TITLE:
SURVIVAL ANALYSIS IN TILAPIAS FROM NILE INFECTED WITH *Streptococcus agalactie.*

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ABSTRACT:
Streptococcosis is one of the major diseases in freshwater fish responsible for significant economic losses in the fish farming sector. Among this group of diseases, the bacterium *Streptococcus agalactiae* is one of the main responsible for high rates of morbidity and mortality in tilapia cultures in the last decades. To avoid reducing these diseases in fish farms and minimize the use of antibiotics and economic losses, the use of genetically resistant fish may be the best and most viable strategy to reduce the likelihood of epidemics. The objective of this work is evaluating the survival response to *Streptococcus agalactiae* infection in three tilapia families. The experiment was performed at the Laboratory of Fish Diseases of the Federal University of Lavras. Fishes weighed 93.70 ± 5.40 g and they were from three families A, B and C. 36 fishes were used in each experimental unit. 107 CFU /mL of *S. agalactiae* were inoculated intraperitoneally on each fish. The control group received 1mL of BHI. The animals were evaluated for 15 days. The clinical signs observed in the animals were: unilateral or bilateral exophthalmos; erratic swimming; lethargy and dorsal stiffness; depression or irritability and anorexia. Kaplan-Meier non-parametric estimator and Log-rank test were used to evaluate the difference between the survival curves and, according to the methodology; the families evaluated did not present any difference among them. In the evaluation of the percentage of final survival, the B family rate was lower (8%) when compared to the families A and C (22% and 25%, respectively) at the end of the study. Estimating how long the fish will survive the disease is a good parameter for selecting resistant animals, but the percentage of final survival is not a good criterion for such selection.

Key words: STREPTOCOCCOSIS; *Oreochromis niloticus*; Kaplan-Meier.

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