1. Record Nr. UNINA9910830150603321

Autore	Kittrick J. A.
Titolo	Acid Sulfate Weathering / / J.A. Kittrick
Pubbl/distr/stampa	[Place of publication not identified] : , : John Wiley & Sons, Inc., , 2015
ISBN	0-89118-905-X
Descrizione fisica	1 online resource (viii, 234 pages) : illustrations
Collana	SSSA special publication ; ; Number 10
Disciplina	631.42
Soggetti	Acid sulfate soils
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Physiography of Coastal Sediments and Development of Potential Soil Acidity1 -- Morphological and Mineralogical Features Related to Sulfide Oxidation under Natural and Disturbed Land Surfaces in Maryland1 -- Alfisols and Ultisols with Acid Sulfate Weathering Features in Texas1 -- Gypsiferous Soils in the Western United States -- Mineralogical Properties of Lignite Overburden as they Relate to Mine Spoil Reclamation1 -- Controls and Consequences of Sulfate Reduction Rates in Recent Marine Sediments1 -- Relation of Pyritic Sandstone Weathering to Soil and Minesoil Properties1 -- Mineralogical Alterations that Affect Pedogenesis in Minesoils from Bituminous Coal Overburdens1 -- Characteristics and Reclamation of "Acid Sulfate" Mine Spoils1 -- Aqueous Pyrite Oxidation and the Consequent Formation of Secondary Iron Minerals -- Microbiological Transformations of Iron and Sulfur and Their Applications to Acid Sulfate Soils and Tidal Marshes1 -- Microbial Formation of Basic Ferric Sulfates in Laboratory Systems and in Soils -- Genesis Morphology and Classification of Acid Sulfate Soils in Coastal Plains1 -- Front Matter.
Sommario/riassunto	Acid sulfate weathering is a subject of increased interest both nationally and internationally. Acid sulfate soils, in general, result from processes that release sulfuric acid into the soil system as the soil forms. This term is in turn applied to soils in which sulfuric acids have been, are being, or will be produced in amounts that have a lasting effect on principal soil characteristics. Such soils occur in all climatic zones of the earth with the majority of them being located in relatively recent coastal marine sediments. However, sulphidic materials which

produce acid sulfates on oxidation are not limited to coastal regions. They are often associated with pyritic materials such as lignite. When such materials are brough to the soil surface through mining, construction, or other activities that disturb the soil, sulfuric acid may form making revegetation of the soil very difficult and releasing pollutants into surface and subsurface waters.