



INTISARI

Karakter morfologi dan agronomi seperti jumlah gabah per malai banyak, daun lebar, daun tipis, daun mendatar, daun cepat luruh, serta berumur genjah merupakan karakter penentu kehampaan gabah pada malai Padi Tipe Baru (PTB). Kehampaan gabah pada malai disebabkan oleh faktor genetik dan lingkungan. Penelitian ini bertujuan mengidentifikasi karakter morfologi padi penyebab kehampaan malai. Dua puluh satu padi nomor aksesori padi ditanam di Pusat Inovasi Agro Teknologi (PIAT) Universitas Gadjah Mada (UGM) di Kalitirto, Berbah, Kabupaten Sleman, Daerah Istimewa Yogyakarta pada bulan Maret hingga Agustus 2018 menggunakan Rancangan Acak Kelompok Lengkap (RAKL) dengan tiga ulangan. Data pengamatan dianalisis dengan analysis of covariance (Ancova) dilanjutkan analisis korelasi dan analisis lintas (path analysis). Hasil penelitian mengatakan, kehampaan mampu mengurangi gabah isi sebesar 29.33%. Berdasarkan analisis korelasi karakter morfologi dan agronomi penyebab kehampaan malai antara lain panjang daun bendera, anakan produktif, kepadatan malai dan gabah isi. Karakter tersebut beragam secara genetik sehingga dapat digunakan sebagai kriteria seleksi menurunkan kehampaan. Aksesori nomor 91 atau Q hitam dan 23 atau UGM*2 memiliki kehampaan rendah masing-masing sebesar 9.68% dan 9.92%, sehingga dapat digunakan sebagai tetua persilangan untuk menurunkan kehampaan.

Kata kunci : padi, kehampaan malai, morfologi, agronomi



ABSTRACT

Morphological and agronomical characters such as a lot of the number of grains per panicle, such as wide leaves, slight leaves, horizontal leaves, and fast decaying leaves, and early maturity are the determinants of grain barrenness of rice panicles in New Type of Rice (NTR). Barrenness of seeds is caused by genetic and environmental factors. The purpose of this study was to identify the morphological components of rice to determine the cause of seed barrenness. Twenty-one promising line of rice was planted at the Universitas Gadjah Mada Agro Technology Innovation Center (PIAT) in Kalitirto, Berbah, Sleman Regency, Special Territory of Yogyakarta from March to August 2018 using a Randomized Complete Block Design (RCBD) with three replications. Data was analyzed by analysis of covariance (ANCOVA) followed by correlation analysis and path analysis. The research shows that barrenness seeds could reduce grain filled by 29.33%. This due to morphology and agronomy characters that cause the seed barrenness include flag leaf length, productive tillers, panicle density and filled grain number based on correlation analysis that has been done. These characters vary genetically so that can be used as selection criteria to reduce barrenness. Accession number 91 or Q Hitam and 23 or UGM*2 give low barrenness of 9.68% and 9.92% respectively, can be used as crossing parents increasing grain yield by reducing barrenness.

Keywords : rice, barrenness, morphology, agronomy