Methods in Determining Soluble Soil Phenolic Content

Standard
*In 1000 ml volumetric flask*
50.0 mg Syringic acid
Bring to volume
Mix concentrations: 100%, 75%, 50%, 25%, 10%, and 0%

Soluble Soil Phenolic Extraction
*In a 50 ml centrifuge tube*
5 g Soil sample
25 ml Distilled Water

Agitate on an orbital-action shaker for 18 h
Centrifuge 15 m @ 900 rpm
Filter with 0.45 μm nylon filters

Folin-Ciocalteu Method
*In a 15 ml test tube*
5.0 ml Sample
0.75 ml Na₂CO₃ (1.9 M; 201.38 g L⁻¹)
0.25 ml Folin-Ciocalteu reagent

After 1 h @ 25°C in the dark

Record the absorbance at 750 nm