

ABSTRAK

Ulfa Jamily Tanjung, 4161220024 (2020). Perbanyak Vegetatif Andaliman (*Zanthoxylum acanthopodium* DC.) dengan Menggunakan Zat Pengatur Tumbuh IBA di Taman Eden 100 Kecamatan Lumban julu Kabupaten Toba Samosir Provinsi Sumatera Utara.

Penelitian ini bertujuan untuk mengetahui pengaruh zat pengatur tumbuh IBA dan dosis maksimal yang terbaik terhadap kemampuan andaliman (*Zanthoxylum acanthopodium* DC.) untuk berkembang biak secara vegetatif menggunakan stek batang di habitat aslinya. Penelitian didisain secara acak kelompok (RAK) dengan 6 kali ulangan. Berdasarkan pengukuran pada 28 dan 42 hari setelah tanam (HST) tanaman andaliman yang memiliki kemampuan bertahan hidup dengan nilai rata-rata tertinggi yaitu pada konsentrasi 1000 ppm dengan persentase hidup (1.22 %) dan (1.04 %). Nilai rata-rata terendah pada 28 HST dikonsentrasi 2000 ppm (0.96 %), 42 HST di konsentrasi 2000 dan 3000 ppm dengan nilai yang sama (0.78 %). Nilai rata-rata optimal tinggi tanaman pada 28 HST (3.53 cm), 42 HST (2.67 cm) dikonsentrasi 1000 ppm. Nilai rata-rata terendah 28 HST dikonsentrasi 2000 ppm (2.15 cm), 42 HST dikonsentrasi 2000 dan 3000 ppm dengan nilai yang sama (1.3 cm). Nilai rata-rata optimal jumlah helai daun pada 28 HST dikonsentrasi 2000 ppm (1.86 helai), 42 HST dikonsentrasi 1000 ppm (1.858 helai). Nilai rata-rata terendah pada 28 dan 42 HST dikonsentrasi 3000 ppm (1.676 helai) dan (1.038 helai). Nilai rata-rata optimal panjang daun pada 28 HST (1.385 cm), 42 HST (1.32 cm) dikonsentrasi 0 ppm. Konsentrasi terendah 28 HST (1.158 cm), 42 HST (0.913cm) di 3000 ppm. Nilai rata-rata optimal lebar daun pada 28 HST dikonsentrasi 2000 ppm (1.003 cm), 42 HST dikonsentrasi 1000 ppm (1.015 cm). Konsentrasi terendah 28 HST 3000 ppm (0.95), 42 HST dikonsentrasi 2000 ppm (0.54 cm).

Kata kunci: Perbanyak vegetatif, Zat pengatur tumbuh IBA, Andaliman.



ABSTRACT

Ulfa Jamily Tanjung, 4161220024 (2020). Andaliman Vegetative Propagation (*Zanthoxylum acanthopodium* DC.) Using IBA Growth Regulatory Substances in Taman Eden 100, Lumban Julu District, Toba Samosir Regency, North Sumatra Province.

This study aims to determine the effect of IBA growth regulators and the best maximum dose on the ability of andaliman (*Zanthoxylum acanthopodium* DC.) to reproduce vegetatively using stem cuttings in their natural habitat. This study was designed in a randomized block design (RBD) with 6 replications. Based on measurements at 28 and 42 days after planting (DAP) andaliman plants have the ability to survive with the highest average value, namely at a concentration of 1000 ppm with a percentage of survival (1.22%) and (1.04%). The lowest average value at 28 DAP was concentrated at 2000 ppm (0.96%), 42 DAP at a concentration of 2000 and 3000 ppm with the same value (0.78%). The optimal mean value of plant height at 28 DAP (3.53 cm), 42 DAS (2.67 cm) was concentrated at 1000 ppm. The lowest average value of 28 DAP was concentrated at 2000 ppm (2.15 cm), 42 DAP was concentrated at 2000 and 3000 ppm with the same value (1.3 cm). The optimal average value of the number of leaves at 28 DAP was concentrated at 2000 ppm (1.86 strands), 42 DAP was concentrated at 1000 ppm (1,858 strands). The lowest average values at 28 and 42 DAP were concentrated at 3000 ppm (1,676 strands) and (1,038 strands). The optimal mean value of leaf length at 28 DAP (1,385 cm), 42 DAP (1.32 cm) was concentrated at 0 ppm. The lowest concentration was 28 DAP (1,158 cm), 42 DAS (0.913 cm) at 3000 ppm. The optimal mean leaf width at 28 DAP was concentrated at 2000 ppm (1,003 cm), 42 DAP was concentrated at 1000 ppm (1,015 cm). The lowest concentration was 28 DAP 3000 ppm (0.95), 42 DAP was concentrated 2000 ppm (0.54 cm).

Keywords: Vegetative propagation, IBA growth regulating agent, Andaliman.