheatfish
Bohle iridovirus	BIV ●	Ornate burrowing frog
Frog virus 3	FV3 ●	Common frog Leopard frog Etc.
Tiger salamander virus	ATV ●	Tiger salamander Stickleback
Rana tigrina ranavirus	RTRV ●	Tiger frog



Steps in the Risk Assessment for the RANA-project



Pathway of introduction of ranavirus to the EU



Conclusion

As a result of the workshop, the first steps in the risk assessment were taken, when the hazards were identified and a pathway for introduction of ranaviruses established.

References:

1. Risk assessment of new and emerging systemic iridoviral diseases for European fish and aquatic ecosystems. 6th framework programme, European commission
2. Office international des épizooties: Handbook on import risk analysis for animals and animals products / OIE 2004