SUMMARY

The soil under study belongs to one of the few areas of the Vega Baja unchanged by cultivation, and is situa - ted in the final stretch of the Segura River valley, in the province of Alicante, Spain.

The soil is quite limey, with the water table less than 0, 50 m, in depth, wich gives rise to reduction con - ditions through leck of aeration as well as to gleyfication characteristics. The abundant higrophilic spontaneus ve_ getation, clearly indicates the presence of a hydromorphic soil with subalvic water of weak to moderate salinity.

In the transparent lamina preparations for micromor_ phological study, a great many gypsum crystals appeared on the upper horizons, the organans increasing with depth together with crystalizations of calcium carbonate. Under the microscope the existence of the gleyfication process was clearly indicated by the presence of the patinas and separations of hydrous iron oxides of reddish colour, with characteristics of neoferran. Verticacharacter with a strong structure in large prismatic blocks of intense of intense retraction, can be observed macromorphologi_ cally as well as, micromorphologically, several stages of sedimentation and consequently edaphization.

A transitional strip of soils towards a saline area, in which the micromorphological preparations reveal a structure rather similar to the previous one appears.