## Mass propagation of ornamental plants through tissue culture S.A. Ghaem maghami

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The application of tissue culture techniques for regeneration and commercial propagation of whole plants is a more recent development in agriculture. It has become an important altrnative for more conventional propagation procedures for a wide range of plant species. The widespread use of in vitro cloning is indicative that it has many advantages.

- Propagation in vitro is more rapid than in vivo.
- Production of fungal, bacteria and virus free plants
- The growth of in vitro propagated plants is often stronger than those cloned in vivo, this is mainly due to rejuvenation and / or the fact that they are disease free.
- In vitro propagation can produce great savings in fuel cost, greenhouse space, etc. The area needed for raising stock plants and propagating beds is decreased by in vitro culture.

In this paper an in vitro propagation protocol for Saintpaulia ionatha and Ficus benjamina is described.

If explants are sensitive to antibiotics, growth suppression and chlorosis are observed. Bacteri-static antibiotics only stop the growth of bacteria and for this reason, are not suitable for eliminating bacterial contamination. Their application along with bactericidal antibiotics gives the best results.

The usage of fungicides is the same as that of antibiotics. Amphotricin B and nystatin are more recommended.