1. Record Nr. UNINA9910768199503321 Autore Blanco Humberto **Titolo** Soil Conservation and Management [[electronic resource] /] / by Humberto Blanco, Rattan Lal Cham:,: Springer Nature Switzerland:,: Imprint: Springer,, 2023 Pubbl/distr/stampa **ISBN** 3-031-30341-5 Edizione [2nd ed. 2023.] 1 online resource (621 pages) Descrizione fisica Altri autori (Persone) LalRattan Disciplina 631.45 Agriculture Soggetti Soil science Sedimentology Conservation biology **Ecology Environmental management** Soil Science **Conservation Biology Environmental Management** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Chapter 1: Soil And Water Management -- Chapter 2: Water Erosion --Chapter 3: Modeling Water Erosion -- Chapter 4: Wind Erosion --Chapter 5: Wind Erosion Modeling -- Chapter 6: Tillage Erosion --Chapter 7: Tillage Systems -- Chapter 8: Cropping Systems -- Chapter 9: Crop Residue Management -- Chapter 10: Cover Crops -- Chapter 11: Perennial Plants And Soil Management -- Chapter 12: Soil Amendments -- Chapter 13: Mechanical Structures And Engineering Techniques -- Chapter 14: Restoration And Management Of Degraded Soils -- Chapter 15: Soil Fertility Management -- Chapter 16: Nutrient Erosion And Hypoxia Of Aquatic Ecosystems -- Chapter 17: Soil Water Management -- Chapter 18: Management Of Grazing Lands -- Chapter 19: Soil Management And Carbon Dynamics -- Chapter 20: One Health

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Sommario/riassunto

This updated and expanded second edition textbook, describes all main aspects of soil management, to address the serious problems of soil erosion and the attendant environmental pollution. The global high demands for food, fiber, feed, and fuel put a constant strain on the environment, which can only be mitigated by soil conservation. This edition incorporates new concepts and provides an up-to-date review of soil management principles and practices. The authors also added new chapters on cover crops, crop residues, soil water management, nutrient management, perennials in crop rotations and organic amendments. All practices have a clear perspective on addressing soil erosion, physical and chemical problems, carbon dynamics and sequestration as well as non-point source pollution. The restorative nature of many practices, also consider water conservation as a main pillar of sustaining a healthy soil. This textbook is valuable for students and professionals in soil science, agronomy, agricultural engineering, hydrology, and management of natural resources.