

ABSTRAK

PENGARUH KONSENTRASI ASAM SULFAT (H_2SO_4) TERHADAP VIABILITAS DAN VIGOR BENIH KORO RAWE (*Mucuna bracteata* L.)

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Benih koro rawe (*Mucuna bracteata* L.) memiliki kulit benih yang keras sehingga sulit untuk berkecambah, untuk itu diperlukan perlakuan benih sebelum disemaikan antara lain direndam menggunakan H_2SO_4 . Penelitian ini bertujuan untuk mengetahui pengaruh konsentrasi H_2SO_4 terhadap viabilitas dan vigor benih. Percobaan dilakukan di *Screen House* Fakultas Pertanian, Universitas Siliwangi, Tasikmalaya pada bulan November 2023 sampai dengan Desember 2023. Menggunakan Rancangan Acak Kelompok dengan 9 perlakuan. Terdiri dari: A = Perendaman dalam aquadest.; B = Perendaman dalam larutan H_2SO_4 0,5%; C = Perendaman dalam larutan H_2SO_4 1%; D = Perendaman dalam larutan H_2SO_4 1,5%; E = Perendaman dalam larutan H_2SO_4 2%; F = Perendaman dalam larutan H_2SO_4 2,5%; G = Perendaman dalam larutan H_2SO_4 3%; H = Perendaman dalam larutan H_2SO_4 3,5%; I = Perendaman dalam larutan H_2SO_4 4%. Setiap perlakuan diulang sebanyak 3 kali, data hasil pengamatan dianalisis menggunakan uji F dan jika terdapat pengaruh dilanjutkan dengan Uji Jarak Berganda Duncan pada taraf α 5%. Hasil penelitian menunjukkan bahwa konsentrasi H_2SO_4 berpengaruh terhadap viabilitas dan vigor benih koro rawe. Perlakuan yang paling baik adalah perendaman menggunakan H_2SO_4 dengan konsentrasi 1,5%.

Kata kunci: Koro rawe, konsentrasi, viabilitas, vigor

ABSTRACT
EFFECT OF SULFURIC ACID (H₂SO₄) CONCENTRATION ON
VIABILITY AND VIGOR OF KORO RAWE SEEDS

(*Mucuna bracteata* L.)

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Mucuna seeds (*Mucuna bracteata* L.) have a hard seed coat making it difficult to germinate, for this reason it is necessary to treat the seeds before sowing using H₂SO₄. This research aims to determine the effect of mucuna concentration in H₂SO₄ solution on seed viability and vigor. The experiment was carried out at the Mugarisari *Screen House*, Faculty of Agriculture, Siliwangi University, Tasikmalaya from November 2023 to December 2023. Using a Completely Randomized Design with 9 treatments. Seed soaking is carried out at various concentrations, namely: A = Soaking in distilled water; B = Soaking in 0.5% H₂SO₄ solution; C = Immersion in 1% H₂SO₄ solution; D = Immersion in 1.5% H₂SO₄ solution; E = Immersion in 2% H₂SO₄ solution; F = Immersion in 2.5% H₂SO₄ solution; G = Immersion in 3% H₂SO₄ solution; H = Immersion in 3.5% H₂SO₄ solution; I = Soaking in 4% H₂SO₄ solution. Each treatment was repeated 3 times, the observation data was analyzed using the F test and if there was an effect, it was continued with the Duncan Multiple Range Test at an α level of 5%. The results showed that the concentration of H₂SO₄ affected the viability and vigor of mucuna seeds. Better treatment was produced at a H₂SO₄ concentration of 1.5%

Keywords: *Mucuna*, concentration, viability, vigor