Uji Daya Hasil Sembilan Galur Padi dengan Pembanding Varietas Ciherang di Kaliwining, Rambipuji, Jember. Yield Test of Nine Mutant and Inbred Rice Lines with Comparison of Ciherang Varieties in Kaliwining, Rambipuji, Jember.

Advisor: Ir. Sri Rahayu, MP

Rohmaan Arifin
Seed Production Technique Study Program
Agricultural Production Department
Program Studi Teknik Produksi Benih
Jurusan Produksi Pertanian

## **ABSTRACT**

Increasing need for rice per year continues to encourage the government to make efforts to develop the food sector through agricultural institutions in Indonesia, so there is a need for quality rice seeds to support the fulfillment of community needs. This research aims to determine the effect of the yield test results of nine mutant and inbred rice lines (Oryza sativa L.) belonging to the Indonesian Center for Rice Research (BBPadi) with the comparison of Ciherang varieties. The research was conducted on December 2019 to May 2020 at Kaliwining Village, Rambipuji District, Jember Regency with an altitude of  $\pm$  89 meters above sea level. Research using non-factorial randomized block design (RCBD) consisting of the treatment of 9 mutant and inbred lines with the Ciherang comparison variety and further test Tukey's Honestly Significant Difference Test (BNJ). Observation parameters consisted of plant height 30 DAS and harvest (cm), number of vegetative tillers, number of productive tillers, panicle length (cm), number of grains per panicle, weight of 1000 grains (g), production per hectare (tonnes), and yield potential (tonnes). The results of observations and analysis of variance showed that there were very significant results in all observed parameters except for the height of the plants aged 30 DAS and the number of vegetative tillers which gave significantly results, as well as production parameters per hectare and yield potential which gave not significant results. Based on the yield potential average, it shows that the B13813D-RS \* 1-1-MR-8-1 line gave the highest yield compared to the Ciherang comparison variety.

Key words: paddy, line, yield test