

Hemorrhagic Disease of Grass Carp: Status of Outbreaks, Diagnosis, Surveillance, and Research

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Abstract

Hemorrhagic disease of grass carp is the most serious infectious disease of grass carp and causes significant losses of fingerlings. The main clinical signs are external and internal hemorrhage. The disease is caused by aquareovirus and has several serotypes. The optimal epidemic temperature of this disease is 25-28°C. The disease can be transmitted by water or parasite bite. Susceptible hosts are grass and black carp. Other cyprinids are only carriers. Vaccination can control hemorrhagic disease of grass carp. An inactivated vaccine prepared from organs of sick fish is simple and easy to produce with good efficacy. In China, hemorrhagic disease of grass carp was prevalent but has been controlled by wide application of the vaccine. In other Southeast Asian countries, it is a new disease. For surveillance and diagnosis of hemorrhagic disease of grass carp, isolation of the virus using carp kidney (CK) cells and reverse transcriptase polymerase chain reaction (RT-PCR) are the main methods of detection.