Record Nr. UNINA9910298383203321 Autore Shahid Shabbir A **Titolo** United Arab Emirates Keys to Soil Taxonomy [[electronic resource] /] / by Shabbir A. Shahid, Mahmoud A. Abdelfattah, Michael A. Wilson, John A. Kelley, Joseph V. Chiaretti Dordrecht:,: Springer Netherlands:,: Imprint: Springer,, 2014 Pubbl/distr/stampa **ISBN** 94-007-7420-6 Edizione [1st ed. 2014.] Descrizione fisica 1 online resource (143 p.) Disciplina 631.4 631.4/4 631.44 Soggetti Soil science Soil conservation Regional planning Urban planning Environmental sciences Geoecology Environmental geology Geographical information systems Geography Soil Science & Conservation Landscape/Regional and Urban Planning

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## Sommario/riassunto

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Central to human life and civilization, soils are an integral part of the physical and cultural environment. Although we may take them for granted, the rise and fall of civilizations is closely linked with the use and abuse of soil and water resources. It is therefore important to evaluate soils for their quality and link them to appropriate uses and services. This book provides information on soil classification and shows how to key out taxa relevant to UAE soils. The latest soil inventory of United Arab Emirates reveals that a rather uniform looking desert landscape has, in fact, a diversity of subsurface features. These features confirm the soil diversity in terms of classification, chemistry, physics, mineralogy, fertility, suitability for different uses and vulnerability to land degradation. United Arab Emirates Keys to Soil Taxonomy presents information for keying out the soils of the United Arab Emirates into separate classes and provides a guide to associated laboratory methods. The classification used predominantly is extracted from the 11th edition of the USDA-NRCS Keys to Soil Taxonomy, and sections relevant to the soils found in the UAE are included here. Primarily, this key is designed to fit the soil system of the United Arab Emirates. Information not found in the USDA key has been added, including criteria and classes for: 1) differentiating anhydritic soils from gypsic soils, 2) identifying "lithic" subgroups for Aquisalids and Haplosalids, 3) identifying "salidic" subgroups within the great groups of Gypsids, Calcids, Psamments, and Orthents, and 4) incorporation of phases for soil taxa. A subsurface diagnostic horizon and mineralogy class (anhydritic), not reported earlier in the world soil literature and, recently found in the UAE, has also been added to the book. The book also offers a mechanism for updating the current soil surveys, and will facilitate the correlation of soils from new surveys in the UAE. Additionally, it will help the international soil science community to converse about UAE soils, and facilitate comparison to soils of other regions. These linkages allow countries with similar mapping and classification procedures and similar soils to transfer agriculture technology without conducting long-term experiments under similar environmental conditions, especially for Gulf Cooperation Council countries (Bahrain, Kuwait, Qatar, Oman, and Saudi Arabia).