

ABSTRAK

Nurul Fadilla. 2025. Karakterisasi Serta Analisis Jarak Genetik Padi Lokal Asal Bayongbong, Kabupaten Garut. Dibawah bimbingan Jajang Supriatna dan Yati Setiati Rachmawati.

Padi lokal adalah padi yang mudah beradaptasi dan dibudidayakan secara turun temurun, namun keberadaan padi lokal mulai terancam punah karena petani beralih ke padi unggul. Tujuan penelitian ini adalah untuk mengetahui karakteristik dan hubungan kekerabatan padi lokal asal Bayongbong, Kabupaten Garut sebagai langkah awal kegiatan konservasi. Penelitian dilaksanakan pada bulan Januari sampai dengan bulan Juni 2025 yang bertempat di Lahan percobaan kampus 2 dan Laboratorium Agroteknologi Universitas Islam Negeri Sunan Gunung Djati Bandung. Metode yang digunakan dalam kegiatan karakterisasi menggunakan metode eksperimen dan metode deskriptif dengan rancangan acak kelompok (RAK) dengan 10 aksesi padi lokal dan 2 padi unggul yang diulang 3 kali ulangan. Analisis jarak genetik menggunakan metode deskriptif analisis klaster berdasarkan dendrogram menggunakan *software NTSYS* versi 2.2 dengan menganalisis beberapa karakter. Hasil penelitian menunjukkan bahwa 10 aksesi padi lokal dan 2 padi unggul memiliki ciri khasnya masing-masing berdasarkan Karakter Kuantitatif yaitu Panjang helai daun, lebar helai daun, jumlah anakan, umur berbunga, panjang batang, tinggi tanaman, jumlah malai per rumpun, jumlah bulir per rumpun, dan daun perumpun, begitupun dengan Karakter Kualitatif yaitu warna pelepah, pewarnaan daun antosianin, distribusi antosianin, pewarnaan batang antosianin, distribusi antosianin batang, perilaku daun bendera, dan bulu ujung gabah. Terdapat 3 kelompok besar berdasarkan dendrogram dengan nilai koefisien kemiripan 41%, sehingga kelompok yang berbeda menunjukkan jarak genetik yang jauh.

Kata kunci : Bayongbong, Garut, Jarak Genetik, Karakterisasi, Padi Lokal

ABSTRACT

Nurul Fadilla. 2025. Characterization and Analysis of Genetic Distance of Local Rice from Bayongbong, Garut Regency. Under the supervised of Jajang Supriatna and Yati Setiati Rachmawati.

Local rice is rice that is easy to adapt and cultivated through generations, but the existence of local rice is beginning to be threatened by extinction due to farmers switching to superior rice. The aim of this research is to determine the characteristics and kinship relationships of local rice from Bayongbong, Garut Regency as a preliminary step for conservation activities. The research will be conducted from January to June 2025 at the experimental field of Campus 2 and Agrotechnology Laboratory of Sunan Gunung Djati Islamic State University, Bandung. The methods used in the characterization activities include experimental methods and descriptive methods with a randomized block design (RBD) involving 10 local rice accessions and 2 superior rice varieties, each repeated 3 times. Genetic distance analysis will be conducted using descriptive cluster analysis based on dendrograms using NTSYS version 2.2 software by analyzing several characteristics. The research results show that 10 local rice accessions and 2 superior rice varieties have their own characteristics based on Quantitative Characters such as leaf blade length, leaf blade width, number of tillers, flowering age, plant height, stem height, number of panicles per clump, number of grains per clump, and leaves per clump, as well as Qualitative Characters such as sheath color, anthocyanin leaf coloring, anthocyanin distribution, stem anthocyanin coloring, stem anthocyanin distribution, flag leaf behavior, and awn characteristics. There are 3 major groups based on the dendrogram with a similarity coefficient value of 41%, indicating that the different groups show a considerable genetic distance.

Keywords : Bayongbong, Characterization, Garut, Genetic distance, Local rice