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RESEARCH ARTICLE

In-vitro clonal propagation of *Asparagus racemosus* by nodal explants

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ABSTRACT

Asparagus one of the most important medicinal plants, found in India, China and other parts of the world, known to produce steroidal saponins called Shatavarins, which is used in many Ayurvedic and Homeopathic drugs. It is recommended in Ayurvedic texts for prevention and treatment of gastric ulcers as galatogogue and nervine tonic. An experiment was conducted to optimize the concentration of phytohormone for multiple shoot induction from different explants of *Asparagus racemosus*. Sterile culture were obtained when the explants were treated with (0.1%) bavestine, for 5-10 min, (70 %) alcohol for 2 min, (20%) sodium hypochlorite 5 min, (0.1%) HgCl₂ for 3 min, washed with sterile distilled water for 6 times. After proper treatment of explants with antimicrobial agent, explants were transferred to MS medium supplement with different combinations and concentration of auxins (2, 4-D and NAA) and cytokinins (BAP and Kinetin). Among the different combinations tested best shooting was found in MS medium supplemented with 2.0 mg/lit. Kn followed by 4.0 mg/l BAP.

Key words : *Asparagus*, *In-vitro*, Shooting, Auxin, Cytokinin, 2, 4-D: 2, 4-Dichlorophenoxy acetic acid, NAA: Naphthalene acetic Acid, Kn: kinetin

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