Shallot Extract Concentration Test and Soaking Time on the Growth Rate of Pepper Cuttings (Piper nigrum L.)

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ABSTRACK

This study aims to determine the concentration test of shallot extract and soaking time on the growth rate of pepper cuttings (Piper nigrum L). This research was conducted at the Jember State Polytechnic from October to December 2021. This study used a Randomized Block Design (RAK) which was arranged in a factorial manner with two factors. The first factor was the concentration of shallot extract which consisted of 4 levels, namely K0 = 0% (control), K1 = 30%, K2 = 60%, and K3 = 90%. The second factor was the soaking time of the shallot extract which consisted of 3 levels, namely P1 = 9 hours, P2 = 12 hours, and P3 = 15 hours. The data that has been obtained from the test results, then analyzed using the F test (Anova). If there is a significant effect, further tests are carried out using BNT at the 5% level. The results showed that the location of the internodes had no significant effect on shoot length, percentage of live cuttings, number of internodes, wet weight of seedlings, dry weight of seedlings and root length. So you can use any segment as a cutting material. The interaction of shallot extract concentration and soaking time had no significant effect on shoot length, percentage of live cuttings, number of internodes, wet weight of seedlings, dry weight of seedlings and root length. Concentration of shallot extract 30% had a significantly different effect on shoot length and number of internodes. The immersion time of 9 hours had a very significant effect on the number of segments.

Key words: Pepper Plant, Shallot Extract, Soaking Time