

ABSTRAK

Herdina Ariefa, 2015. Pengaruh *Benzil Amino Purine* (BAP) dan Kinetin Terhadap Pertumbuhan Biji Sengon Solomon (*Paraserianthes Falcataria (L.) Nielsen*) Secara *In Vitro*, **dibawah bimbingan Liberty Chaidir dan Dikayani Lufti.**

Sengon solomon masih jarang dibudidayakan oleh petani sehingga benih masih sulit diperoleh, selain itu sengon solomon sulit berbunga dan berbuah. Saat ini, bibit sengon diperbanyak dengan cara konvensional sehingga dibutuhkan waktu yang lebih lama untuk menghasilkan bibit dalam jumlah yang banyak untuk memenuhi kebutuhan industri perkayuan. Salah satu cara adalah dengan menggunakan teknik kultur jaringan. Tujuan penelitian ini yaitu membandingkan pengaruh pemberian zat pengatur tumbuh sitokinin (BAP dan Kinetin) terhadap pertumbuhan tunas, daun, tinggi planlet, akar dan bobot basah tanaman sengon solomon secara *in vitro* dengan menggunakan metode Rancangan Acak Lengkap (RAL) dengan 1 faktor. Media yang digunakan WPM (*Woody Plant Medium*) dan ditambahkan konsentrasi sitokinin (BAP dan Kinetin) 2 mg/l, 4 mg/l, 6 mg/l. Penelitian dilakukan di Laboratorium Esha Flora pada bulan Maret-Mei 2015. Hasil penelitian menunjukkan bahwa perlakuan (S4) dengan konsentrasi kinetin 2 mg/l berpengaruh nyata dalam meningkatkan jumlah tunas, jumlah daun dan bobot basah tanaman sengon solomon secara *in vitro* sedangkan perlakuan (S0) kontrol berpengaruh nyata dalam meningkatkan tinggi planlet dan panjang akar tanaman sengon solomon secara *in vitro*.

Kata kunci : BAP, kinetin, kultur jaringan, sengon solomon, WPM.

ABSTRACT

Herdina Ariefa, 2015. The Effect of Benzyl Amino Purine (BAP) and Kinetin on the Growth of Seed Sengon Solomon (*Paraserianthes Falcataria* (L.) Nielsen) By In Vitro, **supervised by Liberty Chaidir and Dikayani Lufti.**

Sengon solomon is rare cultivated by planters so the seed is difficult to obtain. Sengon solomon in addition is difficult to flower and fruit. Currently, propagated of the seed sengon by conventional so that it was needed a longer time to produce seeds, many timber industry in the right amount to the need. One way is by using tissue culture technique. The purpose of the research is known to the effect cytokinin (BAP and Kinetin) on the growth of shoot, leaves, the length of the plant, the length of the root and wet weight of sengon solomon by in vitro with the metode used of Completely Randomized Design (CRD) with one factor. Used Woody Plant Medium (WPM) and added cytokinin (BAP and Kinetin) concentration 2 mg/l, 4 mg/l, 6 mg/l. The research was done in a laboratory of Esha Flora in March until May 2015. The result showed that treatment (S4) with a concertation of 2 mg/l kinetin is real effect in increasing the result of shoots, leaves, and wet weight sengon solomon by in vitro, while the treatment of (S0) control effect in increasing height and the length of the root sengon solomon by in vitro.

Keywords: BAP, kinetin, in vitro, sengon Solomon, WPM.

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