

## RINGKASAN

**ABDUL ROZAK.** Pengaruh Pemberian Level Dedak Padi Sebagai Aditif Terhadap Kualitas Fisik Silase Rumpus Gajah Dwarf (*Pennisetum Purpureum cv. Mott*). Penelitian dilaksanakan pada tanggal 1 Agustus sampai 30 Agustus 2016 di Laboratorium Agrostologi dan Eksperimental Farm, Fakultas Peternakan Universitas Jenderal Soedirman Purwokerto. Penelitian ini bertujuan untuk mengetahui pengaruh pemberian dedak padi sebagai aditif dengan level berbeda terhadap kualitas fisik silase rumpus gajah dwarf. Metode penelitian yang digunakan adalah metode eksperimen menggunakan Rancangan Acak Lengkap (RAL) dengan 4 kali ulangan dan 5 perlakuan. R<sub>0</sub> = Rumpus gajah dwarf + 0% Dedak padi, R<sub>1</sub> = Rumpus gajah Dwarf + 10% Dedak padi, R<sub>2</sub> = Rumpus gajah dwarf + 20% Dedak padi, R<sub>3</sub> = Rumpus gajah dwarf + 30% Dedak padi, R<sub>4</sub> = Rumpus gajah dwarf + 40% Dedak padi. Variabel yang diamati meliputi warna, tekstur, kadar air dan pH. Data dianalisis dengan metode Analisis Variansi dan dilanjutkan dengan Uji Beda Nyata Jujur (BNJ). Hasil penelitian menunjukkan bahwa Rataan ± sd warna untuk R<sub>0</sub>, R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub> dan R<sub>4</sub> berturut-turut adalah 1,00 ± 0, 2,41 ± 0,41, 3,54 ± 0,39, 3,84 ± 0,13 dan 4,00 ± 0. Rataan ± sd tekstur untuk R<sub>0</sub>, R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub> dan R<sub>4</sub> berturut-turut adalah 1,33 ± 0,13, 2,91 ± 1,22, 4,70 ± 0,08, 4,45 ± 0,75 dan 4,50 ± 0,56. Uji Lanjut BNJ menunjukkan bahwa warna dan tekstur silase pada perlakuan R<sub>0</sub> berbeda nyata (P<0,05) dengan R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub> dan R<sub>4</sub>. Perlakuan R<sub>1</sub> berbeda nyata (P<0,05) dengan R<sub>2</sub>, R<sub>3</sub> dan R<sub>4</sub>. Namun pada perlakuan R<sub>2</sub>, R<sub>3</sub> dan R<sub>4</sub> tidak berbeda nyata (P>0,05). Rataan ± sd kadar air untuk R<sub>0</sub>, R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub> dan R<sub>4</sub> berturut-turut adalah 91,25 ± 0,63, 82,69 ± 0,71, 78,00 ± 1,05, 73,54 ± 0,75 dan 72,73 ± 0,91. Uji Lanjut BNJ menunjukkan bahwa R<sub>0</sub> berbeda nyata (P<0,05) dengan R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub> dan R<sub>4</sub>. Perlakuan R<sub>1</sub> berbeda nyata (P<0,05) dengan R<sub>2</sub>, R<sub>3</sub> dan R<sub>4</sub>. Perlakuan R<sub>2</sub> berbeda nyata (P<0,05) dengan R<sub>3</sub> dan R<sub>4</sub>. Namun pada perlakuan R<sub>3</sub> dan R<sub>4</sub> tidak berbeda nyata (P>0,05). Rataan ± sd pH untuk R<sub>0</sub>, R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub> dan R<sub>4</sub> berturut-turut adalah 5,17 ± 0,22, 4,45 ± 0,1, 4,07 ± 0,32, 4,07 ± 0,18 dan 3,97 ± 0,15. Uji Lanjut BNJ menunjukkan bahwa R<sub>0</sub> berbeda nyata (P<0,05) dengan R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub> dan R<sub>4</sub>. Namun pada perlakuan R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub> dan R<sub>4</sub> tidak berbeda nyata (P>0,05). Disimpulkan bahwa pemberian dedak padi sebagai aditif pada silase dengan level 10%, 20%, 30% dan 40% memberikan pengaruh terhadap kualitas fisik silase rumpus gajah dwarf yang meliputi warna, tekstur, kadar air dan pH. Pemberian dedak padi 20%, 30% dan 40% berpengaruh sama. Disarankan dalam pembuatan silase rumpus gajah dwarf pemberian dedak padi sebanyak 20% secara umum menunjukkan hasil yang baik terhadap kualitas fisik silase.

