

Materials List for

Estimation of Crystalline Cellulose Content of Plant Biomass using the Updegraff Method

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jove.com/video/62031

Materials

Name	Company	Catalog Number	Comments
Acetone	Fisher Chemical	A18-500	Used in the protocol
Anthrone	Sigma Aldrich	90-44-8	For colorimetric assay
Centrifuge	Eppendorf	5424	For centrifugation
Chloroform	Mallinckrodt	67-66-3	Used in the protocol
Ethylenediaminetetraacetic acid (EDTA)	Sigma Aldrich	6381-92-6	Used in the protocol
Ethanol	Millipore Sigma	EM-EX0276-4S	Used in the protocol
Filter paper	Whatman	1004-090	Positive control
Glacial acetic acid	Sigma	SKU A6283	Used in the protocol
Heat block/ ThermoMixer F1.5	Eppendorf	13527550	For controlled temperatures
Incubator	Fisherbrand	150152633	Used for drying plant sample
Measuring Scale	Mettler Toledo	30243386	For specific quantities
Methanol 100 %	Fisher Chemical	A412-500	Used in the protocol
Microplate (96 well)	Evergreen Scientific	222-8030-01F	For anthrone assay
Nitric acid	Sigma Aldrich	695041	Used in the protocol
Polypropylene Microvials (2 mL) / screw capped tubes	BioSpec Products	10831	For high temperatures
Spectrophotometer(Multimode Detector)	Beckmancoulter DTX880	1000814	For measuring absorbances
Spex SamplePrep 6870 Freezer / Mill	Spex Sample Prep	68-701-15	For grinding plant tissues into fine powder
Sulphuric acid	J.T.Baker	02-004-382	Used in the protocol
Sodium dodecyl sulfate (SDS)	Sigma Aldrich	151-21-3	Used in the PSB buffer
Tubes (2 mL)	Fisher Scientific	05-408-138	Used in the protocol
Tris Hydrochloride	Sigma Aldrich	1185-53-1	Used in the PSB buffer
Ultrapure distilled water	Invitrogen	10977	Used in the protocol
Vacuum dryer (vacufuge plus)	Eppendorf	22820001	For drying samples
Vortex mixer	Fisherbrand	14-955-151	For mixing

Waterbath	Thermoscientific	TSGP02PM05	For temperature controlled conditions at specific steps
Weighing Paper	Fisher Scientific	09-898-12A	Used in the protocol