

1. Sample collection and preparation



(A) placing auger to grab the soil, (B) collect to soil to a plastic bucket, (C) divide soil to four portion, (D) sealed polithene bag, (E) soil sample grounded, (F) sieve soil through mesh, (G) soil storing in plastic bottle

2. Determination of soil pH



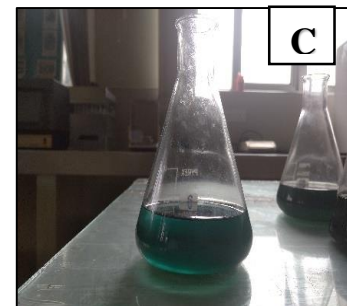
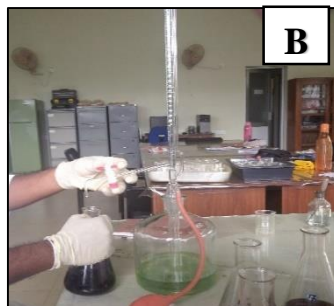
(A) Weighted 5g of soil (B) using glass rod stir the solution. (C) Measure the pH using pH meter.

3. Determination of soil Electrical Conductivity (EC)



(A) Weighted 5g of soil (B) using glass rod stir the solution. (C) Measure the EC using EC meter.

4. Determination of soil organic matter content



(A) Potassium dichromate added into soil (B) titrate using ferrous sulfate (C) after titrate sample color

5. Determination of available phosphorus

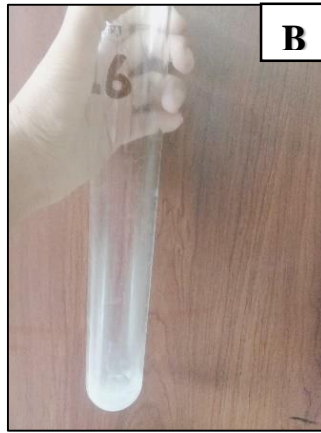


(A) Shake the soil sample using mechanical shaker (B) filter the extract using filter papers (C) get reading using spectrophotometer.

6. Determination of exchangeable potassium (K)

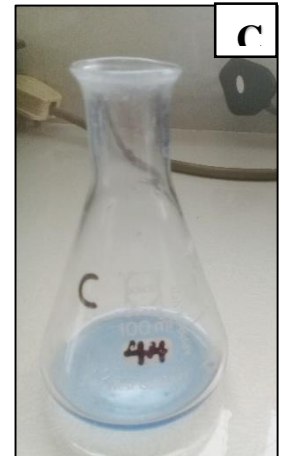
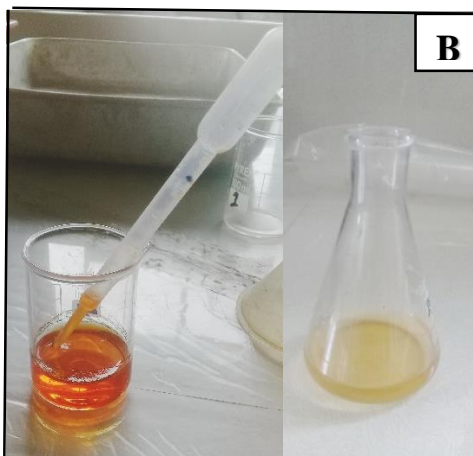


7. Determination of total phosphorus



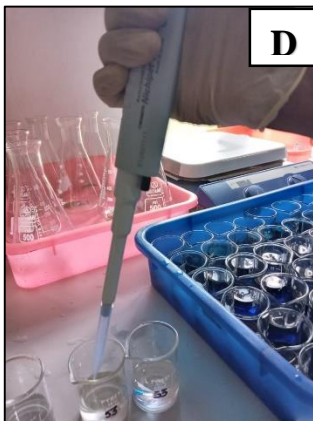
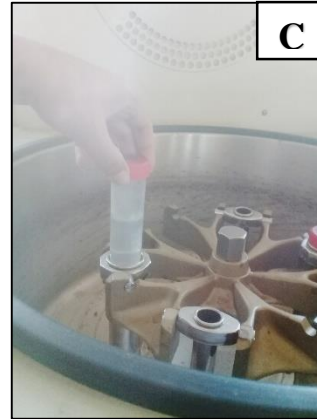
(A) The soil sample digested (B) after digest sample (C) get reading using spectrophotometer.

8. Determination of cation exchange capacity (CEC)



(A) The soil sample filter in a percolation apparatus (B) added thymol blue indicator into sample extract (C) after titration of solution color.

9. Determination of phosphorous fixing capacity



(A) soil sample shaking using mechanical shaker (B) solution added into centrifuge tube (C) the tube was put in the centrifuge machine (D) prepare the sample for get spectrophotometer reading (E) after adding reagent into the sample (F) put the prepare sample into spectrophotometer (G) get reading in sample using spectrophotometer.

