

**Pengaruh Lama Perendaman  $KNO_3$  Terhadap Pematahan Dormansi Beberapa Varietas Benih Padi (*Oryza sativa* L.). *Effect Of Soaking Time  $KNO_3$  Against Dormancy Breaking Several Varieties Of Paddy (*Oryza sativa* L.).*  
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***ABSTRACT***

*The purpose of this study was to determine effect of soaking  $KNO_3$  and use several varieties of the seed dormancy breaking of rice (*Oryza sativa* L.) The research was conducted using the experimental method Completely Randomised Design (CRD) 4X4 factorial consisting of 16 treatment combinations. The first factor is the long immersion (L) which consists of 4 levels  $KNO_3$  soaking for 24 hours (L1),  $KNO_3$  soaking for 36 hours (L2),  $KNO_3$  soaking for 48 hours (L3) and  $KNO_3$  soaking for 60 hours (L4). The second factor is the use of varieties (P) consisting of Ciherang (V1), Mekongga (V2), Bondojudo (V3), and Towuti varieties (V4). Each treatment was repeated two times in order to obtain 32 units of treatment. The parameters were observed consisting of maximum growth potential (%), an intensity of dormancy (%), germination of seeds (%), simultaneity sprouted seeds (%) and the speed of growth of the seed (%). Data were analysed using Analysis Of Variance (ANOVA) followed by Duncan's Multiple Range Test (DMRT) level of 5%. Results of analysis of variance showed that the long immersion factor (L) gives a highly significant effect on germination parameters. In contrast with the measurement of the speed of growth and simultaneity grow, but it gives the effect of no significant on maximum growth potential parameters and the intensity of dormancy. While the use of several varieties of factors (V) provides a highly significant effect on maximum growth potential observation parameters, the speed of growth and the intensity of dormancy. As well as the measurement of the effect not observation germination and simultaneity grow.*

**Keywords :** *dormancy breaking, *Oryza sativa* L., seed dormancy*