Development of Artificial Diets for Milkfish (*Chanos chanos*) Larvae

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This study aims to develop nutritionally balanced and cost-effective artificial diets for milkfish larvae. Two larval diets (Feed A and Feed B) were formulated and prepared to contain 45% protein and 10% lipid. Several larval diet preparation techniques were tried and diets produced were assessed in terms of feed particle size and bouyancy, water stability, and feed acceptability. The larval diet preparation that gave the best particle size and bouyancy as well as good water stability was the one prepared as microbound diet (using K-carrageenan as a binder) and flaked using a drum drier.

A series of feeding experiments were then conducted to determine growth and survival of milkfish larvae reared on various feeding schemes involving the use of these artificial diets. The artificial diets were fed either alone or in combination with live foods. Larvae in control treatments were reared on live foods such as *Brachionus* and *Artemia.* Larvae were observed to ingest the diets indicating that the feeds had suitable physical characteristics and were attractive to the larvae. Over-all results of the feeding trials showed that the artificial diets could be fed to milkfish larvae in combination with the rotifer *Brachionus* starting Day 8 or could be fed alone to milkfish larvae starting Day 15 onward. These promising results would reduce dependence of milkfish larvae on live foods and would have significant economic benefits in the form of simplified milkfish hatchery procedures.