

INTISARI

Padi merupakan komoditas pangan penting dunia. Salah satu jenis padi adalah padi hitam yang saat ini belum banyak direkayasa, sehingga daya hasilnya rendah dengan umur yang panjang. Penelitian ini bertujuan mengetahui karakter agronomi galur harapan padi hitam berdaya hasil tinggi dan berumur genjah. Percobaan dilaksanakan di Pusat Inovasi Agro Teknologi (PIAT) Universitas Gadjah Mada di Kalitirto, Berbah, Kabupaten Sleman, Daerah Istimewa Yogyakarta pada bulan Maret-Agustus 2018. Bahan penelitian yang digunakan adalah 17 galur harapan padi dan 1 varietas unggul lokal. Rancangan percobaan lapangan yang digunakan adalah Kisi Sederhana (*Simple Lattice Design*) dengan 3 ulangan. Setiap galur harapan ditanam pada plot berukuran 5×1,2 m dengan jarak tanam 20×30 cm, secara *inling* (1 bibit per lubang tanam) dengan umur pindah tanam 21 hari. Variabel pengamatan berupa komponen agronomi, komponen hasil dan karakter fisik gabah dan beras. Analisis varians dilakukan untuk variabel kuantitatif dengan taraf nyata α 5%. dilanjutkan dengan uji Scott Knott. Hasil penelitian menunjukkan karakter agronomi galur harapan padi hitam secara umum serupa dengan karakter agronomi galur harapan padi putih dan padi merah terkait dengan variabel tinggi tanaman (<110 cm), anakan produktif (10-20 buah), umur panen (125-150 HSS), panjang malai (20-30 cm), jumlah gabah per malai (<250 biji) dan persentase gabah hampa per malai (>20 %). Daya hasil galur harapan padi hitam P2 (4,10±0,27 ton/hektare) dan XI (3,95±0,45 ton/hektare) lebih tinggi dari varietas unggul lokal Sleman Merah (3,84±0,50 ton/hektare). Galur harapan padi hitam W (116±0,33 HSS) memiliki kategori umur panen genjah.

Kata kunci : karakterisasi, padi hitam, daya hasil, genjah.

ABSTRACT

Rice is one of the world's important food commodities. One of the rice varieties is black rice, which has been yet widely genetically modified, this causes the low yield of black rice with long life expectancy up to now. The research aims to characterize rice promising lines of high yielding and early ripening of black rice. The field experiment was executed at Pusat Inovasi Agro Teknologi (PIAT) of Gadjah Mada University situated in Kalitirto, Berbah, Sleman, Regency, Yogyakarta Special Territory started from March to August 2018. The 17 rice promising lines and 1 local superior variety were used, arranged in the Simple Lattice Design with 3 replications. Each promising line was planted in 5 x 1,2 m plot with 20 x 30 cm spacing following inling planting procedures. The observation focused on agronomic variables, physical characteristics of rice and grain. Analysis of variance was performed for quantitative traits with α 5%, followed by Scott Knott test. The research showed that the agronomic character of black rice promising line similar to that of white rice and red rice with respect to characters of plant height (<110 cm), productive tillers number (10-20 tiller), harvesting date (125-150 day after seedling), panicle length (20-30 cm), number of grain per panicle (<250 seeds) and barrenness per panicle (>20%). The black rice promising line of P2 (4.10±0,27 tons / hectare) and XI (3,95±0,45 tons /hectare) gave the higher grain yield that of Sleman Merah (3,84±0,50 ton/hectare). The promising line of W (116±0,33 day after seedling) is the only early-ripening promising line.

Keywords: characterization, black rice, high yielding, early ripening.