

## INTISARI

### PENGARUH KEDALAMAN AIR TERHADAP SINTASAN DAN PERTUMBUHAN LELE MUTIARA (*Clarias sp.*) PADA PENDEDERAN

Penelitian ini bertujuan untuk mengetahui pengaruh kedalaman air terhadap sintasan dan pertumbuhan lele mutiara (*Clarias sp.*) pada pendederan. Pelaksanaan penelitian dilakukan pada bulan Januari sampai dengan Februari 2024 di Laboratorium Akuakultur, Departemen Perikanan, Fakultas Pertanian, Universitas Gadjah Mada. Penelitian dilakukan dengan metode Rancangan Acak Lengkap yang terdiri dari 4 (empat) perlakuan dan 3 (tiga) ulangan. Perlakuan yang diberikan berupa kedalaman air 20 cm, 30 cm, 40 cm, dan 50 cm. Lele mutiara diberi pakan komersial dengan dosis 3 % dari biomassa. Selama pemeliharaan, air budidaya lele setiap 10 hari disifon sebesar 5 % dari volume air, namun tidak diberi aerasi. Pengamatan dilakukan terhadap sintasan dan pertumbuhan lele, serta kualitas air. Data sintasan dan pertumbuhan lele dianalisis menggunakan *Analysis of Varians* (ANOVA) dan jika menunjukkan hasil yang berbeda nyata dilanjutkan uji lanjut *Duncant's Multiple Range Test* (DMRT). Data kualitas air diinterpretasikan secara deskriptif. Hasil penelitian menunjukkan bahwa kedalaman air (20 s/d 50 cm) tidak berpengaruh nyata terhadap sintasan lele mutiara. Kedalaman air berpengaruh nyata ( $P < 0,05$ ) terhadap pertumbuhan berat dan panjang lele mutiara pada pendederan selama 60 hari. Pendederan lele dengan kedalaman air 20 s/d 50 cm dihasilkan sintasan 81 s/d 88 %. Pendederan lele dengan kedalaman air 36 s/d 40 cm diperoleh pertumbuhan tertinggi: berat mutlak sebesar 5,6 g/ ekor; berat spesifik 3,26 %/ hari; panjang mutlak 5,4 cm; dan panjang spesifik 1,49 % / hari.

Kata kunci : kedalaman air, kualitas air, lele mutiara, pertumbuhan, sintasan.

## ABSTRACT

### THE EFFECT OF WATER DEPTH ON THE SURVIVAL RATE AND GROWTH OF MUTIARA CATFISH (*Clarias sp.*) DURING NURSERY

This research aimed to determine the effect of water depth on the survival rate and growth of mutiara catfish (*Clarias sp.*) in the nursery. This research was conducted out from January to February 2024 at the Aquaculture Laboratory, Department of Fisheries, Faculty of Agriculture, Universitas Gadjah Mada. The research was carried out using a completely randomized design method consisting of 4 (four) treatments and 3 (three) replications. The treatment given was in the form of water depths of 20 cm, 30 cm, 40 cm and 50 cm. Mutiara catfish were given commercial feed at a dose of 3 % of biomass. During maintenance, the catfish cultivation water was siphoned every 10 days at 5 % of the water volume, but was not given aeration. Observations were made on catfish survival rate and growth, as well as water quality. Data on catfish survival rate and growth were analyzed using *Analysis of Variance* (ANOVA) and if the results showed significantly different results, continued with the *Duncant's Multiple Range Test* (DMRT). Water quality data is interpreted descriptively. The results showed that water depth (20 to 50 cm) had no significant effect on the survival rate of mutiara catfish. Water depth had a significant effect ( $P < 0.05$ ) on the weight and length growth of pearl catfish in the nursery for 60 days. Catfish nurseries with a water depth of 20 to 50 cm resulted in survival rates of 81 to 88 %. Catfish nurseries with a water depth of 36 to 40 cm obtained the highest growth: absolute weight of 5.6 g / fish; specific gravity 3.26 % / day; absolute length 5.4 cm; and specific length 1.49 % / day.

**Keywords:** growth, mutiara catfish, survival rate, water depth, water quality