



PENGARUH ARAS PUPUK MAGNESIUM TERHADAP KOMPOSISI KIMIA RUMPUT RAJA

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INTISARI

Penelitian ini bertujuan untuk, inengetahui pengaruh aras pupuk magnesium terhadap komposisi kimia rumput Raja. Sembilan plot tanah regosol yang ditanami rumput Raja, masing-masing plot berukuran 3 m x 4 m dibagi menjadi 3 perlakuan. Perlakuan pertaroa (P-I) adalah petak kontrol dengan aras pupuk 34,8 kg H/ha/42 hari, 17,4 kg P₂Pj/ha/42 hari dan 17,4 kg K₂O/ha/42 hari. Perlakuan kedua (P-II) sama dengan (P-I) ditambah pupuk Mg sebesar 0,9 kg Mg/435 l air/ha/42 hari (tiga tahap pemberian). Perlakuan ketiga (P-III) sama dengan (P-I) ditambah pupuk Mg sebesar 0,9 kg Mg/145 l air/ha/42 hari (satu kali pemberian). Perlakuan P-II dan P-III menerima jumlah yang sama pupuk N, P₂O₅ dan K₂O dengan yang diberikan pada P-I. Setelah tanaman berumur 42 hari dilakukan pemotongan dan setelah diketahui beratnya kemudian diambil sampelnya untuk dianalisis komposisi kimianya. Semua data dicatat selanjutnya dianalisis variansi dengan menggunakan uji rancangan acak lengkap pola satu arah. Hasil penelitian menunjukkan rata-rata hasil perlakuan P-I, P-II dan P-III berturut-turut adalah kandungan bahan organik 87,17%; 88,52% dan 86,85%; protein kasar 12,28%; 13,09% dan 12,97%; serat kasar 33,91%; 34,24% dan 34,51%; ekstrak ether 2,07%; 2,39% dan 2,27%; ekstrak tanpa nitrogen 38,04%; 37,74% dan 37,89%. Perlakuan pemupukan Mg tidak menunjukkan perbedaan yang nyata (P>0,05) terhadap kandungan bahan organik, protein kasar, serat kasar, ekstrak ether dan ekstrak tanpa nitrogen rumput Raja. Kesimpulan dari penelitian ini adalah pemberian pupuk Mg tidak berpengaruh terhadap peningkatan kualitas kimia rumput Raja.

(Kata kunci : Rumput Raja, Pupuk Mg, Protein kasar, Serat kasar, Ekstrak ether, Ekstrak tanpa nitrogen).



THE EFFECT OF MAGNESIUM FERTILIZER LEVELS OS CHEMICAL COMPOSITION OF KING GRASS

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ABSTRACT

Reserch was performed to determine effect of magnesi-um fertiliser level on chemical composition of King grass. Sine plots of regosol soil with sise of 3 m X 4 m each were divided into three groups of treatments and were planted with King grass. The first treatment (P-I) was the control with H,P,K fertilisers given at the rate of 34.8 kg H /ha/42 days, 17.4 kg Pj0₅/ha/42 days and 17.4 kg K₂O/ha/42 days. The second group (P-II) was treated with (P-I) Mg fertiliser at the rate of 0.9 kg/435 l water/ha/42 days (applied three times). The third group (P-III) was treated with Mg fertiliser at the rate of 0.9 kg/145 l water/ha/42 days (applied once time). P-II and P-III received the same amount of S, P and K fertilizers as given to P-I. After 42 days old the King grass were cut and after were weighed, the samples were taken for chemical analyses. All parameters recorded were subjected to statistical analysis in a that completely randomized design. The result showed average nutritive content of P-I, P-II, P-III treatments successively were: organics material 87.17%; 86.52% and 86.65%; crude protein 12.28%; 13.09% and 12.97%; crude fiber 33.91%; 34.24% and 34.51%; extract ether 2.07%; 2.39% and 2.27%; nitrogen free extract 38.04%; 37.74% and 37.89%. Mg fertilizer treatment was not significantly ($P > 0.05$) affected the organics material, crude protein, crude fiber, extract ether and nitrogen free extract instead of King grass. It can be concluded that the use of Mg fertilizer was not able to increase proximate quality of King grass.

(Key word : King grass, Mg fertilizer, Organics material, Crude protein, Crude fiber, Extract ether and Nitrogen free extract).