

ABSTRACT

EFFECT OF BLACK CUMIN (*Nigella sativa*) AGAINST HISTOPATHOLOGY BARRAMUNDI (*Lates calcarifer*) CHALLENGED By VIRAL NERVOUS NECROSIS (VNN) AIMED.

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Nervous Viral Infection Virus (VNN) in barramundi (*Lates calcarifer*) can lead to death. One of the treatments against the disease is done by boosting the immune system of fish. Black cumin (*Nigella sativa*) is a plant that can be used as an immunostimulant. This study to determine the effect of black cumin against histopathology barramundi challenged by VNN aimed. A total of 60 white tail snappers were maintained 4 with 4 treatments addition of black cumin is 0g/Kg of feed, 25 g/Kg of feed, 50 g/Kg of feed and 75g/Kg of feed. The treatments is applied for 44 days, on the 37th day, it was performed challenge test by injecting of VNN isolates into the body of the fish intra peritoneal dose of 0.1 ml/individual. histopathological analysis of organs brain, eyes, liver and kidney proves that with the addition of black cumin (treatments B, C and D) can prevent organ damage due to infection VNN. Treatment B is the optimal dose of cumin to prevent tissue damage caused by VNN infection. These results demonstrated that the addition of black cumin in a feed can prevent tissue damage caused by infection of VNN.

Key word : VNN, barramundi, black cumin, immunostimulatory, histopathology.