Factors Affecting on Growth of Transformed Plant Tissue (II) - Effect of inorganic salts

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Abstract

Hairy roots induced by Agrobacterium rhizogenes also offer a valuable source of root-derived phytochemicals that are useful as pharmaceuticals, cosmetics, pigments and food additives. These hairy roots can also synthesize more than a single metabolite and therefore prove economical for commercial production purposes. Transformed hairy roots of many plant species have been widely studied for the in vitro production of secondary metabolites. Transformed root lines can be a promising source for the constant and standardized production of useful metabolites of plant. Also, hairy roots cultures follow a definite growth patterns, the metabolite production may not be related hairy roots growth. Hairy roots have faster elongation and more branches than normal cultured root. In plant tissue cultures, growth and metabolites production are influenced by nutritional factors. In this study, we investigate factors affecting enhancing of growth and metabolite production such as inorganic salts.

References

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