

# Effect of Callus Sub Culturing from different Type of Explants of *SAUSSUREA LAPPA* Clarke

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**Abstract**—*Saussurea lappa* Clarke is pharmacologically important plant belonging to family Asteraceae. It is enlisted in the most endangered plant list of CITES (Appendix – I). National Medicinal Plants Board, Govt. of India has recognized this plant as important species of high trade. An efficient protocol for callus induction and sub culture was developed. The various explant segments were inoculated on MS media supplemented with various concentrations of auxins and cytokinins in alone as well as in combinations were tested for best callus induction and sub culturing. The best callus in term of highest per cent culture responding and visual growth after the third subculture was observed on MS medium supplemented with 2.0 mg/l of 2,4-D and 2.0 mg/l of BAP from callus inducted on mature leaf explant. The best suited callus inducted from mature leaf explant was further tested up to seven sub cultures on best reported MS medium supplemented medium which reported above ninety seven per cent culture repose in all the successive sub cultures.

**Abbreviations:** MS - Murashige and Skoog (1962) basal medium; 2,4-D - 2,4-Dichlorophenoxyacetic acid; BAP - 6 Benzyl amino purine

**Keywords:** *Saussurea lappa*; endangered; In vitro; callus;