Efficient Method for Inducing Embryos from Isolated Microspores of Durum Wheat

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Abstract : Durum wheat represents an attractive species to study androgenesis via isolated microspore culture in order to increase the efficiency of androgenic yield in recalcitrant species such as in induction embryogenesis. We describe here an efficient method for inducing embryos from isolated microspores of durum wheat. It is shown that this method, associated with cold alone or cold plus mannitol pretreatment, or mannitol alone of the spikes kept within their sheath leaves during different times, has significant positive effects on embryo production. The aim of this study was, therefore, to test the effect of mannitol 0,3M and cold pretreatment on the quality and quantity of embryos produced from microspore culture from wheat cultivars.

Keywords : in vitro embryogenesis, isolated microspores culture, durum wheat, pretreatments, mannitol 0.3m, cold pretreatment

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