## ABUNDANCE OF ZOOPLANKTON POPULATION AND FISH PRODUCTION IN INTEGRATED FISH LIVESTOCK FARMING SYSTEMS

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**Abstract:** Zooplankton occupies a central position in the food webs of aquatic ecosystem. They do not only form an integral part of the lentic community but also contribute significantly, the biological productivity of the fresh water ecosystem. Very high zooplankton density was recorded in two integrated systems i.e. the duck-fish and chicken-fish integrated farming. The zooplankton population was analysed in terms of density, species composition, and seasonal abundance. Both the integrated ponds, supported luxurious population of zooplankton almost during the entire study period. A total of 22 and 25 species were recorded from duck-fish and chicken-fish integrated ponds, respectively. The total fish production recorded from the ponds was also high. The present findings suggest that integrated farming systems support large population of natural fish food organisms which results in high growth rate and overall production of fish.

Keywords: Fish production, Farming system, Population, Zooplankton

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