

Improvement of Pseudojубogenin Glycosides Production from Regenerated *Bacopa monnieri* (L.) Wettst. and Enhanced Yield by Elicitors

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Bacopa monnieri (L.) Wettst. was studied for shoot induction and regeneration on Murashige and Skoog (MS) medium supplemented with different plant growth regulators. Stem explants cultured on medium containing 0.1 mg/l thidiazuron (TDZ) resulted in the highest number of shoots (117 shoots/explant). Regenerated plants from medium with 0.5 mg/l TDZ contained the highest level of pseudojубogenin glycosides [(30.62 ± 1.29) mg/g dry wt] which was 2-fold higher than that of *in vitro* grown plants of the same age [(16.96 ± 1.49) mg/g dry wt]. Plantlets regenerated from 0.1 mg/l TDZ also showed a high level of pseudojубogenin glycosides [(27.94 ± 1.19) mg/g dry wt]. The effect of elicitor on pseudojубogenin glycosides accumulation in *B. monnieri* whole plant cultures was investigated. Chitosan at 150 mg/l and yeast extract at 2 mg/ml increased the pseudojубogenin glycosides production [(40.83 ± 2.24) mg/g dry wt and (40.05 ± 2.37) mg/g dry wt, respectively] after 7 days, which was 6-fold higher than in the control cultures.

Key words: Pseudojубogenin Glycosides, *Bacopa monnieri*, Elicitor