Streptococcosis in tilapia (Oreochromis niloticus): a review

ABSTRACT

Tilapia (Oreochromis niloticus) is a hardy, most cultured freshwater fish in the world. It has been contributing to the world aquaculture since the ancient Egyptian days and remains a major freshwater fish species to be cultured. Although tilapias are more resistant to unfavourable water quality than other freshwater fish, tilapias have been reported to succumb to infection by Streptococcus, which was first observed among the populations of rainbow trout (Oncorhynchus mykiss) farmed in the Shizouka Prefecture in Japan in April 1957. Since then, the disease that is also known as ‘pop eye’ has been reported in many other fish species throughout the world, contributing to an annual loss of approximately USD 150 million. Affected tilapia shows loss of appetite, spine displacement, haemorrhages in the eye, corneal opacity, haemorrhages at the base of the fins and in the opercula. The most prominent signs are uni- or bi-lateral exophthalmia (also known as “pop-eye”), distended abdomen and erratic swimming. Control is mainly through implementing some preventive measure and antibiotic therapy, while vaccination is generally not effective in preventing Streptococcus outbreaks in tilapias.

Keyword: Streptococcus; Tilapia; Infection