

SECOND EDITION

A photograph showing a person's hands using a soil sampling tool in a field. The person is wearing a black long-sleeved shirt and a watch. The tool is a clear plastic tube with a blue cap and a green connector. The background is a field of green plants and brown soil.

**P. K. GUPTA**

**SOIL, PLANT, WATER  
AND FERTILIZER  
ANALYSIS**



# SOIL, PLANT, WATER AND FERTILIZER ANALYSIS

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## **PREFACE**

Soil, plant, water and fertilizers are the major ingredients of interest in agriculture system. Analysis of soil, plant and water as natural resources is of utmost importance in regard to conservation strategies. The fertilizers are invariably used for supplying the nutrients to growing plants. They need characterization for their balanced and judicious use.

This manuscript is a compilation of some tested and widely used analytical method of characterizing soil, plant, water and fertilizers. The text presented in the book is subdivided into nineteen chapters and four appendixes dealing with procedures of quantifying various physical and chemical properties of soil, water and fertilizers as well as chemical composition of plant material. Some analytical concepts related to soil microbiology and water biology have been dealt separately. The method given are described under four sub heads *viz.*, Principle, Materials/Equipment, Method and Calculation. Brief explanations of the important steps have also been included. Modifications in the method and calculations are made wherever felt necessary for providing better understanding and clarity about the subject.

Hopefully, the technical information contained herein will prove useful to students, teachers, scientists and analysis studying/working in the field of biological and applied sciences, more specifically, in the fields of Soil Science, Agronomy, Horticulture, Environmental Science, Plant Science, Geology, Hydrology, Microbiology and Forestry. It will also prove as a tool for soil testing, quality control and research laboratories of related fields.

Efforts are made to make this publication self explanatory and useful however, any suggestions for improvement will be highly appreciated.

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**May, 2007**

**P. K. Gupta**

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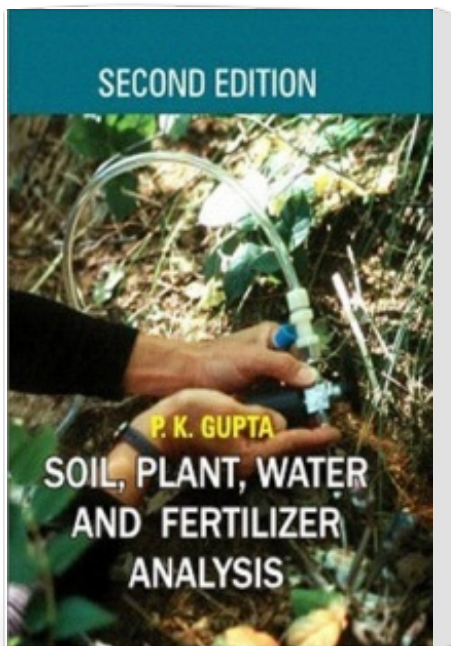
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