An overview on the history of pedology and soil mapping in Italy

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In Italy, the word pedology (pedologia) was introduced in a text book as synonym of soil science for the first time in 1904 by Vinassa de Regny. In the literature, the term cohabitates with the words agrology (agrologia), agro-geology (agro-geologia), agricultural geognostic (geognostica agraria), geopedology (geo-pedologia) used in different historical moments by differently rooted soil scientists. When early pedologists started with systematic studies of soils, their characteristics and geography, they were strongly influenced by their cultural background, mainly geology and agro-chemistry. Along the time, the soil concept evolved, as did the concept of pedology, and this is somehow witnessed by the use of different Italian words with reference to soil: suolo, terreno, terra. Differently from agro-chemists, early pedologists based the soil study on the field description of soil profile. This was firstly based on the vertical differentiation between humus rich layers and “inactive” layers and later on, as long as the discipline evolved, on the presence of genetic horizons.

The first complete soil map of Italy is dated 1928. Its Author, the geologist De Angelis d’Ossat, was the president of the organising committee of the 1924 International Soil Conference of Rome, where the International Society of Soil Science was founded. The map was based on the geological map of Italy, drafted in scale 1:1,000,000 after the creation of the Kingdom of Italy in 1861. The internal disputes within the Geological Society, together with the scarce interest of most of geologists for soil, did not facilitate the birth of a central soil survey. Soil mapping was mainly conducted by universities and research institutes, and we had to wait until 1953 for a new soil map (scale 1:3,125,000) at national level to be realised by Paolo Principi, based on literature data. In 1966 a new 1:1,000,000 soil map of Italy was eventually published by a national committee, led by Fiorenzo Mancini. This was based on literature data and on field surveys, and the mapping units limits, based on geomorphology, are still the basis of the most updated European 1:1,000,000 soil map. At the end of the 80ies of the past century, soil survey and mapping were taken over by the Italian regional administrations, which set up regional soil surveys working in co-ordination among them and with the research institutions.