

Materials List for:

Hydroponics: A Versatile System to Study Nutrient Allocation and Plant Responses to Nutrient Availability and Exposure to Toxic Elements

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URL: <https://www.jove.com/video/54317>

DOI: [doi:10.3791/54317](https://doi.org/10.3791/54317)

Materials

Name	Company	Catalog Number	Comments
For seed sterilization			
Bleach	The Clorox Company	NA	The regular bleach www.cloroxprofessional.com
Hydrochloric acid	Fisher Scientific	A144-500	
Desiccator body	Nalgene	D2797 SIGMA	Marketed by Sigma-Aldrich
Desiccator plate	Nalgene	5312-0230	Marketed by Thermo Scientific
For one quarter MS medium preparation			
MES	Acros Organics	172591000	4-Morpholineethanesulfonic acid hydrate
Murashige and Skoog (MS)	Sigma-Aldrich	M0404-10L	
KOH	Fisher Scientific	P250-500	
Phytoagar	Duchefa Biochemie	P1003.1000	
Square plate	Fisher Scientific	0875711A	Disposable Petri Dish With Grid
For seed plating			
Filter paper	Whatman	1004090	
Toothpick	Jarden Home Brands	NA	
Aluminum foil	Reynolds Wrap	NA	Standard aluminum foil
Micropore tape	3M Health Care	19-898-074	Surgical tape; Marketed by Fisher Scientific
For hydroponic solution preparation			
KNO ₃	Fisher Scientific	BP368-500	
KH ₂ PO ₄	Fisher Scientific	P386-500	
MgSO ₄	Fisher Scientific	M63-500	
Ca(NO ₃) ₂	Acros Organics	A0314209	
H ₃ BO ₃	Sigma	B9645-500G	
MnCl ₂	Sigma-Aldrich	M7634-100G	
ZnSO ₄	Sigma	Z0251-100G	
Na ₂ MoO ₄	Aldrich	737-860-5G	
NaCl ₂	Fisher Scientific	S271-1	
CoCl	Sigma-Aldrich	232696-5G	
FeEDTA	Sigma	E6760-100G	
"Stericup & Steritop" bottle	Milipore Corporation	SCGVU02RE	Micronutrient container www.milipore.com
For root wash buffer preparation			
EDTA	Acros Organics	A0305456	

Tris	Fisher Scientific	BP154-1	
For hydroponic setup			
Autoclavable foam tube plug	Jaece Industries Inc.	L800-A	Identi-Plugs fit to holes with 2R = 6-13 mm
Foam Board	Styrofoam Brand Dow	ESR-2142	Thickness is 1/2 inches
Cork borer	Humboldt	H-9662	Cork Borer Sets with Handles, , Plated Brass Set of 6, 3/16" to 1/2" OD Size
Air pump	Aqua Culture	MK-1504	
Air pump	Marketed by Wal-mart Stores, Inc.		
Airline tubing and aquarium bubble stones	Aqua Culture	Tubing: 928/25-S	
Airline tubing and aquarium bubble stones	Marketed by Wal-mart Stores, Inc.	Stone: ASC-1	
Other			
Ethanol	Fisher Scientific	A995-4	Reagent Alcohol
Cadmium Chloride (CdCl ₂)	Sigma-Aldrich	10108-64-2	