

Intisari

Pengaruh Cacing Sutra (*Tubifex* sp.), Microworm (*Panagrellus redivivus*) dan Grindalworm (*Enchytraeus buchholzi*) sebagai Pakan Alami terhadap Sintasan dan Pertumbuhan Benih Gurami (*Osphronemus goramy*, Lacepède 1801)

Penelitian ini bertujuan untuk mengetahui pengaruh cacing sutra (*Tubifex* sp.), microworm (*Panagrellus redivivus*) dan grindalworm (*Enchytraeus buchholzi*) sebagai pakan alami terhadap sintasan dan pertumbuhan benih gurami (*Osphronemus goramy*, Lacepède 1801). Penelitian menggunakan Rancangan Acak Lengkap dengan tiga perlakuan dan tiga ulangan. Benih gurami yang digunakan berumur 15 hari. Benih gurami ditebar dalam *box* plastik dengan volume air sebanyak 3 L, dengan jumlah 45 ekor per *box*. Benih gurami dipelihara selama 30 hari dan diberi pakan alami sesuai perlakuan dengan dosis 20% biomassa sebanyak satu kali yaitu pada sore hari. Sampling pertumbuhan dan kualitas air dilakukan 10 hari sekali. Pengelolaan kualitas air dilakukan dengan sifon dan pergantian air setiap hari sebanyak 70% dari total volume *box* agar optimal. Data sintasan dan pertumbuhan dianalisis menggunakan *Analysis of Varians* melalui aplikasi IBM SPSS. Hasil yang beda nyata pada tingkat signifikansi $<0,05$, diuji lanjut menggunakan *Duncan Multiple Range Test*. Hasil penelitian menunjukkan bahwa pemberian grindalworm menghasilkan sintasan tertinggi ($74,1 \pm 7,13\%$), diikuti oleh cacing sutra ($60,0 \pm 5,88\%$) dan microworm ($48,9 \pm 2,20\%$). Hasil penelitian menunjukkan bahwa pemberian cacing sutra, microworm, dan grindalworm meningkatkan ukuran berat dan panjang benih gurami. Pertumbuhan benih gurami tertinggi diperoleh pada pemberian grindalworm dengan pertumbuhan mutlak berbasis berat $0,16 \pm 0,00$ g, pertumbuhan mutlak berbasis panjang $1,23 \pm 0,07$ cm, laju pertumbuhan spesifik berbasis berat $8,22 \pm 0,34$ %/hari, laju pertumbuhan spesifik berbasis panjang $2,93 \pm 0,10$ %/hari.

KATA KUNCI : benih gurami, cacing sutra, grindalworm, microworm, pertumbuhan

Abstract

The Effect of Tubifex Worms (*Tubifex* sp.), Microworms (*Panagrellus redivivus*), and Grindalworms (*Enchytraeus buchholzi*) as Live Feed on the Survival Rate and Growth of Gourami Fry (*Osphronemus goramy*, Lacepède 1801)

This research aims to determine the effect of tubifex worms (*Tubifex* sp.), microworms (*Panagrellus redivivus*), and grindalworms (*Enchytraeus buchholzi*) as live feed on the survival rate and growth of gourami fry (*Osphronemus goramy*, Lacepède 1801). The study used a Completely Randomized Design with three treatments and three replications. Gourami fry used were 15 days old. Gourami fry were distributed in plastic boxes containing 3 L of water, with a total of 45 individuals per box. Gourami fry were maintained for 30 days and fed with a biomass dose of 20% once in the evening. Growth and water quality sampling was conducted every 10 days. Water quality management was carried out through siphoning and a 70% water change every day for optimal results. The survival and growth data were analyzed using Analysis of Varians through the IBM SPSS application. Significantly different results at a significance level of $<0,05$ were further tested using Duncan's Multiple Range Test. The results showed that the provision of grindalworm resulted in the highest survival rate ($74,1 \pm 7,13\%$), followed by tubifex worms ($60,0 \pm 5,88\%$) and microworm ($48,9 \pm 2,20\%$). The study results indicated that the provision of tubifex worms, microworm, and grindalworm increased the weight and length of gourami fry. The highest growth of gourami fry was obtained with the provision of grindalworm, with absolute weight-based growth of $0,16 \pm 0,00$ g, absolute length-based growth of $1,23 \pm 0,07$ cm, specific growth rate based on weight of $8,22 \pm 0,34$ %/day, and specific growth rate based on length of $2,93 \pm 0,10$ %/day.

KEYWORDS: gourami fry, grindalworms, growth, microworms, tubifex worms