Soil Analyzer

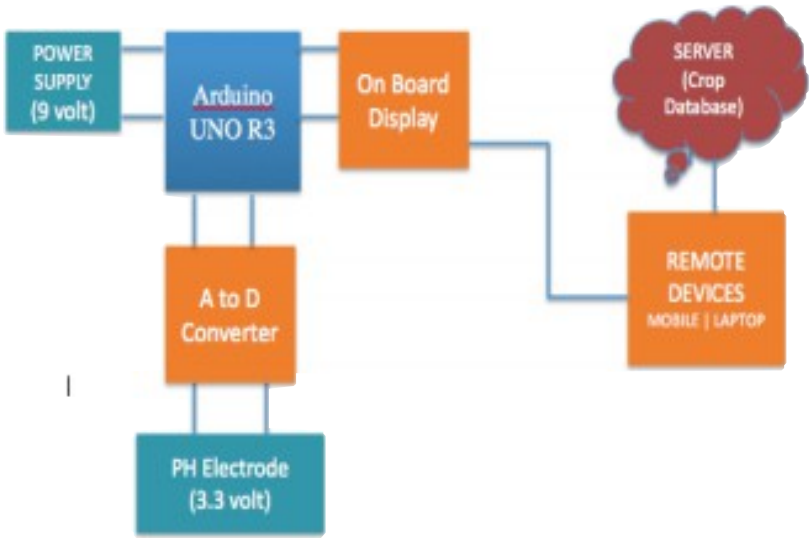
Abstract

Soil analysis is a valuable tool for farmers; it determines the inputs required for efficient and economical production. A proper soil test will help to ensure the application of enough fertilizer to meet the requirements of the crop while taking advantage of the nutrients already present in the soil. It will also allow you to determine lime requirements and can be used to diagnose problem areas. Sampling technique is correct as the results are only as good as the sample you take. Soil testing is also a requirement for farms that must complete a nutrient management plan. Tests often check for plant nutrients in three categories

- Major nutrients: Nitrogen (N), Phosphorus (P) and Potassium (K)
- Secondary nutrients: Sulphur (S), Calcium (C), And Magnesium (Mg)
- Minor nutrients: Iron (Fe), Manganese (Mn), Copper (Cu), Zinc (Zn), Boron (B).

Soil pH is the most commonly measured soil properties. It is also one of the most useful and informative soil parameters because of its relationship to many aspects of soil fertility and plant growth. Despite its importance, the implications of inadequate soil pH on forage response, particularly nutrient use efficiency, is often overlooked.

Block Diagram


POWER SUPPLY (9 volt)
Arduino UNO R3
On Board Display
SERVER (Crop Database)
A to D Converter
REMOTE DEVICES
MOBILE | LAPTOP
PH Electrode (3.3 volt)