PRODUKSI DAN KUALITAS JERAMI JAGUNG HIBRIDA DAN JERAMI JAGUNG MANIS DI KECAMATAN JATINOM, KABUPATEN KLATEN

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INTISARI

Penelitian ini bertujuan untuk mengetahui produksi, komposisi kimia dan kecernaan jerami jagung hibrida dan jerami jagung manis di Kecamatan Jatinom, Kabupaten Klaten. Tanaman jagung hibrida varietas Pertiwi 2 dipanen umur 70 hari dan tanaman jagung manis Talenta dipanen umur 65 hari setelah diambil buahnya dilakukan ubinan 2,5 × 2,5 m^2 secara sistematis sebanyak lima kali. Hasil ubinan ditimbang untuk pengukuran produksi kemudian diambil sampel untuk analisis kimia dan kecernaan. Variabel produksi yang diamati adalah produksi jerami segar, produksi bahan kering, dan produksi bahan organik. Variabel kualitas kimia meliputi kadar bahan kering (BK), bahan organik (BO), protein kasar (PK), serat kasar (SK), ekstrak eter (EE), dan bahan ekstrak tanpa nitrogen (BETN). Variabel kecernaan meliputi kecernaan bahan kering (KcBK) dan kecernaan bahan organik (KcBO) secara *in vitro*. Data yang diperoleh dianalisis statistik *Independent sample t-test* menggunakan *software* SPSS v.22. Hasil penelitian menujukkan jerami jagung hibrida memiliki kadar yang lebih tinggi (P<0,01) dibanding jerami jagung hibrida pada PK (9,49 vs. 7,18%), KcBK (64,34 vs. 57,23%), dan KcBO (53,61 vs. 48,48%). Jerami jagung hibrida memiliki kadar SK lebih tinggi (P<0,05) dibanding jerami jagung manis (29,65 vs. 28,26%). Hasil penelitian menunjukkan perbedaan yang tidak nyata antara jerami jagung hibrida dan jerami jagung manis pada produksi jerami segar (35,43 vs. 35,5 ton/ha), produksi BK (6,97 vs. 7,14 ton/ha), produksi BO (6,31 vs. 6,5 ton/ha), kadar BK (19,8 vs. 20,1%), kadar BO (90,5 vs. 91,04%), kadar EE (2,71 vs. 2,78%), dan kadar BETN (50,96 vs. 50,51%). Hasil penelitian ini dapat disimpulkan bahwa jerami jagung manis memiliki komposisi kimia dan kecernaan yang lebih baik tetapi kandungan BO, EE, BETN, dan produksi relatif sama.

(Kata Kunci: Jerami Jagung, Produksi, Komposisi Kimia, Kecernaan)

YIELD AND QUALITY OF HYBRID CORN STOVER AND SWEET CORN STOVER IN JATINOM SUB-DISTRICT, KLATEN REGENCY

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ABSTRACT

The objectives of this study were to determine the yield, chemical composition and digestibility on hybrid corn stover and sweet corn stover in Jatinom Sub-district, Klaten Regency. Hybrid corn plant (cultivar Pertiwi 2) at 70 days after planting and sweet corn plant (cultivar Talenta) at 65 days after planting after the ears of both were harvested were sampled systematically using quadrant 2.5 x 2.5 m^2 with five replications. The samples were weighed then sub-samples were taken for chemical and digestibility analysis. Yield variables measured were fresh stover, dry matter, and organic matter yield. Chemical composition variables included the concentration of dry matter (DM), organic matter (OM), crude protein (CP), crude fiber (CF), ether extract (EE), and nitrogen-free extract (NFE). Digestibility variables included *in vitro* dry matter digestibility (IVDMD) and *in vitro* organic matter digestibility (IVOMD). Data were analyzed statistically by Independent sample t-test using SPSS v.22 software. The results showed that sweet corn stover has higher levels ($P<0.01$) than hybrid corn stover on CP (9.49 vs. 7.18%), IVDMD (64.34 vs. 57.23%), and IVOMD (53.61 vs. 48.48%). Hybrid corn stover contained higher levels ($P<0.05$) of CF than sweet corn stover (29.65 vs. 28.26%). The results did not differ significantly between hybrid corn stover and sweet corn stover in fresh yield (35.43 vs. 35.5 ton/ha), DM yield (6.97 vs. 7.14 ton/ha), OM yield (6.31 vs. 6.5 ton/ha), CF content (19.8 vs. 20.1%), OM content (90.5 vs. 91.04%), EE content (2,71 vs. 2.78%), and NFE content (50.96 vs. 50.51%). The results of this study can be concluded that the sweet corn stover had better chemical composition and digestibility but OM, EE, NFE content, and the yield were not relatively different from hybrid corn stover.

(Key Words: Corn Stover, Yield, Chemical Composition, Digestibility)