

Direct somatic embryogenesis in cucumber by using one-step culture method

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Abstract

The cotyledon explants of cucumber cultured in MS medium containing 2mg/l 2,4-D, 0.5mg/l NAA, 0.5mg/l BA and 9% sucrose could produce somatic embryo derived from the induced callus by one step culture. The frequency of somatic embryo induction was about 65%. It could produce 1–20 germinated or ungerminated somatic embryos per callus derived from the surface layer of calli after cultured in above medium. The germinated somatic embryos could develop into intact plants after treatment with 1mg/l BA in culture.

Key words: *Cucumis sativus* L., Somatic embryogenesis, Tissue culture

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