

## **A review on the improvement of cladocera (*Moina*) nutrition as live food for aquaculture: Using valuable plankton fisheries resources**

### **ABSTRACT**

Since formulated feed for this purpose has not yet been established effectively, the features of live feeds in the performance of marine and freshwater larval rearing is essential. Hence, to succor growth productivity and to introduce newly livestock species into aquaculture industry, support for the stage of larval rearing must be improved and, better nutritional options must be applied. Furthermore, the natural feeding habits of fish needs live food rich in protein for improved growth, enhanced reproduction as well as survival. Common enrichment protocols, such as oil emulsion, are relatively expensive and consequently, increase overall production cost in hatcheries. The above factors have moved scientists to focus more on development of low-cost, live feed substitutions to ensure success of larval feeding in aquaculture. Larval feed performance depends directly on improvements in finding a better low-cost live feed technology for a better zooplankton and phytoplankton production. Cladocerans like *Moina* sp. have recently been explored as a potential live feed alternative to boost fish and shrimp larval cultivation in hatcheries. The increase in demand for fish as a source of protein for human consumption requires advancement in the development of aquaculture technologies and, emphasis is well placed on improving supply of live food organisms to assist in the larval development process.

**Keyword:** Aquaculture live feed; Low-cost; Nutrition; Zooplankton