TECTONIC CONTROL OF DIAMONDIFEROUS PROVINCE OF FRANCA, SÃO PAULO STATE, BRASIL

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The Diamondiferous Province of Franca, in São Paulo State (Brazil) is situated at northeast part of Paraná Basin, aside the Alto Paranaíba Uplift. The occurences are distributed along the Sapucaizinho, Santa Bárbara and Canoas hidrographic basins, where the tectonic-sedimentary processes had promoted the distribution and concentration of diamonds. This basin is characterized by siliciclastic sediments of Bauru Group (Cretaceous-Eocenozoic ?) overlying basaltic rocks of Serra Geral Formation (Mesozoic), sandstones and conglomerates of Botucatu (Triassic), Pirambóia (Triassic) and Aquidauana (Permo-Carboniferous) formations, recovered by inconsolidated lateritizated sediments (Cenozoic). Along the Alto Paranaíba Uplift there are occurence of kimberlitic and alcaline rocks.Mesozoic tectonic strutures (NW-SE to NNW-SSE trends) are related to the Alto Paranaíba Uplift evolution, emplacement of alcaline/kimberlitic rocks and Bauru sediments deposition. Cenozoic is marked by E-W structures, at south, controling the relief and its dissecation, and NW-SE, at north, with low relief zones to NE. At central portion of area there are a transpressives NE-SW structures, with folded and faulted stone lines.Morphotectonic evolution, Cenozoic sedimentary process and similar mineralogic assemblage among its sediments, basement mineralogy and Quaternary diamondiferous occurrences could indicate the multiplicity of tectono-sedimentary cycles eroding Alto Paranaíba diamandiferous primary sources, making progressive selection and enriching Cretaceous and Cenozoic sediments until the Quaternary placeres formation.