ABSTRAK

PENGARUH PEMBERIAN MACAM ZAT PENGATUR TUMBUH TERHADAP PERTUMBUHAN DAN KEBERHASILAN STEK TANAMAN KELENGKENG DIAMOND RIVER (*Dimocarpus longan* L.)

Oleh:

Angelusia Novita Charmila
Dibimbing oleh : Wahyu Widodo dan Maryana

Budidaya tanaman kelengkeng di Indonesia sering mengalami kendala, salah satunya tidak tercukupinya kebutuhan bibit dan mahalnya harga bibit. Permasalahan tersebut dapat diatasin dengan dilakukan perbanyakan tanaman secara vegetatif dengan stek batang. Keberhasilan suatu stek dapat dipengaruhi oleh berbagai faktor diantaranya zat pengatur tumbuh (ZPT). Zat Pengatur Tumbuh (ZPT) terdiri dari 2 macam komposisi, yaitu alami dan sintetik. Penelitian ini bertujuan untuk menentukan efektifitas zat pengatur tumbuh (ZPT) alami dan sintesis serta menentukan keberhasilan stek tanaman kelengkeng Diamond river.

Penelitian ini dilaksanakan pada Januari 2019 – Mei 2019 di Kebun Praktek Wedomartani Fakultas Pertanian, Universitas Pembagunan Nasional 'Veteran' Yogyakarta. Metode yang digunakan yaitu Rancangan Acak Lengkap (RAL) 1 faktor yang terdiri dari 10 perlakuan yang masing-masing diulang 3 kali. Perlakuan yang digunakan adalah A0 = Kontrol (Stek Kelengkeng tanpa ZPT), A1 = Stek Kelengkeng direndam dengan Air Kelapa, A2 = Stek Kelengkeng direndam dengan Ekstrak Bawang Merah, A3 = Stek Kelengkeng direndam dengan Urine Sapi, A4 = Stek Kelengkeng direndam dengan Atonik, A5 = Stek Kelengkeng direndam dengan Dekamon, A6 = Stek Kelengkeng direndam dengan Super Gib, A7 = Stek Kelengkeng dioles dengan Root Up, A8 = Stek Kelengkeng dioles dengan Nature Stek, dan A9 = Stek Kelengkeng direndam dengan PGPR**.** Data yang diperoleh dianalisis menggunakan analisis keragaman (Anova) pada taraf 5%. Untuk mengetahui ada beda nyata antara perlakuan dilakukan uji beda nyata terkecil (BNT) pada taraf 5%. Hasil penelitian menunjukan bahwa pemberian zat pengatur tumbuh Nature Stek memberikan pertumbuhan yang baik terhadap tanaman stek kelengkeng varietas Diamond River.

Kata kunci: Stek, Zat Pengatur Tumbuh

ABSTRACT

THE EFFECT OF VARIOUS PLANT GROWTH REGULATOR APPLICATION TOWARDS THE GROWTH AND THE SUCCESS OF DIAMOND RIVER LONGAN (*Dimocarpus longan* L.) CUTTINGS

By: Angelusia Novita Charmila
Supervised by: Wahyu Widodo Padmini and Maryana

Longan cultivation in Indonesia often experiences problems, one of them are not fulfilled the needs of seeds and the high price of seeds. These problems can be overcome by vegetative propagation by stem cuttings. The success of cuttings can be influenced by various factors including Plant Growth Regulators (PGR). Plant Growth Regulators (PGR) consist of 2 compositions, namely natural and synthetic. This study aimed to determine the effectiveness of natural and synthesis Plant Growth Regulators (PGR) and also the success of Diamond River Longan plant cuttings.

This research was carried out in January 2019 - May 2019 at the Greenhouse of the Faculty of Agriculture's experimental garden, Universitas Pembangunan Nasional "Veteran" Yogyakarta. This research used Completely Randomized Design (CRD) with 1 factor consisting of 10 treatments with 3 replications. The treatments used were A0 = Control (Longan Cuttings without PGR), A1 = Longan Cuttings soaked with Coconut Water, A2 = Longan Cutters soaked with Shallot Extract, A3 = Longan Cutters soaked with Cow Urine, A4 = Longan Cuttings soaked with Atonik, A5 = Longan Cuttings soaked with Dekamon, A6 = Longan Cutters soaked with Super Gib, A7 = Longan Cuttings smeared with Root Up, A8 = Longan Cuttings smeared with Nature Stek, and A9 = Longan Cuttings soaked with PGPR. The data obtained were analyzed using Analysis of Variance (ANOVA) at the test level of 5%. The mean difference between treatments was tested according to the Least Significance Different (LSD) with a level of 5%. The results showed that the application of the Nature Stek Plant Growth Regulators gave good growth on the Diamond River Longan cuttings.

Keywords: Cuttings, Plant Growth Regulator