(05-2-01)

Plant regeneration from leaf and petiole derived callus of *Pulsatilla koreana* Nakai

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Abstract

An efficient protocol has been developed for mass propagation of *Pulsatilla koreana* from leaf and petiole derived callus. Optimal callus was developed from leaf and petiole explants on Murashige and Skoog (MS) medium supplemented with 4.52 μM 2,4- dichlorophenoxyaceticacid (2,4-D) and 2.22 μM 6-benzyladenine (BA). Adventitious shoots were regenerated (42.4%) from the surface of the callus on MS medium supplemented with 4.44 μM BA and 0.1 μM polyvinylpyrrolidone (PVP). Individual elongated shoots were rooted on half-strength MS medium containing different concentration of indole acetic acid (IAA). Regenerated plantlets with well developed shoots and roots were successfully transferred to soil. This *in vitro* propagation protocol might be useful for mass propagation as well as conservation of this plant.

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