

ABSTRAK

Penelitian tentang Kelimpahan *Daphnia magna* telah dilaksanakan pada tanggal 15 Juli sampai 5 Agustus 2019 di Laboratorium Fakultas Perikanan dan Ilmu Kelautan Universitas Jenderal Soedirman. Tujuan dari penelitian adalah Mengetahui pengaruh *Azolla microphylla* terfermentasi sebagai pakan terhadap kelimpahan dan Laju Pertumbuhan *Daphnia magna*. Metode penelitian pakan untuk *Daphnia magna* adalah metode Rancangan Acak Lengkap (RAL) dengan 4 perlakuan dan masing-masing perlakuan diulang sebanyak 4 kali, yaitu penggunaan kotoran ayam P0 : Kontrol menggunakan Kotoran ayam 0,25 gr/L, P1 : pakan *Azolla microphylla* terfermentasi 2 ml/L, P2 : pakan *Azolla microphylla* terfermentasi 4 ml/L, P3 : pakan *Azolla microphylla* terfermentasi 6 ml/L. *Daphnia magna* dikultur selama 15 hari dalam wadah dengan volume 3 liter. Parameter yang diamati adalah kelimpahan, laju pertumbuhan *Daphnia magna* dan kualitas air. Hasil pengamatan dianalisis menggunakan analisis Anova. Hasil penelitian menunjukkan bahwa Pemberian pakan *Azolla microphylla* terfermentasi (2 ml/L) dan pakan dengan kotoran ayam (0.25 g/L) dalam kultur *Daphnia magna* berpengaruh tidak berbeda nyata terhadap kelimpahan *Daphnia magna*. Pemberian pakan *Azolla microphylla* terfermentasi dan pakan dengan kotoran ayam (0.25 g/L) dalam kultur *Daphnia magna* tidak berbeda nyata terhadap Laju Pertumbuhan *Daphnia magna*. Pertumbuhan Panjang *Daphnia magna* 2,54-2.65 mm. Kualitas air selama penelitian yaitu suhu sebesar 22-25°C, DO 2,45-7,45 mg.L⁻¹, dan pH 6.

Kata Kunci: *Daphnia magna*, kelimpahan, Laju pertumbuhan, *Azolla microphylla*, fermentasi.

ABSTRACT

Research on the abundance of *Daphnia magna* was carried out on 15 July to 5 August 2019 in the Laboratory of the Faculty of Fisheries and Marine Sciences, Jenderal Soedirman University. The purpose of the study was to determine the fermented *Azolla microphylla* as food for abundance and the rate of testing *Daphnia magna*. The feed research method for *Daphnia magna* is a Completely Randomized Design (CRD) method with 4 settings and each repeated 4 times, namely the use of P0 chicken manure: Control using 0.25 gr / L chicken manure, P1: *Azolla microphylla* fermented 2 ml / L, P2: fermented *Azolla microphylla* feed 4 ml / L, P3: *Azolla microphylla* fermented feed 6 ml / L. *Daphnia magna* was cultured for 15 days in a container with a volume of 3 liters. The updated parameters are abundance, growth rate of *Daphnia magna* and water quality. The observations were analyzed using Anova analysis. The results showed that the feeding of *Azolla microphylla* fermented (2 ml / L) and feed with chicken manure (0.25 g / L) in the culture of *Daphnia magna* was designed not in accordance with the abundance of *Daphnia magna*. Feeding of fermented *Azolla microphylla* and feed with chicken manure (0.25 g / L) in the culture of *Daphnia magna* were similarly bound to the rate of *Daphnia magna*. Passing the length of the *Daphnia magna* 2.54-2.65 mm. Water quality during the study was 22-25oC, DO 2.45-7.45 mg.L-1, and pH 6.

Keywords: *Daphnia magna*, abundance, growth rate, *Azolla microhylla*, fermentation.

