

Effects of BAP and Lighting Duration on Banana (*Musa paradisiaca* cv. Raja Bulu) Micropropagation

Title	Effects of BAP and Lighting Duration on Banana (<i>Musa paradisiaca</i> cv. Raja Bulu) Micropropagation
Author Order	2 of 3
Accreditation	2
Abstract	<p>This study aims to determine the best concentration of 6-Benzilaminopurine (BAP) and lighting duration for Raja Bulu banana cultivar micropropagation. The explant was taken from Pagubugan Village, Cilacap Regency, Central Java. The experiment was arranged as a Randomized Completely Block Design (RCBD) with two factors. The first factor was BAP, with concentration used were 0; 2.5; 5; 7.5 mg/L and the addition of Indole-3-acetic acid (IAA) 0.5 mg/L for all treatment. The second factor was lighting treatment. All explants were put in dark incubation for two weeks followed by light duration treatment: 12 hours of light/day and 16 hours of light/day for the next two weeks. The addition of BAP increased the number of shoots, but did not affect time for shoot initiation, shoot height, number of leaves and number of roots. The best BAP concentration was 2.5 mg/L with an average number of 3.2 shoots/explant. Scalps were formed in the treatment of BAP 5 mg/L and 7 mg/L after four weeks of incubation and has the potential to become new shoots. Nevertheless, the lighting duration did not affect all observed variables.</p>
Publisher Name	Department of Biology, Faculty of Mathematics and Sciences, Semarang State University . Ro
Publish Date	2021-12-10
Publish Year	2021
Doi	DOI: 10.15294/biosaintifika.v13i3.25173
Citation	
Source	Biosaintifika: Journal of Biology & Biology Education
Source Issue	Vol 13, No 3 (2021): December 2021
Source Page	284-289
Url	https://journal.unnes.ac.id/nju/index.php/biosaintifika/article/view/25173/12320
Author	PRITA SARI DEWI, S.P, M.Sc., Ph.D