## CONTENT

Foreword		ix
Preface		xi
Contributors		xii
Table of Conver	rsion Factors	vii
Chapter 1	Opportunities to Improve Soil Testing Programs	1
Chapter 2	The Principles of Soil Testing	13
Chapter 3	Factors Affecting the Availability of Nutrients to Plants	23
Chapter 4	Interpretation of Soil Test Results	35
Chapter 5	Experimental Methods for Correlating and Calibrating Soil Tests	55
Chapter 6	Field Sampling for Soil Testing	67
Chapter 7	Testing soils for pH and Lime Requirement	77
Chapter 8	Testing Soils for Nitrogen	97
Chapter 9	Testing Soils for Phosphorus	115
Chapter 10	Testing Soils for Potassium, Calcium, and Magnesium	135
Chapter 11	Testing Soils for Zinc, Copper, Manganese, and Iron	153
Chapter 12	Testing Soils for Sulphur, Boron, Molybdenum, and Chlorine	173
Chapter 13	The Changing Philosophy of Soil Test Interpretations	201
Chapter 14	Plant Analysis : Problems and Opportunities	213
Chapter 15	principles and Practices in Plant Analysis	223
Chapter 16	Sampling, Handling, and Analyzing Plant Tissue Samples	249
Chapter 17	Plant Analysis as an Aid in Fertilizing Sugar Crops : Part II. Sugarcane	289
Chapter 18	Plant Analysis as an Aid to Cotton Fertilization	299
Chapter 19	Plant Analysis as an Aid in Fertilizing Soybeans and Peanuts	315
Chapter 20	Plant Analysis as an Aid in Fertilizing Small Grains	329
Chapter 21	Plant Analysis as an Aid in Fertilizing Corn and Grain sorghum	349
Chapter 22	Plant Analysis as an Aid in Fertilizing Vegetable Crops	365
Chapter 23	Leaf Analysis as an Aid in Fertilizing Orchards	381
Chapter 24	Plant Analysis as an Aid in the Fertilization of Forage Crops	393
Chapter 25	Plant Analysis as an Aid in Fertilizing Forests	427
Chapter 26	Use of Data Processing in Soil Testing and plant Analysis	455
Chapter 27	Operation and Management of a Commercial Soil Testing and Plant Analysis	
	Laboratory	473
Glossary – Common and Scientific Names of Plants Referred to in This Book		489