



S02.04 -3

USING WRB TO MAP THE SOIL SYSTEMS OF ITALY

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Aim of this work was to test the 2010 version of the WRB soil classification for compiling a map of the soil systems of Italy at 1:500,000 scale. The source of data was the national geodatabase storing information on 1,414 Soil Typological Units (STUs). Though, basically, we followed WRB criteria to prioritize soil qualifiers, however, it was necessary to work out an original methodology in the map legend representation to reproduce the high variability inside each delineation meanwhile avoiding any loss of information. Each map unit may represent a combination of three co-dominant STUs at the most. Dominant STUs were assessed summing up the occurrence of STUs in the Land Components (LCs) of every soil system, where each LC is a specific combination of morphology, lithology and land cover. STUs were classified according to the WRB soil classification system, at the third level, that is, reference soil group and first two qualifiers, when possible. Since the large number of delineations, map units grouping was needed to make the map more legible. Legend colours were organized according to soil regions groups firstly, then by considering the highest level of soil classification, so resulting a nidificated legend. The map showed 3,357 polygons and 704 map units. The most common STU were Calcaric Cambisols, by far followed by Calcaric Regosols, Eutric Cambisols, Haplic Calcisols, Vertic Cambisols, Cutanic Luvisols, Leptic Pheozems, Chromic Luvisols, Dystric Cambisols, Fluvic Cambisols, and others STUs belonging to almost all the WRB soil references. Keywords: geodatabase, soil systems