The Effect of Plant Split and Nitrogen Fertilizer Dosage on Growth and Production of Hybrid Rice Supervised by Ir. Damanhuri, MP

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ABSTRACT

Rice (Oryza sativa L.) is a food crop commodity as well as a staple food that has an important role in the Indonesian economy. Currently, population in Indonesia continues to increase; therefore, the need for rice also increases. However, rice production in Indonesia has decreased so that it is unable to meet the need of the Indonesian people. Several ways can be done to overcome the problem. One of them is the use of hybrid rice with the right fertilizer dosage. Therefore, the study was aimed to know the effect of plant split and nitrogen fertilizer dosage, and the interaction of them on Mapan-05 hybrid rice plant in Mayang Village, Jember Regency. This research was conducted by using factorial randomized block design (RBD). The first factor was plant split which consisted of three levels, namely; non-split, 1 plant split, and 2 plant split. The second factor was the dosage of nitrogen fertilization which consisted of 4 levels, namely; 92 kg N / ha, 115 kg N / ha, 138 kg N / ha, and 161 kg N / ha. Variables observed were: weight of well-lined grain, number of tillers per hill, number of productive tillers, weight of empty grain, weight of grain per hill, weight of grain per plot, and weight of 1000 seeds. The research results indicated that there was no interaction between plant split and nitrogen fertilization dosage. In plant split, the best effect was at the non-split level on all observation variables, while in the treatment of nitrogen fertilization dosage, the best effect was at the nitrogen dosage level of 115 Kg N / Ha on all observation variables.

Keywords: hybrid rice, plant split, and nitrogen