

**PENGARUH LAMA PENYINARAN DAN TINGKAT PENAMBAHAN  
DOLOMIT PADA TANAH REGOSOL TERHADAP KECERNAAN  
IN VITRO TANAMAN ALFALFA (*Medicago sativa* L.)**

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**INTISARI**

Penelitian ini bertujuan untuk mengetahui pengaruh lama penyinaran yang berbeda dan penambahan berbagai level dolomit pada tanah regosol terhadap kecernaan *in vitro* tanaman alfalfa. Penelitian dilakukan di Rumah Kaca Laboratorium Hijauan Makanan Ternak dan Pastura Fakultas Peternakan, Universitas Gadjah Mada. Tanaman alfalfa ditanam dalam *polybag*. Rancangan percobaan yang digunakan adalah rancangan acak lengkap pola faktorial 2 x 3 dengan 4 ulangan. Faktor lama penyinaran (C) dua level terdiri atas penyinaran 12 jam (C0) dan 14 jam (C1). Faktor penambahan dolomit (D) tiga level terdiri atas penambahan dolomit 0 g/*polybag* (D0), 90 g/*polybag* (D1), dan 180 g/*polybag*. Data yang diamati adalah nilai kecernaan bahan kering *in vitro* (KcBKIV) dan kecernaan bahan organik *in vitro* (KcBOIV). Data yang diperoleh dianalisis statistik dengan analisis variansi dan bila terdapat perbedaan yang nyata dilanjutkan dengan uji *Duncan's new multiple range test*. Hasil penelitian menunjukkan bahwa KcBKIV dan KcBOIV tidak dipengaruhi oleh lama penyinaran dan penambahan dolomit. Tidak terdapat interaksi antara perlakuan lama penyinaran dan penambahan dosis dolomit terhadap KcBKIV dan KcBOIV tanaman alfalfa.

(Kata kunci: Alfalfa, Lama penyinaran, Penambahan dolomit, Kecernaan *in vitro*)

**THE EFFECT OF PHOTOPERIODS AND LEVEL OF DOLOMITE ADDITIONS ON THE REGOSOL SOIL TO *IN VITRO* DIGESTIBILITY OF ALFALFA (*Medicago sativa* L.)**

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**ABSTRACT**

The study was conducted to determine the effect of photoperiods and level of dolomite additions on the regosol soil of *in vitro* dry matter and organic matter digestibility of alfalfa. The experiment was carry out in greenhouse of Laboratory Forage and Pasture Science Faculty of Animal Sciences Universitas Gadjah Mada. Alfalfa was planted in *polybag*. Following by 2 x 3 factorial completely randomized design, 3 levels dolomite addition (0 g/D0, 90 g/D1, and 180 g/D2) in each *polybag* were planted in four replications under two levels light duration (12 hours/C0 and 14 hours/C1). Data measured were *in vitro* dry matter digestibility (IVDMD) and *in vitro* organic matter digestibility (IVOMD) of alfalfa. Data were analyzed using analysis of variance (anova) and then continued with Duncan's new multiple range test (DMRT) if significant results among results were found. The results showed that the IVDMD and IVOMD of alfalfa were not affected by photoperiods and dolomite additions. There were no interactions between IVDMD and IVOMD of alfalfa.

(Keywords: Alfalfa, Photoperiods, Dolomite additions, Regosol soil, *In vitro* digestibility)