

**PENGARUH MACAM INOKULUM TERHADAP KANDUNGAN NUTRIEN  
SILASE DAUN KELAPA SAWIT (*Elaeis guineensis* Jacq)**

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**INTISARI \*)**

Penelitian ini bertujuan untuk mengetahui pengaruh macam inokulum terhadap kandungan nutrien silase daun kelapa sawit (*Elaeis guineensis* Jacq). Penelitian ini dilakukan selama 5 minggu terhitung mulai 18 Februari 2019 – 25 Maret 2019 di Laboratorium Kimia, Fakultas Agroindustri, Universitas Mercu Buana Yogyakarta. Materi yang digunakan daun kelapa sawit (*Elaeis guineensis* Jacq), inokulum EM4 (*Effective Microorganisms*), starbio, bekatul dan molases. Penelitian ini menggunakan Rancangan Acak Lengkap (RAL) pola searah dengan 3 perlakuan dan 3 kali ulangan. Perlakuan 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, kadar BETN dan kadar TDN. Data yang diperoleh di analisis *Analysis of variance* (ANOVA), bila berbeda nyata dilanjutkan dengan uji *Duncan's New Multiple Range Test* (DMRT). Hasil penelitian menunjukkan rerata kadar air P1 5,49; P2 7,61 dan P3 6,74%, kadar protein kasar P1 12,64; P2 14,05 dan P3 13,85%, kadar serat kasar P1 22,23; P2 18,69 dan P3 18,63%, kadar lemak kasar P1 4,53; P2 3,60 dan P3 3,84, kadar abu P1 12,62; P2 14,55 dan P3 14,64%, BETN P1 47,98; P2 49,09 dan P3 49,02%, TDN P1 63,98; P2 65,59 dan P3 65,58%. Berdasarkan hasil *Analysis of Variance* (ANOVA) menunjukkan bahwa penambahan macam inokulum berpengaruh nyata ( $P<0,05$ ) terhadap semua variabel. Disimpulkan bahwa penambahan inokulum EM4 (0,6%) dan starbio (0,6%) sama efektifnya dalam meningkatkan kandungan nutrien silase daun kelapa sawit (*Elaeis guineensis* Jacq).

Kata kunci : Silase, daun kelapa sawit, inokulum, nutrien.

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# **THE EFFECT OF INNOCULUM KIND ON NUTRIENT CONTENT OF OIL PALM (*Elaeis guineensis* Jacq) LEAF SILAGE**

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## **ABSTRACT \*)**

The purpose of this research is to determine the effect of inoculum kind on nutrient oil palm (*Elaeis guineensis* Jacq) leaf silage. The research was conducted for 5 weeks from February 18<sup>th</sup> 2019 up to March 25<sup>th</sup> 2019 at the Laboratory of Chemistry, Faculty of Agroindustry, University of Mercu Buana Yogyakarta. The material used were oil palm (*Elaeis guineensis* Jacq) leaf, inoculum Effective Microorganisms (EM4), starbio, rice bran and molasses. The research used a Completely Randomized Design (CRD) one way pattern with 3 treatments and 3 repetitions. The treatments used were P1 (control), P2 (EM4), P3 (Starbio). Variables were observed among water content, crude protein, crude fiber, crude fat, ash, NFE, and TDN. The date analyzed using Analysis of Variant (ANOVA), followed by Duncan's Multiple Range Test (DMRT) when the difference was significant. The result showed that the average of water content P1 5,49; P2 7,61 and P3 6,74%, crude protein content P1 12,64; P2 14,05 and P3 13,85%, crude fiber content P1 22,23; P2 18,69 and P3 18,63%, crude fat content P1 4,53; P2 3,60 and P3 3,84%, ash content P1 12,62; P2 14,55 and P3 14,64%, NFE content P1 47,98; P2 49,09 and P3 49,02%, TDN content P1 63,98; P2 65,59 and P3: 65,58%. Based on the results of the analysis of variance (ANOVA) it was showed that the addition of different types of inoculum was significant effect ( $P < 0.05$ ) on all variables. It was concluded that the addition of EM4 inoculums and Starbio were as effective as increasing oil palm (*Elaeis guineensis* Jacq) leaf silage nutrient.

Keywords : silage, oil palm leaf, inoculum, nutrient.

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