Record Nr. UNINA9910784753203321 Autore Tinker P. B (Philip Bernard) Titolo Solute movement in the rhizosphere [[electronic resource] /] / P.B. Tinker, P.H. Nye New York, : Oxford University Press, 2000 Pubbl/distr/stampa **ISBN** 0-19-756132-2 1-280-83087-5 9786610830879 0-19-535231-9 Edizione [2nd ed.] Descrizione fisica 1 online resource (465 p.) Collana Topics in sustainable agronomy Altri autori (Persone) NyePeter Hague Disciplina 631.8 Soggetti Crops and soils - Mathematical models Crops - Nutrition - Mathematical models Plant nutrients - Mathematical models Plants - Nutrition - Mathematical models Plant-soil relationships - Mathematical models Rhizosphere - Mathematical models Roots (Botany) - Physiology - Mathematical models Soils - Solute movement - Mathematical models Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali This edition previously issued in print: 2000. Previous edition published as Solute movement in the soil-root system. Oxford: Blackwell Scientific, 1977. Nota di bibliografia Includes bibliographical references (p. 373-433) and index. Nota di contenuto Contents: Main Symbols: 1 Introduction: 2 Soil and Plant Water: 3 Solute Interchange between Solid, Liquid, and Gas Phases in the Soil; 4 Local Movement of Solutes in Soil; 5 The Uptake Properties of the Root System: 6 Solute Transport in the Soil near Root Surfaces: 7 Chemical and Physical Modification of the Rhizosphere; 8 Microbiological Modification of the Rhizosphere; 9 Root System Architecture, Density, and Measurement; 10 The Mineral Nutrition of Single Plants in Soil; 11 Solute Transport and Crop Growth Models in the Field; References; Index

This is a new edition of the book previously titled Solute Movement in

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the Soil-Root System, and describes in detail how plant nutrients and other solutes move in the soil in response to plant uptake. It provides a basis for understanding processes in the root zone so that they can be modelled realistically in order to predict the effects of variations in natural conditions or our own practices. The new edition brings the text up-to-date, and it will be less technical.