

Effects of 2,4 Dichlorophenoxyacetic Acid and 6 Benzylaminopurine on Callus Induction of Leaf, Stem and Root Explants of *Crotalaria Pallida*

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ABSTRACT

Crotalaria pallida is an important medicinal herb. Due to rapid development and overexploitation, there is a need to mass propagate this herb before it extinct. The objective of this study was to determine the effect of 2,4-D and BAP on callus induction of *C. pallida*. The leaf, stem and root explants of *C. pallida* were cultured in MS medium supplemented with 2,4-D (1.0 to 5.0 mg/L) and BAP (0.5 to 2.5 mg/L) in single exposure or in combined exposure for callus induction. Based on the result of the study, callus was formed on leaf and stem explants except for root explants. Not all root explants produced callus. Earliest callus production was observed on the 6th day and maximum callus production was observed on the 18th day. Maximum callus induction for leaf explant was observed in MS medium supplemented with 2.0 mg/L 2,4-D + 1.0 mg/L BAP and 4.0 mg/L 2,4-D + 0.5 mg/L BAP (90%). Maximum callus production for the stem explant was observed in medium supplemented with 1.0 mg/L 2,4-D + 2.5 mg/L BAP (90%) and for the root explant maximum callus percentage was observed in medium supplemented with 2.0 mg/L 2,4-D (40%).