

ABSTRAK

PENGARUH PERBEDAAN UMUR PANEN TERHADAP PRODUKTIVITAS (produksi segar, produksi bahan kering, serta proporsi daun dan batang) HIJAUAN *Indigofera zollingeriana*

Oleh

Ibnu Kesuma Prayoga

Penelitian ini bertujuan untuk mengetahui pengaruh perbedaan umur panen terhadap produktivitas (produksi segar, produksi bahan kering, serta proporsi daun dan batang) dan mengetahui umur panen dengan produktivitas hijauan *Indigofera zollingeriana* yang optimal. Penelitian dilaksanakan pada Mei sampai Agustus 2017 di Desa Purwodadi, Kabupaten Pringsewu, Lampung dan analisis proksimat bahan kering di Laboratorium Nutrisi dan Makanan Ternak, Jurusan Peternakan, Universitas Lampung. Perlakuannya : umur panen pada 40 hari (P40), 55 hari (P55), 70 hari (P70), dan 85 hari (P85). Rancangan dalam percobaan ini yaitu, Rancangan Acak Lengkap (RAL). Peubah pada penelitian ini yaitu, 1. produksi segar; 2. produksi bahan kering pada daun, batang, dan keseluruhan; 3. proporsi daun dan batang terhadap produksi segar hijauan *Indigofera zollingeriana*. Data dianalisis dengan analisis ragam pada taraf nyata 1% dan di uji lanjut menggunakan Polinomial Orthogonal. Hasil penelitian menunjukkan bahwa perbedaan umur panen berpengaruh sangat nyata ($P < 0,01$) terhadap produktivitas hijauan *Indigofera zollingeriana*. Pada rentang umur 40 sampai 85 hari terbentuk persamaan sebagai berikut, produksi segar : $\hat{y}(\text{ton/ha}) = 1,65 + 0,049x$ [40:85 hari]; produksi bahan kering pada daun : $\hat{y}(\text{ton/ha}) = 0,030 + 0,003x$ [40:85 hari]; produksi bahan kering pada batang : $\hat{y}(\text{ton/ha}) = 0,009 + 0,002x$ [40:85 hari]; produksi bahan kering pada keseluruhan : $\hat{y}(\text{ton/ha}) = 0,038 + 0,005x$ [40:85 hari]; proporsi daun : $\hat{y}(\%) = 80,69 - 0,19x$ [40:85 hari]; dan proporsi batang : $\hat{y}(\%) = 19,31 + 0,19x$ [40:85 hari].

Kata kunci : umur panen, produksi segar, produksi bahan kering, proporsi daun dan batang, hijauan *Indigofera zollingeriana*.

ABSTRACT

The Effect of Differences of Harvest Age on Productivity (fresh production, dry matter production, proportion of leaves and stems) of Forage *Indigofera zollingeriana*

By

Ibnu Kesuma Prayoga

This research aims to know the effect of harvest age differences on productivity (fresh production, dry matter production, proportion of leaves and stems) and to know the age of harvest with optimal productivity of forage *Indigofera zollingeriana*. This research was conducted in May until August 2017 in Purwodadi Village, Pringsewu District and the dry matter proximate analysis was conducted at the Nutrition and Feeding Laboratory, Livestock Department, Lampung University. It consisted of harvest age at 40 days (P40), 55 days (P55), 70 days (P70), and 85 days (P85). The design used in this experiment is, Completely Randomized Design. The variables in this research are, 1. fresh production; 2. dry matter production on leaves, stems, whole; 3. the proportion of leaves and stems against fresh production of forages *Indigofera zollingeriana*. The data obtained were analyzed by analysis of variance at 1% and then test using Polynomial Orthogonal. The results showed that the difference of harvest age had a very real effect ($P < 0,01$) on productivity (fresh production, dry matter production, proportion of leaves and stems) forage *Indigofera zollingeriana*. In the 40 to 85 days age range, the following equations are made, fresh production : $\hat{y}(\text{ton/ha}) = 1,65 + 0,049x$ [40:85 days]; dry matter production on leaves: $\hat{y}(\text{ton/ha}) = 0,030 + 0,003x$ [40:85 days]; dry matter production on stems : $\hat{y}(\text{ton/ha}) = 0,009 + 0,002x$ [40:85 days]; dry matter production on whole : $\hat{y}(\text{ton/ha}) = 0,038 + 0,005x$ [40:85 days]; the proportion of leaves : $\hat{y}(\%) = 80,69 - 0,19x$ [40:85 days]; and the proportion of stems : $\hat{y}(\%) = 19,31 + 0,19x$ [40:85 days].

Keywords : harvest age, fresh production, dry matter production, proportion of leaves and stems, forage *Indigofera zollingeriana*.