

**Pengaruh Masa *After-Ripening* dan Tingkat Konsentrasi  $KNO_3$  Terhadap Pematangan Dormansi Benih Padi (*Oryza sativa* L. ). (*The Effect of After-ripening and Concentration of  $KNO_3$  Age Toward Dormancy Breaking of Rice Seed (*Oryza sativa* L.).* Supervised by : Ir. Suwardi, MP. and Sukmandari, STP**

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### ***ABSTRACT***

*Rice seeds have a period of dormancy that causes the seeds cannot be tested directly, so it need to break the dormancy method by using the treatment after ripening and  $KNO_3$ . Seed soaking in  $KNO_3$  solution is one of treatment to break seed dormancy. This research aims to determine the effect of concentration of after-ripening and  $KNO_3$  age toward dormancy breaking of rice seed. This research was conducted in October to November 2018 at Laboratory of UPT PSBTPH District III Kediri. This research was applied Completely Randomized Design with 2 factors and 4 replications. The first factor was after-ripening age consisted 3 levels, there are 2 weeks ( $M_1$ ), 4 weeks ( $M_2$ ) and 6 weeks ( $M_3$ ) The second was concentration of  $KNO_3$  solution consisted 4 levels, there are  $KNO_3$  0% ( $K_0$ ), 1% ( $K_1$ ), 2% ( $K_2$ ) and 3% ( $K_3$ ). The result of this research shows that intreaaction between concentration of  $KNO_3$  and after ripening age is significant on all parameters. The highest interaction on seed viability is ( $M_3K_1$ ) with value of 98,75%, on growth speed is ( $M_3K_2$ ) with value of 36,65%, on growth simultaneously is ( $M_3K_1$ ) with value of 97,50%, on maximum growth potential is ( $M_3K_1$ ) with value of 99,5% and on Dormancy intensity is ( $M_3K_1$ ) with value of 00,00%.*

***Key words* : Dormancy Breaking,  $KNO_3$ , Rice**