

Abstrak

Penelitian ini bertujuan untuk mengetahui pengaruh suhu dan suhu optimum untuk sintasan dan pertumbuhan benih gurami ras sendangsari umur 46-88 hari. Penelitian ini dilakukan di sub-laboratorium genetika dan pembenihan ikan Universitas Gadjah Mada. Penelitian ini menggunakan metode rancangan acak lengkap tanpa kontrol. Perlakuan suhu yang diberikan yaitu $27\pm0,5^{\circ}\text{C}$, $29\pm0,5^{\circ}\text{C}$, $31\pm0,5^{\circ}\text{C}$, dan $33\pm0,5^{\circ}\text{C}$ serta masing-masing perlakuan terdiri dari tiga ulangan. Benih gurami dipelihara selama 42 hari menggunakan wadah aquarium berukuran $60 \times 40 \times 40 \text{ cm}^3$ dengan volume air pemeliharaan 90 L dan padat tebar 1 ekor/liter. Parameter yang diamati meliputi sintasan, pertumbuhan mutlak, pertumbuhan harian, *feed conversion ratio* serta kualitas air. Data dianalisis menggunakan analisis sidik ragam (ANOVA), dilanjutkan dengan uji BNT (beda nyata terkecil), dan regresi. Hasil penelitian menunjukkan perlakuan suhu yang berbeda berpengaruh nyata terhadap pertumbuhan tetapi tidak berpengaruh terhadap sintasan benih gurami ras sendangsari umur 46-88 hari. Benih gurami ras sendangsari umur 46-88 hari dapat hidup dengan baik pada kisaran suhu $27-33^{\circ}\text{C}$. Suhu optimum untuk pertumbuhan pada pendederan benih gurami ras sendangsari umur 46-88 hari adalah $31,25^{\circ}\text{C}$.

Kata kunci : gurami, optimum, pertumbuhan, sintasan, suhu.

Abstract

This study aims to determine an effect of temperature and optimum temperature for survival and growth of a fries of Sendangsari race gouramy (*Osphronemus goramy* Lac.) 46-88 days. This research was conducted in the Genetic and Fish Hatchery Sub-Laboratory Universitas Gadjah Mada, using a Completely Randomized Design. The treatments temperature were $27 \pm 0,5^{\circ}\text{C}$, $29 \pm 0,5^{\circ}\text{C}$, $31 \pm 0,5^{\circ}\text{C}$, and $33 \pm 0,5^{\circ}\text{C}$, each treatment consisted of three replications. The gouramy fries were maintained for 42 days in a 60 x 40 x 40 cm aquarium with a 90 L water volume and 1 individual/L stocking density. The parameters observed were survival rate, absolute growth rate, daily growth rate, feed conversion ratio and water quality. The data were analyzed using Analysis of Variance (ANOVA), followed by LSD (Least Significance Different), and quadratic regression. The result showed that the different temperature treatments significantly affected growth but did not significantly affect the survival rate. The fries could live well at a temperature 27-33°C. The optimum temperature for growth was 31,25°C.

Key words: gouramy, growth, optimum, survival, temperature