

INTISARI

Cabai hias memiliki keragaman morfologi yang banyak sehingga dapat menarik perhatian masyarakat Indonesia. Keindahan cabai hias terletak pada variasi warna, bunga, dan buah, sehingga perlu dilakukan identifikasi karakter dalam pemuliaan tanaman. Tujuan dilakukan penelitian ini yaitu untuk mengidentifikasi karakter morfologi tanaman cabai hias F1 hasil persilangan. Penelitian ini dilakukan bulan Januari - September 2024 di Kebun Tridharma, Fakultas Pertanian, Universitas Gadjah Mada dengan Rancangan Acak Kelompok Lengkap dengan 5 genotipe yaitu F1 (EE x SYP), 'Explosive Ember', 'Shypoan', 'Ayesha', dan 'Lembayung' dengan 3 ulangan. Karakter yang diamati dibagi menjadi dua kategori yaitu kualitatif dan kuantitatif. Data dianalisis menggunakan ANOVA, apabila terdapat perbedaan dilakukan uji lanjut HSD-Tukey pada taraf nyata 0.05. Dilanjutkan analisis heterosis, heterobeltiosis, heritabilitas, PCA, dan seleksi pada tanaman. Terdapat 5 karakter F1 yang memiliki variasi pada antosianin pada buku, warna mahkota bunga, warna kepala putik, warna benang sari, dan warna buah muda. Berdasarkan karakter kualitatif dan PCA, F1 lebih dominan mengikuti karakter tetua betina 'Explosive ember' seperti karakter pemendekan ruas, bentuk daun, bentuk buah, orientasi buah, bentuk pangkal buah, dan bentuk ujung buah. Tanaman nomor 2 dan 19 pada populasi F1 memiliki kriteria seperti tinggi tanaman, lebar tajuk, dan umur berbunga yang sesuai untuk cabai hias. Seleksi tanaman dapat dilakukan diawal generasi karena nilai heritabilitasnya tinggi.

Kata Kunci: Cabai Hias; Kualitatif; Kuantitatif; F1; Heritabilitas

ABSTRACT

Ornamental pepper has a lot of morphological diversity so they can attract public attention. The beauty of ornamental peppers lies in their variations in colour, flowers, and fruit. Therefore, it is important to identify these characteristics in plant breeding. The purpose of this study is to identify the morphological characteristics of F1 ornamental pepper plant resulting from hybridization. The research will be conducted from January to September 2024 at the Tridharma Garden, Faculty of Agriculture, Universitas Gadjah Mada, using a Randomized Complete Block Design with three replications and five genotypes namely F1 (EE x SYP), 'Explosive Ember', 'Shypoona', 'Ayesha' as comparisons, and 'Lembayung' as another comparison. Characters of ornamental pepper were observed as qualitative and quantitative characters. The data were analyzed using ANOVA, and if a significant difference was found, a post-hoc HSD-Tukey test was conducted at a 0.05 significance level. Further analysis included heterosis, heterobeltiosis, heritability, PCA, and plant selection. There are five F1 characters that have variations in the nodal anthocyanin, corolla colour, stamen colour, pistil stalk colour, and immature fruit colour. Based on qualitative characters and PCA, F1 is more dominant in following the female parent character 'Explosive ember' such as the shortening of internodes, leaf shape, fruit shape, fruit orientation, fruit base shape, and tip shape. Plants number 2 and 19 in the F1 population have criteria such as plant height, canopy width, and flowering age that are suitable for ornamental chili. Plant selection can be done at the beginning of the generation because the heritability value is high.

Key Words: Ornamental Pepper; Qualitative; Quantitative; F1; Heritability