

ABSTRAK

Budidaya ikan nila semakin berkembang, dimana produksi ikan nila meningkat dari tahun ke tahun. Suatu upaya dalam meningkatkan produksi ikan dapat dilakukan dengan menambahkan bahan herbal pada pakan. Tujuan penelitian untuk mengetahui pengaruh penambahan fermentasi larutan herbal terhadap pertumbuhan, kelulushidupan, efisiensi pakan, dan rasio konversi pakan ikan nila. Penelitian dilaksanakan pada bulan Maret - April 2024 di UPTD BIAT Purbalingga. Penelitian menggunakan Rancangan Acak Lengkap (RAL) dengan 4 perlakuan 3 ulangan, yaitu P0 (kontrol), P1 dosis 50 mL/kg, P2 dosis 75 mL/kg dan P3 dosis 100 mL/kg. Ikan dipelihara dengan padat tebar 30 ekor/m³ yang dipelihara selama 40 hari dengan rata-rata panjang 7,22 cm dan rata-rata berat 5,94 g. Data yang diperoleh dianalisis menggunakan ANOVA di uji lanjut BNT. Parameter yang diamati meliputi pertumbuhan berat mutlak, SGR, SR, EP, FCR dan kualitas air. Hasil dari penelitian menunjukkan penambahan larutan herbal fermentasi memiliki pengaruh signifikan terhadap pertumbuhan panjang mutlak dan FCR ($P < 0,05$), tapi tidak memiliki pengaruh yang signifikan terhadap pertumbuhan berat mutlak, SGR, SR dan EP ($P > 0,05$). Kualitas air selama penelitian berada dalam kisaran yang mendukung untuk pertumbuhan ikan nila, yaitu suhu berkisar antara 28,3°C - 31,9 °C, oksigen terlarut 6,0-6,4 mg/L, pH berkisar 7,2-7,6 dan amonia berkisar 0,90-0,69 mg/L.

Kata kunci : *ikan nila; fermentasi bahan herbal; pertumbuhan; kualitas air*

ABSTRACT

Tilapia cultivation is increasingly developing, where tilapia production increases from year to year. An effort to increase fish production can be done by adding herbal ingredients to the feed. The aim of the research was to determine the effect of adding fermented herbal solutions to the growth, survival, feed efficiency and feed conversion ratio of tilapia. The research was carried out in March - April 2024 at UPTD BIAT Purbalingga. The research used a Completely Randomized Design (CRD) with 4 treatments and 3 replications, namely P0 (control), P1 with a dose of 50 mL/kg, P2 with a dose of 75 mL/kg and P3 with a dose of 100 mL/kg. Fish were reared at a stocking density of 30 fish/m³ and kept for 40 days with an average length of 7.22 cm and an average weight of 5.94 g. The data obtained were analyzed using ANOVA in the BNT follow-up test. The parameters observed included absolute weight growth, SGR, SR, EP, FCR and water quality. The results of the study showed that the addition of fermented herbal solution had a significant effect on growth in absolute length and FCR ($P < 0.05$), but did not have a significant effect on growth in absolute weight, SGR, SR and EP ($P > 0.05$). Water quality during the research was in a range that supported the growth of tilapia, namely temperature ranging from 28.3°C - 31.9°C, dissolved oxygen 6.0-6.4 mg/L, pH ranging from 7.2-7.6 and ammonia ranges from 0.90-0.69 mg/L.

Key words: *Tilapia; fermentation of herbal ingredients; growth; water quality*

