First evidence of infectious hematopoietic necrosis virus (IHNV) in the Netherlands

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In spring 2008, infectious hematopoietic necrosis virus (IHNV) was detected for the first time in the Netherlands. The virus was isolated from rainbow trout, Oncorhynchus mykiss (Walbaum), from a put-and-take fishery with angling ponds. IHNV is the causative agent of a serious fish disease, infectious hematopoietic necrosis (IHN). From 2008-2011, we diagnosed eight IHNV infections in rainbow trout originating from six put-and-take fisheries (symptomatic and asymptomatic fish), and four IHNV infections from three rainbow trout farms (of which two were co-infected by Infectious Pancreatic Necrosis Virus, IPNV), at water temperatures between 5 and 15°C. At least one Dutch farm (with both put-and-take fisheries and rainbow trout culture) delivered trout to four of these eight IHNV positive farms. Mortalities related to IHNV were mostly <40%, but increased to nearly 100% in case of IHNV and IPNV co-infection. Subsequent phylogenetic analysis revealed that these 12 isolates clustered into two different monophyletic groups within the European IHNV-genogroup E. One of these two groups indicates a virus-introduction event by a German trout import, whereas the second group indicates that IHNV was already (several years) in the Netherlands before its discovery in 2008. Since 2011 no further IHNV infections were detected in the Netherlands. In this poster, details on the first IHNV detections in 2008-2011 in the Netherlands are presented.

Keywords: Infectious hematopoietic necrosis virus, rainbow trout, phylogenetic analysis, The netherlands, Virus introduction


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