

TAMPILAN GENOTIPE F1 JAGUNG PUTIH LOKAL

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INTISARI

Jagung putih merupakan salah satu tanaman pangan yang masih ditanam di beberapa daerah di Indonesia. Namun pemanfaatan jagung putih masih sangat terbatas di Indonesia dan sering digunakan sebagai pakan ternak. Tujuan penelitian ini adalah mencari galur-galur tetua jagung putih lokal yang baik untuk digunakan dalam kegiatan pemuliaan tanaman khususnya pemuliaan jagung putih lokal. Penelitian ini dilaksanakan pada 12 April 2020 sampai 29 Juni 2020, di Demplot Central Jamur Merang dan Pertanian Terpadu “Lestari Makmur” milik bapak Sumarjan yang di Dusun Kepuhan, Desa Argorejo, Kecamatan Sedayu, Kabupaten Bantul, Daerah Istimewa Yogyakarta. Ketinggian tempat penelitian 87,5 meter diatas permukaan laut dengan jenis tanah vertisol. Penelitian ini menggunakan 13 genotipe F1 jagung putih lokal, yakni Genotipe 12, Genotipe 13, Genotipe 14, Genotipe 15, Genotipe 16, Genotipe 17, Genotipe 18, Genotipe 19, Genotipe 20, Genotipe 21, Genotipe 22, Genotipe 23, Genotipe 24, dan jagung putih variatas Srikandi, sebagai kontrol. Genotipe bahan penelitian ditanam dalam Rancangan Acak Kelompok Lengkap (RAKL), 14 macam genotipe bahan penelitian sebagai aras perlakuan, dengan 3 ulangan sehingga terdapat 42 unit percobaan. Variabel yang di amati adalah tinggi tanaman (cm), jumlah daun (helai), panjang daun dan lebar daun (cm), diameter batang (mm), tinggi letak tongkol (cm), bobot segar tanaman (g), panjang tongkol (cm), diameter tongkol (mm), bobot per tongkol (g), jumlah baris biji per tongkol (baris), bobot biji per tongkol (g). seluruh data yang di peroleh dari hasil pengamatan di analisis dengan menggunakan analisis varian taraf $\alpha=5\%$ dan uji lanjut menggunakan *Duncan's Multiple Range Test* (DMRT). Berbagai genotipe F1 hasil persarian bebas beberapa jagung putih lokal menunjukkan perbedaan nyata pada tinggi tanaman, jumlah daun, tinggi letak tongkol, dan jumlah baris biji pertongkol. Tampilan sifat-sifat tanaman genotipe F1 hasil persarian bebas beberapa jagung putih lokal yang berbeda dengan sifat jagung putih Srikandi (kontrol) adalah tinggi tanaman, jumlah daun, tinggi letak tongkol, jumlah baris biji.

Kata kunci : Genotipe F1, jagung putih lokal, pertumbuhan dan hasil

F1 PHENOTYPE OF LOCAL WHITE CORN GENOTYPES

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ABSTRACT

White corn is a food crop that is still planted in several regions in Indonesia. However, the use of white corn is still very limited in Indonesia and its often used as animal feed. The purpose of this study was to find good local white corn parent lines to be used in plant breeding activities, especially local white corn breeding. This research was conducted on 12 April 2020 to 29 June 2020, at the Central Demonstration Plot of Merang Mushroom and Integrated Agriculture "Lestari Makmur" owned by Mr. Sumarjan in Kepuhan, Argorejo Village, Sedayu District, Bantul Regency, Yogyakarta Special Region. The altitude of the research site is 87.5 meters above sea level with vertisol soil type. This study used 13 F1 genotypes of local white maize. Genotype 12, Genotype 13, Genotype 14, Genotype 15, Genotype 16, Genotype 17, Genotype 18, Genotype 19, Genotype 20, Genotype 21, Genotype 22, Genotype 23, Genotype 24, and Srikandi white corn, as control varieties, which are designed with a single factorial completely randomized block design (RCBD) so there were 14 treatment levels, with 3 replications so that there were 42 experimental units. The variables observed were plant height (cm), number of leaves (strands), leaf length and leaf width (cm), stem diameter (mm), ear height (cm), plant fresh weight (gr), ear length (cm), ear diameter (mm), number of seed rows (line), ear weight (g), grain weight per ear (g). All data obtained from the observations were analyzed using the 5% level of variance analysis and was continued with Duncan's Multiple Range Test (DMRT). Various F1 genotypes from open pollination of some local white maize showed significantly differences in plant height, number of leaves, ear height, and number of seed rows. Result of this research indicated that F1 genotype of which differ from the characteristics of Srikandi white corn (control) were plant height, number of leaves, stem diameter, ear height, and number of seed rows.

Keywords : *F1 genotypes, local white corn, growth and yield*