

## **ABSTRAK**

**Miranda Oktavini Gultom, NIM 4183520022 (2018). Pemberian Rootone F Terhadap Pertumbuhan Stek Pucuk Andaliman (*Zanthoxylum acanthopodium* DC.) di Taman Eden 100, Lumban Julu, Kabupaten Toba Samosir, Sumatera Utara.**

Penelitian ini bertujuan untuk mengetahui pengaruh Rootone F terhadap pertumbuhan stek pucuk andaliman (*Zanthoxylum acanthopodium* DC.) untuk setiap varietas dan untuk mengetahui konsentrasi terbaik Rootone F untuk pertumbuhan stek pucuk andaliman (*Zanthoxylum acanthopodium* DC.) untuk setiap varietas. Penelitian ini dilaksanakan di Taman Eden 100, Lumban Julu, Kabupaten Toba Samosir, Sumatera Utara. Penelitian ini terlaksana pada bulan Agustus sampai bulan Oktober 2022. Penelitian ini menggunakan Rancangan Acak Lengkap (RAL) Non-Faktorial. Jumlah perlakuan adalah 11 perlakuan dimana tiap perlakuan diberikan terhadap 3 varietas andaliman dan 10 pengulangan. Analisis data menggunakan Analisis Varians (ANAVA) dilanjutkan dengan uji Duncan (DMRT). Parameter yang diamati terdiri dari jumlah stek hidup, umur muncul tunas, jumlah tunas, panjang tunas dan jumlah daun. Hasil penelitian menunjukkan bahwa pemberian Rootone F terhadap stek pucuk andaliman simanuk dengan berbagai konsentrasi tidak memberikan pengaruh nyata terhadap persentase hidup stek 28 HST dan 42 HST, umur muncul tunas dan jumlah daun namun memberikan pengaruh sangat nyata terhadap panjang tunas. Pemberian Rootone F terhadap stek pucuk andaliman sikoreng dengan berbagai konsentrasi tidak memberikan pengaruh nyata terhadap persentase stek hidup 28 HST, umur muncul tunas dan jumlah daun 28 HST namun memberikan pengaruh nyata terhadap persentase stek hidup 42 HST, jumlah tunas, panjang tunas dan jumlah daun 42 HST dan pemberian Rootone F terhadap stek pucuk andaliman silokot tidak memberikan pengaruh nyata terhadap persentase hidup stek andaliman 28 HST dan 42 HST, umur muncul tunas, jumlah tunas dan jumlah daun 28 HST dan 42 HST namun memberikan pengaruh nyata terhadap panjang tunas. Pertumbuhan tanaman yang optimal pada konsentrasi R10 (500 mg/l) pada andaliman varietas sikoreng.

**Kata Kunci :** Andaliman (*Zanthoxylum acanthopodium* DC), Konsentrasi hormon, Rootone F, Pertumbuhan, Stek pucuk

## **ABSTRACT**

**Miranda Oktavini Gultom, NIM 4183520022 (2018). Rootone F Application on the Growth of Andaliman Shoots (*Zanthoxylum acanthopodium* DC.) in Eden Park 100, Lumban Julu, Toba Samosir Regency, North Sumatra.**

This study aims to determine the effect of Rootone F on the growth of andaliman shoot cuttings (*Zanthoxylum acanthopodium* DC.) for each variety and to determine the best concentration of Rootone F for the growth of andaliman shoot cuttings (*Zanthoxylum acanthopodium* DC.) for each variety. This research was conducted at Eden Park 100, Lumban Julu, Toba Samosir Regency, North Sumatra. This research was conducted from August to October 2022. This study used a Non-Factorial Completely Randomized Design (CRD). The number of treatments was 11 treatments where each treatment was given to 3 varieties of Andaliman and 10 repetitions. Data analysis used Analysis of Variance (ANAVA) followed by Duncan's test (DMRT). Parameters observed consisted of the number of live cuttings, the age at which shoots appeared, the number of shoots, the length of shoots and the number of leaves. The results showed that the application of Rootone F to andaliman simanuk shoot cuttings with various concentrations did not have a significant effect on the survival percentage of cuttings at 28 DAP and 42 DAP, the age of shoot emergence and number of leaves but had a very significant effect on shoot length. Rootone F application to andaliman sikoreng shoot cuttings with various concentrations did not have a significant effect on the percentage of live cuttings 28 DAP, age of shoots appearing and number of leaves 28 DAP but had a significant effect on the percentage of live cuttings 42 DAP, number of shoots, shoot length and number of leaves 42 DAP and application of Rootone F to andaliman silokot shoot cuttings did not have a significant effect on the survival percentage of andaliman cuttings at 28 DAP and 42 DAP, age of shoot emergence, number of shoots and number of leaves 28 DAP and 42 DAP but had a significant effect on length. Optimal plant growth at the concentration of R10 (500 mg/l) on andaliman sikoreng variety.

**Keywords :** Andaliman (*Zanthoxylum acanthopodium* DC), Hormone concentration, Rootone F, Growth, Shoot cuttings