

**PENGARUH ZAT PENGATUR TUMBUH *GROW QUICK R* TERHADAP
PERTUMBUHAN DAN PERKEMBANGAN PERAKARAN SEMAI
*CENDANA (Santalum album)***

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INTISARI

Cendana merupakan pohon yang menjadi primadona dan memiliki nilai jual yang sangat tinggi. Sedangkan di persemaian ditemukan adanya semai cendana berumur 2 bulan yang terlambat dilakukan penyapihan. Oleh karena itu, perlu dilakukan suatu upaya dalam pengadaan bibit cendana yang bermutu meskipun waktu penyapihan yang terlambat. Salah satunya yaitu dengan pemberian zat pengatur tumbuh *Grow Quick R* yang berguna untuk merangsang perkembangan perakaran sehingga pertumbuhan tinggi dan diameter dapat optimal.

Rancangan penelitian menggunakan *Completely Randomized Design* (CRD), dengan pemberian zat pengatur tumbuh *Grow Quick R* yang terdiri dari 4 perlakuan (0 ml/L air, 2 ml / L air, 4 ml / L air, dan 6 ml /L air). Dalam setiap perlakuan menggunakan 25 semai yang diulang sebanyak 3 kali, sehingga total semai yang digunakan sebanyak 300 semai. Data yang diperoleh dianalisis dengan menggunakan deskriptif kualitatif dan Analisis Varian Satu Arah (*One Way Anova*).

Hasil penelitian menunjukkan bahwa berdasarkan analisis anova, pemberian zat pengatur tumbuh *Grow Quick R* dengan konsentrasi (0 ml/L air, 2 ml / L air, 4 ml / L air, dan 6 ml /L air) tidak berpengaruh nyata terhadap pertumbuhan tinggi dan diameter semai cendana. Sedangkan dalam analisis deskriptif kualitatif diketahui bahwa pertumbuhan tinggi, diameter dan perkembangan perakaran terbaik pada pemberian zat pengatur tumuh *Grow Quick R* dengan konsentrasi 6ml/L air yaitu rata-rata tinggi 6,66 cm, rata-rata diameter 0,09 cm dan perkembangan perakaran yang terbentuk lebih kompak dibandingkan perlakuan lainnya.

Kata Kunci : *Santalum album*, *Grow Quick R*, pertumbuhan, perakaran semai

THE EFFECT OF GROW QUICK R GROWTH SUBSTANCE TO THE SANDALWOOD (*Santalum album*) GROWTH AND DEVELOPMENT

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ABSTRACT

Sandalwood is one of the favorite plants, which has a high selling rate. However, the researcher found that there are 2-months-old sandalwood seedlings that performed late weaning. Therefore, there should be an effort to procure the high quality sandalwood seedling in spite of the late weaning time. One of those efforts is applying the Grow Quick R growth substance to the Sandalwood seedlings to stimulate the root growth, so that the height and diameter of the Sandalwood seedlings is in the optimum value.

The design of this study is Completely Randomized Design (CRD), with the application of the Grow Quick R growth substance, which consists of four treatments (0 ml/L of water, 2 ml/L of water, 4ml/L of water, and 6ml/L of water). Each treatment uses 25 sandalwood seedlings that are repeated in 3 times. It means that the researcher uses 300 Sandalwood seedlings. The data analyze using the descriptive qualitative analysis and One Way Variant Analysis (One Way ANOVA).

The result of the ANOVA shows that the application of the Grow Quick R growth substance with those concentrations (0 ml/L of water, 2 ml/L of water, 4 ml/L of water, and 6 ml/L of water) does not significantly affect the height and diameter of Sandalwood seedlings. Meanwhile, the result of the descriptive qualitative analysis shows that the best height, diameter and root development is acquired by applying the Grow Quick R growth substance in the concentration of 6 ml/L of water. With that concentration of Grow Quick R growth substance, the average of the height is 6,66 cm, the average of diameter is 0,09 cm and the development of the root is more dense than the other treatments.

Keywords: *Santalum album*, Grow Quick R, growth, rooting seedling