

عنوان مقاله:

A Simple and Efficient Direct Shoot Organogenesis Method Using Leafy Petiole Explants in *Gerbera jamesonii* 'Royal Soft Pink'

محل انتشار:

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نویسندگان:

Farzad Nazari - *Department of Horticultural Science, College of Agriculture, University of Kurdistan, Sanandaj, Iran*

Morteza Khosh-Khui - *Department of Horticultural Science, College of Agriculture, Shiraz University, Shiraz, Iran*

Pejman Azadi - *Agriculture Biotechnology Research Institute of Iran, Karaj, Iran, Ornamental Plants Research Institute of Iran, Mahallat, Iran*

خلاصه مقاله:

The gerbera market would benefit from an efficient and simple protocol for high rate regeneration for propagation and genetic engineering. With these objectives, this investigation was done on shoot regeneration via direct organogenesis from leafy petiole explants of *Gerbera jamesonii* 'Royal Soft Pink'. Murashige and Skoog (1962) (MS) medium was supplemented with 0.1 mg L⁻¹ indole-3-acetic acid (IAA) and additions of various concentrations and combinations of thidiazuron (TDZ: 0, 0.5 and 1 mg L⁻¹) and N6-benzyladenine (BA: 0, 2, 4 and 6 mg L⁻¹). Higher values were recorded for a number of shoots on leafy petiole on the MS medium containing BA in combination with TDZ than on media containing BA or TDZ solely. The highest evaluations for percentage of shoot regeneration (85.43 %) and number of shoots per explant (12.88) was recorded in the medium supplemented with 0.1 mg L⁻¹ IAA and 1.0 mg L⁻¹ TDZ plus 4.0 mg L⁻¹ BA. For rooting of the shoots, MS medium supplemented with three concentrations of - naphthaleneacetic acid (NAA: 0.5 and 1 mg L⁻¹) together with control (MS only) were tried. The optimal results for rooting of shoots were obtained on MS medium containing 1 mg L⁻¹ NAA. The in vitro raised plantlets were acclimatized and transferred to greenhouse successfully.

کلمات کلیدی:

direct regeneration, gerbera, organogenesis, petiole, TDZ

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