PENGARUH SALINITAS YANG BERBEDA TERHADAP KELANGSUNGAN HIDUP DAN PERTUMBUHAN BENIH IKAN BANDENG

Oleh

Maulana Hendri, NIM 2013111002

Program Studi S1 Akuakultur

ABSTRAK

Ikan bandeng (*Chanos chanos*) merupakan salah satu komoditas budidaya yang pertumbuhan dan kelangsungan hidupnya dipengaruhi oleh salinitas. Penelitian ini bertujuan menganalisis pengaruh salinitas terhadap pertumbuhan dan kelangsungan hidup benih ikan bandeng serta menentukan salinitas yang sesuai selama pemeliharaan. Penelitian dilakukan selama 30 hari di Desa Patas, Kecamatan Gerokgak, Kabupaten Buleleng, Bali, menggunakan metode eksperimen dengan Rancangan Acak Lengkap (RAL). Perlakuan terdiri atas salinitas 15, 20, 25, dan 30 ppt dengan tiga ulangan. Parameter yang diamati meliputi kelangsungan hidup (SR), laju pertumbuhan spesifik (SGR), pertumbuhan panjang, bobot akhir, dan kualitas air. Data dianalisis menggunakan ANOVA dan dilanjutkan uji BNT pada taraf 95%. Hasil menunjukkan bahwa salinitas berpengaruh nyata terhadap SR ($P<0,05$) dan sangat nyata terhadap SGR ($P<0,001$). Salinitas 25 ppt menghasilkan nilai terbaik dengan SR 95,5%, SGR 5,62% per hari, bobot akhir 4,05 g, dan panjang akhir 7,1 cm. Kualitas air selama penelitian masih berada pada kisaran yang mendukung kehidupan dan pertumbuhan benih. Dengan demikian, salinitas 25 ppt sesuai untuk mendukung pertumbuhan dan kelangsungan hidup benih ikan bandeng selama pemeliharaan.

Kata kunci: Benih Ikan Bandeng, *Chanos chanos*, kelangsungan hidup, pertumbuhan, salinitas.

EFFECTS OF DIFFERENT SALINITY LEVELS ON THE GROWTH PERFORMANCE AND SURVIVAL OF JUVENILE MILKFISH (*Chanos Chanos*)

By

Maulana Hendri, NIM 2013111002

Program Studi S1 Akuakultur

ABSTRACT

Milkfish (*Chanos chanos*) is an important aquaculture commodity whose growth and survival are influenced by salinity. This study aimed to analyze the effect of different salinity levels on the growth and survival of milkfish fry and to determine the appropriate salinity level during the rearing period. The study was conducted for 30 days in Patas Village, Gerokgak District, Buleleng Regency, Bali, using an experimental method with a Completely Randomized Design (CRD). Four salinity treatments were applied, namely 15, 20, 25, and 30 ppt, with three replications for each treatment. The observed parameters included survival rate (SR), specific growth rate (SGR), length growth, final weight, and water quality. Data were analyzed using analysis of variance (ANOVA), followed by the Least Significant Difference (LSD) test at a 95% confidence level. The results showed that salinity significantly affected SR ($P<0.05$) and highly significantly affected SGR ($P<0.001$). The 25 ppt salinity treatment produced the highest values, with an SR of 95.5%, an SGR of 5.62% per day, a final weight of 4.05 g, and a final length of 7.1 cm. Water quality parameters throughout the study remained within suitable ranges for the survival and growth of milkfish fry. Therefore, a salinity level of 25 ppt is suitable for supporting the growth and survival of milkfish fry during the rearing period.

Keywords: *Milkfish juveniles, Chanos chanos, salinity, growth, survival rate.*