



Study of Immune mucose factor *common carp* fed dietary water hyacinth

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Abstract:

A 7-weeks feeding trial was conducted to examine the effects of different levels (0, 0.5, 1 and 1.5%) of dietary water hyacinth (*Eichhornia crassipes*) leaf powder (WLP) on mucus non-specific immune response (Total immunoglobulins, lysozyme, protease and alkaline phosphatase activity) in *common carp* were evaluated. A total of 120 fish weighting 50.07 ± 0.79 g were randomly divided into four groups. Skin mucus samples were obtained from nine 24-h starved fish (three sample per replicate) according to the method recommended by Subramanian. Feeding on water hyacinth supplemented diet remarkably increased skin mucus factor special lysozyme activity and Alkalin phosphat ($P < 0.05$). This study indicates that oral administration of water hyacinth enhances some nonspecific immune responses in *C. carpio*, and therefore it can be recommended as an herbal immunostimulant in fish.

Keywords: Immune mucose, factor, common carp, water hyacinth