Analysis Of The Potential Yield And Effects Of Grasshoper Attack (*Oxya sp.*) Against 11 Promising Lines of Rice (*Oryza sativa* L.) In Jember Regency. *Advisor : Putri Santika*, S.ST, M.S.c.

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ABSTRACT

The purpose of this research is to find a comparison of the potential yield and the effect of the grasshoper attack on 11 promising lines of rice compared to Ciherang, and IR 30. This research was conducted at the Village of Wirowongso Sub-district Ajung Regency Jember with an elevation of 89 M (Low Land). This research was carried out on July 7.2019 to December 12,2019 visual observations were made directly on the field. This research used non factorial randomized group design. In this research, there were 13 treatments consisting of Ciherang an IR 30 as comparisons, as well as 11 promosing lines of Rice which are the decendants of gamma ray radiated KI 237 derived rom Combalt at 200 Gy dose. The treatments are coded as follow; UDS 001, UDS 002, UDS 003, UDS 004,UDS 005,UDS 006,UDS 007,UDS 008,UDS 009,UDS 010, KI 237, Ciherang, Inpari -30. The data obtained was analyzed using anova at 5%, and if there was any significiant differences, the analysis was continued using DMRT at 5% error level. The results showed that the severity level of 11 lines and 2 comparisons had significantly comparable results, and the level of pest attack in each treatment increased from the final vegetative phase to the final phase of grain filling. The lowest locust attack was in the final vegetative stage in the UDS 011 treatment with a yield of 2.469%, in the final flowering stage the UDS 009 line with a yield of 4.484% and the final grain filling stage in the UDS 009 treatment with 10.741%.

Keywords: Rice, Grasshopper, Potential Yield