

Transfer of human interferon γ -oleosin genes to safflower (*Carthamus tinctorius* L.)

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ABSTRACT

The use of plants as a source of medicine is traced back to long time ago. Modern biotechnology provides the possibility of production of valuable protein such as pharmaceutical protein in plant. In this study human Interferon gamma-oleosine genes under the control of Napin promoter were transferred to *Carthamus tinctorius* L. (safflower) by *Agrobacterium tumefaciens* strain LBA4404. Cotyledonal explants from safflower plant (*Carthamus tinctorius* L.) Padideh cultivar were used for transformation. The transformed plants were screened on MS medium containing 0.09 mg L⁻¹ NAA, and 1 mg L⁻¹ TDZ containing 40 mg L⁻¹ kanamycin. Presence of transgenes was confirmed using polymerase chain reaction (PCR). Characterization of the transgenic plants is going on.

Key Words

Agrobacterium, *Carthamus tinctorius* L., Human Interferon Gamma-Oleosin Genes, Molecular Farming, Transformation