

ABSTRACT

Patchouli plant (*Pogostemon Cablin*Benth) is one of the essential oil producing plant originating from Indonesia, The Philippines and India. Patchouli plants are propagated vegetatively by cuttings. This study aims to examine the effect of soaking time and Rootone-F concentrations on the growth of patchouli seed cuttings. This research was conducted in the experimental garden of the Faculty of Agriculture and Laboratory of Malikussaleh University, North Aceh District. The study took place from January to March, 2023, using a Randomized Block Design (RBD). The first factor consisted of four levels, namely (R0) without soaking, (R1) 1 hour soaking time, (R2) 2 Hour soaking time, (R3) 3 hour soaking time and the second factor consisted of three levels, namely (W1) concentration 100mg/ one liter of water, (W2) concentration 200mg/ one liter of water, (W3) concentration 300mg/ one liter of water. The variables observed were plant height, number of shoots, number of leaves, number of roots, root length, shoot fresh weight, crown dry weight. The length of soaking affects plant height, number of shoots of the patchouli. Root length, crown fresh weight, shoot dry weight, root fresh weight, root dry weight. The concentration of rootone-f is 200 mg one liter of water had an effect on all parameters observed. The interaction between soaking time and rootone-f concentration influences the variables of plant height, number leaves, root dry weight. The best interaction was found in the R3W2 treatment.

Keyword: patchouli, Soaking time, Rootone-F, Concentration