

## ABSTRAK

Penelitian ini bertujuan untuk mengetahui pertumbuhan biomassa mutlak dan laju pertumbuhan relatif (RGR) *Tubifex* sp. yang dipelihara pada media dengan jenis pupuk terfermentasi yang berbeda serta mengetahui media dengan jenis pupuk yang menghasilkan pertumbuhan biomassa cacing sutra (*Tubifex* sp.) paling maksimal. Penelitian menggunakan Rancangan Acak Lengkap (RAL) dengan 5 perlakuan dan 3 ulangan yaitu P0 (4 kg lumpur sawah), P1 (2 kg lumpur sawah, 1 kg fermentasi kotoran burung puyuh, 1 kg fermentasi ampas tahu), P2 (2 kg lumpur sawah, 1 kg fermentasi kotoran ayam, 1 kg fermentasi ampas tahu), P3 (2 kg lumpur sawah, 2 kg fermentasi kotoran burung puyuh) dan P4 (2 kg lumpur sawah, 2 kg fermentasi kotoran ayam). Media dimasukkan ke dalam wadah berukuran 36,5 x 23 x 12 cm. Cacing sutra yang ditebar dalam media sebanyak 10/wadah dan dikultur selama 30 hari. Data dianalisis menggunakan uji ANOVA. Pertumbuhan biomassa mutlak yang didapat berkisar 7,36-17,90 g dan laju pertumbuhan relatif (RGR) berkisar 2,45-5,97%. Hasil penelitian menunjukkan bahwa penggunaan jenis pupuk yang berbeda pada media kultur cacing sutra (*Tubifex* sp.) tidak berpengaruh nyata terhadap pertumbuhan biomassa mutlak dan laju pertumbuhan relatif ( $P>0,05$ ). Kualitas air selama penelitian yaitu suhu berkisar antara 27-29°C dan pH 6,8-8,4.

**Kata kunci** : *Tubifex* sp., pertumbuhan biomassa mutlak, laju pertumbuhan relatif (RGR)

## ABSTRACT

This study aims to determine the absolute biomass growth and relative growth rate (RGR) of silkworm (*Tubifex* sp.) maintained on media with different types of fermented fertilizers and to determine the media with different types of fermented fertilizers that produced the maximum growth of *Tubifex* sp. biomass. The study used a completely randomized design (CRD) with 5 treatments and 3 replications, namely P0 (4 kg of mud), P1 (2 kg of mud, 1 kg of fermented quail manure, 1 kg of fermented tofu waste), P2 (2 kg of mud, 1 kg of fermented chicken manure, 1 kg of fermented tofu waste), P3 (2 kg of mud, 2 kg of fermented quail manure) and P4 (2 kg of mud, 2 kg of fermented chicken manure). Silkworms were stocked in 10/container media and cultured for 30 days. Data were analyzed using the ANOVA test. The absolute biomass growth obtained ranged from 7.36-17.90 g and the relative growth rate ranged from 2.45-5.97%. The results showed that the use of different types of fertilizers on *Tubifex* sp. culture media had no significant effect on absolute biomass growth and relative growth rate ( $P>0.05$ ). The water quality during the study ranged from 27-29°C and pH 6.8-8.4.

**Keywords :** *Tubifex* sp., absolute biomass growth, relative growth rate (RGR)

