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POSSIBLE PALAEOCLIMATIC SIGNIFICANCE OF THE MIDDLE SÃO FRANCISCO RIVER FOSSIL DUNEFIELD (STATE OF BAHIA, BRAZIL)*

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The middle São Francisco River stabilized dunefield is an important aeolian inland sedimentation area. It possibly originated during successive drier periods of the Quaternary and nowadays is represented by unconsolidated sands exhibiting very undulated to flat surfaces. It is situated between the left bank of the São Francisco River and the Serra do Estreito, occupying an area of about 6,000 km². It extends downriver along the São Francisco River for about 200 km from Barra to Pilão Arcado, Bahia. Presently, this area is characterized by a semi-arid climate with a rainfall of about 600 mm/y.

The physiographic pattern, as identified in aerial photographs and satellite images, is dominated by "draas" and complex parabolic dunes covered by arboreal and shrubby "caatinga-type" vegetation. Preliminary TL dating has furnished an age of about 7,400 years B.P., suggesting a possible phase of intense aeolian reworking by palaeowinds blowing N 66° W, almost coincident with the average direction of presently prevailing winds.

Detailed geomorphological, sedimentological and geochronological (TL and ¹⁴C) studies are now in progress in the area and hopefully will permit the recognition of the most important generations of dunes and their relationship with changes in the regional palaeoclimate.

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