

INTISARI

MASKULINISASI IKAN NILA (*Oreochromis* sp.) MELALUI PERENDAMAN LARVA BERUMUR 7 HARI DALAM LARUTAN PROPOLIS DENGAN DOSIS YANG BERBEDA

Penelitian ini bertujuan untuk mengetahui pengaruh pemberian propolis dengan dosis yang berbeda pada maskulinisasi ikan nila (*Oreochromis* sp.) melalui perendaman larva berumur 7 hari terhadap persentase kelamin jantan, serta sintasan, pertumbuhan dan morfometri ikan hasil maskulinisasi. Penelitian ini menggunakan metode eksperimental model Rancangan Acak Lengkap dengan 4 perlakuan dan 3 ulangan, yaitu P0 (0 ml/l), P1 (0,125 ml/l), P2 (0,150 ml/l), P3 (0,175). Penelitian ini dilakukan selama 90 hari di Laboratorium Riset, Departemen Perikanan, Fakultas Pertanian Universitas Gadjah Mada. Parameter yang diamati yaitu sintasan hidup (SR%), pertumbuhan, kualitas air yang diamati setiap 14 hari dan persentase jantan yang diamati setelah 90 hari. Hasil penelitian membuktikan bahwa pemberian larutan propolis melalui perendaman larva memberikan efek maskulin pada ikan nila ($P < 0,05$). Perlakuan P3 (0,175 ml/l) menghasilkan persentase jantan tertinggi sebesar $79,89 \pm 7,58\%$ diikuti P2 (0,150 ml/l) sebesar $74,62 \pm 0,32\%$, kemudian P1 (0,125 ml/l) sebesar $68,41 \pm 6,01\%$ dan yang terakhir P0 (0 ml/l) sebesar $56,13 \pm 1,53\%$. Hasil penelitian juga membuktikan bahwa pemberian larutan propolis melalui perendaman larva memberikan pengaruh terhadap sintasan dan pertumbuhan bobot ikan ($P < 0,05$). Sintasan ikan nila berkisar antara $73,89 \pm 2,54$ - $85,00 \pm 3,33\%$ dengan P0 (0 ml/l) mendapatkan rata-rata tertinggi. Hasil dari pertumbuhan bobot mutlak berkisar antara $13,48 \pm 0,53$ - $16,27 \pm 1,42$ g dengan P2 (0,150 ml/l) mendapatkan rata-rata tertinggi dan laju pertumbuhan spesifik berkisar antara $0,150 \pm 0,005$ - $0,181 \pm 0,015\%/hari$ dengan perlakuan P2 (0,150 ml/l) mendapatkan rata-rata tertinggi.

Kata Kunci: larva, maskulinisasi, nila, perendaman, propolis.

ABSTRACT

MASCULINIZATION OF TILAPIA FISH (*Oreochromis* sp.) THROUGH 7 DAYS AGE LARVAE IN PROPOLIS SOLUTION AT DIFFERENT DOSAGE

This study aims to determine the effect of propolis administration at different doses on the masculinisation of tilapia (*Oreochromis* sp.) through immersion of 7-day-old larvae on the percentage of male sex, as well as survival, growth, and morphometry of masculinised fish. This study used experimental method of Completely Randomised Design with 4 treatments and 3 replications, namely P0 (0 ml/l), P1 (0.125 ml/l), P2 (0.150 ml/l), P3 (0.175). This research was conducted for 90 days at the Research Laboratory, Department of Fisheries, Faculty of Agriculture, Gadjah Mada University. Parameters observed were survival rate (SR%), growth, water quality observed every 14 days and percentage of males observed after 90 days. The results proved that the administration of propolis solution through larval immersion has a masculine effect on tilapia ($P < 0.05$). P3 (0.175 ml/l) treatment produced the highest percentage of males at $79.89 \pm 7.58\%$ followed by P2 (0.150 ml/l) at $74.62 \pm 0.32\%$, then P1 (0.125 ml/l) at $68.41 \pm 6.01\%$ and the last P0 (0 ml/l) at $56.13 \pm 1.53\%$. The results also proved that the administration of propolis solution through larval immersion influenced fish survival and weight growth ($P < 0.05$). Tilapia survival ranged from 73.89 ± 2.54 - $85.00 \pm 3.33\%$ with P0 (0 ml/l) getting the highest average. The results of absolute weight growth ranged from 13.48 ± 0.53 - $16.27 \pm 1.42\text{g}$ with P2 (0.150 ml/l) getting the highest average and specific growth rate ranged from 0.150 ± 0.005 - $0.181 \pm 0.015\%/day$ with P2 (0.150 ml/l) treatment getting the highest average.

Keywords: immersion, larvae, masculinization, propolis, tilapia.