PENGARUH BERBAGAI UMUR DEFOLIASI TERHADAP PRODUKSI DAN KANDUNGAN NUTRIEN TANAMAN JAGUNG (*Zea mays*) SEBAGAI PAKAN

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INTISARI*)

Tujuan dari penelitian ini adalah untuk mengetahui pengaruh berbagai umur defoliasi terhadap produksi dan nutrien tanaman Jagung (*Zea mays*) sebagai pakan ternak. Penelitian ini dilakukan dari tanggal 18 Januari sampai dengan 8 Mei 2023 di Kelurahan Hargorejo, Kecamatan Kokap, Kabupaten Kulon Progo, Daerah Istimewa Yogyakarta dan dilanjutkan di laboratorium Nutrisi dan Teknologi Hasil Ternak, Program Studi Peternakan Fakultas Agroindustri Universitas Mercu Buana Yogyakarta. Penelitian ini dirancang dengan menggunakan Rancangan Acak Lengkap (RAL) pola searah. Penelitian ini terdiri dari 3 umur perlakuan dan 3 kali ulangan yang masing-masing adalah P1: umur panen 30 hari, P2: umur panen 45 hari, P3: umur panen 60 hari. Variabel yang diamati adalah produksi tanaman yang meliputi tinggi tanaman, diameter batang, lebar daun, panjang daun, berat segar dan kandungan nutrien yang meliputi kadar air, protein kasar dan serat kasar. Data dianalisis menggunakan *Analysis of Variance* (ANOVA), jika ada perbedaan nyata dilanjut dengan uji *Duncan's New Multiple Range Test* (DMRT). Hasil penelitian menunjukkan perbedaan umur panen pada tanaman Jagung (*Zea mays*) berpengaruh sangat nyata (P<0,05) terhadap produksi dan kandungan nutrien dari tanaman. Berdasarkan hasil penelitian dapat disimpulkan bahwa umur panen terbaik yaitu 45 hari menghasilkan produksi protein kasar 0,67 ton/ha/thn dan berat kering yang maksimal 7,40 ton/thn/ha.

Kata kunci : Tanaman_Jagung, defoliasi, produksi, kandungan_nutrien.

THE EFFECT OF VARIOUS DEFOLIATION AGE ON PRODUCTION AND NUTRIENT CONTENT OF CORN (*Zea mays*) PLANT AS FEED

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ABSTRACT*)

The purpose of this study was to determine the effect of various defoliation age on the production and nutrient content of Maize (*Zea mays*) plants as animal feed. This research was conducted from January 18 to May 8, 2023 in Hargorejo Village, Kokap District, Kulon Progo Regency, Daerah Istimewa Yogyakarta and continued in the Laboratory of Nutrition and Animal Product Technology, Animal Husbandry Study Program, Faculty of Agroindustry, Mercu Buana University Yogyakarta. This study was designed using a completely randomized design (CRD) one way pattern. This study consisted of 3 treatment ages and 3 replications, each of which was P1: harvest age 30 days, P2: harvest age 45 days, P3: harvest age 60 days. The variables observed were plant production including plant height, stem diameter, leaf width, leaf length, fresh weight and nutrient content including moisture content, crude protein, crude fiber. Data were analyzed using *Analysis of Variance* (ANOVA), if there were significant differences, it was continued with *Duncan's New Multiple Range Test* (DMRT). The results showed that differences in harvest age in Maize (*Zea mays*) plants had a significant effect (P <0,05) on plant production. The results also showed that differences in harvest age in Maize (*Zea mays*) plants had a significant effect (P<0,05) on the nutrient content of the plants. Based on the results of the study, it can be concluded that the best harvest age is 45 days which produces 0,67 tons/ha/year of crude protein production and a maximum dry matter of 7,40 tons/ha/year.

Keywords : Maize, defoliation, production, nutrient_content.