Record Nr. UNINA9910983349303321 Autore Sharma U. C Titolo Soil Acidity: Management Options for Higher Crop Productivity / / by U. C. Sharma, M. Datta, Vikas Sharma Cham:,: Springer Nature Switzerland:,: Imprint: Springer,, 2025 Pubbl/distr/stampa **ISBN** 9783031763571 Edizione [1st ed. 2025.] Descrizione fisica 1 online resource (786 pages) Collana Progress in Soil Science, , 2352-4782 Altri autori (Persone) DattaM SharmaVikas Disciplina 631.4 Soggetti Soil science Physical geography Agriculture Chemistry Soil Science Physical Geography Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Introduction -- Global status and extent of acid soils -- Toxicity and Nota di contenuto tolerance -- Recent advances and future challenges. Sommario/riassunto The book on acid soils offers a thorough analysis of the degree of soil acidity at the global level, information on the biota, chemistry, and behaviour of acid soils, as well as the mechanisms by which plants tolerate soil acidity. It also offers crop management strategies that make effective use of amendments and acid soil-specific crop management practices. Crop output, forest health, and aquatic life all suffer from acidic soil. The main causes are the toxicity of aluminium (Al) and/or manganese (Mn), as well as the deficiencies of calcium (Ca), magnesium (Mg), phosphorus (P), and molybdenum (Mo), to a lesser extent. Lack of calcium affects the health and integrity of cells, which lowers agricultural yield and quality. To achieve the highest crop productivity, management options have been provided. All concerned

a sustainable manner.

will find this book of great assistance in solving the global food crisis in