



## **Boost Your Harvest: Why Every Farmer Needs Soil Testing and Nutrient Management**

Soil testing and nutrient management refer to the maintenance of soil fertility and plant nutrient supply at an optimum level.

Nutrient management refers to the agricultural practice of maintaining the fertility of the soil and providing plants with the necessary nutrients to grow properly for sustaining the desired productivity. Soil testing refers to the process by which elements such as magnesium, calcium, potassium, phosphorous, sodium, sulfur, manganese, copper, and zinc are chemically removed from the soil and measured for their available content within the sample of soil. It is an important diagnostic tool for determining the nutrients for plants.

Nutrient management refers to the agricultural practice of maintaining the fertility of the soil and providing plants with the necessary nutrients to grow properly for sustaining the desired productivity. This practice helps optimize the benefits from all possible sources of organic, inorganic, and biological components. One of its aims is to have no adverse impact on the ecosystem by balanced fertilization of organic manures, bio-inoculant, and inorganic fertilizers.

### **Importance of Soil Testing**

There are several objectives of soil testing-

- To determine the acidity, salinity, and alkalinity of the soil.
- To ensure environmental safety by reducing the excessive use of chemical fertilizers.
- To evaluate the fertility and nutrient status of the soil.
- To check the loss of nutrients post-harvest.
- To determine that a certain type of soil is suitable to grow a crop.
- To form strategies to restore and revitalize the soil's fertility.

The best time to get the soil tested is after the harvest as it leaves the farmer with plenty of time to formulate a nutrient management or fertilization strategy.

### **Importance of Nutrient Management**

Nutrient management aims to fulfill the nutrient requirements of the crop by monitoring the fertility of the soil and using strategies to overcome any deficiencies. While forming strategies, it takes the economic conditions of the farmers, social acceptability, ecological and environmental impact, and accessibility into consideration. Nutrient management is starting to play an important role in agriculture as it uses tools that are easily accessible to improve soil fertility.

It helps provide balanced nutrition to the crops and minimizes the antagonistic effects resulting from nutrient imbalance. Nutrient management strategies help farmers improve and sustain the physical, chemical, and biological functioning of the soil. It also minimizes the deterioration of soil, water, and ecosystem by promoting carbon sequestration, reducing nutrient losses to groundwater and surface water bodies, and to the atmosphere. Nutrient management practices help produce fruits and vegetables that are healthier because of their high nutritional content.

***Soil Lovers say: Know Your Soils, Especially If You Are Growing Food***