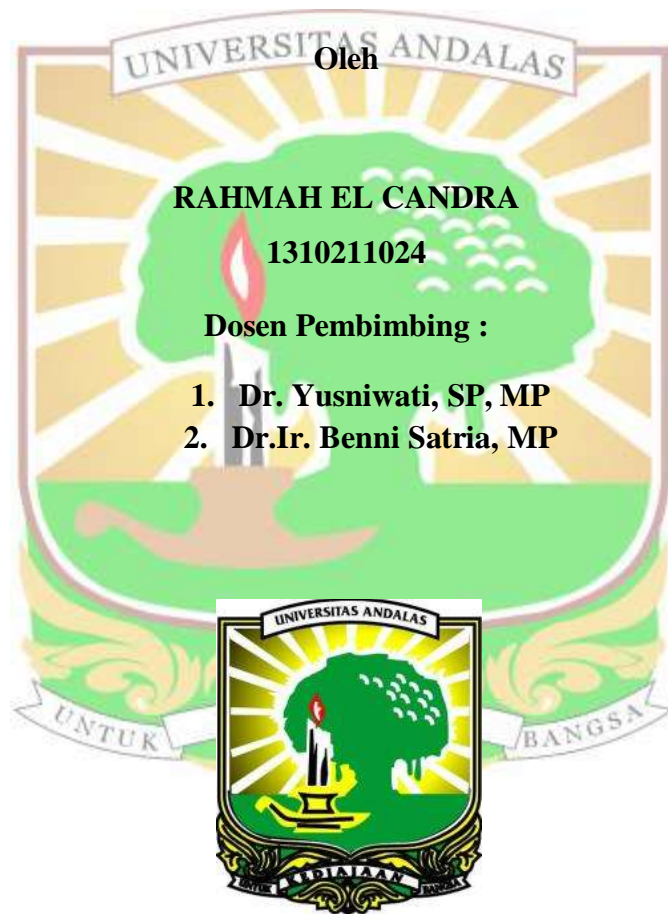


**EVALUASI KARAKTER MORFOLOGI DAN KOMPONEN
HASIL TIGA GENOTIPE SORGUM
(*Sorghum bicolor* L. Moench)**

SKRIPSI



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EVALUASI KARAKTER MORFOLOGI DAN KOMPONEN HASIL BEBERAPA GENOTIPE SORGUM (*Sorghum bicolor* L. Moench)

ABSTRAK

Penelitian ini dilakukan di UPT. Farm Lahan Basah Fakultas Pertanian Universitas Andalas, mulai bulan Desember 2017 sampai Mei 2018. Penelitian ini bertujuan untuk mengevaluasi keragaman dan keragaman karakter morfologi dan komponen hasil serta kadar proksimat beberapa genotipe sorgum. Evaluasi genotipe sorgum menggunakan rancangan acak kelompok (RAK) dengan 3 ulangan. Data yang diperoleh dianalisis dengan uji F dan apabila F hitung berbeda nyata maka dilanjutkan dengan uji DNMRT taraf 5%. Analisis kemiripan menggunakan program statistik NTSYSpc 2.02i. Hasil analisis ragam menunjukkan bahwa genotipe-genotipe yang dievaluasi berbeda nyata untuk karakter tinggi tanaman, diameter batang, jumlah daun, panjang daun, lebar daun, umur berbunga, jumlah batang/cabang yang berbunga, panjang malai, panjang tangkai malai, bobot malai kering, dan bobot 1000 butir biji serta tidak berbeda nyata untuk karakter lebar malai, kadar air, kadar protein, kadar lemak, kadar abu, dan kadar karbohidrat. Pada karakter kualitatif keragaman ditunjukkan oleh karakter warna batang kecambah, warna biji, kepadatan dan bentuk malai, dan warna sekam. Kadar proksimat sorgum menunjukkan bahwa ke 3 genotipe yang diuji memiliki kandungan kadar proksimat yang tidak berbeda dan termasuk kadar proksimat yang memenuhi kandungan gizi sorgum yang baik. Genotipe Baso mempunyai kadar protein yang tinggi diantara genotipe lainnya. Hasil analisis kemiripan menunjukkan bahwa terdapat dua genotipe yang mengelompok dan berdekatan baik berdasarkan hasil karakter kualitatif maupun karakter kuantitatif.

Kata kunci : *Genotipe sorgum, karakter morfologi, komponen hasil, kadar proksimat*



EVALUATION OF MORPHOLOGICAL CHARACTERS AND COMPONENTS OF THREE SORGUM GENOTIPE (*Sorghum bicolor* L. Moench)

ABSTRACT

This research was conducted at the UPT Wetland, Faculty of Andalas University, Agriculture from December 2017 to May 2018. The purpose of this research was to evaluate the performance diversity of morphological characteristics and yield components as well as to conduct a proximate analysis of three sorghum genotypes. A randomized group design was used with three replicates. The data was analyzed using the F test and significant differences were further analyzed using Duncan Multiple Range Test at the level 5%. Similarity analysis used the NTSYSpc 2.02i statistical package. The analysis of variance showed that the genotypes evaluated were different with respect to plant height, stem diameter, leaf number, leaf length, leaf width, time to flowering, number of flowering stems, panicle length, peduncle length, panicle dry weight, and the weight of 1000 seeds but was not significantly different for the panicle width, water content, protein content, fat content, ash content, and carbohydrate content. With respect to qualitative characteristics diversity was showed by the germinating shoot color, seed color, panicle density and shape, and husk color. The proximate analysis showed no differences across all 3 genotypes. All three had good nutritional content. The Genotypes Baso had higher protein content than the other genotypes. The similarity analysis showed two genotypes that were clustered and based on both the qualitative and quantitative characteristics tested.

Keywords: *Sorghum genotypes, morphological characters, yield components, Proximate contents*

