Advisory Board Grant Report 2015-2016 Dr. Jorge Santiago-Blay Adjunct Instructor in Biology

Effects of temperature on ambers and copals: Progress Report

For decades, scientists have wondered about the process of resin maturation. Maturation refers to the physical and chemical processes that turn a freshly-produced blob of resin into amber. Although traditionally suggested that the processes may make at least a million years, other researchers have stated that fossilization could only take 40,000 years. During the summer 2015, experiments to explore at what range of temperatures copal (partially fossilized resin) turn into amber (greatly fossilized resin) and amber turn into charred debris were carried out. Thirty (30) exemplars of amber and copal, selected to represent different botanical and geographical origins as well as different ages (ambers are older; copals are younger) were examined. This large size may permit conclusions to be based on these three variables, botanical origins, geographical origins, and maturation.