



An Assessment of rainbow trout (*Oncorhynchus mykiss*) by Egteved disease (Viral Hemorrhagic Septicemia Virus - VHS) detection during 4 years (2012-2015 A.D.) with cell culture & molecular method (RT-PCR).

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Abstract:

During the 2012-2015 A.D., a project had done to detect VHS virus in rainbow trout (*O. mykiss*) of a farm in IRAN. The first step, was sampling. About 1% of rainbow trout population (brood stock) selected as sample. Each year about 30 fish sampled. They contains 50% male and 50% female. Also, fertilized eggs of female fish, unfertilized egg, and semen of male fish, larvae and small fish (several ages) had sampled. All samples immersed in VTM (Virus Transport Medium) separately and accommodated in nitrogen tank and froze. Then, they transferred to a laboratory to do cell cultivation and molecular (RT-PCR) by means of the virus detection. In the lab, samples examined by recommended protocols. Samples homogenized and centrifuged and filtered. Then they cultivated in suitable cell lines (EPC & BF-2). The samples which had shown CPE (Cyto Pathic Effect) selected and examined by RT-PCR (Reverse Transcriptase -Polymerase Chain Reaction) method as a molecular method to diagnose viral genome. The results shown that a few samples (about 3.3%) had been infected with VHS virus in 2012 & 2013 while detect any virus from samples of 2014 - 2015.

Keywords: Egteved disease, VHS (Viral Hemorrhagic Septicemia Virus), PCR, Rainbow trout, IRAN.