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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.
