

PENGARUH UMUR PEMOTONGAN RUMPUT TEFF (*Eragrostis tef*) TERHADAP MORFOLOGI DAN PRODUKSI BIOMASSA

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INTISARI

Rumput teff (*Eragrostis tef*) diusulkan sebagai alternatif hijauan pakan karena tanaman tahan terhadap kekeringan dan memiliki kualitas nutrisi yang baik. Penelitian ini bertujuan untuk mengetahui pengaruh umur pemotongan yang berbeda terhadap morfologi dan produksi biomassa teff di Indonesia. Penelitian dilakukan di Area Sawah Kalijeruk, Sleman, Yogyakarta, dan Laboratorium Hijauan Makanan Ternak dan Pastura, Universitas Gadjah Mada, pada bulan April hingga November 2024. Metode penelitian menggunakan rancangan acak lengkap (RAL) dengan perlakuan umur pemotongan 30, 45, dan 60 hari. Pengamatan mencakup parameter morfologi (tinggi tanaman, panjang tanaman, jumlah daun, panjang daun, lebar daun, panjang internode, dan diameter batang) serta produksi biomassa (produksi segar, produksi bahan kering, dan produksi bahan organik). Analisis statistik dilakukan menggunakan SPSS versi 27. Penelitian menemukan bahwa umur potong memengaruhi pertumbuhan morfologi dan produksi rumput teff secara signifikan. Tinggi tanaman dan panjang daun terbaik terdapat pada umur pemotongan 30 hari. Panjang tanaman dan jumlah daun terbaik terdapat pada umur pemotongan 60 hari. Sementara dari sisi produksi segar, produksi bahan kering, maupun produksi bahan organik terbaik terdapat pada umur pemotongan 60 hari. Hasil penelitian menunjukkan bahwa tanaman teff dapat menghasilkan produksi biomassa terbaik pada umur pemotongan 60 hari dengan proporsi bahan organik yang tetap stabil.

(Kata kunci : Morfologi, Produksi biomassa, Rumput Teff, Umur potong)

THE EFFECT OF DIFFERENT CUTTING AGE ON TEFF (*Eragrostis tef*) MORPHOLOGY AND BIOMASS PRODUCTION

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ABSTRACT

Teff grass (*Eragrostis tef*) is proposed as an alternative forage as it is resistant to drought and has good nutritional quality. Teff can grow fast and produce high biomass, thus making it a potential feed for livestock. This study aimed to determine the effect of different cutting age on the morphology and biomass production of teff in Indonesia. Determine the optimal cutting age is important to get the best results. The research was conducted in Kalijeruk Field, Sleman, Yogyakarta, and in the Laboratory of Forage and Pasture, Gadjah Mada University, April to November 2024. The research method used a completely randomized design (CRD) with 30, 45, and 60 days cutting age treatments. Observations included morphological parameters (plant height, plant length, number of leaves, leaf length, leaf width, internode length and stem diameter) also biomass production (fresh weight, dry matter and organic matter). Statistical analysis was conducted using SPSS version 27. The study found that cutting age significantly affected the morphological growth and production of teff grass. Plant height and leaf length were best at 30 days cutting age. Plant length and number of leaves were best at 60 days cutting age. While in terms of fresh production, dry matter production and organic matter production, the best was found at 60 days of cutting. The results showed that teff plants can produce the best biomass production at the cutting age of 60 days with a stable proportion of organic matter.

(Key Words : Biomass production, cutting age, morphology, Teff grass).