



Physiographic map of the Sicilian region (1:250,000 scale)

Simone Priori, Maria Fantappiè, and Edoardo A.C. Costantini

CRA-ABP, Consiglio per la Ricerca e la sperimentazione in Agricoltura, Research Center for Agrobiologia and Pedology, Italy
(simone.priori@entecra.it)

Physiographic maps summarize and group the landforms of a territory into homogeneous areas in terms of kind and intensity of main geomorphological process. Most of the physiographic maps have large scale, which is national or continental scale. Other maps have been produced at the semi-detailed scales, while examples at the regional scale are much less common. However, being the Region the main administrative level in Europe, they can be very useful for land planning in many fields, such as ecological studies, risk maps, and soil mapping.

This work presents a methodological example of regional physiographic map, compiled at 1:250,000 scale, representing the whole Sicilian region, the largest and most characteristic of Mediterranean island. The physiographic units were classed matching thematic layers (NDVI, geology, DEM, land cover) with the main geomorphological processes that were identified by stereo-interpretation of aerial photographs (1:70,000 scale). In addition, information from other published maps, representing geomorphological forms, aeolian deposits, anthropic terraced slopes, and landslides were used to improve the accuracy and reliability of the map.

The classification of the physiographic units, and then the map legend, was built up on the basis of literature and taking into account Italian geomorphological legend. The legend proposed in this map, which can be applied also in other Mediterranean countries, is suitable for different scales. The landform units were grouped on the base of a geomorphological classification of the forms into: anthropogenic, eolian, coastal, valley floor, intermountain fluvial, slope erosional, structural, karstic, and volcanic.