1. Record Nr. UNINA9910959218603321

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Titolo	Soil organic matter and their interactions with metals : processes, factors, ecological significance / / editors, Galina V. Motuzova ... [et al.]
Pubbl/distr/stampa	New York, : Nova Science Publishers, c2012
ISBN	1-62100-101-6
Edizione	[1st ed.]
Descrizione fisica	1 online resource (150 p.)
Collana	Environmental science, engineering and technology
Altri autori (Persone)	MotuzovaG. V (Galina Vasilevna)
Disciplina	577.5/72753
Soggetti	Soil corrosion Soils - Heavy metal content Soils - Humic acid content
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references (p. [109]-128) and index.
Nota di contenuto	Intro -- SOIL ORGANIC MATTER AND ITS INTERACTIONS WITH METALS: PROCESSES, FACTORS, ECOLOGICAL SIGNIFICANCE -- Library of Congress Cataloging-in-Publication Data -- Contents -- Preface -- Introduction -- Interactions of the Organic Matter with Heavy Metals in Soils and Its Environmental Importance -- Chapter 1: Humic Substances: Origin, Transformation, Interaction With Metals, and Ecological Significance (Review) -- Interaction of HSs with Inorganic Soil Components -- Complexation of HSs with Metals -- Chapter 2: Study Objects -- Chapter 3: Study Methods -- Chapter 4: General and Specific Properties of Humic Acids and Their Migration in a Soil Profile -- 4.1. Properties of Humic Acids from Soils of Different Natural Zones -- 4.2. Amphiphilic Properties of Humic Acids from a Chernozem -- 4.3. Migration Ability of Humic Substances in Peat-Podzolic Soil -- Chapter 5: Interaction of Copper Ions with Humic Acids from Soils of Different Natural Zones -- Copper Distribution in Complexes with HA Fractions of Different Amphiphilic Properties -- Chapter 6: Water-Soluble Organic and Organomineral Cu and Ni Compounds of Podzols -- The Properties of Organic Substances of Water Extracts -- Organomineral Cu and Ni Compounds of Podzols -- Chapter 7: Complexation of Metal Ions with Organic Substances and the Acid-Base Properties of the Soil Liquid Phase in the Taiga and Steppe Zones -- Parameters of Complexation of Copper Ions with Oxalate Ions --

Chapter 8: Changes in the Properties of Humic Acids under the Effect of Copper Ions -- Changes in the 1H NMR Spectra of HAs during the Interaction of HAs from the Studied Soils with Copper Ions -- Changes in the Molecular-Weight Distribution of HA Particles during the Interaction of HAs from the Soil Studied with Copper Ions. Changes in Hydrophilic-Hydrophobic Properties of HAs from the Studied Soils at the Interaction with Copper Ions -- Chapter 9: Environmental Significance of Humic Substances in Natural and Natural-Anthropogenic Systems -- 9.1. Effect of Humic Substances on Plants -- 9.2. Physiological Significance of Humic Substances -- 9.3. Effect of HSs on the Agrochemical Properties of Soils -- 9.4. Effect of Hss on the State of Agrocenoses -- 9.4. Significance of Humic Substances for Decreasing the Toxic Effect of Heavy Metals on Living Organisms -- Conclusions -- References -- Index.

Sommario/riassunto

Soil organic matter is the most important component of the ecosystem. As a product of transforming the organic residues under specific conditions it enables us to reflect on the impact rendered by these conditions. In order to be able to perform unique functions in the ecosystem, the organic matter becomes very active in interactions with mineral components. Being widespread in the environment, these compounds play an important role in soil genesis, plant nutrition, migration and accumulation of chemical substances. At present, when the load of heavy metals is augmenting on soil, the consequences of the formation of these compounds in soil requires special attention. New experimental data is needed to provide information about scantily studied soils and complex processes affected by different factors. This book examines current research in the study of soil organic matter. (Imprint: Nova)