



The Italian contribution to the World Soils Book Series: The Soils of Italy

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Passing to the age of “Anthropocene”, man has forgotten the ancient bond that ties him to the soil, and turning from “homo sapiens” to “homo technologicus” he has stopped considering how much his well-being and the quality of life on Earth are fundamentally linked to the quality of soils. Yet today, as never before, maintaining the quality of soils is of paramount relevance for the sustainable development of humanity. Unfortunately, as soils are a crypto-resource, not many lay-people recognize its importance in the biosphere equilibrium and, unfortunately, seldom consider it among the environmental resources that must be protected!

To fill such a gap in knowledge, the Springer editor, under the leading of professor Alfred Hartemink, has published the World Soils Book Series, whose aim is to spread the knowledge on the soils in a particular country in a concise and highly reader-friendly way.

The volume “The Soils of Italy” belongs to this international series of books. Its ambitious goals are to establish a broad base for the knowledge of the soils of Italy, and to give useful information on i) their characteristics, diffusion and fertility, ii) the main threats they are subjected, and iii) the future scenarios of relationships between soil sciences and the disciplines, which are not traditionally linked to the world of agriculture, such as urban development, medicine, economics, sociology, archaeology.

In Italy there is about 75% of the global pedodiversity. A vast majority of the WRB reference soil groups (25 out of 32), as well as soil orders of Soil Taxonomy (10 out of 12) are represented in the main Italian soil typological units (STUs). More than a fourth of STUs belongs to Cambisols, more than a half to only four reference soil groups (Cambisols, Luvisols, Regosols, Phaeozems), and 88% to nine RSGs (the former plus Calcisols, Vertisols, Fluvisols, Leptosols, and Andosols), while the remaining 16 RSGs are represented in 12% of STUs. The clear skewness and lognormal distribution of STUs demonstrate the utmost endemic nature of most of Italian soils, which make many of them threatened with extinction.

The writing of this book was attended by numerous experts from several Italian universities and research centres, which have taken on the responsibility of editing the various chapters.

A specific characteristic of the book is that it collects scripts of both mature and young soil scientists, who contributed in a decisive way to render the text up-to-date and, hopefully, attractive.

It is a common aspiration of the authors that this book could provide interesting information to soil experts and students, so that they can enhance the attention of the public on the Italian soils: a very limited but very economically and environmentally important resource of Italy.