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Title: Application of Limnology for Efficient Nutrient Utilization in Tropical Pond Aquaculture

Author(s): C. F. Knud-Hansen, Asian Institute of Technology, Agriculture and Food Engineering
G. P.O. Box 2754, Bangkok 10501, Thailand

C.D. McNabb and T. R. Batterson, Department of Fisheries and Wildlife
Michigan State University, East Lansing, Michigan 48824, U.S.A.

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Abstract: In most waste-fed systems, water quality degradation ultimately limits net fish yields (FY). Often as fertilization rates increase, inefficient nitrogen utilization together with daytime pHs exceeding 9.0 results in high unionized ammonia concentrations which reduce fish growth and survival. FY generally increases until high unionized ammonia concentrations and/or low morning dissolved oxygen concentrations become growth limiting. For optimal fish yields, maximum food availability must be balanced with favorable pond water quality. This paper examines the role of nitrogen limitation in managing pond eutrophication in order to produce greater and more predictable fish yields.

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