

Fertilizer Analysis

Fertilizer analysis is important in order to detect the different radicals present in the fertilizer. It helps in the faster growth of the plants. Fertilizers also supply nutrients for the plants. These nutrients which are supplied to the plants should be in correct amount for the plants to grow better. Thus, fertilizer analysis helps in identification of the quantity of the nutrients present in the fertilizers.

Why is fertilizer test necessary?

The fertilizer contains all the nutrients which cannot be obtained naturally by plants. If any of the macronutrients are missing or hard to obtain from the soil, this will limit the growth rate for the plant. By testing the fertilizers, it is easy to know the nutrients present in the fertilizers.

Types of fertilizers:

There are two types of fertilizers that require testing. They are

- Organic Fertilizers
- Inorganic Fertilizers

Organic fertilizers are fertilizers derived from animal or vegetable matter. Processed organic fertilizers include compost, bone meal, humic acid, amino acids, and seaweed extracts. Other examples are natural enzyme-digested proteins, fish meal, and feather meal.

Inorganic fertilizers or Mineral fertilizers need to be applied to crop at least two times within a growing season (split application), either basally at planting or top-dressed during vegetative growth. The amount of inorganic fertilizer used in most smallholder farming systems falls far below standard extension recommendations, due to poor purchasing power, risk aversion due to poor and unreliable rainfall, and lack of significant returns.

Parameters:

The parameters that are necessary for the fertilizer analysis are

- **Macronutrients** - Appearance, pH, EC, Nitrogen, Potassium, Phosphorous, Calcium, Magnesium, Sulphur
- **Micronutrients** - Copper, Iron, Zinc, Manganese, Boron.