KARAKTERISTIK MORFOLOGI DAN PRODUKSI BIOMASSA TANAMAN CHICORY (*Cichorium intybus* cv. Chico) PADA *REGROWTH* PERTAMA DAN KEDUA DENGAN LEVEL PUPUK YANG BERBEDA DI YOGYAKARTA

Zam Asfari Latfi
15/383827/PT/07100

INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh perbedaan level pemberian pupuk dan *regrowth* pertama dan kedua terhadap morfologi dan produksi biomassa dari *Chicorium intybus* cv. Chico. Biji *Chicorium intybus* cv. Chico ditanam di Yogyakarta pada plot berukuran 1x1,5 m. Penelitian dilakukan menurut rancangan *split plot*. Plot utama adalah *regrowth* dan anak plot adalah level pupuk NPK 16-16-16. Level pupuk NPK 16-16-16 masing-masing dilakukan pengulangan 3 kali sehingga terdapat 9 plot. Perlakuan level pupuk dibedakan menjadi 3, yaitu tanpa penambahan pupuk (0), dengan penambahan pupuk 4,5; dan dengan penambahan pupuk 6 atau setara dengan 0 kg/ha, 30kg/ha, dan 40 kg/ha. Pupuk NPK 16-16-16 diberikan sesaat setelah defoliasi yaitu setiap 28 hari. Variabel yang diamati adalah morfologi yang meliputi tinggi tanaman, panjang tanaman, lebar daun, dan jumlah daun, serta produksi yang meliputi kadar bahan kering (BK) dan kadar bahan organik (BO). Data hasil penelitian dianalisis statistik dengan analisis variansi dan beda antar rerata diuji dengan uji *Duncan's New Multiple Range Test* (DMRT). Hasil penelitian menunjukkan bahwa level pupuk NPK 16-16-16 hanya memiliki pengaruh yang nyata ($P<0,05$) pada jumlah daun. Perlakuan *regrowth* menunjukkan perbedaan nyata ($P<0,05$) pada tinggi tanaman, produksi BK dan produksi BO. Produksi terbanyak pada *regrowth* pertama dengan produksi BK 130,77 kg/ha dan produksi BO 106,15 kg/ha. Dari penelitian tersebut dapat disimpulkan morfologi dan produksi biomassa chicory tidak dipengaruhi oleh level pupuk NPK 16-16-16, dan *regrowth* pertama menghasilkan morfologi dan produksi biomassa chicory yang lebih tinggi daripada *regrowth* kedua.

(Kata Kunci : *Chicorium intybus* cv. Chico, Perbedaan level pupuk, *Regrowth*, Karakteristik morfologi, Produksi biomassa)

MORPHOLOGY CHARACTERISTICS AND BIOMASS PRODUCTION OF CHICORY (*Chicorium intybus* cv. Chico) PLANTS IN THE FIRST AND SECOND REGROWTH WITH DIFFERENT FERTILIZATION LEVEL IN YOGYAKARTA

Zam Asfari Latfi
15/383827/PT/07100

ABSTRACT

This study aims to determine the effect of differences in the level of fertilizer application and the first and second regrowth on morphology characteristics and biomass production of *Chicorium intybus* cv. Chico. *Chicorium intybus* cv. Chico's seed was planted in Yogyakarta in 1x1.5 m plots. The study was conducted according to a split plot design. The main plot is regrowth and the sub plot is NPK 16-16-16 fertilizer level. The NPK 16-16-16 16-16-16 fertilizer level treatment was conducted with 3 replications so that there were 9 plots. The level of fertilization treatment was divided into 3, without the addition of fertilizer (0), with the addition of 4.5, and with the addition of 6 equivalent to 0 kg, 30kg/ha, and 40 kg/ha. NPK 16-16-16 fertilizer is given shortly after defoliation which is each 28 days. The variables observed were morphology which included plant height, plant length, leaf width, and number of leaves, as well as production which included dry matter content (DM) and organic matter content (OM). The research data were statistically analyzed using analysis variance and the difference between the mean tested with Duncan's New Multiple Range Test (DMRT). The results showed that the difference in fertilizer content only gave a significant difference ($P<0.05$) in the number of leaves. The regrowth treatment showed significant differences ($P<0.05$) in plant height, DM production and OM production. The highest production was in the first regrowth with DM production of 130,77 kg/ha and OM production of 106,15 kg/ha. It can be concluded that the morphology and biomass production of chicory were not affected by fertilizer level, and the first regrowth resulted in higher morphology and production of chicory biomass than the second regrowth.

(Keywords: *Cichorium intybus*, Morphological characteristics, Biomass production, Fertilization level, *Regrowth*)