

ABSTRACTS

COMPARISON OF NORMAL FLORA COMPOSITION OF PHYTOPLANKTON AND ZOOPLANKTON IN MILKFISH DIGESTION (*Chanos chanos*, Forsskal) IN AN IMTA FLOATING NET CAGE SYSTEM

Checilia Fama Hening

NIM. 24020121140137

Plankton composition in the digestive tract of milkfish reflects the trophic interaction between the fish and its aquaculture environment within an Integrated Multi-Trophic Aquaculture (IMTA) floating net cage system. This study aimed to identify the phytoplankton and zooplankton consumed by milkfish, compare them to those present in the surrounding waters, and evaluate their role in supporting fish health and growth. Samples were collected from IMTA cages in Teluk Awur, Jepara, followed by digestive tract dissection and microscopic plankton identification. A descriptive quantitative approach was applied to assess diversity and dominance indices. Results revealed a high diversity of plankton in both digestive and aquatic samples, with selective feeding behavior observed toward nutrient-rich taxa. The composition indicates a close ecological connection between natural feed availability and feeding preferences. IMTA systems effectively promote the presence of plankton as sustainable natural feed while maintaining a stable aquaculture environment.

Keywords: *digestive tract, IMTA, milkfish, natural feed, plankton*