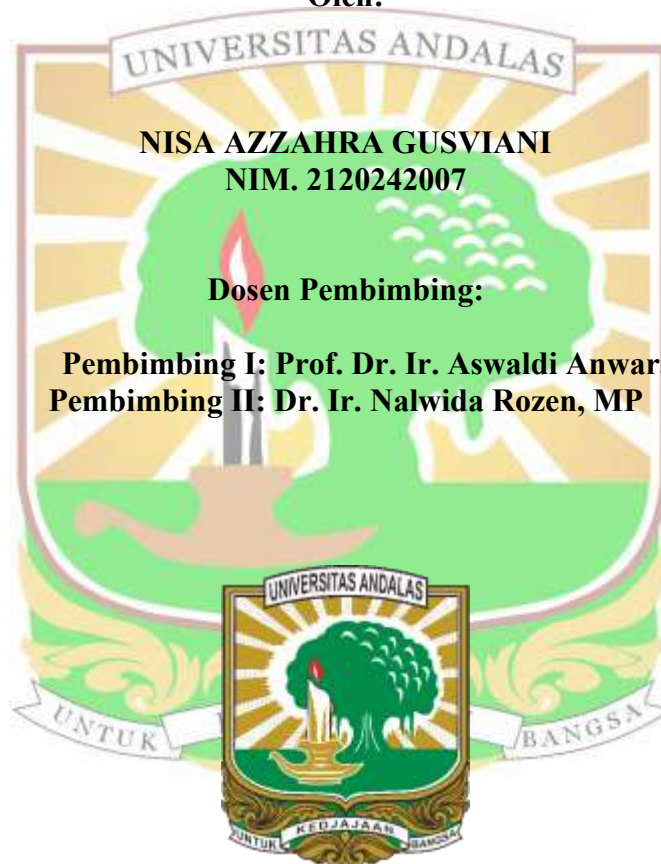


***SEED ENHANCEMENT MENGGUNAKAN METODE  
MATRICONDITIONING PLUS *Trichoderma harzianum*  
PADA BENIH PADI GOGO (*Oryza sativa* L.)  
YANG MENGALAMI DETERIORASI***

**TESIS**

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**Abstrak**

Peningkatan produksi tanaman padi dapat dilakukan dengan memanfaatkan lahan kering sub optimal untuk budidaya tanaman padi gogo. Walaupun demikian, masih terdapat beberapa kendala dalam meningkatkan produksi padi gogo di Indonesia, seperti kurang tersedianya benih yang bermutu tinggi. Benih berpotensi mengalami penurunan mutu (deteriorasi) dan berdampak pada pertumbuhan tanaman menjadi tidak optimal. Penelitian ini dilakukan dengan rancangan acak lengkap faktorial, yang terdiri dari dua faktor, yaitu perbandingan komposisi dan lama perendaman benih dalam *matriconditioning plus Trichoderma harzianum*. Perkecambahan benih dilakukan pada media kertas stensil dan tanah Inceptisol untuk pengujian uji muncul tanah. Data pengamatan dianalisis menggunakan uji F pada taraf nyata 5% dan data yang berbeda nyata dilakukan uji lanjut DMRT. Perbandingan komposisi dan lama perendaman benih dalam *matriconditioning plus Trichoderma harzianum* terdapat interaksi pada pengamatan kadar air benih, persentase kecambah normal, persentase kecambah abnormal, persentase benih mati, potensi tumbuh maksimum, dan daya hantar listrik benih. Perbandingan komposisi *matriconditioning plus Trichoderma harzianum* yang terbaik untuk memperbaiki mutu benih Inpago 12 yang telah mengalami deteriorasi adalah benih: abu sekam padi: suspensi *Trichoderma harzianum* (9:6:8). Lama perendaman benih dalam *matriconditioning plus Trichoderma harzianum* yang terbaik untuk memperbaiki mutu benih Inpago 12 yang telah mengalami deteriorasi adalah 6 jam.

Kata kunci: Padi gogo, Mutu benih, Deteriorasi, *Matriconditioning plus Trichoderma harzianum*

**SEED ENHANCEMENT USING MATRICONDITIONING PLUS  
*Trichoderma harzianum* METHOD ON DETERIORATED SEEDS OF  
UPLAND RICE (*Oryza sativa* L.)**

**Abstract**

Increasing rice production can be done by utilizing sub-optimal dry land for cultivating upland rice plants. However, there are still several obstacles in increasing upland rice production in Indonesia, such as the limited availability of high-quality seeds. Seeds have the potential to experience a decrease in quality (deterioration) and have an impact on suboptimal plant growth. This research was carried out with a completely randomized factorial design, which consisted of two factors, namely the comparison of composition and length of soaking of seeds in matriconditioning plus *Trichoderma harzianum*. Seed germination was carried out on stencil paper and Inceptisol soil for soil emergence testing. Observational data was analyzed using the F test at a significance level of 5% and data that was significantly different was subjected to a further DMRT test. Comparison of the composition and length of soaking of seeds in matriconditioning plus *Trichoderma harzianum* showed an interaction in observing seed water content, percentage of normal sprouts, percentage of abnormal sprouts, percentage of dead seeds, maximum growth potential, and electrical conductivity of seeds. The best comparison of the composition of matriconditioning plus *Trichoderma harzianum* to improve the quality of deteriorated Inpago 12 seeds is seeds: rice husk ash: *Trichoderma harzianum* suspension (9:6:8). The best length of soaking seeds in matriconditioning plus *Trichoderma harzianum* to improve the quality of deteriorated Inpago 12 seeds is 6 hours.

Keywords: Upland rice, Quality of seeds, Deterioration, Matriconditioning plus *Trichoderma harzianum*

