

## ABSTRAK

Ikan gabus (*Channa striata*) merupakan ikan air tawar bernilai ekonomi tinggi karena kandungan albuminnya. Namun, rasio jantan yang rendah dibandingkan betina, baik di alam maupun budidaya, menjadi tantangan dalam produksi ikan ini. Maskulinisasi menjadi salah satu strategi untuk meningkatkan jumlah ikan jantan. Penelitian ini mengevaluasi efek dosis ekstrak kulit manggis pada maskulinisasi ikan gabus dengan lima perlakuan dosis: P1 (0 mg/L sebagai kontrol), P2 (5 mg/L), P3 (10 mg/L), P4 (15 mg/L), dan P5 (20 mg/L) menggunakan Rancangan Acak Lengkap (RAL). Ekstrak yang digunakan adalah Solonat Mangosteen Peel Powder dari PT KONIMEX SOLO. Larva ikan berusia tujuh hari direndam selama delapan jam dalam larutan ekstrak tersebut. Hasilnya menunjukkan bahwa persentase ikan jantan tertinggi (91,7%) dicapai pada dosis P2 (5 mg/L). Tingkat kelulushidupan tertinggi (55,3%) ditemukan pada dosis P5 (20 mg/L). Rata-rata bobot tertinggi tercatat pada perlakuan P1 dan P2 (2 gram), sementara panjang tertinggi ditemukan pada P1 dan P5 (6,1 cm). Berdasarkan hasil ini, ekstrak kulit manggis berpotensi sebagai agen maskulinisasi karena efektif meningkatkan persentase jantan, meskipun tidak mempengaruhi kelulushidupan, bobot akhir, atau panjang rata-rata ikan.

Kata kunci: Aromatase inhibitor; *Channa striata*; ekstrak kulit manggis; maskulinisasi

## **ABSTRACT**

*Snakehead fish (*Channa striata*) is a freshwater species with significant economic value due to its high albumin content. However, the low male-to-female ratio, both in natural habitats and aquaculture, poses a challenge to its production. Masculinization is one strategy to increase the number of male fish. This study evaluates the effect of varying doses of mangosteen peel extract on the masculinization of snakehead fish, using five different doses: P1 (0 mg/L as control), P2 (5 mg/L), P3 (10 mg/L), P4 (15 mg/L), and P5 (20 mg/L), employing a Completely Randomized Design (CRD). The extract used was Solonat Mangosteen Peel Powder from PT KONIMEX SOLO. Seven-day-old larvae were immersed in the extract solution for eight hours. The results revealed that the highest percentage of male fish (91.7%) was achieved at a dose of P2 (5 mg/L). The highest survival rate (55.3%) was observed at the P5 dose (20 mg/L). The highest average weight was recorded in treatments P1 and P2 (2 grams), while the longest length was observed in treatments P1 and P5 (6.1 cm). Based on these findings, mangosteen peel extract shows potential as a masculinization agent, effectively increasing the percentage of male fish, although it did not significantly affect survival rate, final weight, or average length of the fish.*

**Key words:** Aromatase inhibitor; *Channa striata*; mangosteen peel extract; masculinization

