

PENGARUH JARAK TANAM TERHADAP PRODUKTIVITAS DEFOLIASI PERTAMA  
RUMPUT ODOT (*Pennisetum purpureum* cv. *Mott*)

DWI HIDAYANTO

NIM: 15021002

INTISARI<sup>\*)</sup>

Penelitian ini bertujuan untuk mengetahui pengaruh jarak tanam terhadap produktivitas rumput Gajah Odot (*Pennisetum purpureum* cv. *Mott*). Penelitian telah dilakukan di Unit Pelaksana Teknis (UPT) Teaching Farm Fakultas Agroindustri Universitas Mercu Buana Yogyakarta yang terletak di Gunung Bulu, Argorejo, Sedayu, Bantul, Yogyakarta dan dilanjutkan di Laboratorium Produksi Ternak Universitas Mercu Buana Yogyakarta pada tanggal 13 Mei sampai tanggal 11 Juli 2019. Penelitian ini dilakukan dengan metode Rancangan Acak Kelompok (RAK) dengan 4 perlakuan dan 3 kali ulangan sehingga diperoleh 12 unit. Percobaan perlakuan jarak tanam P1 : 50 x 50 cm, P2: 50 x 60 cm, P3: 50 x 70 cm, dan P4: 50 x 80 cm. Variabel perlakuan yang diukur adalah tinggi tanaman, diameter batang, jumlah daun, jumlah anakan, produktivitas berat segar (ton/ha/panen) dan produktivitas berat kering oven (ton/ha/panen). Data hasil penelitian dianalisis dengan Analysis of Variance (ANOVA) pada taraf 5% dan untuk mengetahui perbedaan antar perlakuan menggunakan uji Duncan New Multiple Range Test (DMRT) taraf 5%. Hasil penelitian menunjukkan bahwa jarak tanam 50 x 80 cm menghasilkan rerata yang terbaik pada setiap variabel yang diamati yaitu berupa, tinggi tanaman 74,50 cm, diameter batang 27,39 mm, jumlah daun 11,50 helai, jumlah anakan 14,23 tunas, berat segar 14,07 ton/ha/panen dan berat kering 8,23 ton/ha/panen. Dari hasil penelitian disimpulkan bahwa jarak tanam 50 x 80 cm menghasilkan produktivitas rumput Gajah Odot (*Pennisetum purpureum* cv. *Mott*) yang terbaik.

**Kata Kunci :** Jarak tanam, produksi per hektar, produktivitas, rumput Gajah Odot.

---

<sup>\*)</sup>Intisari Skripsi Sarjana Peternakan, Program Studi Peternakan, Fakultas Agroindustri, Universitas Mercu Buana Yogyakarta, Yogyakarta, 2019.

THE EFFECT OF PLANT SPACING ON PRODUCTIVITY OF FIRST DEFOLIATION  
OF DWARF ELEPHANT (*Pennisetum purpureum* cv. *Mott*) GRASS

DWI HIDAYANTO

NIM: 15021002

**ABSTRACT<sup>\*)</sup>**

The objective of research was to know the effect of plant spacing on productivity of first defoliation of Dwarf Elephant (*Pennisetum purpureum* cv. *Mott*) Grass. This research was conducted from 13 May 2019 to 11 July 2019 in the Teaching Farm Unit, Agroindustry Faculty, University of Mercu Buana Yogyakarta at Gunung Bulu, Argorejo, Sedayu, Bantul and continued in Animal Production Laboratory University of Mercu Buana Yogyakarta. The research was designed by Randomized Block Design consisting of 4 treatments and 3 block as replication. Different spacing were P1 : 50 cm x 50 cm, P2 : 50 cm x 60 cm, P3 : 50 cm x 70 cm, P4 : 50 cm x 80 cm. The observed variables were produced increased plant height, stem diameter, leaf number, Poll number, wet and dried weight productivity. Data was analyzed by ANOVA, if there were significant different between the treatment, then continued by Duncan New Multiple Range Test (DMRT). The research result showed the effect of plant spacing that 50 cm x 80 cm the best growth and production components such as increased plant height 74,50 cm, stem diameter 27,39 mm, leaf number 11,50 leaf, poll number 14,23 polls. Wet weight 14,07 ton/ha/harvest and cabbinet dried weight 8,23 ton/ha/harvest It was concluded that 50 cm x 80 cm difference of plant spacing produced the best productivity Dwarf Elephant (*Pennisetum purpureum* cv.*Mott*) Grass.

**Key Words :** Plant spacing, Production per hectare, Productivity, Dwarf elephant grass.

---

<sup>\*)</sup>Abstract Thesis of S1 Animal Husbandry, Faculty of Agroindustry, University of Mercu Buana Yogyakarta, 2019.