

**Karakterisasi Sifat Morfologi, Komponen Hasil, dan Hasil Jagung Putih
Aksesi Lokal Umur Medium**

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INTISARI

Jagung adalah tanaman berumah satu, dan tergolong tanaman C4 sehingga mampu beradaptasi baik terhadap faktor-faktor pembatas pertumbuhan dan hasil. Jagung putih merupakan varian jagung yang tidak memiliki pigmen warna karoten, namun mengandung zat gizi lain seperti karbohidrat, protein, lemak, dan serat, serta vitamin B1, Fe, Zn, serta asam folat, sehingga jagung putih merupakan salah satu bahan pangan alternative pengganti nasi beras padi. Produktivitas varietas jagung putih yang telah dilepas di Indonesia masih tergolong rendah. Pemuliaan merupakan cara peningkatan produktivitas tanaman melalui perbaikan genotype. Karakterisasi morfologi, komponen hasil, dan hasil plasma nutfah tanaman bermanfaat bagi kegiatan pemuliaan tanaman. Penelitian ini bertujuan mengetahui karakteristik 4 aksesi jagung putih local umur medium asal Sentolo-Kulonprogo, Grabag- Magelang, Bejen-Temanggung, dan Kedungpelem-Wonogiri. Percobaan lapangan dalam Rancangan Acak Kelompok Lengkap 3 ulangan dilaksanakan di KebunPercobaan UMBY di Gunungbulu, Argomulyo, Sedayu, Bantul, DIY dengan ketinggian tempat 87,50 m dpl dengan tekstur lahan lempungan. Data pengamatan variable dianalisis dengan analisis varians $\alpha=5\%$ dan uji lanjut DMRT pada sumber variasi yang berbeda nyata. Hasil penelitian menunjukkan bahwa karakter morfologi , yakni tinggi tanaman 5 mst (cm), tinggi letak tongkol (cm), diameter batang (mm), hari pembungaan jantan (hst), jumlah daun, panjang dan lebar daun, luas/ daun (cm²), jumlah stomata /luasan objek pengamatan mikroskop cahaya, bobot segar dan bobot kering tanaman tidak berbeda antar keempat aksesi. Demikian pula, karakter jumlah baris biji / tongkol, diameter tongkol, panjang tongkol, bobot biji/tongkol, bobot 100 biji, dan hasil biji/ha tidak berbeda antar keempat aksesi. Empat aksesi jagung putih lokal umur medium dalam penelitian ini memiliki rerata tinggi tanaman 183,62 cm, hari pembungpan jantan 43,67 hst , panjang tongkol 14,30 cm, diameter tongkol 36,50 mm, bobt 100 biji 29 gram , dan hasil biji 3,62 ton/ha .

Kata kunci : karaterisasi sifat , aksesi jagung putih lokal

Characterization of Morphological Properties, Yield Components, and Yield of Local Medium Age White Corn Medium Accession

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ABSTRACT

Corn is a monoecious plant, and is classified as a C4 plant so it is able to adapt well to the limiting factors of growth and yield. White corn is a variant of corn that does not have a carotene color pigment, but contains other nutrients such as carbohydrates, proteins, fats, and fibers, as well as vitamin B1, Fe, Zn, and folic acid, so that white corn is one of the alter foodstuff other than rice. Productivity of white corn varieties that have been released in Indonesia is still relatively low. Breeding is a way of increasing crop productivity through genotype improvement. Characterization of morphology, yield components, and yield of plant germplasm is beneficial for crop breeding activities. This study aims to determine the characteristic of four accessions of local age medium of white corn from Sentolo-Kulonprogo, Grabag-Magelang, Bejen-Temanggung, and Kedungpelem-Wonogiri. Field experiments in Randomized Complete Block Design with 3 replications held at the UMBY Experiment Station in Gunungbulu, Argomulyo, Sedayu, Bantul, DIY with 87.50 m altitude, and clay texture of the land. Data is analyzed by analysis of variance of $\alpha = 5\%$ and followed of DMRT on significantly different of sources of variation. The results showed that the morphological character, i.e. plant height 5 mst (cm), ear height (cm), stem diameter (mm), day of male flowering (dap), number of leaves, length and width of leaves, area/leaf (cm²), number of stomata per observation object of microscopes, fresh and dry weight of plants do not differ among the four accessions. Similarly, the character of the row number of seeds/ear, ear diameter (mm), ear length (cm), seed weight/ear (gram), weight 100 seeds (gram), and grain yield/ha (ton) does not differ among the four accessions. Four accessions of local age medium corn in the study had average plant height 183.62 cm, day of male flowering of 43.67 days after planting-, ear length of 14.30 cm, ear diameter of 36.50 mm, 100 seed weight of 29 grams, and grain yield of 3.62 tons/ha.

Keywords: characteristics of plant properties, accessions of local medium age white corn