



RESEARCH ARTICLE :

Identification of best culture media from medicinal plant *Celastrus paniculatus* (Malkangni)

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SUMMARY : The present study was conducted with the objectives to find out the best culture media for callusing and to study shoot and root regeneration capacities of callus in the medicinal plant *Celastrus paniculatus* commonly known as Malkangni. Seven media were tried under the present study. Of them, five were of Murashige and Skoog's (MS) medium with various concentrations and combinations of growth hormones and the other two media were Gamborg B5 and White's media. Different combinations and concentrations of 2,4-Dichlorophenoxy acetic acid (2,4-D), Kinetin (Kn), benzyl amino purine (BAP), Naphthalene acetic acid (NAA) were used. With regard to callusing percentage and callus growth medium M₃ was the best, which contained MS+ 2mg/l BAP + 2mg/l Kinetin + 1mg/l IAA and NAA, followed by Medium M₄ (MS + 2mg/l Kinetin + 1mg/l NAA) found the best callusing and shoot regeneration in *Celastrus paniculatus*. For root regeneration containing 1/2 MS salts + 2mg/l BAP + 2mg/l Kinetin + 1mg/l IAA and NAA was found to be the best. Darkness was found to be favourable for root regeneration.

KEY WORDS:

Celastrus paniculatus,

MS media, Callus

culture, Nodal

segment

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