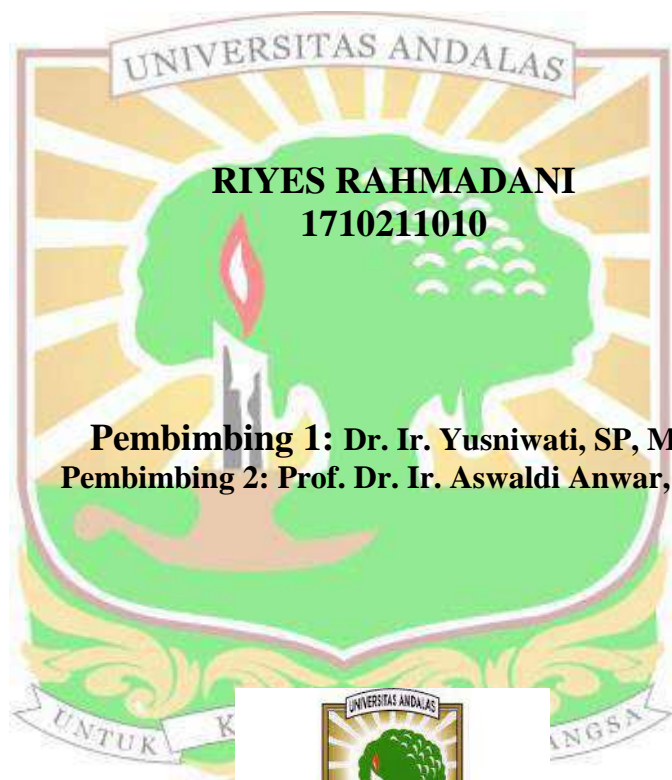


**PENGARUH KONSENTRASI H₂SO₄ DAN KNO₃ TERHADAP
PEMATAHAN DORMANSI DAN PERKECAMBAHAN BENIH
AREN (*Arenga pinnata* (Wurmb.) Merr.)**

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PENGARUH KONSENTRASI H_2SO_4 DAN KNO_3 TERHADAP PEMATAHAN DORMANSI DAN PERKECAMBAHAN BENIH AREN (*Arenga pinnata* (Wurmb.) Merr.)

Abstrak

Benih tanaman aren memiliki masa dormansi yang cukup lama yang disebabkan embrio yang belum berkembang dan benih masih dalam keadaan dorman, sehingga benih aren digolongkan kedalam dormansi morfofisiologis. Dormansi benih dapat diatasi dengan memberikan perlakuan sebelum perkecambahan baik secara fisik, kimia, maupun biologi. Penelitian ini bertujuan untuk: Mengetahui interaksi antara konsentrasi H_2SO_4 dan KNO_3 terhadap Pematihan dormansi dan perkecambahan benih aren, Mendapatkan konsentrasi H_2SO_4 terbaik terhadap pematihan dormansi dan perkecambahan benih aren, dan Mendapatkan konsentrasi KNO_3 terbaik terhadap pematihan dormansi dan perkecambahan benih aren. Penelitian ini menggunakan metode eksperimen dengan rancangan Faktorial yang disusun dalam Rancangan Acak Lengkap (RAL) dengan 2 faktor dan 3 ulangan. Faktor I, konsentrasi H_2SO_4 yang terdiri dari 2 taraf perlakuan yaitu 10% dan 20%. Faktor II, konsentrasi KNO_3 yang terdiri dari 4 taraf perlakuan yaitu 0,5%, 1,0%, 1,5%, dan 2,0% sehingga diperoleh 24 satuan percobaan. Data yang diperoleh dianalisis menggunakan uji F, jika berbeda nyata dilanjutkan dengan uji *Duncan's New Multiple Range Test* (DNMRT) pada taraf nyata 5%. Hasil penelitian menunjukkan terdapat interaksi antara pemberian konsentrasi H_2SO_4 dan konsentrasi KNO_3 terhadap pematihan dormansi benih aren, namun tidak ada interaksi pada perkecambahan benih aren. Perlakuan konsentrasi H_2SO_4 yang berbeda memberikan pengaruh yang berbeda terhadap pematihan dormansi benih aren.

Kata kunci: Aren, dormansi, perkecambahan, H_2SO_4 , KNO_3



THE EFFECT OF H_2SO_4 AND KNO_3 CONCENTRATIONS ON THE BREAKING OF DORMANCY AND GERMINATION OF SUGAR PALM (*Arenga pinnata* (Wurmb.) Merr.)

Abstract

Sugar palm seeds have a long dormancy period due to the undeveloped embryo and the seeds are still in a dormant state, so the sugar palm seeds are classified into morphophysiological dormancy. Seed dormancy can be overcome by providing treatment before germination either physically, chemically, or biologically. This study aims to: determine the interaction between concentrations of H_2SO_4 and KNO_3 on breaking dormancy and germination of sugar palm seeds, obtaining the best concentration of H_2SO_4 on breaking dormancy and germination of sugar palm seeds, and obtaining the best concentration of KNO_3 on breaking dormancy and germination of sugar palm seeds. This study used an experimental method with a factorial design arranged in a completely randomized design (CRD) with 2 factors and 3 replications. Factor I, the concentration of H_2SO_4 which consists of 2 treatment levels, namely 10% and 20%. Factor II, the concentration of KNO_3 which consists of 4 treatment levels, namely 0.5%, 1.0%, 1.5%, and 2.0% in order to obtain 24 experimental units. The data obtained were analyzed using the F test, if they were significantly different, then continued with the Duncan's New Multiple Range Test (DNMRT) test at a 5% significance level. The results showed that there was an interaction between application of H_2SO_4 concentration and KNO_3 concentration on the breaking of oil palm seed dormancy, but there was no interaction on sugar palm seed germination. Treatment of different concentrations of H_2SO_4 gave different effects on breaking the dormancy of sugar palm seeds.

Key words : Sugar palm, dormancy, germination, H_2SO_4 , KNO_3

