PENGARUH LEVEL DEFOLIASI TERHADAP PERTUMBUHAN, PRODUKSI, DAN KANDUNGAN NUTRIEN *CHICORY* (*Cichorium intybus* cv. Chico) DI YOGYAKARTA

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INTISARI

Penelitian ini dilakukan untuk mengetahui pertumbuhan, produksi, dan kandungan nutrien *chicory* (*Cichorium intybus* cv. Chico) pada level defoliasi yang berbeda. Penelitian ini dilaksanakan di kebun Laboratorium Hijauan Makanan Ternak dan Pastura, Fakultas Peternakan, Universitas Gadjah Mada. Penelitian menggunakan rancangan acak lengkap pola searah dengan tiga level perlakuan defoliasi (2,5, 5, dan 10 cm) dan tiga variabel pengamatan (pertumbuhan, produksi biomassa, dan kandungan nutrien). Tanaman *chicory* (*Cichorium intybus* cv. Chico) berumur 7 bulan pada *regrowth* ke-8 yang ditanam pada petak ukuran 1 × 1,5 m^2 dengan 3 ulangan. Tanaman *chicory* dipotong dengan level defoliasi 2,5, 5, dan 10 cm dari atas permukaan tanah. Panen dilakukan setiap tanaman berumur 21 hari. Data penelitian dianalisis dengan analisis variansi dilanjutkan dengan analisis antar rerata. Hasil penelitian menunjukkan bahwa pertumbuhan *chicory* dengan level defoliasi 2,5 cm lebih rendah (P<0,05) dibanding level defoliasi 5 dan 10 cm yaitu tinggi tanaman (20,87 *vs*. 32,02 dan 34,57 cm), panjang tanaman (21,97 *vs*. 33,38 dan 37,17 cm), panjang daun (14,17 *vs*. 22,27 dan 22,69 cm), dan lebar daun (1,90 *vs*. 3,25 dan 3,15 cm). Jumlah tunas dan daun level defoliasi 2,5 cm lebih tinggi (P<0,05) daripada 10 cm (4,43 *vs*. 0,37 dan 27,86 *vs.* 18,07). Kandungan nutrisi dan produktivitas level defoliasi 2,5 cm lebih rendah (P<0,05) daripada 5 dan 10 cm yaitu protein kasar (21,04 *vs*. 21,98 dan 21,77 %), produksi segar (5,81 *vs*. 11,22 dan 13,40 ton/ha), produksi bahan kering (0,49 *vs*. 0,89 dan 1,09 ton/ha), dan produksi bahan organik (0,40 *vs*. 0,72 dan 0,88 ton/ha). Bahan kering, bahan organik, serat kasar, lemak kasar, dan *total digestible nutrient* sebagai akibat perlakuan level defoliasi tidak berbeda nyata; rerata berturut-turut adalah 8,19%, 80,90%, 10,78%, 4,46%, dan 62,26%. Dari penelitian ini dapat disimpulkan bahwa tanaman *chicory Cichorium intybus* cv. Chico dengan level defoliasi 5 dan 10 cm menghasilkan pertumbuhan dan produktivitas yang lebih tinggi.

Kata kunci: *Cichorium intybus,* Level defoliasi, Pertumbuhan, Produksi, Kandungan nutrien.

THE EFFECT OF DEFOLIATION LEVELS ON GROWTH, PRODUCTION, AND NUTRIENT CONTENT OF *CHICORY* (*Cichorium intybus* cv. Chico) IN YOGYAKARTA

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ABSTRACT

The objective of this study was to explore the growth, production, and nutrient content of 8th regrowth *chicory* (*Cichorium intybus* cv. Chico) at different defoliation levels. Experiments were carried out at forage facilities owned by Laboratory of Animal Forages and Pasture at Faculty of Animal Science, Universitas Gadjah Mada. One-way completely randomized design was employed on the experiment, followed by Duncan multiple range test to determine differences among treatments. Variables observed on this study were growth, biomass production, and nutrient content. *Chicory* plants (aged 7 months and on 8th regrowth) were planted on 1 × 1,5 m^2 with 3 replications. The data were analyzed with analysis of variance. The results showed that *chicory* with 2,5 cm defoliation level has lower (P<0,05) plant height (20,87 vs. 32,02 and 34,57cm), plant length (21,97 vs. 33,38 and 37,17 cm), leaf length (14,17 vs. 22,27 and 22,69 cm), and leaf width (1,90 vs. 3,25 and 3,15 cm) than those with 5 dan 10 cm defoliation levels. Number of buds and leaves of *chicory* with 2,5 cm defoliation level was higher (P<0,05) than 10 cm defoliation level (4,43 vs. 0,37 and 27,86 vs. 18,07). *Chicory* with 2,5 cm defoliation level showed lower (P<0,05) crude protein (21,04 *vs*. 21,98 dan 21,77 %), dry matter production (0,49 vs. 0,89 and 1,09 ton/ha), and organic matter production (0,40 vs. 0,72 and 0,88 ton/ha) than those with 5 and 10 cm defoliation levels. DM, OM, crude fiber, EE, and TDN were not significantly different among treatments, averaged at 26,92, 8,19%, 80,90%, 10,78%, 4,46%, and 62,26%, respectively. Based on these results, it can be concluded that *chicory* plant *Cichorium intybus* cv. Chico that defoliated at 5 and 10 cm above ground level had higher growth and productivity.

Keywords: *Cichorium intybus,* Defoliation levels, Growth, Production, and Nutrient content.