KECERNAAN *IN VITRO Brachiaria ruziziensis* cv Kennedy MENGGUNAKAN MATERIAL TANAM BERBEDA DENGAN CAIRAN RUMEN DOMBA EKOR TIPIS

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INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh material tanam berbeda terhadap kecernaan *in vitro Brachiaria ruziziensis* cv Kennedy menggunakan cairan rumen domba ekor tipis dan membandingkan hasil kecernaan yang terbaik. Rancangan penelitian yang digunakan adalah rancangan penelitian pola split plot dengan 9 ulangan, terdapat 4 macam perlakuan dan 36 unit percobaan. Faktor yang diteliti adalah pengaruh material tanam berbeda berupa penanaman menggunakan satu bibit berumur 10 hari, dua bibit berumur 10 hari, satu pols, dan dua pols. Data penelitian yang diambil berupa data kecernaan bahan kering (KcBK) dan kecernaan bahan organik (KcBO), serta hasil analisis proksimat berupa bahan kering (BK), bahan organik (BO), dan serat kasar (SK). Data dianalisis menggunakan analisis rancangan pola split plot, apabila hasil menunjukkan perbedaan yang signifikan dilanjutkan menggunakan *duncan mutiple range test* (DMRT). Penggunaan bahan material berbeda pada *Brachiaria ruziziensis* dengan dua pols memberikan pengaruh signifikan ($P<0,05$) terhadap bahan kering, bahan organik, dan serat kasar. Penggunaan material tanam berbeda tidak berpengaruh terhadap kecernaan bahan kering (KcBK) dan kecernaan bahan organik (KcBO). Nilai bahan kering *Brachiaria ruziziensis* menggunakan satu bibit, dua bibit, satu pols, dan dua pols sebesar 16,00±6,8, 17,33±0,57, 19,33±3,21, dan 20,67±2,73%. Nilai bahan organik *Brachiaria ruziziensis* menggunakan satu bibit, dua bibit, satu pols, dan dua pols sebesar 83,67±0,45, 85,00±1,27, 88,33±1,07, dan 88,73±0,64%. Nilai kecernaan bahan kering menggunakan satu bibit, dua bibit, satu pols, dan dua pols sebesar 72,33±6,65, 79,67±1,53, 65,00±18,68, dan 79,67±3,51. Nilai kecernaan bahan organik menggunakan satu bibit, dua bibit, satu pols, dan dua pols sebesar 76,11±7,07, 83,40±0,36, 85,28±0,61, 80,28±0,49%. Berdasarkan penelitian dapat disimpulkan bahwa penanaman *Brachiaria ruziziensis* menggunakan dua pols memberikan hasil terbaik terhadap kandungan bahan kering, bahan organik, dan serat kasar. Penggunaan material tanam berbeda tidak mempengaruhi kecernaan bahan kering dan bahan organik.

(Kata kunci: *Brachiria ruziziensis* cv Kennedy*,* Kecernaan *in vitro,* Material tanam, *Regrowth,* Cairan rumen domba ekor tipis)

IN VITRO DIGESTIBILITY OF *Brachiaria ruziziensis* cv Kennedy USING DIFFERENT PLANT MATERIAL WITH RUMEN LIQUID OF THIN TAIL SHEEP

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ABSTRACT

This study was aimed to investigate in vitro digestibility of *Brachiaria ruziziensis* cv Kennedy using different plant material with rumen liquid of thin tail sheep and planted the best result of the digestibility. Research design which used in this study was split plot design with 9 repetitions. There were 4 treatments and 36 experiments. Factor which examined was influence of different plant material on nutrient content and its digestibility. The kind of different plant material which was using in this study were a seed which is 10 days germinated, two seeds which is 10 days germinated, a tiller, and two tillers when planting *Brachiaria ruziziensis* in a polybag. The data which was obtained in this study were result of proximate analysis like content of dry matter, organic matter, and crude fiber, digestibility of dry matter and organic matter. The data would be analyzed by split plot design, and If there was significant different means, the data would be analyzed by duncan multiple range test (DMRT). Based on research, planting using two tillers gave significant difference ($P<0.05$) on dry matter, organic matter, and fiber content.The value of dry matter content of *Brachiaria ruziziensis* were 16,00±6,8, 17,33±0,57, 19,33±3,21, dan 20,67±2,73%. The value of organic mater of *Brachiaria ruziziensis* were 83,67±0,45, 85,00±1,27, 88,33±1,07, dan 88,73±0,64%. It could be known that dry matter digestibility values of *Brachiaria ruziziensis* which planted using a seed, two seeds, a tiller, and two tillers were 72,33±6,65, 79,67±1,53, 65,00±18,68, dan 79,67±3,51.%. Organic matter digestibility of *Brachiaria ruziziensis* which planted using a seed, two seeds, a tiller, and two tillers were 76,11±7,07, 83,40±0,36, 85,28±0,61, 80,28±0,49%. Based on the research, it could be concluded that planting *Brachiaria ruziziensis* using two tillers gave best result on dry matter, organic matter, and fiber content. The using of different plant material didn't influence dry matter and organic matter digestibility.

(Key word: *Brachiaria ruziziensis* cv Kennedy*, In vitro* digestibility, Plant material, Regrowth, Rumen liquid of thin tail sheep)