

KANDUNGAN DAN PRODUKSI NUTRIEN RUMPUT GAMA UMAMI (*Pennisetum purpureum* cv. Gama Umami) DI BAWAH NAUNGAN POHON JATI DI BLORA JAWA TENGAH

Virna Anintya Ramadhani
21/481298/PT/09036

INTISARI

Penelitian ini bertujuan untuk mengetahui kandungan dan produksi nutrient rumput gajah (*Pennisetum purpureum*) kultivar gama umami yang berada pada naungan pohon jati. Penelitian dilakukan di Kawasan Hutan Dengan Tujuan Khusus (KHDTK), Desa Megeri, Kecamatan Kradenan, Kabupaten Blora, Jawa Tengah. Lahan yang digunakan berada di pinggir kawasan hutan jati yang masih mendapatkan naungan pohon jati, di bagi menjadi 12 petak (sebagai ulangan) yang terbagi atas 6 petak tidak ternaungi dan 6 petak yang ternaungi oleh pohon jati dengan ukuran petak 3x1 m². Setiap plot ditanami 14 bibit gama umami dengan jarak tanam 0,6m. Penelitian dilaksanakan menggunakan *independent samples t-test* dengan pengulangan sebanyak 3 kali. Rumput dilakukan pemanenan pada umur 4 bulan. Variabel yang diamati meliputi kandungan nutrien (bahan kering, bahan organik, serat kasar, lemak kasar, protein kasar). Hasil menunjukkan bahwa penelitian berpengaruh tidak nyata ($P>0,05$) pada kandungan nutrien. Serta berpengaruh sangat nyata ($P<0,01$) dan berpengaruh sangat nyata pada produksi nutrien kecuali produksi lemak kasar yang menghasilkan data signifikan.

Kata kunci: Gama Umami, Intensitas Cahaya, Kawasan Hutan Jati, Naungan, *Pennisetum Purpureum*, Produksi

ABSTRACT

This study aimed to determine the nutrient content and nutrient production of elephant grass (*Pennisetum purpureum*) cultivar Gama Umami grown under teak tree (*Tectona grandis*) shading. The research was conducted in the Special Purpose Forest Area (KHDTK), located in Megeri Village, Kradenan Subdistrict, Blora Regency, Central Java. The experimental site was situated at the edge of a teak forest, allowing natural shading from the trees. The area was divided into 12 plots (as replicates), consisting of 6 unshaded and 6 shaded plots, each measuring $3 \times 1 \text{ m}^2$. Each plot was planted with 14 Gama Umami seedlings using a planting distance of 0.6 m. The study was carried out using an independent samples t-test with three replications. Harvesting was performed at four months of plant age. Observed variables included nutrient content (dry matter, organic matter, crude fiber, ether extract, and crude protein). The results showed that shading had no significant effect ($P > 0.05$) on nutrient content. However, shading had a highly significant effect ($P < 0.01$) on nutrient production, except for crude fat production, which showed a non-significant difference.

Key words: Gama Umami, Light Intensity, Carrying Capacity, Teak Forest Area, Shade, *Pennisetum Purpureum*, Production