

## ABSTRAK

Bambang Arianto. **Uji Efektifitas Berbagai Zat Pengatur Tumbuh Alami Dan Sintetis Terhadap Pertumbuhan Stek Pucuk Jambu Air Kesuma Merah (*Syzygium aqueum*)**. Dibimbing oleh Ir. H. Abdul Rahman, MS dan Dr. Ir. Sumihar Hutapea, MS. Penelitian ini bertujuan untuk membandingkan respon pemberian berbagai zat pengatur tumbuh sintetis dan zat pengatur tumbuh alami terhadap pertumbuhan stek pucuk tanaman Jambu Air var.Kesuma Merah (*Syzygium equaeum*). Penelitian ini dilakukan pada lokasi yang terletak di Jalan Sederhana Dusun IX, Desa Sambirejo Timur, Kecamatan Percut Sei Tuan, Kabupaten Deli Serdang dengan ketinggian 20 m dpl. Penelitian dilaksanakan pada bulan Maret hingga Mei 2016. Penelitian di lakukan dengan bertanam di polibeg. Penelitian ini dilakukan dengan menggunakan Rancangan Acak Lengkap (RAL) Non Faktorial yang terdiri dari 6 faktor perlakuan yaitu :  $A_0$  = (Kontrol),  $A_1$  = Zat Pengatur Tumbuh Alami Ekstrak Bawang Merah,  $A_2$  = Zat Pengatur Tumbuh Alami Air Kelapa Muda,  $A_3$  = Zat Pengatur Tumbuh Alami Urine Sapi,  $A_4$  = Zat Pengatur Tumbuh Sintetis Liquinox Start,  $A_5$  = Zat Pengatur Tumbuh Sintetis Atonik,  $A_6$  = Zat Pengatur Tumbuh Sintetis Biggest. Hasil penelitian menunjukkan bahwa Pemberian zat pengatur tumbuh berpengaruh tidak nyata terhadap parameter tinggi tanaman dan jumlah daun pada umur 4 sampai 9 MST, tetapi berpengaruh nyata terhadap parameter persentase tumbuh, panjang akar dan jumlah akar. Perlakuan terbaik adalah pada perlakuan A5 (ZPT Atonik) yakni dengan pemberian kosentrasi 2 %/ 1 air.

Kata Kunci : Jambu Air Kesuma Merah, Zat Pengatur Tumbuh Alami dan Zat Pengatur Tumbuh Sintatis

## ABSTRACT

Bambang Arianto. **Test the Effectiveness of Various plant growth regulator on Growth Natural And Synthetic Air Cuttings Shoots Water Apple Kesuma Merah (*Syzygium aqueum*)**. Guided by Ir. H. Abdul Rahman, MS and Dr. Ir. Sumihar Hutapea, MS. This study aimed to compare the response of administration of various synthetic plant growth regulators and plant growth regulators naturally to the growth of the plant shoot cuttings water apple var.Kesuma merah (*Syzygium aquaeum*). This research was conducted at the site, located at Jalan Dusun Simple IX, Sambirejo East Village, District Percut Sei Tuan, Deli Serdang district with a height of 20 m above sea level. The study was conducted in March and May 2016. The study was done by planting in polybag. This study was conducted using a completely randomized design (CRD) non factorial consisting of six treatment factors, namely: A0 = (Control), A1 = plant growth regulator Natural Extract Shallot, A2 = plant growth regulator Natural Coconut water, A3 = Substances Growing Regulatory Natural Cow Urine, A4 = plant growth regulator Synthetic Liquinox Start, A5 = Synthetic Atonik plant growth regulator, A6 = Synthetic Biggest plant growth regulator. The results showed that administration of growth regulators did not affect the measurement of the plant height and number of leaves at the age of 4 to 9 MST, but the real impact on the percentage of growth parameters, root length and root number. The best treatment is in treatment A5 (PGR Atonik), namely the provision of 2% concentration / l of water.

Keywords: Water apple kesuma merah, plant growth regulator and plant growth regulator Natural syntactical