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130-19 The Cartography of Gypseous Soils In San Luis Potosi State, Mexico.

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The gypseous soils are common in arid and semiarid lands of Mexico. These soils have been reported for the Sonoran Desert and Chihuahuan Desert, with greater presence on the latter. In Mexico, at national-level and at scale 1:1000 000, The National Institute of Statistic and Geography (INEGI by its name in Spanish) –according to FAO nomenclature (1968) – delimitates 1 351 300 ha as gypseous soils. These soils of San Luis Potosi State are not well map-delimited, in spite of their broad extent and the specific agricultural and environmental management they require. The present article highlights the location and extent of the gypseous lands in the regions *Altiplano* and *Zona Media* of San Luis Potosi State. For this purpose, we consulted maps of soils, geology and vegetation as well as studies related to gypsum-rich soils, aerial photographs, and *espaciomapas* (Landsat-5 Thematic Mapper images in Red-Green-Blue: 432 composition printed at 1:250 000 scale). Moreover, we conducted field and laboratory work. The maps of the Commission for Studies of the National Territory (CETENAL, by its name in Spanish) were very useful in the mapping process, especially as an initial reference of the presence of this soil. The gypseous surface (397,250 ha) delineated in this study is double the extent (193,900 ha) reported in the cartography of CETENAL at 1:50 000 scale. We discriminated between areas with shallow gypsum, i.e., a gypseous horizon occurring at less than 50 cm depth, and areas with deep gypsum (shallow and deep gypsum phases, respectively). This latter distinction is very useful for planning the management of this resource. The maps produced serve as a reference for specific studies aimed at evaluating the suitability of the land for production or environmental purposes.

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