

## ABSTRACT

This study aimed to determine the effectiveness of gambier extract (*Uncaria gambir* R.) on the survival rate and healing time of saline tilapia (*Oreochromis niloticus*) infected with *Pseudomonas aeruginosa*. The research was conducted from 22 July - 7 August 2025 at the CP Prima Laboratory, Bireuen Regency, and the Hatchery and Aquaculture Technology Laboratory, Universitas Malikussaleh. The method used was a Completely Randomized Design (CRD) with four treatments and three replications, namely A (control without immersion), B (2000 ppm), C (3000 ppm), and D (4000 ppm). The observed parameters included clinical symptoms, survival rate, healing time, and water quality. The results showed that gambier extract had a significant effect on the survival and recovery of saline tilapia infected with *P. aeruginosa*. The highest survival rate was obtained in treatment D (4000 ppm) with 90%, followed by treatment C (60%), B (40%), and A (20%). The fastest healing time was also observed in treatment D, which occurred within 80 hours, while treatments C and B required 136 hours and 216 hours, respectively. Treatment A showed no recovery until the end of the observation period. Clinical symptoms after treatment indicated an improvement in the fish's physical condition, such as normal body color, complete scales, and increased feeding response. Water quality parameters during the experiment were within the optimal range for saline tilapia maintenance, with temperature ranging from 26–28°C, pH 6.9–7.7, dissolved oxygen 6.2–7.7 mg/L, and salinity 15 ppt. Overall, the administration of gambier extract at a concentration of 4000 ppm was the most effective dose in improving the survival rate and accelerating the healing process of saline tilapia infected with *Pseudomonas aeruginosa*.

**Keywords:** *Uncaria gambir*, *Oreochromis niloticus*, *Pseudomonas aeruginosa*