

**CHARACTERIZATION, GENETIC VARIABILITY AND HERITABILITY
OF SOME GENOTYPES OF PERIWINKLE PLANTS
(*Catharanthus roseus* L.)**

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ABSTRACT

The diversity of periwinkles in Indonesia hasn't been developed optimally. This research aims to obtain plant phenotype variability, genetic diversity coefficient and heritability values for each periwinkle genotype. The field trial research method used a single treatment Completely Randomized Design (CRD) method in the form of 14 periwinkle genotypes. Each treatment was repeated 3 times. Data were analyzed using descriptive analysis and analysis of variance. Tested further with the DMRT test at the 5% level. The results of the research show that the periwinkle plant have elongated and jordermal leaves, pointed and blunt tips, and flat leaf edges, as well as a smooth and dense surface texture. The growth type of periwinkle stem is upright and hanging stems. The main color of the corolla on the periwinkle flower has various colors, such as red, orange, purple, pink, and white with different colors in the middle of the corolla. The coefficient of genetic diversity of periwinkle plants is quite high, which is obtained from the character of the number of flowers. High heritability values were obtained in the characters of plant height, number of leaves, number of flowers, and flower diameter. The *Vinca Ningrum Black Hallo*, *Vinca Exotic Peach*, *Vinca Pink Hallo*, and *Vinca Exotic Pink* genotype periwinkle has potential for development as a hybrid.

Keywords: *Characterization, Heritability, Genotype, Periwinkle*