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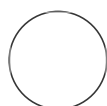
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🌐 Phosphorus Extraction - Olsen Method

📁 In 2 collections

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ABSTRACT

The method is based on the extraction of phosphate from the soil by 0.5 N sodium bicarbonate solution adjusted to pH 8.5.



MATERIALS

- 50 ml polypropylene centrifuge tube for extraction (3 per site and depth)
- 50 ml polypropylene centrifuge tube for extractant (3 per site and depth)
- ~12 g of fresh soil
- Olsen extract solution (See OSU Soil health lab protocol for making extraction solution)
- 25 ml pipet
- Electronic pipettor
- Centrifuge
- Shaker


- 1 Print the required labels needed for Bray extraction for each site, depth, and replicate.

1.1 1000S_SITE_OLSEN_DEPTH_REPLICATE


1.2 1000S_SITE_Pext_OLSEN_DEPTH_REPLICATE


2 Weigh out  3 g of soil into labeled  50 mL centrifuge tubes.

2.1 For example: 1000S_PRS1_P_OLSEN_TOP_1


3 Add  20 mL of Olsen Extract solution (in cabinet under hood in 1521) using the pipet and electronic pipettor.

4 Cap the samples and shake to mix. Add samples to foam block on shaker.


5 Shake samples at  1 rpm, 00:01:00 .

6 Centrifuge samples (using centrifuge on west side of 1521) for  4000 rpm, 00:08:00 .

8m

7 Pour off liquid into a clean and labelled  50 mL centrifuge tube.

7.1 For example: 1000S_PRS1_Pext_OLSEN_TOP_1

8 Freeze samples on their side to prevent tube breaking in the  -20 °C freezer (Staging Freezer 2) bottom shelf if unable to filter immediately.

9 Follow sample filtering protocol below when ready to filter extracts.