

SUMMARY

The soils of the middle Casamance ( a region of Senegal having a tropical climate with contrasting seasons) are developed on the low tablelands of the "Terminal Continental", and all these soils have a similar mineralogi - cal composition containing quartz, kaolinites and ferric - hydrates. Never the less, 2 very common soil types may be found side by side : "red" (ferrallitic) soils and "beige" soils which appear to be like the red-yellow podzolised tropical soils. The relative distribution of these soils in the landscape is not haphazard. The line of contact bet - ween these 2 types is always made up of a band of "tran - sition soils" about 200 m in width, in which gradual and progressive modifications from one type to the other are discernable. The object of this publication is to show, by way of a detailed microscopic analysis coupled with a certain number of analytical and experimental studies, that the formation of these "beige" soils is mainly due to transformations which affect the state of the assemblage of the "red" (ferrallitic) soils as a result of modifica - tions in the soil-climatic regime.

The microscopic analysis began with a study of the microstructure of the "red" soils which are characteri - zed by a dominance of plasmic concentrations under the appearance of an assemblage of "micronodules" formed of kaolinite and iron hydrates. The microscopic analysis also shows up the succession of transformations first evident in the transition soils (breakdown of primary mi - cronodules which follows from the clay-iron dissociation) is accompanied by a secondary nodulation and by loss of iron from the matrix. The same process occurs in the "beige" soils and is characterized by an extension of the iron-depleted and relatively mobile s-matrix in which fi - nally, one realises a dissociation between skeleton and plasma.