## NOTICE OF PUBLICATION

## RESEARCH REPORTS TITLE XII POND DYNAMICS/AQUACULITURE COLLABORATIVE RESEARCH SUPPORT PROGRAM

Title:

Tilapia yield improvement through maintenance of minimal oxygen concentrations in

experimental grow-out ponds in Honduras

Author(s):

David Teichert-Coddington and Bartholomew W. Green

Department of Fisheries and Allied Aquaculture and

Alabama Agricultural Experiment Station, Auburn University, Alabama 36849-5419, USA

Date:

1 December 1994

**Publication Number:** 

CRSP Research Report 94-77

Price:

The CRSP will not be distributing this publication. Copies may be obtained by writing to

the authors.

Abstract:

Tilapia yields and water quality were compared in 1000-m<sup>2</sup> grow-out ponds that were unaerated, or aerated beginning at 10 or 30% of oxygen saturation. Tilapia yield and individual final size were significantly greater in aerated ponds than in unaerated ponds, but there were no significant differences between levels of aeration. Treatment means of organic-N, total P, chlorophyll a, net primary productivity, and total volatile solids were not significantly different. However, aeration caused higher clay turbidity as indicated by significantly higher total fixed solids and lower Secchi disk visibility in aerated treatments. Maintenance of oxygen above minimal levels augmented tilapia yields, but additional research is needed to make aerator use in tilapia culture more efficient and profitable.

This abstract was excerpted from the original paper, which was published in *Aquaculture* 118:63-71, 1993.

CRSP RESEARCH REPORTS are published as occasional papers by the Program Management Office, Pond Dynamics/Aquaculture Collaborative Research Support Program, Office of International Research and Development, Oregon State University, Snell Hall 400, Corvallis, Oregon 97331-1641 USA. The Pond Dynamics/Aquaculture CRSP is supported by the U.S. Agency for International Development under CRSP Grant No.: DAN-4023-G-00-0031-00.