

**PENGARUH MACAM INOKULUM TERHADAP KANDUNGAN NUTRIEN
SILASE ECENG GONDOK (*Eichhornia crassipes*)**

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INTISARI *)

Penelitian ini bertujuan untuk mengetahui pengaruh macam inokulum terhadap kandungan nutrisi silase eceng gondok (*Eichhornia crassipes*). Penelitian ini dilakukan selama 5 minggu terhitung mulai 6 Juni 2019 – 6 Juli 2019 di Laboratorium Produksi dan Nutrisi Ternak dan Kimia, Fakultas Agroindustri, Universitas Mercu Buana Yogyakarta. Materi yang digunakan adalah eceng gondok (*Eichhornia crassipes*), inokulum *Effective Microorganisme* (EM4), starbio dan bekatul sebagai akselerator. Penelitian ini menggunakan Rancangan Acak Lengkap (RAL) pola searah dengan 3 perlakuan dan 3 kali ulangan. Perlakuan dan macam inokulum yang digunakan yaitu P1 (kontrol), P2 (EM4) dan P3 (Starbio). Variabel yang diamati adalah kadar air, kadar protein kasar, kadar serat kasar, kadar lemak kasar, kadar abu, dan kadar BETN. Data yang diperoleh dianalisis variansi (ANOVA), bila berbeda nyata dilanjutkan dengan uji *Duncan's Multiple New Range Test* (DMRT). Hasil penelitian menunjukkan rerata bahan kering P1 82,01; P2 76,78 dan P3 79,37%, kadar protein kasar P1 14,12; P2 16,31 dan P3 15,76%, kadar serat kasar P1 27,79; P2 24,84 dan P3 23,66%, kadar lemak kasar P1 4,24; P2 3,07 dan P3 3,37%, kadar abu P1 14,96; P2 17,14 dan P3 18,16%, BETN P1 20,91; P2 15,42 dan P3 18,43%. Berdasarkan hasil analisis variansi (ANOVA) menunjukkan bahwa penambahan macam inokulum berpengaruh sangat nyata ($P < 0,01$) terhadap semua variabel. Disimpulkan bahwa penambahan inokulum EM-4 0,6% dapat meningkatkan nutrisi silase eceng gondok (*Eichhornia crassipes*).

Kata kunci : Silase eceng gondok (*Eichhornia crassipes*), Nutrien, Inokulum.

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THE EFFECT OF INNOCULUM KIND ON NUTRIENT CONTENT OF WATER HYACINTH (*Eichhornia crassipes*) SILAGE

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ABSTRACT *)

The purpose of this study is determining the effect of inoculum kind on nutrient content of water hyacinth (*Eichhornia crassipes*) silage. This research was accomplished for 5 weeks from June 6th, 2019 up to July 6th, 2019 at the Livestock Production Nutrition and Chemistry Laboratory, Faculty of Agroindustry, University of Mercu Buana Yogyakarta. The material used were water hyacinth (*Eichhornia crassipes*), inoculums Effective Microorganisms (EM4), starbio and rice brand as the accelerator. The research used a completely randomized design with 3 treatments and 3 repetitions. The treatments used were P1 (Control), P2 (EM4), P3 (Starbio). Variables were observed among water content, crude protein content, crude fiber content, crude fat content, ash content, and BETN content. The data analyzed using Analysis of Variant (ANOVA) if the difference was significant it will be followed by Duncan's Multiple Range Test (DMRT). The result showed that the average of water content P1 82,01; P2 76,78 and P3 79,37%, crude protein content P1 14,12; P2 16,31 and P3 15,76%, crude fiber content P1 27,79; P2 24,84 and P3 23,66%, crude fat content P1 4,24; P2 3,07 and P3 3,37%, ash content P1 14,96; P2 17,14 and P3 18,16%, BETN content P1 20,91; P2 15,42 and P3 18,43%. Based on the results of the analysis of variance (ANOVA) it was showed that the addition of inoculum kind was significant effect ($P < 0.01$) on all variables. It was concluded that the addition of EM4 inoculum was can't in improving water hyacinth silage nutrients (*Eichhornia crassipes*).

Keywords: water hyacinth (*Eichhornia crassipes*) silage, nutrients, inoculums

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