

EFFECTS OF DIFFERENT BRANDS OF EPS COOLERS USED ON THE MELT
RATE OF ICE FOR THE CONTAINMENT AND TRANSPORT OF
MILKFISH (*Chanos chanos*) IN LIBAS FISHING PORT
AND ILOILO FISH PORT COMPLEX (IFPC)

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By

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ABSTRACT

Milkfish (*Chanos chanos*) is named as the national fish of the Philippines and also one of the major fish species produced in Panay. This study aims about the comparison and assessment of the effectiveness of two different brands of Expanded Polystyrene (EPS) Coolers available in Iloilo and are used to help in preserving the milkfish by containing it with crushed ice to be transported from one port to another. In this test, a simulation of the actual distribution of milkfish from Libas Fishing Port to Iloilo Fish Port Complex is performed to determine the most effective and capable EPS Cooler in slowing the melt rate of ice and minimizing the spoilage of the milkfish. A laboratory test consisting of ice melt test and random vibration testing of shipping containers were performed to. An organoleptic assessment table was used to determine if the samples are spoiled or not. A manual computation was also made for the comparison of the theoretical values. After testing and comparing the results, the study shows that the EPS cooler 1 has better insulating properties compared to EPS cooler 2. The team also suggested alternatives for the EPS cooler samples by modifying the specifications such as the width and computing the effect of using *hilada* and packing tape to the melt rates of the two samples. The team did not conduct materials testing and there is no construction of prototype for the suggested alternatives.