

Intisari

Penelitian ini bertujuan untuk mengetahui pengaruh padat tebar 417 ekor/m², 556 ekor/m² dan 694 ekor/m² yang dikombinasikan dengan penggunaan probiotik EM4 (*Effective Microorganism 4*) dalam pakan terhadap laju sintasan dan pertumbuhan benih nila merah (*Oreochromis sp.*). Penelitian menggunakan metode eksperimen Rancangan Acak Lengkap Faktorial dengan enam kombinasi perlakuan dan tiga ulangan. Kombinasi perlakuan meliputi tiga padat tebar yang masing-masing dikombinasikan dengan kontrol probiotik (0 ml/kg) dan penambahan probiotik (15 ml/kg) dalam pakan. Penelitian dilakukan selama delapan minggu (56 hari) dengan bak fiber 60 x 60 cm, sehingga padat tebar yang digunakan disesuaikan dengan luas bak, yaitu 150 ekor/bak, 200 ekor/bak dan 250 ekor/bak. Pemberian pakan 10% dari total biomasa dengan frekuensi tiga kali sehari (pagi, siang, dan sore). Hasil penelitian menunjukkan bahwa laju sintasan terbaik dihasilkan pada kombinasi perlakuan padat tebar 417 ekor/m² dengan penambahan probiotik dalam pakan yaitu 88,22%. Perlakuan kombinasi yang sama juga menghasilkan pertumbuhan berat dan panjang tertinggi, serta rasio konversi pakan terendah.

Kata kunci : nila merah, padat tebar, pendederan, probiotik.

Abstract

*This research aimed to evaluate the effect of stocking density combined with the use of probiotics EM4 (Effective Microorganism 4) in feed on survival and growth rates of red tilapia seeds (*Oreochromis sp.*). A Factorial Complete Randomized Design with six combination treatments and three replications was used for this experimental research. The treatment included three stocking densities, 417 seeds/m², 556 seeds/m² and 694 seeds/m² were each combined with controls without probiotic (0 ml / kg) and with the addition of probiotics in feed (15 ml / kg). The study was conducted for eight weeks (56 days) in a 60 x 60 cm² fiber glass tank with 60 cm of water level. Stocking densities were applied depends on the dimension of tank, i.e. 150 fishs/tank, 200 fishs/tank and 250 fishs/tank. The feeding rate 10% of the total biomass with a feeding frequency of three times a day (morning, afternoon, and evening). The results showed that the highest survival rate was observed in the combination treatment of stocking density 417 fish/m² with the addition of probiotics in feed of 88.22%. This combination treatment also resulted the highest weight growth and length growth as well as the lowest feed conversion ratio.*

Keywords: breeding, probiotic, red tilapia, stocking density.