ABSTRACT

THE EFFECT OF CHEMICAL SCARIFICATION ON GERMINATION AND GROWTH OF TEAK SEEDLINGS (*Tectona grandis* Linn. f)

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Teak plant propagation is generally done generatively. One of the obstacles in teak nurseries is the percentage of seeds that germinate is low and it also takes a long time to germinate. This is because naturally teak seeds have a hard shell structure that makes them impermeable and impermeable to water and gas. This study aims to determine the effect of chemical scarification on germination and growth of teak seedlings. This research was conducted in the Greenhouse of the Faculty of Agriculture, Siliwangi University from December 2022 to February 2023. Using the experimental method with a randomized block design with 5 treatments and repeated 5 times. The chemical scarification treatments tried were A = without immersion, B = immersion in H_2SO_4 solution with a concentration of 20%, C = immersion in H_2SO_4 solution with a concentration of 40%, D = immersion in HCl solution with a concentration of 10% and E = immersion in HCl solution with a concentration of 20%. The results showed that the chemical scarification treatment had an effect on germination rate and germination rate but had no effect on the growth of teak seedlings (*Tectona grandis* Linn.f). Scarification treatment using H_2SO_4 solution with a concentration of 20% and 40% resulted in the best germination power and germination speed of teak seeds.

Keywords: nursery, germination, scarification, teak.