

Materials List for

Non-destructive SPE-UPLC-based Quantification of Aflatoxins and Stilbenoid Phytoalexins in Single Peanut (*Arachis spp.*) Seeds

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Materials

Name	Company	Catalog Number	Comments
Acetone, Optima	Fisher Scientific	A929-4	
Acetonitrile, Optima	Fisher Scientific	A996-4	
Acquity BEH C18 2.1 x 5mm Van-Guard pre-column	Waters Corporation	186003975	
Acquity BEH C18 3 x 100mm column	Waters Corporation	186004661	
Acquity BEH C18 2.1 x 100mm column	Waters Corporation	186002352	
Aflatoxins B1, B2, G1, and G2	Sigma-Aldrich	A9441-1VL	Dissolve the contents of the commercial vial in 5 mL of methanol to obtain 5 µg/mL for aflatoxins B1 and G1 and 1.5 µg/mL for B2 and G2
Aflatoxin B1 (1mg)	Sigma-Aldrich	A6636-1MG	
Aflatoxin B2 (1mg)	Sigma-Aldrich	A9887-1MG	
Aflatoxin G1 (1mg)	Sigma-Aldrich	A0138-1MG	
Aflatoxin G2 (1mg)	Sigma-Aldrich	A0263-1MG	
Aflatoxin M1 (10 µg)	Sigma-Aldrich	CRM46319	
Agar, Granulated (2kg)	Becton Dickinson	BD214510	
Alumina oxide basic (60-325 mesh)	Fisher Scientific	A941-500	
Basal medium	Murashige and Skoog	M5519	
Bead Ruptor 24	Omni International	19-042E	
Beaker (1000mL)	Corning (Pyrex)	10001L	
Beaker (250mL)	Corning (Pyrex)	1000250	
Beaker (400mL)	Corning (Pyrex)	1000400	
Beaker (600mL)	Corning (Pyrex)	1000600	
Blade, scalpel	Feather	#10	
Centrifuge (LSE Compact)	Corning	Model: 6755	
Centrifuge, micro	Corning	Model: 6770	

Ceramic beads (2.8 mm)	Omni International	19-646	
Ceramic beads (6.5 mm)	Omni International	19-682	
Chromeleon 7 series Software	Thermo Scientific		
Drill bit	Kyocera	07896	1.6 mm
Drill bit	Kyocera	07357	2.0 mm
Drill bit	Kyocera	07985	2.34 mm
Ethanol (200 proof)	Decon Labs	2805M	
Evaporator, nitrogen	organimation	11106	6-position
Excel, Microsoft	Microsoft	Office 365	
Filter paper (#4)	Cytiva Whatman	1004-090	
Filter paper cutter, stainless steel (ID 11.5mm)	Unknown		
Filter paper, glass fibre	Cytiva Whatman	934-AH	
Flask (2800mL)	Corning (Pyrex)	44202XL	
Florisil (100-200 mesh)	Fisher Scientific	F101-500	
Forceps	Integra Lifescience (Miltex)	PM-0300	
Formic acid (88%, ACS)	Fisher Scientific	A118P-500	
Freezer (-80°C)	Fisher Scientific	TSX70086D	
Funnel (15 x 80mm)	DWK Life Sciences (Kimax)	2902060	
Gelzan (medium)	Caisson Labs	G024	
Glass rod (custom)	Custom made		
Glass wool	Corning (Pyrex)	3950	
Handle, scalpel	Feather	#7	
Hemocytometer	Hausser Scientific	3100	
Hydrogen peroxide	Fisher Scientific	H325-4	30%, Certified ACS
Ice bucket, round with lid	Corning	432122	
Incubator	Percival	136VL	
Kimtech SCIENCE Brand Kimwipes	Kimtech	34120	8.2" x 4.39"
Kimtech SCIENCE Brand Kimwipes	Kimtech	34256	16.4" x 14.43"
Lab coat	Cenmed	B113660SBXL	
Methanol, Optima	Fisher Scientific	A454-4	
Mini column rack (custom)	Custom made		
Mixer, touch (maxi mix II)	Thermolyne	37600 (model 231)	
Nitrile gloves	Microflex	XC310M	
Nitrogen gas, compressed (ultra high purity)	Jones Welding		
Paper towel	Georgia-Pacific	20023 (D400)	
pH meter	Fisher Scientific (Accumet)	13-636-AB15	
pH/ATC electrode	Fisher Scientific (Accumet)	13-620-111	
PhCR Photochemical Reactor	Waters (Vicam)	600001222	
Pipette, pasteur	Fisher Scientific	13-678-20D	9"
Pipettor (1 mL) (Reference 2)	Eppendorf	4924000088	
Pipettor (10 µL) (Reference)	Eppendorf	022470051D	
Pipette tips: 10 µL, 200 µL, 1 mL	Eppendorf	F144054M	
Pipettor (200 µL)(Ergofit)	Fisher Scientific	12-146-679	
Plates, petri (100x15mm)	Fisher Scientific	FB0875713	
Potato Dextrose Agar (500g)	Becton Dickinson	BD213400	
Reinforced bead tube (2 mL)	Omni International	19-660	

Reinforced bead tube (7 mL)	Omni International	19-651	
Repipettor, Dispensette III (10mL)	Brandtech	4701141	
Resveratrol	Sigma-Aldrich	R5010-100MG	
Scoop (custom)	Custom made		
screwcap jar (250 mL)	Corning (Pyrex)	1395250	
Silica gel, spherical (200-400 mesh)	Supelco	97727-U	100 g
Sodium Hydroxide	Fisher Scientific	S318-500	
SPE extract clean 1.5-mL polypropylene column	American Chromotography Supplies	SP-5122382	
SPE extract clean PP frits (for 1.5 mL minicolumn)	American Chromotography Supplies	SP-3119414	
Spectrophotometer, UV-visible	Fisher Scientific	14-385-351 (Genesys 50)	
Test tube	Corning (Pyrex)	982516X	16x125mm
Test tube (Disposable)(16x125mm)	Fisher Scientific	14-961-31	
Test tube (Disposable)(150x250mm)	Fisher Scientific	14-961-34	
Thermo Vanquish DAD detector (UPLC)	Thermo Scientific	VF-D11-A-01	
Thermo Vanquish Fluourescence detector (UPLC)	Thermo Scientific	VF-D51-A	
Thermo Vanquish quaternary pump F (UPLC)	Thermo Scientific	VF-P20-A	
Thermo Vanquish Split Sampler FT (UPLC)	Thermo Scientific	VF-A10-A-02	
Tween 20 (polysorbate 20) (enzyme grade)	Fisher Scientific	BP337-500	
Vial caps (4mL)	Fisher Scientific	C4015-75A	
Vial caps (autosampler)	Fisher Scientific	C4010-60A	
Vials & caps (16 mL)	Thermo Scientific	B7800-4	
Vials, glass (4mL)	Fisher Scientific	C4015-1	
Vials, polypropylene (autosampler) (400mL)	Fisher Scientific	C4010-11	
Water, Optima	Fisher Scientific	W6-4	