

***Effect of Storage time and Seed Priming on Viability of Rice Seed (Oryza sativa L.) Mekongga Variety. Supervised by Leli Kurniasari SP, M.Si and Sri Ekawati S.P.***

**Fabe Sulistiya Dini**  
**Study Program of seed production technique**  
**Department of agricultural department**

### **ABSTRACT**

*Paddy is a rice-producing food crop that has an important role in the economy in Indonesia. One of the problems that occur in the provision of seeds is a decrease in seed quality during the storage period. The purpose of the study was to determine the effect of seed shelf life, seed priming and the interaction of the two treatments on the viability of rice seeds (Oryza sativa L.). This study uses a completely randomized design (CRD) factorial which has two factors. The first factor (F1) is the shelf life of seeds with 3 levels, namely U1 (shelf life 9 months), U2 (shelf life 8 months) and U3 (shelf life 7 months). The second factor (F2) was seed priming with 3 levels, namely S1 (PEG 6000), S2 (husk charcoal) and S3 (direct sowing), each treatment was repeated four times. The treatment of seed shelf life showed a very significant difference in the viability of rice seeds by increasing the percentage of germination variable to 91.33%, growth speed 15.36%, maximum growth potential 95.08%, simultaneous growth of 88.67% and vigor index 33, 58% in the treatment of 7 months seed shelf life. The treatment seed priming showed a very significant difference in the viability of rice seeds by increasing the percentage of germination of 88.17%, growth speed of 15.61%, maximum growth potential of 92.67% and vigor index of 42.67% on husk charcoal, and increasing Variable percentage of seed sprouting simultaneously was 86.33% at PEG 6000. The interaction between seed shelf life and treatment seed priming showed that the results were not significantly different from seed viability.*

**Keywords:** *Seed quality, Storage Time, Seed Priming, Viability, rice seeds*