

Biotechnology for *in vitro* propagation of the *Magnolia x soulangeana* species

Main features

- the technology is intended for the production of planting material of *Magnolia x soulangeana* (magnolia) through *in vitro* propagation.
- the working methodology consists of inoculating explants (meristems with 1-2 leaf primordia) on MS culture medium (Murashige - Skoog, 1962) supplemented with 0,5 mg/l BAP (benzylaminopurine), 0,1 mg/l GA₃ (gibberellic acid), 1 mg/l ANA (naphthaleneacetic acid), 5 mg/l ascorbic acid, under sterile conditions in a laminar airflow hood; transfer of explants that have started growing on MS medium supplemented with 0,7 mg/l BAP and 0,5 mg/l kinetin in order to stimulate regeneration and shoot elongation; transfer of regenerated microshoots in the multiplication phase to MS culture medium with mineral salts reduced by half, supplemented with 4 mg/l IBA (indolylbutyric acid) in order to induce rhizogenesis; acclimatization and fortification of *in vitro* regenerated plants.



Aspects of *in vitro* culture



Plants acclimatized and fortified in pots and in the soil