

**Pengaruh Konsentrasi Media Dasar *Murashige and Skoog* (MS)
dan Takaran Zat Pengatur Tumbuh *Benzyl Amino Purine* (BAP)
terhadap Induksi Tunas Durian (*Durio zibethinus*, Murr)**

INTISARI

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Durian (*Durio zibethinus*, Murr) merupakan tanaman MPTS (*Multi Purpose Tree Spesies*), yaitu tanaman serbaguna penghasil kayu dan non kayu. Kebutuhan bibit durian terus meningkat, sedangkan perbanyakan vegetatif secara konvensional masih terbatas. Perbanyakan durian secara *in vitro* akan memberikan peluang untuk menghasilkan bibit seragam, singkat dan banyak serta memungkinkan manipulasi tanaman yang resisten terhadap hama penyakit dan pembentukan kultivar unggul (Arumingtyas, 1997). Tujuan penelitian ini adalah mengetahui konsentrasi media dasar MS dan Takaran BAP yang sesuai untuk pertumbuhan jumlah tunas dan panjang tunas dalam induksi tunas Durian.

Penelitian dilaksanakan di Laboratorium Budidaya Jaringan Fakultas Pertanian Universitas Gadjah Mada Yogyakarta sejak bulan September 2005 sampai bulan Oktober 2006. Penelitian faktorial disusun dengan Rancangan Acak Lengkap atau CRD (*Completely Randomized Design*) dengan 2 faktor, yaitu faktor konsentrasi media dasar MS terdiri dari MS (M1) dan $\frac{1}{2}$ MS (M2). faktor takaran BAP (*Benzyl Amino Purine*) dengan konsentrasi 4 ppm (B1), 6 ppm (B2) dan 8 ppm (B3). Pada semua perlakuan ditambahkan 1 ppm GA₃ (*Giberelic Acid*)

Hasil penelitian menunjukkan bahwa perlakuan B2 (takaran BAP 6 ppm) mempunyai hasil terbaik terhadap jumlah tunas yang terbentuk dengan rata-rata jumlah tunas 2. Faktor perlakuan konsentrasi media dasar MS tidak berpengaruh terhadap jumlah tunas, volume kalus dan panjang tunas. Faktor perlakuan takaran BAP berpengaruh terhadap jumlah tunas, tetapi tidak berpengaruh nyata terhadap panjang tunas dan volume kalus. Interaksi kedua faktor perlakuan tidak berbeda nyata terhadap ketiga parameter.

Kata kunci : *Durio zibethinus*, Kultur tunas, Induksi Tunas, Konsentrasi MS, Takaran BAP

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**THE EFFECT OF MURASHIGE AND SKOOG MEDIUM (MS)
CONCENTRATION AND BENZYL AMINO PURINE (BAP) DOSAGE
TO DURIAN (*Durio zibethinus*, Murr) SHOOT INDUCTION**

ABSTRACT

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Durian (*Durio zibethinus*, Murr) is Multi Purpose Tree Species (MPTS) that can be used for wood and non-wood product. The Requirement for durian seedling is increasing. However propagation by conventional vegetatif method is still limited. Durian propagation by in vitro culture has the potential to obtain seedlings that are uniform in a relative short time and in large numbers. This method also enable manipulation to produce crops that are resistant to pest and disease and produce new varieties.

The aim of this reseach was to find out the concentration of MS media and BAP that is appropriate for the growth of durians bud. Observation was done on the number of buds and the length of buds. The research was conducted at Plant Tissue Culture Laboratory, Faculty of Agronomi, Gadjah Mada University from September 2005 until October 2006. The experimental design used was CRD factorial. The two factors were the concentration of MS medium (MS and ½ MS) and BAP concentration (4 ppm, 6 ppm and 8 ppm). All treatments were added with 1 ppm GA₃.

The result showed that 6 ppm BAP gave the best result for the member of buds with an average of 2 buds produced. The different concentration of MS media did not gave significant result on the member of buds, volume of callus and the length of buds. The concentration of BAP gave significant result on the member of buds, but not on the length at buds and callus volume. The interaction between the two factors also did not give significant effect on the three parameters.

Keyword : *Durio zibethinus*, Shoot Culture, Shoot Induction, MS Concentration, BAP Dosage

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