

## **ABSTRAK**

### **PENGARUH KONSENTRASI DAN LAMA PERENDAMAN ZAT PENGATUR TUMBUH ATONIK TERHADAP PERTUMBUHAN BIBIT SETEK MANGGIS (*Garcinia mangostana* L.)**

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Penelitian ini bertujuan untuk mendapatkan konsentrasi zat pengatur tumbuh dan lama perendaman terhadap pertumbuhan bibit setek manggis (*Garcinia mangostana* L.). Penelitian telah dilaksanakan pada bulan Juli sampai September 2021, bertempat di Kebun Percobaan Fakultas Pertanian Universitas Siliwangi. Metode penelitian eksperimental menggunakan Rancangan Acak Kelompok (RAK) pola faktorial dengan jumlah perlakuan 9 diulang 3 kali. Faktor pertama adalah konsentrasi zat pengatur tumbuh atonik (Z) yang terdiri dari tiga taraf yaitu  $z_1=20$  ml/L air,  $z_2=35$  ml/L air dan  $z_3=60$  ml/L air. Faktor kedua adalah lama perendaman (L) yang terdiri dari tiga taraf yaitu  $l_1=20$  menit,  $l_2=35$  menit dan  $l_3=60$  menit. Data dianalisis menggunakan sidik ragam dengan uji F dan Uji Jarak Berganda Duncan dengan taraf nyata 5%. Hasil penelitian menunjukkan: 1) Terdapat interaksi antara konsentrasi dan lama perendaman zat pengatur tumbuh atonik terhadap tinggi tunas pada 40 hari setelah tanam dengan konsentrasi 60 ml/L air dan lama perendaman 20 menit memberikan rata rata tinggi tunas 2,45 cm. 2) Konsentrasi zat pengatur tumbuh atonik berpengaruh terhadap parameter tinggi tunas dengan konsentrasi 60 ml/L air dan lama perendaman 20 menit. perlakuan lama perendaman berpengaruh terhadap parameter tinggi tunas .

Kata Kunci: konsentrasi, zpt atonik, lama perendaman, setek manggis

## **ABSTRACT**

### **THE EFFECT OF CONCENTRATION AND DURATION OF IMMERSION ATONIC GROWTH REGULATORY SUBSTANCES ON SEED GROWTHSTICKING MANGGIS (*Garcinia mangostana* L.)**

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The aim of this study was to determine the concentration of growth regulators and immersion time on the growth of mangosteen cuttings (*Garcinia mangostana* L.). The research was carried out from July to September 2021, located in the experimental garden of the Faculty of Agriculture, Siliwangi University. The experimental research method used a factorial randomized block design (RBD) with 9 treatments repeated 3 times. The first factor was the concentration of atonic growth regulators (Z), which consisted of three levels, namely  $z_1=0.20$  ml/L water,  $z_2=35$  ml/L water and  $z_3=60$  ml/L water. The second factor is the immersion time (L) which consists of three levels, namely  $l_1=20$  minutes,  $l_2=35$  minutes and  $l_3=60$  minutes. The data were analyzed using variance with the F test and Duncan's Multiple Distance Test with a significance level of 5%. The results of the study: 1) There was an interaction between concentration and immersion time of atonic growth regulators on mangosteen cuttings. The shoot height parameter at 40 days after planting was 60 ml/L water concentration and 20 minutes soaking time showed an average shoot height of 2.45cm. The parameters of growth percentage and number of leaves showed no significant effect 2) The concentration of atonic growth regulators had a significant effect on shoot height parameters, a concentration of 60 ml/L water and an immersion time of 20 minutes.

Keywords: atonic zpt, concentration, soaking time, mangosteen cuttings