GERMINATION AND GROWTH OF TWO VARIETIES OF SENGON (Albizia chinensis Osb.) WITH VARIOUS H₂SO₄ CONCENTRATIONS FOR BREAKING SEED DORMANCY

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ABSTRACT

The demand for Sea sengon (Paraserianthes falcataria L.) and Solomon's sengon (Falcataria moluccana Miq.) wood is high. Sengon cultivation takes a long time due to seed dormancy, efforts are needed to break this dormancy. The aim of this research is to obtain interactions between treatments, obtain the best sengon varieties and H₂SO₄ concentrations that are effective for breaking dormancy. The research method used was a completely randomized design (CRD) 2 factors, 3 replications. The first factor is varieties, namely Sea sengon and Solomon sengon. The second factor is the concentration of H_2SO_4 , namely 0%, 25%, 50% and 75%, soaking for 15 minutes. The experimental results were analyzed using analysis of variance at $\alpha = 5\%$ level, followed by the DMRT test at $\alpha 5\%$ level. The results of the research showed that the best treatment combination on the Solomon sengon variety with 50% H₂SO₄ increased germination, vigor index, First Count Germination, seedling height, number of leaf stalks and stem diameter. The sengon Solomon variety treatment gave the best results in the number of leaf stalks aged 6 WAP, root volume, dry weight of seedlings and number of root nodules. Treatment with a 25% H₂SO₄ concentration can increase the number of leaf stalks, root volume, dry weight of seedlings and number of root nodules.

Keywords: Sengon, Dormancy Breaking, Varieties, H₂SO₄.