Record Nr. UNINA9910812263403321 Standard soil methods for long-term ecological research / / edited by **Titolo** G. Philip Robertson [and others] Pubbl/distr/stampa New York;; Oxford:,: Oxford University Press,, 2023 **ISBN** 0-19-770203-1 1-280-47058-5 9786610470587 0-19-802826-1 1-60256-289-X Descrizione fisica 1 online resource (481 p.) Collana Oxford scholarship online Long-term ecological research network series;; 2 Disciplina 577.5/7/072 Soggetti Soil ecology - Research Soil ecology - Methodology Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Previously issued in print: 1999. Nota di bibliografia Includes bibliographical references and index. Contents; Contributors; 1 Soil Sampling, Preparation, Archiving, and Nota di contenuto Quality Control: 2 Site and Landscape Characterization for Ecological Studies; 3 Soil Water and Temperature Status; 4 Soil Structural and Other Physical Properties: 5 Soil Carbon and Nitrogen: Pools and Fractions; 6 Exchangeable Ions, pH, and Cation Exchange Capacity; 7 Soil Phosphorus: Characterization and Total Element Analysis; 8 Analysis of Detritus and Organic Horizons for Mineral and Organic Constituents; 9 Collection of Soil Solution; 10 Soil CO[sub(2)], N[sub(2)] O, and CH[sub(4)] Exchange 11 Measuring Decomposition, Nutrient Turnover, and Stores in Plant Litter 12 Dinitrogen Fixation; 13 Soil Carbon and Nitrogen Availability: Nitrogen Mineralization, Nitrification, and Soil Respiration Potentials; 14 Denitrification; 15 The Determination of Microbial Biomass; 16 Characterizing Soil Microbial Communities; 17 Soil Invertebrates; 18 Methods for Ecological Studies of Mycorrhizae; 19 Measurement of Static Root Parameters: Biomass, Length, and Distribution in the Soil Profile; 20 Fine Root Production and Demography; Index

## Sommario/riassunto

Intended for a broad range of ecologists, agronomists and soil scientists, this book provides a standardised set of protocols for measuring soil properties to facilitate cross-site synthesis and evaluation of ecosystem processes.