

ABSTRACT

THE EFFECT OF PROVIDING FERMENTATION FEED OF SAWI VEGETABLE WASTE AND HOWEY WATER ON PROTEIN CONTENT AFRICAN NIGHT CRAWLER (*Eudrilus eugeniae*)

Earthworms are one of the livestock business commodities as a producer of medicines and cosmetic compounds which have great potential in Indonesia. This study aims to determine the effect of feeding fermented mustard greens and water hyacinth on the protein content of the African Night Crawler Earthworm (*Eudrilus eugeniae*).

This research method used a completely randomized design (CRD) consisting of 4 treatments, 3 replications and each replication using 100 grams of worms with both female and male (invertebrates) sex. Treatment P0 = feed made from 100% fermented cow dung P1 = feed made from 100% fermented mustard waste + 0% fermented water hyacinth P2 = feed made from 50% fermented mustard waste + 50% fermented water hyacinth P3 = feed made from 0% fermented mustard waste + 100 % fermented water hyacinth.

The parameters observed in this study were the protein content of earthworms (*Eudrilus Euegeniae*). The results showed that the protein content of earthworms during the study in treatment P0 (39.92), P1 (41.50) P2 (43.75), P3 (39.46).

The conclusion of this study is the feeding of mustard and water hyacinth vegetable waste fermentation to the protein content of the African Night Crawler earthworm (*Eudrilus eugeniae*). Whereas P2 gets a very high protein content of P2 (43.75) with fermented feed made from 50% mustard vegetable waste, 50% water hyacinth.

Keywords: Mustard Vegetable Waste, Water Hyacinth, Feed Consumption, *Eudrilus eugeniae* Earthworms, Worm Body Protein Content

RINGKASAN

PENGARUH PEMBERIAN PAKAN FERMENTASI LIMBAH SAYUR SAWI DAN ECENG GONDOK TERHADAP KANDUNGAN PROTEIN CACING TANAH *AFRICA NIGHT CRAWLER (Eudrilus eugeniae)*

Cacing tanah merupakan salah satu komoditi usaha ternak sebagai penghasil obat-obatan maupun bahan campuran kosmetik yang mempunyai potensi besar di Indonesia. Penelitian ini bertujuan untuk mengetahui pengaruh pemberian pakan fermentasi limbah sayur sawi dan eceng gondok terhadap kandungan protein cacing tanah *Afrika Night Crawler (Eudrilus eugeniae)*.

Metode penelitian ini menggunakan rancangan acak lengkap (RAL) yang terdiri dari 4 perlakuan, 3 ulangan dan setiap ulangan menggunakan 100 gram cacing dengan berdua jenis kelamin betina dan jantan (*invertebrate*). Perlakuan P0 = Pakan berbahan 100% kotoran sapi fermentasi P1 = Pakan berbahan 100% limbah sawi fermentasi+0% eceng gondok fermentasi P2 = Pakan berbahan 50% limbah sawi fermentasi+ 50% eceng gondok fermentasi P3 = Pakan berbahan 0% limbah sawi fermentasi + 100% eceng gondok fermentasi.

Parameter yang diamati dalam penelitian ini adalah kandungan protein cacing tanah (*Eudrilus Euegeniae*). Hasil penelitian menunjukkan bahwa kandungan protein cacing tanah selama penelitian pada perlakuan P0 (39.92), P1 (41.50) P2 (43.75), P3 (39.46).

Kesimpulan dari penelitian ini adalah pemberian pakan fermentasi limbah sayur sawi dan eceng gondok terhadap kandungan protein cacing tanah *Afrika Night Crawler (Eudrilus eugeniae)*. Bahwa pada P2 mendapatkan kandungan protein sangat tinggi sebesar P2 (43.75) dengan pakan fermentasi berbahan 50% limbah sayur sawi 50% eceng gondok.

Kata Kunci : Limbah Sayur Sawi, Eceng Gondok, Konsumsi Pakan, Cacing Tanah *Eudrilus eugeniae*, Kandungan Protein Badan Cacing.