

Pengaruh Teknik Sterilisasi dan Komposisi Medium terhadap Pertumbuhan Tunas Eksplan Sirsak Ratu

The Influence of Sterilization Technique and Medium Composition on The Shoots Growth of The Soursop Explants Ratu Variety

**Rico Hutama Sulistiyo^{1,*}, Zayyan Luthfiyyah¹, Buana Susilo¹, Lengga Nurullah Dalimartha¹,
Eko Chandra Wiguna¹, Nuniek Yuliana², Endry Nugroho Prasetyo²**

¹ PT. Gudang Garam, Tbk. Direktorat Produksi Gempol, Desa Summersuko, Kecamatan Gempol, Kabupaten Pasuruan, Indonesia

² Departemen Biologi FMIPA Insititut Teknologi Sepuluh Nopember, Jalan Gedung H, Kampus ITS Keputih Sukolilo, Surabaya, 60111, Indonesia

*Corresponding author: rico.sulistiyo@gudanggaramtbk.com

Abstract: Successful tissue culture of soursop plants requires proper sterilization techniques and hormone levels to produce good shoot growth. This study aims to determine the effect of sterilization techniques and medium composition of soursop explants, using factorial completely randomized design with 2 factors: sterilizing agents and medium composition, repeated 3 times. Hydrogen Peroxide, Mercury and Sodium Hypoclorite used as sterilizing agents. The medium composition used in this study consisted of 3 levels: MS 0, MS 0.5 ppm BAP + 0.05 ppm NAA and MS 1 ppm BAP + 0.1 ppm NAA. The best treatment is MS medium 0.5 ppm BAP + 0.05 ppm NAA with hydrogen peroxide sterilizing agent which produces the highest propagation level and lowest contamination level.

Keywords: Ratu soursop, sterilization, BAP, NAA

Dipublikasikan di

Bioedukasi: Jurnal Pendidikan Biologi (Universitas Sebelas Maret) Vol 11, No 1 (Februari, 2018)
<https://jurnal.uns.ac.id/bioedukasi/>