

**PENGARUH PENAMBAHAN LAMA PENCAHAYAAN DAN  
DOLOMIT TERHADAP PERTUMBUHAN VEGETATIF  
TANAMAN ALFALFA (*Medicago sativa* L.)  
PADA FASE *REGROWTH* KEDUA**

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**INTISARI**

Penelitian ini bertujuan untuk mengetahui pengaruh penambahan lama pencahayaan dan dolomit terhadap pertumbuhan vegetatif tanaman alfalfa pada fase *regrowth* kedua. Penelitian dilakukan di rumah kaca Laboratorium Ilmu Hijauan Makanan Ternak dan Pastura, Fakultas Peternakan, Universitas Gadjah Mada. Penelitian ini menggunakan Rancangan Acak Lengkap Pola Faktorial 3x3. Perlakuan pertama adalah lama pencahayaan (C) 3 taraf yakni C0= 12 jam, C1= 14 jam, C2 = 16 jam. Perlakuan kedua adalah penambahan dolomit (D) 3 taraf yakni D0= 0 ton/ha, D1= 6 ton/ha, D2= 12 ton/ha. Hasil yang berbeda nyata dilakukan uji lanjutan dengan *Duncan Multiple Range Test* (DMRT) pada taraf 5% dan 1%. Variabel yang diamati adalah tinggi tanaman, jumlah cabang tanaman, jumlah daun tanaman, produksi hijauan segar dan kandungan kimia tanaman berupa bahan kering (BK) dan bahan organik (BO). Hasil penelitian menunjukkan bahwa lama pencahayaan berpengaruh nyata terhadap tinggi tanaman jumlah cabang tanaman. Penambahan dolomit berpengaruh nyata terhadap jumlah cabang, jumlah daun tanaman dan bahan kering tanaman. Terdapat interaksi antara dua perlakuan terhadap jumlah daun yaitu pada perlakuan lama pencahayaan 16 jam dan penambahan dolomit 12 ton/ha (C2D2) dan interaksi perlakuan terhadap bahan kering pada perlakuan lama pencahayaan 14 jam dan penambahan dolomit 12 ton/ha (C1D2).

**Kata kunci:** Dolomit, *Medicago sativa*, Lama pencahayaan, Pertumbuhan vegetatif.

**THE EFFECT OF THE ADDITION OF LIGHTING DURATION dan  
DOLOMITE TO VEGETATIVE GROWTH OF ALFALFA  
(*Medicago sativa* .L) REGROWTH SECOND PHASE**

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**ABSTRACT**

This study was conducted to know the effect of the addition of lighting duration and dolomite to vegetative growth of alfalfa plants in the second regrowth phase. The experiment was conducted at greenhouse of Laboratory of Forage and Pasture, Animal Science Faculty of Universitas Gadjah Mada. This study was designed using Completely Randomized Design (CRD) 3x3 factorial design with two factors dan three replications. The first factor was light duration (C) with 3 levels C0= 12 hours, C1= 14 hours, C2= 16 hours. The second factor was dolomite addition (D) with 3 level D0= 0 ton/ha, D1= 6 ton /ha, D2= 12 ton/ha. The results that significantly effect then proceed with Duncan Multiple Range Test (DMRT) test at 5% and 1% level. The variables observed were plants height, number of plant branches, number of plant leaves, fresh forage production, dan chemical content of plants in the form of dry matter (DM) dan organic matter (OM). The addition of dolomite significantly affected the number of plant branches, number of plant leaves dan dry matter of plants, dan there was an interaction between two treatments on the number of leaves that is in the treatment of C2D2 dan the interaction treatment of dry matter at C1D2 treatment.

**Key word:** Dolomite, Lighting duration, *Medicago sativa*, Vegetative growth.