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ISOPRENOIDS OR TERPENOIDSSUMMARY; Chapter 9: Nitrogen Metabolism; INTRODUCTION; DISTRIBUTION AND SEASONAL FLUCTUATIONS OF NITROGEN; IMPORTANT NITROGEN COMPOUNDS; NITROGEN REQUIREMENTS; SOURCES OF NITROGEN; THE NITROGEN CYCLE; SUMMARY; Chapter 10: Mineral Nutrition; INTRODUCTION; FUNCTIONS OF MINERAL NUTRIENTS AND EFFECTS OF DEFICIENCIES; ACCUMULATION AND DISTRIBUTION OF MINERAL NUTRIENTS; MINERAL CYCLING; THE SOIL MINERAL POOL; LOSSES OF MINERAL NUTRIENTS FROM ECOSYSTEMS; ABSORPTION OF MINERAL NUTRIENTS; SUMMARY; Chapter 11: Absorption of Water and Ascent of Sap; INTRODUCTION ABSORPTION OF WATERWATER ABSORPTION PROCESSES; ROOT AND STEM PRESSURES; ASCENT OF SAP; THE WATER CONDUCTING SYSTEM; SUMMARY; Chapter 12: Transpiration and Plant Water Balance; INTRODUCTION; FACTORS AFFECTING TRANSPIRATION; INTERACTION OF FACTORS AFFECTING TRANSPIRATION; TRANSPIRATION RATES; WATER LOSS FROM PLANT STANDS; THE WATER BALANCE; EFFECTS OF WATER STRESS; ADAPTATION TO DROUGHT; SUMMARY; Chapter 13: Plant Hormones and Other Signaling Molecules; INTRODUCTION; MAJOR CLASSES OF PLANT HORMONES; OTHER REGULATORY COMPOUNDS; MECHANISMS OF HORMONE ACTION; SUMMARY; Bibliography; Index

Sommario/riassunto

Woody plants such as trees have a significant economic and climatic influence on global economies and ecologies. This completely revised classic book is an up-to-date synthesis of the intensive research devoted to woody plants published in the second edition, with additional important aspects from the authors' previous book, Growth Control in Woody Plants. Intended primarily as a reference for researchers, the interdisciplinary nature of the book makes it useful to a broad range of scientists and researchers from agroforesters, agronomists, and arborists to plant pathologists and soil s