OPTIMAL FEEDING OF JUVENILE COBIA (*Rachycentron canadum*) IN A CAGE CULTURE SYSTEM IN BRAZILIAN COAST USING A LONG DATA MODEL

Artur N. Rombenso, Paul G. Kinas, Cauê B. Moreira and Luis A. Sampaio

Laboratório de Piscicultura Marinha e Estuarina
CP 474
Cassino - Rio Grande, RS – Brazil
arturnr@yahoo.com.br

Cobia (*Rachycentron canadum*) is an emerging species in aquaculture worldwide scenario. Currently in Brazil, cobia culture has attracted the interest of research institutions and the private sector. Despite the success of its culture in other countries, it is important that be undertaken studies to assess the preliminary technical and economic feasibility of cobia production on Brazilian coast. In order to better understand the cobia´s performance in Brazil, a feed trial of this specie was held at the Jaconema Beach located in the Bay of Ilha Grande (Angra dos Reis, RJ, Brazil).

Three diets were tested (1) commercial feed; (2) trash-fish and (3) mix of commercial feed, but this data were analyzed in a different way. Three models were made to better represent the best diet according to specific growth rate, feed conversion and weight gain, using a free software R, with Bugs model fit using OpenBUGS, that 1 chains, each with 25.000 iterations where the first 10.000 were discarded.

Medians and 80% intervals of models 1, 2 and 3.

The model 3 is the one that best represent the difference between the diets tested. The diet 2 was the best one with the best specific growth rate and feed conversion. This new way to analyzed some aquaculture data is a good way to interpret the data and can fix better than the conventional statistic.