

## IN-VITRO MICROPROPAGATION POTENTIALITY OF MORUS INDICA L. CULTIVAR BC-259 FROM NODAL EXPLANTS

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### ABSTRACT

*Callus develops and axillary shoot proliferates from nodal explants from mature trees of Morus sp var. BC-259. Explants from nodal part of var. BC-259 were collected, surface sterilized and then cultured. MS medium used as culture media either supplemented with various concentrations of BAP (N<sup>6</sup>- benzyladenine) and Kinetin singly, or in combination with each other. 2, 4-D was also used in different concentrations to induce callogenesis. Microshoot generation was found more in use of 6-BAP than Kinetin. But, when Kinetin supplemented with different combinations of 6-BAP, it also induced organogenetic potential with equal efficiency. MS0 +1.5 mg / L 6-BAP, MS0 +2.0 mg / L 6-BAP, MS0 + 1.5 mg / L Kinetin, MS0 + 2.0 Kinetin and MS0 + 1.5 mg / L 6-BAP + 1.5 mg / L Kinetin exhibited development of highest percentage of microshoot generation. MS0 +1.0 mg / L 6-BAP and MS0 + 1.5 mg / L 6-BAP showed highest cumulative number of microshoots. Rooting induced more efficiently with IAA than other auxins. 0.5 mg / L dose of IAA was found to be potent than 1.0 mg / L dose. Four week old micropropagated plantlets were transferred to plastic pots, containing a mixture of soil: sand: peat moss (1:1:2) under glasshouse condition.*

**KEYWORDS:** BC-259, Culture Media, Explants, In-Vitro Clonally Propagation, Micro Shoots, Morus sp