ISSN 1023-1072

Pak. J. Agri., Agril. Engg., Vet. Sci., 2011, 27 (1): 13-17

REGENERATION POTENTIAL OF 6-BENZYL AMINO PURINE (BAP) INDUCED CALLI OF *SOLANUM TUBEROSUM*

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ABSTRACT

Callogenesis is a potential source to create genetic variability in micropropagated plants. The present study was carried out to evaluate the effect of BAP and 2,4-D on callus induction of potato cv. Desiree and its regeneration potential. The shoot tips of Desiree were processed under sterile conditions and cultured on full strength MS basal medium supplemented with different concentrations of BAP (0, 1, 3, 4 and 5 mg L^{-1}) and 2,4-D (0.5, 1.0 and 2.0 mg L^{-1}). The regeneration potential of calli was analyzed on the basis of days taken to induce shoots. In addition callus morphology in both growth regulators (GRs) was recorded and compared. The MS medium containing 5 mg L^{-1} BAP was found optimal for the induction of callus (4.9 days) and shoots in the shortest time (25 days).

Keywords: *Solanum tuberosum,* benzyl amino purine, desiree, callogenesis

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