

Investigation of the Effects of Quercetin on Oxidative Stress in Cells Infected with Infectious Pancreatic Necrosis Virus

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Abstract : Infectious pancreatic necrosis virus is a disease of great concern in aquaculture, causing mortality of 80 - 90% of the stocks in salmonid production. We aimed to investigate the efficacy of quercetin on oxidant and antioxidant parameters of infectious pancreatic necrosis virus, which is important for fish farming and economy in vitro. Quercetin experimental model was used in the cell culture of *Oncorhynchus mykiss* infected with infectious pancreatic necrosis virus. Malondialdehyde, ceruloplasmin, total oxidant capacity, total antioxidant levels, and glutathione-peroxidase were measured in the samples. As a result of the study, it was observed that quercetin can minimize the damage caused by scavenging free radicals in cells infected with infectious pancreatic necrosis virus. Thus, we think that an important development can be achieved for fish farming and the economy.

Keywords : IPNV, *oncorhynchus mykiss*, TAS, TOS, quercetin

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