

RESEARCH ARTICLE

Optimization of phytohormone combinations for *in vitro* callogenesis in *Lavatera cashmeriana*: An endemic medicinal plant of Kashmir

■ AANISIA ZAHOOR, SUCHIT A. JOHN, PRADEEP K. SHUKLA, SADUF NISSAR AND PRAGATI MISRA

SUMMARY

The state of Jammu and Kashmir is bestowed with diverse variety of plant species especially medicinally important plants due to wide variations in its topography and microclimatic conditions. *Lavatera cashmeriana* Camb. (Malvaceae), which is endemic and endangered to Kashmir valley, has great medicinal importance. Its parts are being used to treat sore throat and common cold. In the present study various phytohormones auxins and cyotkinins either alone or in combination were used for the *in vitro* callogenesis of medicinally important herb of Kashmir. The excellent results from the seeds of *Lavatera cashmeriana* were observed on the Murashige and Skoog medium supplemented with 2,4-D and BAP. In future a fine tune and refinement of phytohormones are required in terms of the concentration for the organogenesis of medicinally important plant.

Key Words : *Lavatera cashmeriana*, MS, 2, 4-D, NAA, BAP

How to cite this article : Zahoor, Aanisya, John, Suchit A., Shukla, Pradeep K., Nissar, Saduf and Misra, Pragati (2016). Optimization of phytohormone combinations for *in vitro* callogenesis in *Lavatera cashmeriana* : An endemic medicinal plant of Kashmir. *Internat. J. Plant Sci.*, 11 (1): 93-97.

Article chronicle : Received : 21.11.2015; **Revised :** 01.12.2015; **Accepted :** 11.12.2015

MEMBERS OF THE RESEARCH FORUM

Author to be contacted :

PRAGATI MISRA, Department of Molecular and Cellular Engineering, Jacob School of Biotechnology and Bio-Engineering, Sam Higginbottom Institute of Agriculture, Technology and Sciences, ALLAHABAD (U.P.) INDIA
Email: pragatimisra3@rediffmail.com

Address of the Co-authors:

AANISIA ZAHOOR, SUCHIT A. JOHN AND PRADEEP K. SHUKLA, Department of Biological Sciences, School of Basic Sciences, Sam Higginbottom Institute of Agriculture, Technology and Sciences, ALLAHABAD (U.P.) INDIA

SADUF NISSAR, Department of Botany, University of Kashmir, SRINAGAR (J&K) INDIA