



INTISARI

UJI DAYA HASIL LANJUT 10 GALUR HARAPAN PADI SAWAH (*Oryza sativa L.*)

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Uji daya hasil dibedakan menjadi dua yakni daya hasil pendahuluan dan daya hasil lanjut. Uji daya hasil pendahuluan dilakukan dengan jumlah galur yang banyak dan jumlah pertanaman sedikit. Galur yang menunjukkan hasil yang baik akan diuji kembali pada uji daya hasil lanjut. Penelitian ini bertujuan untuk menduga daya hasil 10 galur harapan padi hasil uji daya hasil pendahuluan, mengetahui pengaruh komponen pertumbuhan dan komponen hasil terhadap produktivitas tanaman serta mengetahui penciri khusus galur padi. Penelitian ini dilakukan di lahan percobaan blok 1 Pusat Inovasi Agroteknologi (PIAT) Universitas Gadjah Mada pada Maret-Juli 2021. Bahan yang digunakan terdiri dari 10 galur harapan padi serta 2 varietas pembanding (INPARI 33 dan INPARI 30) disusun dalam Rancangan Acak Kelompok Lengkap (RAKL) dengan 3 blok sebagai ulangan. Penanaman dilakukan dengan jarak tanam 25cm x 25cm. Variabel yang diamati meliputi ciri agronomi serta ciri morfologi padi sawah. Data yang diperoleh dianalisis variansnya dan dilanjutkan dengan uji lanjut Scott knott, nilai proporsi keanekaragaman ciri kualitatif, analisis lintas, analisis komponen utama serta analisis heritabilitas. Hasil penelitian menunjukkan 6 galur yaitu galur GM 28, GM2, mutan Rojolele 30 Pendek, mutan Rojolele 30 Tinggi, mutan Lakatesan dan mutan V12T memiliki hasil panen lebih tinggi daripada varietas pembanding. Jumlah gabah, persentase gabah isi serta persentase anakan produktif berpengaruh terhadap hasil tanaman. Penciri khusus ciri kuantitatif yang ditemukan yakni jumlah anakan total yang tinggi serta malai pendek pada galur Mutan Lakatesan dan bobot 1000 gabah isi paling berat pada galur GM 8. Penciri khusus kualitatif yakni corak bergaris coklat pada permukaan gabah galur Mutan Lampung Kuning dan warna hijau (138 A) daun pada galur GM 8.

Kata kunci: Daya hasil, galur harapan, penciri khusus



ABSTRACT
ADVANCE YIELD TRIAL OF 10 PROMISING LINES OF RICE
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The yield potential evaluation is divided into two parts, namely preliminary and advance yield potential evaluation. Preliminary yield potential evaluation was carried out with a large number of lines and a small number of plants. The promising lines that show good results will be further tested in the advance yield test. This study aimed to estimate the yield of 10 promising rice lines, determine the effect of growth and yield components on plant productivity, and determine the specific characteristics of rice lines. This study was carried out in experimental field block 1 of the Agrotechnology Innovation Center (PIAT) at Gadjah Mada University in March–July 2021. The materials used were 10 promising rice lines and two control varieties (INPARI 33 and INPARI 30). The field experiment was arranged in a completely random block design (RAKL) with three blocks as replications. Planting is done with a spacing of 25cm by 25cm. The observation are focused on agronomic and morphological characteristics of rice. The data obtained were analyzed for variance and followed by the Scott-Knott test, the value of the proportion of qualitative characteristic variability, path analysis, principle component analysis, and heritability analysis. The results showed that six lines i.e. GM 28, GM2, Rojolele 30 Pendek mutant, Rojolele 30 Tinggi mutant, Lakatesan mutant, and V12T mutant, had higher yields than the control varieties. The number of grains/panicle, the percentage of filled grain, and the percentage of productive tillers all affect crop yields. The specific quantitative characteristics were the high number of total tillers and short panicles on the Mutan Lakatesan line and the heaviest weight of 1000 filled grains on the GM 8 line. The special identifiers for the qualitative characteristics were brown stripes on the grain surface of the Lampung Kuning Mutant and green color (138 A) of leaves of GM 8.

Keyword: yield potential, promising lines, specific character