

ABSTRACT

Molly fish is one of the ornamental fish species with high market value and is favored by ornamental fish enthusiasts due to its diverse color patterns. In addition to having various colors, molly fish also possess an attractive tail shape, where the tail tapers at the edges, forming a U shape. One of the most influential factors is color. Color is an essential aspect of the beauty of ornamental fish; the brighter the color of the fish, the more appealing it becomes, and consequently, the higher its market price. One way to enhance the brightness of ornamental fish colors, especially molly fish, is by utilizing natural pigment sources. One such natural pigment source that can be used is feed containing anthocyanin compounds. Anthocyanins can be derived from natural materials, one of which is mangosteen peel. The objective of this study was to examine the effect of adding mangosteen peel extract to fish feed on enhancing the color brightness of molly fish, fish growth, survival rate, feed response, feed disintegration rate, and water quality during the study. The research will be conducted from February 10 to March 10, 2024, which is located at Kembang Tani Farm, West Lancang Village, Dewantara District, North Aceh and the Nutrition and Feed Laboratory of Malikussaleh University for the manufacture of extracts. The method used in this study is an experimental method with a Completely Randomized Design (CRD) Non-Factorial, consisting of 4 treatments with 3 replications: (A) 0/100 g of mangosteen peel extract; (B) 3.5 ml/100 g of mangosteen peel extract; (C) 4 ml/100 g of mangosteen peel extract; and (D) 4.5 ml/100 g of mangosteen peel extract. The results showed that the administration of mangosteen peel extract influenced the color brightness level of molly fish (*Poecilia sphenops*). The best RGB observation results were found in treatment D with a dose of 4.5 ml/100 g, yielding a value of 161.67.

Keywords: *Extract, Molly Fish, Brightness, Mangosteen Peel, RGB*