

Intisari

Analisis Budidaya Nila Merah (*Oreochromis sp.*) dengan Kincir Air di Kabupaten Sleman

Dalam lima tahun terakhir intensifikasi budidaya nila merah dengan menggunakan kincir air telah dilakukan di Kabupaten Sleman. Penelitian ini bertujuan untuk menganalisis penerapan dan mengetahui faktor-faktor yang berpengaruh terhadap produktivitas nila merah pada kolam dengan kincir air di Kabupaten Sleman. Pengambilan data dilakukan dengan teknik wawancara dan observasi dengan menggunakan metode *cluster random sampling*, yaitu penentuan sampel berdasar kelompok wilayah dari anggota populasi penelitian dan sampel yang digunakan berjumlah 58 kolam. Data yang dikumpulkan meliputi luas kolam, kedalaman kolam, berat benih, padat tebar, lama pemeliharaan (*day of culture*), total pakan, daya kincir air yang digunakan, dan total produksi. Analisis statistik deskriptif digunakan untuk mengetahui gambaran budidaya nila merah dengan kincir air. Sementara itu, analisis regresi linier berganda untuk mengetahui faktor-faktor yang berpengaruh terhadap produktivitas. Hasil penelitian menunjukkan bahwa budidaya nila merah dengan kincir air di Kabupaten Sleman dilakukan pada luas kolam berkisar 50-1600 m² (rerata 417 m²) dan kedalaman 70-200 cm (rerata 124 cm). Berat benih yang ditebar yaitu 10-20 gram/ekor (rerata 16 gram/ekor) dan padat tebar berkisar 11-117 ekor/m² (rerata 45 ekor/m²). Pemeliharaan selama 60-150 hari (rerata 110 hari) dengan daya kincir air berkisar 11-28 kWh/hari (rerata 14 kWh/hari). Pakan yang diberikan per hari yaitu 3-5% dari berat biomassa dengan total kebutuhan pakan 650-10.400 kg (rerata 3.022 kg). Sistem ini menghasilkan produktivitas sebesar 2,1-18,1 kg/m² (rerata 7,1 kg/m²), dan FCR (*feed conversion ratio*/nisbah konversi pakan) 1,2-1,8 (rerata 1,5) dengan SR (*survival rate*/laju sintasan) 48-100% (rerata 90%). Faktor-faktor yang mempengaruhi produktivitas nila merah pada budidaya dengan kincir air yaitu luas kolam, berat benih, padat tebar, lama pemeliharaan (*day of culture*), pakan, dan daya kincir air.

Kata Kunci: budidaya, intensifikasi, kincir air, kolam, nila merah

Abstract

The Analysis of Red Tilapia (*Oreochromis sp.*) Cultured in Paddle-Wheel Aerator at Sleman Regency

In the last five years the intensification of red tilapia culture using a paddle-wheel aerator has been carried out in Sleman Regency. This research aims to analyze performance and the factors that influence the productivity of red tilapia in ponds with paddle-wheel aerator in Sleman Regency. The data were collected by interview and observation techniques using cluster random sampling method, namely the determination of samples based on regional groups from the research population and the sample used was 58 ponds. The data collected were pond area, pond depth, seed weight, stocking density, day of culture (DOC), total feed, paddle-wheel aerator used, and total production. Descriptive statistical analysis is used to describe the production performance. The data collected were analyzed with multiple linear regression analysis to determine the factors that affect productivity. The results showed that red tilapia cultured with a paddle-wheel aerator in Sleman Regency is carried out in the pond area ranging from 50-1600 m² with an average is 417 m² and the pond depth average is from 70-200 cm (with an average is 124 cm). The seed weight is from 10-20 grams/tails (with an average is 16 grams/tails) and a stocking density is from 11-117 tails/m² (with an average is 45 tails/m²). The day of culture is carried out for 60-150 days (with an average is 110 days) by the paddle-wheel aerator power ranging from 11-28 kWh/day (with an average is 14 kWh/day). The feed given per day is 3-5% of the weight of the biomass with a total feed requirement of 650-10,400 kg (with an average is 3,022 kg). This culture system produces a productivity of 2.1-18.1 kg/m² (with an average is 7.1 kg/m²), FCR (feed conversion ratio) is ranging between 1.2-1.8 (with an average is 1.5), and SR (survival rate) is from 48-100% (with an average is 90%). The factors that affect the productivity of red tilapia with paddle-wheel aerator culture are pond area, seed weight, stocking density, day of culture (DOC), feed, and paddle-wheel aerator power.

Keywords: culture, intensification, paddle-wheel aerator, pond, red tilapia