



# Lab on WHEELS® [Soil Testing]

#### Mobile Soil Testing Laboratory



Soil testing, a necessity for all farmers, is now available at their doorstep, thanks to the introduction of mobile soil testing labs. The equipment on board ascertains Macronutrients like Nitrogen, Phosphate and Potassium, and Micronutrients like Iron, Zinc, Copper, Manganese and Minerals in soil. Correct understanding of the soil characteristics is essential to address nutrient deficiency through fertilisers, leading to better yield and cost-saving. Elico's mobile soil testing lab is designed and manufactured in conformity with industry standards. The lab is spacious and equipped with all the necessary Analytical Instruments for Soil Analysis. The lab analyses various parameters of Soil. The competitive advantages of the mobile lab is providing soil health cards & soil recommendations to the farmer at his door step.

# Instruments provided along with van

- True Double Beam Atomic Absorption Spectrophotometer
- VIS Spectrophotometer
- Flame Photometer
- Conductivity Meter
- pH Meter
- Rotary Shaker
- Digital Electronic Balance
- Any Other Equipment as per Customer Requirement.











# Specifications

The mobile soil testing lab retains the standards of a soil testing lab. It also possesses all the features, including safety, and has a stand-by power backup facility.

#### Vehicle:

- 3800mm wheel base of any suitable four wheelers having
  6-7 tonne capacity vehicle
- Body building with MS structure exterior aluminum paneling (18G) concealed electrical and water pipelines
- GPS System for Vehicle Tracking
- 7.5 KVA / 10.5 KVA green generator set

#### Interiors:

- Driver cabin with additional 3 seat space
- Acid resistance table top
- Interior wood work as per laboratories standards
- Cupboards for glassware and chemicals and allied items
- Vinyl flooring
- Fire proof material for roof top
- 200 liters of loft tank for water
- Fire extinguisher
- Exhaust fume hood for AAS and Flame Photometer
- Luggage carrier on roof
- SS wash basin
- Emergency Shut-off switch for generator
- First Aid box
- 1.5 tonne branded air conditioner
- UPS
- Laptop
- Laser Printer

#### Certifications:

 ISO and CIRT certified body fabrication, facilities



# Applications

A soil test is the analysis of a soil sample to determine nutrient and contaminated content, composition and other characteristics such as the acidity or pH level. A soil test can determine fertility or the expected growth potential of the soil which indicates nutrient deficiencies, potential toxicities from excessive fertility and inhibitions from the presence of noessential trace minerals. The test is used to mimic the function of roots to assimilate minerals.

#### Analysis of

- Iron (Fe)
- Zinc(Zn)
- Copper(Cu)
- Manganese (Mn)
- Magnesium (Mg)
- Sodium (Na)
- Boron(B)
- Molybdenum (Mo)
- Sulphur(S)
- Calcium (Ca)
- Nitrogen (N)
- Phosphorous (P)
- Potassium (K)
- pH
- Conductivity
- Other Elements



## Benefits of soil testing

Soil testing is economically prudent. The appropriate application of nutrients or limestone can save money. Do not buy nutrients that your soil does not need; instead, invest in those nutrients that will bring about healthy grow th and good yields.

To apply optimal levels of nutrients or limestone to your soil, it is necessary to know the existing pH and the availability of essential plant nutrients in the soil. Having too much or too little of these nutrients or limestone can be harmful to plant growth.

Soil testing is an environmentally responsible practice. Applying fertiliser or other nutrient sources incorrectly can lead to nitrate or phosphorus contamination of water resources. By applying fertiliser appropriately, you can ensure that you are feeding your plants in an environment friendly and green way.

## When to go for soil testing

Soil samples, to be analysed for soil pH, salt content, Zinc (Zn) and Phosphorus (P), can be taken nearly any time of year. Potassium (K) values from samples taken in frozen soil may test high compared to other times of the year. Sulphur (S) and Chloride (Cl) are mobile in the soil, so sampling in winter or spring is recommended.



ELICO's Soil Testing Instruments displayed at Mahindra Samriddhi Stall during US President, Mr. Barak Obama visit to India



MSTL Inaugurated by Former Agriculture Minister Shri. Sharad Pawar



PBRI, MSTL Inaugurated by Agriculture Minister, Shri. Radha Mohan Singh on 4th August 2014

http://www.elico.co

#### Testimony

"Till now, we used to approach the government lab at the district headquarters for soil testing. The mobile testing lab spares us of the trouble of taking the soil to the lab. We can get the soil tested on the spot and test the results the same day," says Ravi Kiran, a farmer.



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An ISO 9000 : 14001 : 27001 Certified Company

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