

PENGARUH UMUR DAN BAGIAN STEK TERHADAP PERTUMBUHAN DAN PRODUKSI RUMPUT RAJA (KING GRASS)

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INTISARI

Penelitian dilakukan selama enam bulan di Fakultas Peternakan Universitas Gadjah Mada bertujuan untuk mengetahui pengaruh umur dan bagian stek terhadap pertumbuhan dan produksi Rumput Raja (King Grass). Dalam percobaan digunakan Randomized Complete Block Design (RCBD) pola faktorial 3x3. Faktor pertama umur stek, terdiri atas, stek umur tiga, empat dan lima bulan. Faktor kedua bagian stek terdiri atas stek bagian ujung, tengah dan pangkal, sehingga semuanya membentuk sembilan kombinasi perlakuan. Ulangan dilakukan empat kali. Terdapat 38 plot berupa baris panjang 2,4 m, jarak antar baris satu meter dan jarak tanam dalam baris 30 cm. Selama penelitian dilakukan tiga kali pemupukan dengan urea (46% N) dengan dosis 300 kg/ha. Pemupukan pertama pada saat tanaman umur tiga minggu, berikutnya setelah pemotongan pertama dan kedua. Pemotongan dilakukan tiga kali, yang pertama pada umur 13 minggu, selanjutnya dengan interval 45 hari.

Hasil penelitian pada berbagai perlakuan umur stek menunjukkan perbedaan ($P < 0,01$) terhadap pertumbuhan tanaman tiap minggu selama 13 minggu setelah tanam, tinggi tanaman umur 13 minggu, produksi segar dan bahan kering berturut-turut : 19,33 , 16,04 , 21,18 cm/minggu; 233,95 , 231,53 , 257,70 cm ; 24,78 , 25,50 , 33,34 kg dan 3,40 , 3,44 , 4,54 kg. Pengaruh dari berbagai perlakuan bagian stek menunjukkan perbedaan ($P < 0,01$) terhadap persentase tumbuh, pertumbuhan tanaman tiap minggu selama 13 minggu setelah tanam, produksi segar dan bahan kering berturut-turut : 94,8 , 89,6 , 71,9% ; 20,34 , 19,42 , 19,87 cm/minggu ; 30,82 , 26,02 , 26,78 kg dan 4,35 , 3,52 , 3,51 kg. Interaksi perlakuan memberikan pengaruh yang berbeda ($P < 0,01$) terhadap produksi segar pada kesembilan kombinasi perlakuan berturut-turut : 27,26 , 24,26 , 22,83 , 27,03 , 27,16 , 22,30 , 38,18 , 26,63 dan 35,20 kg. Sedangkan pengaruh dari berbagai perlakuan umur stek, bagian stek maupun interaksinya tidak menunjukkan perbedaan terhadap persentase kematian stek dan jumlah anakan.

Dari hasil penelitian disimpulkan bahwa pertumbuhan dan produksi pada stek umur lima bulan dan juga stek bagian ujung lebih tinggi dibanding perlakuan lainnya, sehingga dalam pengembangan Rumput Raja disarankan untuk menanam stek umur lima bulan.

(Rata Kunci : Rumput Raja, Umur Stek, Bagian Stek, Pertumbuhan, Produksi).

THE EFFECT OF AGE AND PART OF CUTTING ON THE GROWTH AND PRODUCTION OF KING GRASS

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ABSTRACT

The experiment was conducted for six months at the Faculty of Animal Husbandry GMU to investigate the effect of age and part of cutting on the growth and production of King Grass. The collecting data were analysed by using a 3x3 factorial of RCBD. The factor I, was cutting ages of three, four and five months. The factor II, was part of cutting, namely top, medium and bottom, whereas nine trial combinations were obtained with four replications. There were 36 plots of rows with 2.4 m length and the distance between rows was one meter and the distance between plants was 30 cm. The manure was given three times namely urea (46% N) with the dose of 300 kg / ha. It was done at three weeks old, followed by each 45 days periodically.

The results indicated that there were significant differences ($P < 0.01$) due to cutting age on the average of high increasing per week at 13 weeks post planting. The high of plant at 13 weeks old, the fresh and dry-matter production were : 19.33, 16.04, 21.18 cm/week were 233.95, 231.53, 257.70 cm ; 24.78, 25.50, 33.34 kg and 3.40, 3.44, 4.54 kg, respectively. There were significant differences ($P < 0.01$) due to part of cutting on growth percentage, the average of hight increased per week at 13 week post planting, fresh product and dry-matter production, the values were : 94.8, 89.6, 71.9% ; 20.34, 19.42, 19.87 cm/week ; 30.82, 26.02, 26.78 kg and 4.35, 3.52, 3.51 kg. There were interactions ($P < 0.01$) between treatments on the fresh product, at all combination trials, namely : 27.26, 24.26, 22.83, 27.03, 27.16, 22.30, 38.18, 26.63 and 35.20 kg. On the contrary no interactions were observed between cutting age and part of cutting on the percentage of death and the number of buds.

It was concluded that the growth and production of cutting system at five month old and at the top cutting was higher than other treatments, so that the King Grass development was recommended to cutting system at five months old.

(Key Words : King Grass, Cutting Age, Cutting Part, Growth, Production).