

**KARAKTERISTIK MORFOLOGI DAN PRODUKSI BIOMASSA
Brachiaria ruziziensis cv. Kennedy INTERCROPPING
DENGAN *Cichorium intybus* cv. Chico
PADA REGROWTH PERTAMA**

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INTISARI

Penelitian ini dilakukan bertujuan untuk mengetahui karakteristik morfologi dan produksi biomassa rumput ruzi (*Brachiaria ruziziensis* cv. Kennedy) dan chicory (*Cichorium intybus* cv. Chico) pada *regrowth* pertama yang ditanam pada pola penanaman *intercropping* dan *monocropping* serta membandingkan produktivitas sistem tanam. Penelitian dilakukan di lahan Hijauan Makanan Ternak dan Pastura dan Laboratorium Hijauan Makanan Ternak dan Pastura, Fakultas Peternakan, Universitas Gadjah Mada. Penelitian ini menggunakan Rancangan Acak Lengkap (RAL) dengan membandingkan 2 perlakuan pola tanam. Rancangan petak yang digunakan yaitu plot pola penanaman *monocropping* dan plot pola penanaman *intercropping* masing-masing 3 ulangan sehingga terdapat 9 plot dengan luas plot 1 x 1,5 m. Parameter morfologi rumput yang diamati meliputi tinggi tanaman, panjang tanaman dan jumlah tunas. Parameter morfologi chicory yang diamati meliputi panjang tanaman, tinggi tanaman, panjang daun, dan lebar daun, dan membandingkan hasil produksi segar, bahan kering dan bahan organik dari masing-masing *monocropping*nya. Data morfologi dan produksi parsial yang diperoleh dianalisis dengan menggunakan rancangan *Independent Sample T-Test* sedangkan data produktivitas sistem tanam dianalisis menggunakan ANOVA *one way* dilanjutkan dengan uji *Duncan's New Multiple Range Test* (DMRT) apabila menunjukkan hasil yang signifikan. Hasil penelitian menunjukkan bahwa tidak terdapat perbedaan yang nyata pada morfologi dan produksi parsial rumput ruzi dan perbedaan yang nyata pada morfologi dan produksi parsial chicory. Produksi segar total *intercropping* lebih tinggi dibandingkan kedua sistem *monocropping* tetapi tidak menghasilkan perbedaan yang nyata pada produksi bahan kering dan bahan organik dibandingkan *monocropping* ruzi. Berdasarkan hasil penelitian dapat disimpulkan bahwa sistem *intercropping* rumput ruzi dan chicory mampu meningkatkan produksi segar total tetapi tidak meningkatkan produksi bahan kering dan bahan organik.

Kata kunci : *Brachiaria ruziziensis* cv. Kennedy, *Cichorium intybus* cv. Chico, Karakteristik morfologi , Produksi biomassa, *Regrowth*, *Intercropping*

**MORPHOLOGICAL CHARACTERISTICS AND BIOMASS
PRODUCTION OF *Brachiaria ruziziensis* cv. Kennedy
INTERCROPPED WITH *Cichorium intybus* cv. Chico
DURING FIRST REGROWTH**

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ABSTRACT

This study aims to determine the morphological characteristics and biomass production of ruzi grass (*Brachiaria ruziziensis* cv. Kennedy) and chicory (*Cichorium intybus* cv. Chico) during the first *regrowth* planted in a *intercropping* and a *monocropping* patterns, as well as to compare the productivity of the planting systems. The research was conducted in the Forage and Pasture Fields and the Forage and Pasture Laboratory, Faculty of Animal Science, Gadjah Mada University. This research used a *Completely Randomized Design* (CRD) by comparing 2 planting pattern treatments. The plot design used included *monocropping* plots and *intercropping* plots, each with 3 replications, making a total of 9 plots with a plot size of 1 x 1.5 m. Morphological parameters observed for the *grass* included plant height, plant length, and the number of shoots. The morphological parameters of chicory observed included plant length, plant height, leaf length, and leaf width, and compared the fresh yield, dry matter, and organic matter from each of its *monocropping* systems. The morphological and partial production data obtained were analyzed using an *Independent Sample T-Test* design, while the productivity data of the planting system were analyzed using *one-way* ANOVA followed by *Duncan's New Multiple Range Test* (DMRT) if the results were significant. The results showed that there were no significant differences in the morphology and partial production of ruzi *grass*, and significant differences in the morphology and partial production of chicory. The total fresh production in *intercropping* is higher compared to both *monocropping* systems, but it doesn't show a significant difference in dry matter and organic matter production compared to ruzi *monocropping*. Based on the research results, it can be concluded that the *intercropping* system of ruzi grass and chicory can increase total fresh production but does not increase dry matter and organic matter production.

Keywords : *Brachiaria ruziziensis* cv. Kennedy, *Cichorium intybus* cv. Chico, Morphological characteristics, Biomass production, *Regrowth*, *Intercropping*