



Documentation of Arid Land Soilscapes in Southwestern Europe

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There have been no studies to date that have proven the existence of soil assemblages typical of arid lands in Europe. This study was carried out in Almería province, a representative territory of the SE part of the Iberian Peninsula which is the driest part of Europe, to determine if soils characteristic of arid lands were present. The study made use of mathematical tools previously developed in biodiversity and pedodiversity analysis, such as richness, entropy indices, abundance distribution models, diversity-area relationships and nested subset analysis to analyse the spatial distribution of soils. The study demonstrated that the soil types or pedotaxa are typical of mountainous arid lands. Shallow and weakly developed soils (e.g. Leptosols, Regosols, Arenosols), Calcisols, Gypsisols and Solonchaks cover most of the study area, and pedodiversity analysis demonstrates that the pedotaxa spatial patterns follow the same regularities as in other areas, environments and scales. In view of the fact that the class of landscapes identified in this study are unique in Europe, the Tarbernas desert and other arid lands sites of the study area merit preservation as part of the European geological, geomorphological, and pedological heritage.