

Materials List for:

# Soil Lysimeter Excavation for Coupled Hydrological, Geochemical, and Microbiological Investigations

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## Materials

Name	Company	Catalog Number	Comments
Measuring tape	Any	Any	Preventing cross-contamination of samples is crucial. Therefore, it is helpful to have multiple putty knives to isolate voxel boundary.
Brilliant Blue dye	Waldeck GmbH &Co	B0770	Rulers can be used to draw grids. The sampling strategy can be modified based on individual experiments.
Soil Corer	AMS	56975	Any commercially manufactured Brilliant Blue dye can be used.
75% Ethanol	Any	Any	A Nikon D90 camera and 50 mm lens were used for photography. Any high resolution camera and lens can be used for this purpose.
Spray Bottle	Any	Any	Use of dye and color card is subjective to individual experiments and/or research questions.
Spatula	Any	Any	Gardening gloves may be used if handling of corer becomes tedious.
Gloves	Any	Any	Ensure microbiology samples are kept in ice during sampling and frozen as soon as possible.
KimWipes	KimTech Science	Any	Water can be used to wash soil corer, prior to sanitizing with ethanol.
Sterile Sample bags	Fisher Scientific	Whirl-Pak 4 OZ. 24 OZ	Keep buckets and dustpans handy to facilitate removal of waste soil.
Color Card	Any	Any	The original design of miniLEO has various sensors embedded in the lysimeter. Such sensors may or may not be necessary based on the scope of individual experimental design.
X-ray Fluoresce Spectrophotometer	XRF, OLYMPUS	DS-2000 Delta XRF	
Polypropylene cores	Any	Any	
Metal cores	Any	Any	
Caps for polypropylene cores	Any	Any	
Hammer	Any	Any	
Plastic putty knives	Any	Any	

Face masks	Any	Any	
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