

## **MINERAL CHEMISTRY OF SYENITIC-GRANITIC CARA SUJA MASSIF, SOUTHWESTERN OF BAHIA STATE - BRAZIL**

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The paleoproterozoic alkalic-potassic Cara Suja Massif (CSM) shows a curious faciological distribution, marked by: leucocratic quartz-syenitic at the center; hololeucocratic biotite-granites at south and; at east, involving these rocks, occur mesocratic alkali-feldspar syenites, which have been interpreted as a cumulatic facies. Lamprophyric dikes and enclaves are subordinated. The alkali feldspar is the major phase in these rocks. Contents of end-member are low (~ 0,6 %) but can reach 1,5% in cumulatic facies. Iron contents are low (0,3) similar to typical shoshonitic lamprophyres. The plagioclase occurs in greater amounts in the evolved rocks, but have albitic composition (96 to 98 Ab). Clinopyroxene only occurs in cumulatic facies, as cores surrounded by amphibole. This is the major mafic phase in syenites, not existing in granites. Correspond to Mg-hornblend, and it is marked by siliceous character (Si 7) and low K<sub>2</sub>O (0,6 to 0,9%) and TiO<sub>2</sub> (0,5%) contents. The identified micas are flogopite (syenites) and biotites (granites). In these crystals, the Al<sub>2</sub>O<sub>3</sub> contents (12 to 13% syenites, 14 to 15% in granites) are higher than those of typical ultrapotassic suites, whereas the contents of Mg# (0,65 to 0,70 in syenites and 0,54 to 0,58 in granites) and TiO<sub>2</sub> (0,5 to 1,3% in syenites and 1,3 to 1,5% in granites) are lower. Despite the low contents of MgO in micas of the CSM, several other characteristics are similar to potassic-ultrapotassic rocks. These results corroborate those of whole-rock chemical which have appointed a potassic-ultrapotassic magmatism with lamprophyric affinity to the CSM. (CBPM; GPA)