

Effects of tea polyphenols on growth performance, antioxidant effect and non-specific immune indices of *Oreochromis niloticus*

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Abstract: Tea polyphenols of 0, 83,166, 333, 666mg/kg were added in diets respectively and given to feed *Oreochromis niloticus*. The growth performance, anti-oxidant effect and non-specific immune indices of *O.niloticus* were also analyzed. The results showed that WGR and SGR of group 166mg/kg were increased by 16.99% and 7.72% separately than that of the control group and the FCR was not significantly different. The immune indices were effected by tea polyphenols. The phagocytic index and serum lysozyme activity of group 166mg/kg were increased by 97% and 51.8% separately, this dose of tea polyphenols could also improve SOD activity. The liver CAT activity of 333mg/kg was increased but the GSH-Px activity of liver, serum and muscle were not significantly different.

Key words: tea polyphenols; *Oreochromis niloticus*; growth performance; phagocytic index; antioxidant