





CONSTRUINDO SABERES, FORMANDO PESSOAS E TRANSFORMANDO A PRODUÇÃO ANIMAL

Economic influence on the survival of Nile Tilapia fingerlings (*Oreochromis* niloticus)

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Brazilian aquaculture production has received great stimulus in recent years, resulting in growing production. Among the most cultivated species is Nile Tilapia (Oreochromis niloticus), which occupies a prominent position because it is a fish of easy adaptation of climate, environment and water quality, besides having meat with pleasant appearance and flavor and low index of fat. The tilapia has replicate reproduction and great ease of proliferation in the culture environment, which allows optimum multiplication and good distribution of generations. The collection and control of data related to the reproduction of these animals is of great importance both productive and economical, since the efficiency and reproductive quality guarantee the profitability and success of a young animal. The objective of this work was to evaluate the reproductive performance of two generations of Tilapia matrices (Oreochromis niloticus), Aquameric line of the first cycle. Data were collected on spawning volume, percentage of matrices that did not spawn, interval between spawning and number of spawns in the reproductive season of 2014/2015 and 2015/2016. The harvest of the 2014/2015 harvest was carried out in a period of 77 days, from December to February, while the harvest of the crop 2015/2016, in a period of 119 days, from December to April. The experiment was conducted at the UEM / CODAPAR Floriano - PR pisciculture station. Using averages of the two combined harvests, an estimation of the performance and viability of a stock of 1000 matrices, with a reproduction period of 180 days, was drawn. In addition, three different scenarios were suggested, with egg survival rate reverted to 40, 60 and 80%. The results showed that a first cycle matrix can produce around 8000 eggs in a reproductive season of 180 days, spawning on average 5 times. This represents an economic performance of gross income of R \$ 486.70, R \$ 730.06 and R \$ 973.42 per matrix, according to the levels of survival. Improving survival rates is an interesting alternative, since raising R \$ 121.16 more than gross income per matrix in a cycle by raising 1% survival to reversed fish.

Keywords: aguaculture, economic viability, matrices, pisciculture, reproductive efficiency

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