

## BEST MANAGEMENT PRACTICES FOR TILAPIA CAGE CULTURE IN SMALL RURAL RESERVOIRS

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Tilapia cage culture in small rural reservoirs is a common practice at the East Region of São Paulo State, Brazil. According to the last surveys there are more than 400 fish farmers at the region that covers an area of 765,100 ha where the major economical activities are agriculture (intensive culture of vegetables, coffee and fruits) and ecological tourism. Most of the fish farmers produce tilapia in small cages stocked with densities between 100 to 200 fish/m<sup>3</sup> where the fish are fed with commercial feeds containing around 32% of protein. The average annual temperature is 22°C and the production for 8 month culture period is 75 kg/fish/m<sup>3</sup>. The final average weight is 600 grams and the food conversion rates vary from 1.5 to 2.0. These figures are being improved during the last years not only due to economical reasons, but especially in function of environmental reasons and social concerns. The East Region of São Paulo, State is very well know by the abundance of rivers with very good water quality which is the major reason for the high number of “spa facilities” installed in several small towns. The “health tourism” generates a lot of jobs and implicates on a better use of the natural resources, like the natural water streams and rivers.

Therefore, the development and further adoption of Best Management Practices (BMPs) is the major point to guarantee a responsible and sustainable way to produce fish in cages at the small reservoirs in this region. For that, a long term research project is being conducted at a small reservoir (5,600 m<sup>2</sup>) located at the Regional Pole of the São Paulo State Agency for Agribusiness Technology in Monte Alegre do Sul, where different strains of tilapia were tested under different stock densities and feeding regimes, different ages and sizes of fingerlings and at different periods of the year.

Zootechnical indexes and several physical-chemical and biological water quality parameters were monitored and analyzed, and also a series of surveys with the local fish farmers were accomplished in order to organize a standard procedure for fish cage culture in small reservoirs based on the Best Management Practices (BMPs).



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**ABSTRACTS**



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