

Managing soil health for sustainable agriculture

Volume 1: Fundamentals

Edited by Dr Don Reicosky, Soil Scientist Emeritus
ARS-USDA and University of Minnesota, USA



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Managing soil health for sustainable agriculture Volume 1 Fundamentals

Edited by: Dr Don Reicosky, Emeritus Soil Scientist - ARS-USDA, USA

Endorsement:

"*Managing soil health for sustainable agriculture* covers virtually the entire range of soil health topics. Dr Don Reicosky, himself an internationally distinguished soil scientist, has assembled an impressive roster of chapter authors. Each is a world-class specialist in the topic of the chapter. This collection of diverse chapters by highly respected authors promises to be a most interesting read and useful reference."

Professor Ray R. Weil, University of Maryland, USA

Description:

There has been growing concern that both intensive agriculture in the developed world and rapid expansion of crop cultivation in developing countries is damaging the health of soils which are the foundation of farming. At the same time we are discovering much more about how complex soils are as living biological systems. This volume reviews the latest research on soil science.

After an overview of the role of soil as a provider of ecosystem services and in conservation agriculture, the book reviews soil structure and chemistry as well organic matter, soil microorganisms and fauna. The second part of the book discusses soil dynamics, from water and nutrient cycles to carbon capture and erosion mechanisms.

With its distinguished editor and international team of expert authors, this will be a standard reference for soil scientists and agronomists as well as the farming community and government agencies responsible for monitoring soil health. It is accompanied by a companion volume looking at soil monitoring and management.

Key features:

- Puts soil health in the broader context of ecosystem services, conservation and climate change
- Summarises current research on soil structure and composition
- Reviews latest developments in understanding nutrient and other cycles in soil

Audience:

Soil scientists; agronomists; crop growers; government agencies responsible for monitoring soil health

Editor details:

Dr Reicosky is an Emeritus Soil Scientist, formerly at the North Central Soil Conservation Research Laboratory, Morris, Minnesota, USA, a leading laboratory for soil and plant research at the Agricultural Research Service (ARS) of the United States Department of Agriculture (USDA). Dr Reicosky has published widely on carbon management and soil quality as related to soil health, understanding and optimising soil management through conservation agriculture for more sustainable production.

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