

**PENGARUH PUPUK DAUN NITROGEN-UREA
DAN TINGKAT BIOFERT-PLUS® TERHADAP PRODUKSI
DAN KECERNAAN *IN VITRO* RUMPUT RAJA PADA
INTERVAL PEMOTONGAN 40 HARI**

Lilis Palupi Sulanjari
96/107608/PT/03361

2000

INTISARI

Lima belas petak tanaman rumput Raja masing-masing berukuran $2 \times 3 \text{ m}^2$ dibagi secara acak ke dalam lima macam perlakuan yaitu tanpa dipupuk sebagai kontrol, pupuk urea dengan dosis 2g N/l (2g N-urea/l), 2, 4 dan 6cc/l pupuk Biofert-plus®. Semua petak dipupuk dengan pupuk kandang dengan dosis 10ton/ha/tahun serta urea, TSP dan KCl masing-masing dengan dosis 200kg, 150kg, 150kg N-P-K/ha/tahun. Pemupukan melalui daun dilakukan 10 hari sekali pada pukul 09.00, dengan volume pemupukan 300ml/petak. Data yang diperoleh dianalisis variansi dan rerata yang berbeda diuji dengan *Duncan's New Multiple Range Test*. Hasil penelitian menunjukkan bahwa pemupukan melalui daun dengan 2g N-urea/l dan Biofert-plus® pada dosis 2, 4 dan 6cc/l belum mampu meningkatkan produksi bahan kering dan bahan organik rumput Raja. Produksi tertinggi dicapai pada perlakuan 2g N-urea/l yaitu 2,41 dan 2,00ton/ha/panen berturut-turut untuk bahan kering dan bahan organik. Kecemaan bahan kering dan bahan organik *in vitro* rumput Raja pada pemupukan 2g N-urea/l dan Biofert-plus® 6cc/l lebih tinggi ($P < 0,05$) dibandingkan kontrol (tanpa dipupuk). Kecemaan bahan kering dan bahan organik adalah 54,65 dan 54,60%; 53,92 dan 53,32%; 51,48 dan 50,95% berturut-turut untuk perlakuan 2g N-urea/l, Biofert-plus® 6cc/l dan kontrol (tanpa dipupuk). Dari penelitian ini disimpulkan bahwa pemupukan melalui daun dengan 2g N-urea/l dan Biofert-plus® sampai tingkat 6cc/l belum meningkatkan produksi bahan kering dan bahan organik rumput Raja tetapi meningkatkan kecemaan bahan kering dan bahan organik *in vitro*.

(Kata Kunci : Rumput Raja, Pupuk daun, Produksi, Kecemaan *in vitro*)

**THE EFFECT OF NITROGEN-UREA AND
LEVELS OF BIOFERT-PLUS[®] AS FOLIAR APPLICATION
FERTILIZER ON PRODUCTION AND *IN VITRO* DIGESTIBILITY
OF KING GRASS AT THE FORTY DAYS CUTTING INTERVAL**

Lilis Palupi Sulanjari
96/107608/PT/03361

2000

ABSTRACT

Fifteen plots of 2x3m² each with King grass randomly divided into 5 treatment groups were used in the experiment. The five treatments were : without fertilizer as control, 2g N-urea/l fertilizer, 2, 4 and 6cc/l Biofert-plus[®] fertilizer. All the plots were fertilized with manure at level of 10ton/ha/year and urea, TSP, potassium chloride at levels of 200-150-150kg N-P-K/ha/year, respectively. Foliar application fertilizer were done once in 10 days each plot as much as 300ml at 09.00 A.M. Data were analyzed with variance analysis then differences among means were tested with Duncan's New Multiple Range Test. The results showed that fertilization through the leaves with 2g N-urea/l and 2, 4, 6cc/l Biofert-plus[®] fertilizer did not increase dry and organic matter production of King grass. The highest production of dry and organic matter were 2,41 and 2,00ton/ha/defoliation, respectively, detected at 2g N-urea/l. Dry and organic matter *in vitro* digestibility at 2g N-urea/l and 6cc/l Biofert-plus[®] fertilizer were significantly higher ($P<0,05$) than control (without fertilizer). Those were 54,65 and 54,60%; 53,92 and 53,32%; 51,48 and 50,95%, respectively. The conclusion were foliar application fertilizer with 2g N-urea/l and Biofert-plus[®] up to 6cc/l did not increase dry and organic matter production of King grass, but increased dry and organic matter *in vitro* digestibility.

(Key words : King grass, Foliar application fertilizer, Production, *In vitro* digestibility)