

A LATE TERTIARY PALYNOFLORA AND TERRESTRIAL PALEOENVIRONMENTS FROM HAITI

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In 1923 E. W. Berry published on a small collection of fossil plants made by W. P. Woodring from Haiti. Identifications included the alga Chara, the fern Gymnogramma, and the angiosperms Bumelia, Chrysophyllum, Guettarda, Mespilodaphne, Mimusops, Pisonia, and Simaruba. Early identifications of leaves of tropical plants have proven notoriously unreliable, and the flora has not been studied since Berry's work. Recently permission was received to remove small pieces of the outer matrix of the Haitian specimens to process for pollen and spores. The microfossils recovered include monolete and trilete fern spores, the tree fern Pteris (abundant), pollen of the gymnosperm Pinus (pine; abundant), and pollen of the angiosperms Palmae (palm), Alchornea, Chenopodiaceae/Amaranthaceae, Compositae (common and several types), Engelhardia, Hygrophila (first fossil record), Malpighiaceae, Myrtaceae, Oryctanthus, and various unknowns. From the very general locality data on the specimens they are likely from the Maissada Formation, and the palynomorphs indicate a maximum age of uppermost Miocene to Pliocene. Preliminary results suggest the vegetation was similar to that presently growing on the island, including the pine forests now a prominent community on Haiti. The paleoclimates were also similar to those presently prevailing at low to mid-altitudes.