Abstract

The Poço das Antas National Biological Reserve is located in Rio de Janeiro State, southeast Brazil. This paper presents information on past environmental characteristics of the area through pollen analysis. Two sedimentary columns were collected and five samples were selected for radiocarbon dating. The following ages of the columns from bottom to top were detected: column 1 - 1.20-1.16 m: 6080 ±40 years BP, 0.775-0.735 m: 4090 ±40 years BP, 0.385-0.345 m: 1880 ±80 years BP; column 2 - 1.22-1.18 m: 3520 ±40 years BP, 0.23-0.19 m: 1810 ±40 years BP. Three samples from column 1 and two samples from column 2 were selected for pollen analysis: 1.20 m, 0.77 m and 0.37 m of column1 and 1.22 m and 0.21 m of column 2. Chemical treatment followed standard methodology. The palynological analysis shows that around 6080 years BP the study area was dominated by a rain forest and from around 4090 years BP the vegetation changed to a fragmented forest, restricted to low hills and surrounded by an open area of grassland and pioneer plants, swamps and peat areas. The pollen assemblage of the samples 3520, 1880 and 1810 years BP suggest the permanence of this kind of vegetation between 4000 years BP and the actual.

Keywords

Palynology, paleo-environment, Holocene, Brazil.