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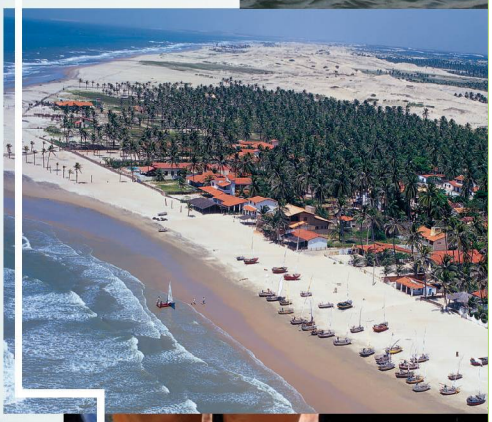

NOVEMBER 16-19, 2015
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CONDITION FACTOR IN PIRARUCU DURING THE GROWTH OUT PHASE

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Piraruru (*Arapaima gigas*) is one of the most important native fishes farmed in Brazil due to its characteristics as the fast growth and rusticity. The production is conducted mainly in ponds, where fishes are stocked with 10 cm (20g) and harvested with average weight of 10kg. During this time, the well-being and consequently growth can be influenced by some aspects as variation in water quality, feed management and genetic responses for the farm fish conditions. The condition factor is used to evaluate the fatness and well-being condition in fishes. To monitor the variation of this factor in pirarucu production, it was developed the growth out phase in ponds, starting with fish weighing 20 g, reaching the final weight of 4.4 kg. In this period, fish were fed with commercially extruded ration, with crude protein level of 40% and 2.4 – 10 mm. The feeding rate adopted was 7%, 5%, 3% and 2,5% of the total biomass for animals weighing up to 100g, 500g, 1.0 kg and 4.4 kg , respectively. Fish were measured and weighed monthly during the first nine months, and, after this, every 45 days. It was observed that the condition factor average in pirarucu was 1.01, with variations in some periods, as showed in table 1. The variation observed when fish were with 350g was possibly related with a decrease in water temperature (reaching 23^0C). Considering that pirarucu is a tropical fish, this temperature results in related to stress conditions. In this study, the stress resulted in a low growth, which influenced negatively the condition factor. The high condition factor observed in the beginning and in the end of the production period can be a compensatory growth due to the adverse conditions occurred. Before stocking fish in the experimental ponds, fish were maintained in an indoor system. In this new environment, natural feed were available and stocking density was lower. These aspects could contribute to fish well-being and fatness recovery. At the end of the trial, the high condition factor could be a result of the recovery well-being. Thus, it can be concluded that condition factor is suitable to show the well-being in pirarucu and the variation in this factor can be a result of stressing situations in production systems.

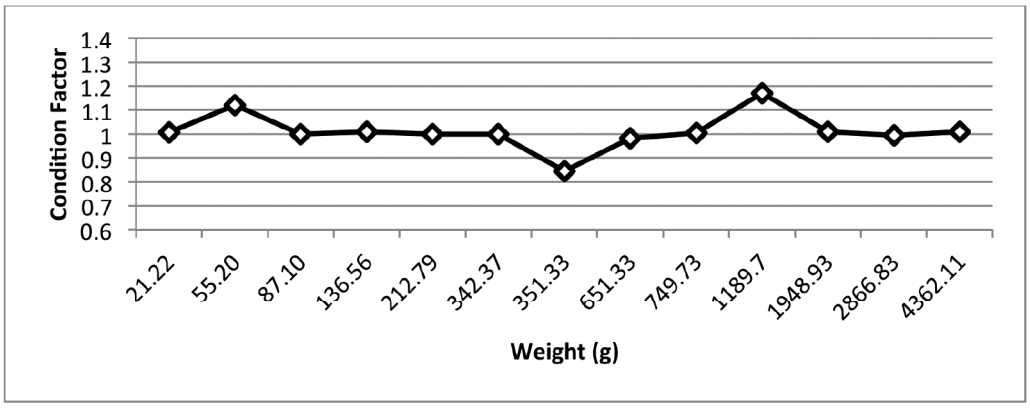

Table 1. Condition factor in the pirarucu along production in ponds.