

ABSTRAK

Penelitian ini bertujuan untuk mengevaluasi efektivitas perbedaan lama perendaman larva ikan gabus (*Channa striata*) menggunakan ekstrak kulit manggis terhadap maskulinisasi, serta menentukan durasi perendaman yang optimal untuk menghasilkan persentase ikan jantan tertinggi. Penelitian dilakukan secara eksperimental dengan menggunakan Rancangan Acak Lengkap (RAL) yang terdiri dari lima perlakuan durasi perendaman (0, 8, 12, 16, dan 20 jam) dan masing-masing diulang sebanyak tiga kali. Perendaman dilakukan pada larva berusia 6 hari sebelum memasuki fase kritis perkembangan gonad. Hasil penelitian menunjukkan bahwa perbedaan waktu perendaman memberikan pengaruh yang nyata terhadap persentase ikan gabus jantan. Persentase tertinggi ditemukan pada perlakuan P4 (12 jam perendaman) yaitu sebesar $90,57 \pm 4,99\%$, sedangkan persentase terendah terdapat pada perlakuan P1 (kontrol) sebesar $59,17 \pm 4,99\%$. Berdasarkan hasil tersebut, dapat disimpulkan bahwa ekstrak kulit manggis dengan konsentrasi 15 mg/L efektif dalam meningkatkan maskulinisasi ikan gabus, dengan waktu perendaman optimal selama 12 jam.

Kata kunci: *Channa striata*, ekstrak kulit manggis, maskulinisasi, perendaman, gonad jantan



ABSTRACT

This study aims to evaluate the effectiveness of different soaking times of snakehead fish larvae (*Channa striata*) using mangosteen peel extract on masculinization, and to determine the optimal soaking duration to produce the highest percentage of male fish. The study was conducted experimentally using a Completely Randomized Design (CRD) consisting of five soaking duration treatments (0, 8, 12, 16, and 20 hours) and each was repeated three times. Immersion was carried out on 6-day-old larvae before entering the critical phase of gonad development. The results showed that differences in soaking time had a significant effect on the percentage of male snakehead fish. The highest percentage was found in treatment P4 (12 hours of soaking) which was $90.57 \pm 4.99\%$, while the lowest percentage was found in treatment P1 (control) which was $59.17 \pm 4.99\%$. Based on these results, it can be concluded that mangosteen peel extract with a concentration of 15 mg/L is effective in increasing the masculinization of snakehead fish, with an optimal soaking time of 12 hours.

Keywords: *Channa striata*, mangosteen peel extract, masculinization, soaking, male gonads

