Materials List for:

Ice-Cap: A Method for Growing *Arabidopsis* and Tomato Plants in 96-well Plates for High-Throughput Genotyping

Shih-Heng Su[1], Katie A. Clark[2], Nicole M. Gibbs[1], Susan M. Bush[1], Patrick J. Krysan[1]

[1]Horticulture Department, University of Wisconsin-Madison

[2]Department of Zoology, Oregon State University

Correspondence to: Patrick J. Krysan at fpat@biotech.wisc.edu

URL: http://www.jove.com/video/3280/

Materials

Name	Company	Catalog Number	Comments
GenoGrinder	Spex/CertiPrep, Metuchen, NJ	2000 Geno/Grinder	Machine for shaking Root Plates for DNA extraction
ABgene Thermo-Sealer	ABgene Limited	AB-0384	Manual heat sealing machine used to Root Plates prior to tissue disruption
Centrifuge equipped with swinging microplate carriers	Beckman Coulter Inc.	Allegra 25R	Any centrifuge with swinging microplate carriers would be suitable
MicroFill Microplate Dispenser	BioTek	AF1000A	Automated liquid dispenser for filling microplates
Bialetti brand 17x11 inch Commercial Large Cookie Sheet	Target Department Store	www.bialetti.com	This specific cookie sheet has the ideal depth for Ice-Cap
Custom Made Metal Rack	Hardware Store		See text for full description
33 Liter plastic storage box	Target Department Store	Sterilite Brand	For Ice-Cap Fountain. Plastic storage box large enough to hold the 17x11 inch cookie sheet
30 gallon per hour Fountain Pump	Sunterra	104506	Small submersible fountain pump available at garden supply stores
Hose for fountain pump	Any Supplier		Hose compatible with fountain pump
Plastic Clamp	Hardware Store		Clamp to hold hose to cookie sheet
Clear plastic lids from Falcon Microtest flat bottom 96-well polystyrene plates	BD Biosciences	351172	Clear plastic lids for covering Ice-Cap Seedling Plates
3M Micropore surgical tape	Fisher Scientific	19-027-761	
3/32-inch diameter stainless steel balls	Hartford Technologies, Rocky Hill, CT	034-006-1K	Used to disrupt root tissue after harvest
3 inch Elastic hair bands	Local Grocery Store		Used to secure Root Plate to Seedling Plate
4 mm diameter wooden skewers	Local Grocery Store		These skewers are typically used to prepare kabobs
Fisher Scientific Nunc brand, 1-mL filter plates without frit	Fisher Scientific	278012	96-well Seedling Plates with holes in bottom.
Fisherbrand 96-Well Tall-Chimney PCR Plate	Fisher Scientific	14-230-242	96-well Root Plates
Agar - cell culture tested	Sigma-Aldrich	A1296	
4-Morpholinoethanesulfonic acid (MES)	Sigma-Aldrich	M2933	
Murashige and Skoog (MS) basal salt mixture	Sigma-Aldrich	M-5524	

Copyright © 2011 Creative Commons Attribution-NonCommercial License

Easy Peel heat sealing foil	ABgene Limited	AB-0745	Heat sealing film for sealing Root Plates prior to tissue disruption
Duck Brand Extra Wide Packaging Tape, 3.00" x 54.6 yd	Office Max	Item no. 21242139	Adhesive tape for sealing microplates containing DNA extracts for storage
Sealing Roller	Bio-Rad	MSR-0001	Hand held rolling tool for pressing adhesive sealing tape onto microplates
96-well metal thermal block	Cole-Parmer	36400-66	Used to freeze the Root Plates for tissue harvest
Whatman Filter paper	Whatman, GE Healthcare	1002 090	Used for surface sterilizing seeds
Disposable Pasteur Pipette	Fisher Scientific	13-678-6A	5 ¾"disposable Pasteur pipette used for transferring seeds to Seedling Plate
Pyrex baking dish (20 cm x 30 cm)	Target Department Store		Used to construct a dry ice/ethanol bath.

Copyright © 2011 Creative Commons Attribution-NonCommercial License