## SUMMARY

**ABDUL ROZAK.** The Influence of The Additive of Rice Bran Level as Additive on Physical Silage Quality of Dwarf Elephant Grass (*Pennisetum Purpureum* cv. Mott). This study was held at August 1<sup>st</sup> 2016 until August 30 2016 in the Agrostology and Eksperimental Farm Laboratories, Animal Husbandry Faculty, Jenderal Soedirman University Purwokerto. This study aimed to determine the effect of rice bran as an additive with different levels on the physical quality of dwarf elephant grass silage. The method used was an experimental method using a completely randomized design (CRD) with four replications and 5 treatments. R0 = dwarf elephant grass + 0% rice bran, R1 = dwarf elephant grass + 10% rice bran, R2 = dwarf elephant grass + 20% rice bran, R3 = dwarf elephant grass + 30% rice bran, R4 = dwarf elephant grass + 40% rice bran. The observed variables included color, texture, moisture and pH. Data were analyzed with the methods of analysis of variance followed by the Test of Honestly Significant Difference (HSD). Based on the results showed the Means  $\pm$  sd of colors for R0, R1, R2, R3 and R4 respectively were  $1.00 \pm 0$ ,  $2.41 \pm 0.41$ ,  $3.54 \pm 0.39$ ,  $3.84 \pm 0$ , 13 and  $4.00 \pm 0$ . The means  $\pm$  sd of the texture for R0, R1, R2, R3 and R4 respectively were  $1.33 \pm 0.13$ ,  $2.91 \pm 1.22$ ,  $4.70 \pm 0.08$ ,  $4.45 \pm 0.75$  and  $4.50 \pm 0.56$ . The HSD test showed that the color and texture of the treated silage of R0 was significantly different ( $P < 0.05$ ) to R1, R2, R3 and R4. R1 treatment was significantly different ( $P < 0.05$ ) to R2, R3 and R4. However, the treatment of R2, R3 and R4 were not significantly different ( $P > 0.05$ ). The means  $\pm$  sd water content for R0, R1, R2, R3 and R4 are respectively  $91.25 \pm 0.63$ ,  $82.69 \pm 0.71$ ,  $78.00 \pm 1.05$ ,  $73.54 \pm 0.75$  and  $72.73 \pm 0.91$ . The HSD test showed that R0 was significantly different ( $P < 0.05$ ) to R1, R2, R3 and R4. R1 treatment was significantly different ( $P < 0.05$ ) to R2, R3 and R4. R2 treatment was significantly different ( $P < 0.05$ ) to R3 and R4. However, the treatment of R3 and R4 were not significantly different ( $P > 0.05$ ). The means  $\pm$  sd pH for R0, R1, R2, R3 and R4 respectively were  $5.17 \pm 0.22$ ,  $4.45 \pm 0.1$ ,  $4.07 \pm 0.32$ ,  $4.07 \pm 0.18$  and  $3.97 \pm 0.15$ . The HSD test showed that R0 was significantly different ( $P < 0.05$ ) to R1, R2, R3 and R4. However, the treatment of R1, R2, R3 and R4 were not significantly different ( $P > 0.05$ ). It is concluded that the administration of rice bran as an additive in silage with the levels of 10%, 20%, 30% and 40% had different influences on the physical quality of dwarf elephant grass silage that includes color, texture, moisture and pH. Granting of rice bran 20%, 30% and 40% the same effect. It is suggested, in the manufacture of dwarf elephant grass silage the addition of rice bran as much as 20% in general shows good physical quality of silage.