

PENGARUH KONSENTRASI PENGAPLIKASIAN ROOT-UP TERHADAP PERTUMBUHAN STEK *INDIGOFERA ZOLLINGERIANA*

**Daniel
18011042**

Mahasiswa Program Studi Agroteknologi Universitas Mercu Buana Yogyakarta
e-mail: danieldaniel62021@gmail.com

INTISARI

Penelitian ini dilakukan pada bulan Januari 2023 sampai dengan bulan April 2023, Green House UPT Kebun Ternak Lahan Percobaan Kaliurang, Universitas Mercu Buana Yogyakarta. Tujuan dari penelitian ini untuk mengetahui pengaruh konsentrasi Hormon Root-Up terhadap pertumbuhan stek *Indigofera zollingeriana*. Penelitian ini merupakan percobaan faktor tunggal yang disusun dalam Rancangan Acak Lengkap (RAL) dengan tiga ulangan. Perlakuan yang diujikan adalah perlakuan konsentrasi pemberian Root-Up yaitu tanpa pemberian Root-up, konsentrasi pemberian Root-Up 50 mg\ liter air, Root-Up 100 mg\ liter air, Root-Up 150 mg\ liter air, Root-Up 200 mg\ liter, Root-Up 250 mg\ liter air. Data hasil pengamatan dianalisis dengan analisis varian taraf 5% dan diuji lanjut dengan DMRT taraf 5%. Hasil penelitian menunjukkan bahwa pemberian konsentrasi Root-Up berpengaruh nyata terhadap pertumbuhan stek batang *Indigofera zollingeriana*. pada variabel tinggi tunas (cm), diameter tunas (mm), jumlah daun (helai), panjang akar (cm), bobot segar (g), bobot kering(g) dan presentasi hidup (%)., pemberian Root-Up konsentrasi 150 mg/liter air memberikan pertumbuhan bibit stek *Indigofera zollingeriana* yang terbaik.

Kata kunci : *Konsentrasi, Root/Up, stek, dan Indigofera zollingeriana.*

THE EFFECT OF CONCENTRATION OF ROOT-UP APPLICATION ON THE GROWTH OF INDIGOFERA ZOLLINGERIANA CUTTINGS

**DANIEL
18011042**

Students of Agrotechnology Study Program, Mercubuana Univesity, Yogyakarta.
e-mail: danieldaniel62021@gmail.com

ABSTRAK

This research was conducted from January 2023 to April 2023 at the Green House of the Livestock Experimental Garden, Kaliurang, Mercu Buana University, Yogyakarta. The aim of this study was to determine the effect of Root-Up hormone concentration on the growth of Indigofera zollingeriana cuttings. This research was a single-factor experiment arranged in a Completely Randomized Design (CRD) with three replications. The treatments tested were different concentrations of Root-Up application, namely without Root-Up application, Root-Up concentration of 50 mg/liter of water, Root-Up 100 mg/liter of water, Root-Up 150 mg/liter of water, Root-Up 200 mg/liter of water, and Root-Up 250 mg/liter of water. The data obtained were analyzed using analysis of variance at the 5% level and further tested using the Duncan's Multiple Range Test (DMRT) at the 5% level. The results showed that the application of Root-Up concentration significantly affected the growth of Indigofera zollingeriana stem cuttings in terms of shoot height (cm), shoot diameter (mm), number of leaves, root length (cm), fresh weight (g), dry weight (g), and survival rate (%). The application of Root-Up concentration of 150 mg/liter of water resulted in the best growth of Indigofera zollingeriana cuttings.

Keywords: Concentration, Root-Up, cuttings, Indigofera zollingeriana.