

INTISARI

Pengaruh Pemberian Cacing Sutra (*Tubifex* sp.) dan Grindalworm (*Enchytraeus buchholzi*) Terhadap Sintasan dan Pertumbuhan Benih Patin (*Pangasius* sp.)

Penelitian ini bertujuan untuk mengetahui pengaruh pemberian cacing sutra (*Tubifex* sp.) dan grindalworm (*Enchytraeus buchholzi*) terhadap sintasan dan pertumbuhan benih patin (*Pangasius* sp.). Penelitian dilaksanakan selama 30 hari di Laboratorium Akuakultur, Departemen Perikanan, Fakultas Pertanian, Universitas Gadjah Mada. Benih patin yang digunakan berumur 15 hari dengan panjang rata-rata 1,8 cm. Pemeliharaan dilakukan menggunakan wadah *box* berkapasitas 8 L yang diisi air sebanyak 7 L dengan kepadatan tebar 21 ekor per wadah atau 3 ekor/L. Penelitian menggunakan Rancangan Acak Lengkap (RAL) dengan tiga perlakuan dan tiga ulangan, yaitu P1 (100% cacing sutra), P2 (50% cacing sutra dan 50% grindalworm), dan P3 (100% grindalworm). Pemberian pakan dilakukan secara *ad libitum* terukur berbasis biomassa dengan dosis awal 25% biomassa dan meningkat hingga 50% biomassa selama masa pemeliharaan. Parameter yang diamati meliputi sintasan, pertumbuhan mutlak berbasis berat dan panjang, laju pertumbuhan spesifik berbasis berat dan panjang, serta *Feed Conversion Ratio*. Hasil analisis proksimat menunjukkan bahwa cacing sutra memiliki kandungan protein lebih tinggi dibandingkan grindalworm, sedangkan grindalworm memiliki kandungan lemak dan karbohidrat yang lebih tinggi. Sintasan benih patin selama penelitian tergolong sangat tinggi, yaitu $98,41 \pm 2,74\%$ pada P1 dan $100,00 \pm 0,00\%$ pada P2 serta P3. Pertumbuhan mutlak berat tertinggi diperoleh pada P1 sebesar $0,996 \pm 0,032$ g, pertumbuhan mutlak panjang tertinggi pada P1 sebesar $3,30 \pm 0,10$ cm, laju pertumbuhan spesifik berat tertinggi pada P2 sebesar $11,82 \pm 0,07\%/hari$, sedangkan nilai FCR terbaik diperoleh pada P2 sebesar $3,234 \pm 0,073$. Hasil uji ANOVA pada taraf kepercayaan 95% menunjukkan bahwa pemberian cacing sutra dan grindalworm tidak memberikan pengaruh yang berbeda nyata terhadap seluruh parameter yang diamati ($P > 0,05$). Berdasarkan hasil penelitian dapat disimpulkan bahwa grindalworm (*Enchytraeus buchholzi*) berpotensi digunakan sebagai pakan alternatif pengganti maupun pelengkap cacing sutra (*Tubifex* sp.) dalam pemeliharaan benih patin.

KATA KUNCI: Benih patin, Cacing sutra, Grindalworm, Pertumbuhan, Sintasan

ABSTRACT

The Effect of Feeding Silkworm (*Tubifex* sp.) and Grindalworm (*Enchytraeus buchholzi*) on the Survival Rate and Growth of Striped Catfish Fry (*Pangasius* sp.)

This study aimed to evaluate the effect of feeding *Tubifex* worms (*Tubifex* sp.) and grindalworms (*Enchytraeus buchholzi*) on the survival and growth performance of striped catfish fry (*Pangasius* sp.). The experiment was conducted for 30 days at the Aquaculture Laboratory, Department of Fisheries, Faculty of Agriculture, Universitas Gadjah Mada. Fifteen-day-old catfish fry with an average length of 1.8 cm were reared in 8-L plastic boxes containing 7 L of freshwater at a stocking density of 21 fish per container (3 fish/L). A Completely Randomized Design (CRD) consisting of three treatments and three replications was applied: P1 (100% *Tubifex* worms), P2 (50% *Tubifex* worms and 50% grindalworms), and P3 (100% grindalworms). Fish were fed using a biomass-based measured ad libitum method, starting from 25% of biomass and gradually increasing up to 50% of biomass during the rearing period. Observed parameters included survival rate, absolute weight gain, absolute length gain, specific growth rate based on weight and length, and feed conversion ratio. Proximate analysis indicated that *Tubifex* worms contained higher protein levels, whereas grindalworms contained higher lipid and carbohydrate contents. Survival rates were very high across all treatments, reaching $98.41 \pm 2.74\%$ in P1 and $100.00 \pm 0.00\%$ in both P2 and P3. The highest absolute weight gain was observed in P1 (0.996 ± 0.032 g), while the highest absolute length gain was also recorded in P1 (3.30 ± 0.10 cm). The highest weight-based SGR was obtained in P2 ($11.82 \pm 0.07\% \text{ day}^{-1}$), and the best FCR value was achieved in P2 (3.234 ± 0.073). One-way ANOVA at a 95% confidence level revealed no significant differences among treatments for all observed parameters ($P > 0.05$). These results indicate that grindalworms (*Enchytraeus buchholzi*) have considerable potential as an alternative or supplementary live feed to replace *Tubifex* worms in striped catfish fry culture.

KEYWORDS: Grindalworm, growth, Striped Catfish fry, survival rate, *Tubifex* worm