## FAIRCHILD TROPICAL GARDEN'S & MONTGOMERY BOTANICAL CENTER'S 1993 RESEARCH EXPEDITION: THE CYCADS AND PALMS OF SOUTHERN MEXICO by Terrence Walters, FTG Cycad Systematist

On October 8, 1993, Dr. Terrence Walters (FTG Cycad Systematist) and Chuck Hubbuch (FTG Curator of Cycads and Palms) flew to Veracruz, Mexico, for a three-week cycad and palm collecting expedition to southern Mexico. This expedition was jointly funded by the Montgomery Botanical Center (MBC) and Fairchild Tropical Garden (FTG). FTG's sister garden in Xalapa, Mexico, the Jardin Botanico Clavijero, which maintains the national cycad collection of Mexico, sponsored the expedition. Dr. Andrew Vovides, director of the Jardin Botanico Clavijero, was the expeditions host, guide and interpreter.

The expedition team obtained at least 19 cycad species representing three genera and seven palm species from 36 sites covering five states (Chiapas, Puebla, Oaxaca, Tabasco, and Veracruz) in southern Mexico. Fourteen of the 19 cycad species, including two undescribed species, are new to the Montgomery Botanical Center's grounds. Two additional cycad species collected from Mexico were previously inadequately represented by documented material at the Foundation.

To begin the development of FTG's off-site conservation collection in Mexico, 15 percent of the specimens collected were donated to the Jardin Botanico Clavijero. These specimens, which have been accessioned into FTG's plant database, greatly increase the scientific and conservation value of the national cycad collection of Mexico. Dividing the collection between two geographically separated botanical gardens enhances the protection of these rare species.

More than 65 herbarium vouchers (dried specimens) were made at each site. These scientifically valuable cycad and palm vouchers are now being accessioned into FTG's herbarium. In addition, duplicate vouchers were made for the herbarium at the Institute of Ecology, Xalapa, Veracruz.

An extremely valuable outcome of the expedition was the opportunity it provided Terrence and Chuck to see each of the species growing in the wild. For each cycad and palm site, the expedition team recorded information concerning soil type, habitat, altitude, associated species and phenology. These data allow us to better evaluate local planting sites and growing requirements for these rare and endangered species.