Keragaan F1 dan Heterosis Karakter Agronomis pada Pesilangan Padi Varietas IPB 3S dan Sintanur (The Performance and Heterosis of Agronomic Character from Crossing of IPB3S and Sintanur Variety). Supervisor: Dwi Rahmawati, SP, MP.

Tutiani Wanasari
Study Program of Seed Production Technique
Majoring of Agricultural Production
Program Studi Teknik Produksi Benih
Jurusan Produksi Pertanian

ABSTRACT

One effort to fulfill the National demand for rice is by plant breeding method. The research aims to determine the performance and heterosis of the agronomic character of the F1 phenotype from IPB3S and Sintanur crossing. This research conducted from August 2020 until January 2021 on the experimental land of State Polytechnic of Jember. The research used randomized complete Block Design (RCBD) non-factorial with one factor consist of three genotypes of rice, V1 (IPB3S variety), V2 (Sintanur Variety) and V3 (F1- the result of a cross). The data will be analyzed using analysis of Variance and continued with DMRT level of 5% and heterosis test on each treatment. The result showed that the treatment of IPB2S, Sintanur and F1 genotype of rice has a very significant effect on almost all parameters and has a different effect on the parameter of flowering age. Based on the calculation of the heterosis test can be concluded that the performance of F1 phenotype and heterosis character from all the expected characters showed that the value was almost suitable with the aim of breeding, so the genotype of the F1 IPB 3S/sintanur cross has the opportunity to become a line with a high grain yield potential

Key words: F1 Phenotype performance, Heterosis, rice