

GEOLOGIC AND STRUCTURAL ANALYSIS OF CENOZOIC SEDIMENTS (RIO CLARO FORMATION) IN CENTRAL-EASTERN REGION OF SÃO PAULO STATE - BRAZIL

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The Rio Claro Formation of Cenozoic age has its type section in the Município of Rio Claro, São Paulo, where it supports thick sandy soils on uplands well above the valley of the Corumbataí River. The formation was studied over an area of 600 km², five sections were described in detail and structural studies were made of 1.269 lineaments and some of its outcrops. These studies were made because much of the city of Rio Claro is built on this formation. Characteristically, the Rio Claro Formation occurs on large flat interfluvies 50 to 60 m above the Corumbataí River at elevations between 580 to 670 m, has a distinct disconformity at its base, and consists predominantly of fine to coarse sand with only a few thin beds of gravel and clay. Colors range from white to yellowish and redish at depth. Maximum thickness appears to be about 40 m, although thicknesses of 25 to 30 m are more typical. Fossils consist mostly of fragmental, poorly preserved plant remains, in clay lenses. Newly plants fossils described are very important to paleobotanical knowledge of this sedimentary unity. Structural analysis of faulted and fractured outcrops reveals two different tectonic events - the first was tensional and the second transcurrent. These are thought to indicate a pre Miocene age. The geological and structural knowledge on Rio Claro Formation will be enable to a better planning and management on soil employments in the Município of Rio Claro.