

## RINGKASAN

**MUHAMMAD FARHAN ASYROFI.** Penelitian yang berjudul Efektivitas Pupuk Padat Organik Granul Feses Ayam Suplementasi Herbal dalam Urin Sapi Bunting Terhadap Jumlah dan Luas Lembar Daun Rumput Gajah Defoliasi I, dilaksanakan pada tanggal 7 September 2016 sampai 11 November 2016. Penelitian ini bertujuan untuk mengetahui jumlah daun dan luas lembar daun dengan pemberian pupuk padat organik granul dari feses ayam, dengan suplementasi herbal dalam pupuk cair urin sapi bunting pada rumput gajah, dan mengetahui dosis terbaik pupuk cair urin sapi bunting yang disuplementasi dengan herbal terhadap jumlah daun dan luas lembar daun terhadap rumput gajah. Penelitian dilakukan selama 65 hari di eksperimental *farm* Fakultas Peternakan Universitas Jenderal Soedirman Purwokerto.

Materi yang digunakan dalam penelitian ini adalah granul dari feses ayam 1000 kg, dan urin sapi bunting 240 liter dengan penambahan herbal nanas, temulawak, dan mengkudu masing-masing 6 kg. Lahan seluas  $\pm 405 \text{ m}^2$  yang terdiri dari 36 petak, luas petak  $6 \text{ m}^2$  (3 m x 2 m), jumlah stek per petak 18 stek dengan jarak 40 cm x 50 cm, dan jumlah keseluruhan stek 648 stek batang rumput gajah. Alat-alat yang digunakan yaitu granulator, ember, gayung, spuit, cangkul, sabit, meteran, dan alat-alat pengukur luas daun meliputi alat ukur, alat hitung dan pensil.

Hasil analisis variansi tidak menunjukkan pengaruh nyata ( $P > 0.05$ ) jenis dan dosis pupuk terhadap jumlah daun. Pupuk urin sapi bunting (P1), urin sapi bunting + nanas (P2), urin sapi bunting + nanas + temulawak (P3), dan urin sapi bunting + nanas + temulawak + mengkudu (P4) menunjukkan jumlah daun yang relatif sama, dengan nilai tengah masing-masing 19 lembar/tanaman. Analisis variansi menunjukkan jenis pupuk berpengaruh sangat nyata ( $P < 0.01$ ) terhadap luas lembar daun rumput gajah. Pupuk urin sapi bunting (P1), urin sapi bunting + nanas (P2), dan urin sapi bunting + nanas + temulawak (P3) menunjukkan luas lembar daun yang relatif sama, dengan nilai tengah  $483.22 \text{ cm}^2$ ,  $489.98 \text{ cm}^2$ , dan  $490.83 \text{ cm}^2$ . Begitu juga antara P3 dan P4 dengan nilai tengah masing-masing  $490.83 \text{ cm}^2$  dan  $517.14 \text{ cm}^2$ . Luas lembar daun pada P4 ( $517.14 \text{ cm}^2$ ) lebih besar ( $P < 0.05$ ) dibanding P1 ( $483.22 \text{ cm}^2$ ) dan P2 ( $489.98 \text{ cm}^2$ ).

**Kata Kunci:** Pupuk organik, feses ayam, pupuk cair, urin sapi bunting, rumput gajah

## **SUMMARY**

**MUHAMMAD FARHAN ASYROFI.** The study, entitled “Effectiveness of Chicken Feces granule Organic Fertilizer with Herbal Supplementation in Pregnant Cow Urine on the Number and Width of Elephant Grass Leaf Sheet at First defoliation”, was held from 7<sup>th</sup> of September 2016 up to 11<sup>th</sup> of November 2016. This study aimed to determine the number of leaves and broad leaves with granules organic fertilizer from chicken feces, with herbal supplementation in pregnant cow urine liquid fertilizer on the grass, and to find out the best dose of liquid fertilizer of pregnant cow urine supplemented with herbs on the number of leaves and the width of leaves of the elephant grass. The study was conducted for 65 days in the experimental farm Faculty of Animal Husbandry Jenderal Soedirman University Purwokerto.

The materials used in this study were 1000 kg of granule chicken feces fertilizer and 240 liters of urine of pregnant cow with the addition of herbal namely pineapple, ginger, and noni each of which was 6 kg, area of  $\pm 405 \text{ m}^2$  which consisted of 36 plots, plot area of  $6 \text{ m}^2$  (3m x 2m), the number of cuttings per plot 18 cuttings with a distance of 40 cm x 50 cm, and the overall number of 648 cuttings of elephant grass stick. The tools used were granulator, bucket, dipper, syringes, hoes, sickles, tape measures and measuring tools in leaf area include measuring tools, calculators and pencils.

The results of variance analysis showed, no effect ( $P > 0.05$ ) of fertilizers on the number of leaves. Urine fertilizer of pregnant cow (P1), urine of pregnant cow + pineapple (P2), urine of pregnant cow + pineapple + ginger (P3), and urine of pregnant cow + pineapple + ginger + noni (P4) showed the number of leaves that was relatively similar, with the mean value of each of 19 sheets. Analysis of variance showed highly significant fertilizer effect ( $P < 0.01$ ) on the elephant grass leaf area. Pregnant cow urine fertilizer (P1), pregnant cow urine + pineapple (P2), and a pregnant cow urine + pineapple + ginger (P3) showed the relatively similar leaf area, with the means of  $483.22 \text{ cm}^2$ ,  $489.98 \text{ cm}^2$ , and  $490.83 \text{ cm}^2$ . Likewise, between P3 and P4 with the means of  $490.83 \text{ cm}^2$  and  $517.14 \text{ cm}^2$  respectively. The leaf area of P4 ( $517.14 \text{ cm}^2$ ) was greater ( $P < 0.05$ ) than P1 ( $483.22 \text{ cm}^2$ ) and P2 ( $489.98 \text{ cm}^2$ ).

**Keywords: organic fertilizer, chicken feces, liquid manure, urine pregnant cow, elephant grass**