A climatic and taxonomic comparison between leaf litter and standing vegetation from a florida swamp woodland

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One method to determine past climate has been the use of leaf morphological characteristics of fossil leaves quantifi ed using modern climate and canopy leaf characteristics. Fossil assemblages are composed of abscised leaves, and climate may be more accurately determined by using leaves from leaf litter instead of the canopy. To better understand whether taphonomic processes make a difference in this relationship, a north-central Florida woodland was sampled to determine the morphologically based climate estimates from these leaves. Leaves from woody, dicotyledonous plants were collected and identifi ed, then compared using presence/absence data and analyzed using several linear regression equations and the CLAMP data set. Although the majority of standing vegetation was refl ected in leaf litter, some inconsistencies were observed, which may refl ect plant community structure or sampling technique. Mean annual temperature (MAT) and growing season precipitation (GSP) were estimated fr