

SUMMARY

The microstructural evolution in a soil catena developed on marls, at the Seville Province (South Spain) are studied with optic electronic system applied on soil thin sections. It is observed more quantity of vughs smaller than 100 μ with increasing of vertic character of soil, also plow pan in the upper part of B horizon. Plow managements improvement the structure of superficial layer. The original material is dominated by the onloading effect, with presence of a maximum porosity zone in its contact with solum to be the maximum weathering zone of the profiles.