

# الإكثار المعملي الدقيق لنبات الطرطوفة والكشف عن التغيرات الجينية باستخدام العلامات الجزيئية لـ د. Ãä

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# In vitro PROPAGATION OF JERUSALEM ARTICHOKE AND THE DISCOVERY OF THE GENETIC VARIATION USING MOLECULAR DNA MARKER

BY

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Appendix 1: Murashige and Skoog Medium. Composition and Preparation.

Constituent	Concentration of stock solution (mg/litre)	Volume of stock per litre of medium (ml)	Storage of stock solution
Major inorganic nutrients :			
NH <sub>4</sub> NO <sub>3</sub>	33.000		
KN0 <sub>3</sub>	38.000		
CaCl <sub>2</sub> 2H <sub>2</sub> O	8800	50	+4°C
MgSO <sub>4</sub> .7H <sub>2</sub> O	74000		
KH <sub>2</sub> PO <sub>4</sub>	3400		
Trace elements:			
KI	166		
H <sub>3</sub> BO <sub>3</sub>	1240		
MnSO <sub>4</sub> .4H <sub>2</sub> O	4460		
ZnSO <sub>4</sub> .7H <sub>2</sub> O	1720	5	+ 4°C
Na <sub>2</sub> MoO <sub>4</sub> .2H <sub>2</sub> O	50		
CuSO <sub>4</sub> .5H <sub>2</sub> O	5		
CoCl <sub>2</sub> .6H <sub>2</sub> O	5		
Iron source :			
FeSO <sub>4</sub> .7H <sub>2</sub> 0	5560	5	+ 4°C
Na <sub>2</sub> EDTA.2H <sub>2</sub> O	7460		
Organic supplement:			
Myo-Inositol .	20 000		
Nicotinic acid	100		
Pyridoxine-HCI	100	5	-20°C
Thiamine-HCl	100		(in 5 ml
Glycine	400		aliquots)
Carbon source :			
Sucrose		Ass as solid	
		(30g/Iitre)	

**Appendix 2: Structure of the Protein marker** 

Protein	MW
Myosin	205
Beta-Galactosidase	116
Phoslphorylase B	97.4
Bovine Serum Albumin	69
Glutamic dehydrogenase	55*
Lactic dehydrogenase	36.5
Carbon anhydrase	29
Trypsin inhibitor	20.1
Lysozyme, chicken egg white	14.3
Aprotinin, Bovine Lung	6.25
Inulin Beta chain	3.5

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