

## *Abstract*

The present work inquires into the phyto-cultural interrelationships of two Huecoid communities that inhabited Vieques and Puerto Rico (La Hueca and Punta Candellero) around 2300 years ago. The primary objectives of this investigation were, among others: to characterize for the first time the agroecology of these communities and to interpret the role of plants as humanized natural objects which were consciously used during the movement of these peoples across the insular Caribbean. With the aim of understanding the characteristics of the adaptive processes of these Huecoid people in these sites, a conceptual framework constituted by a combination of cultural ecology and hermeneutic phenomenology was established. Although both of these approaches seem antagonistic at first glance, it was possible to conciliate their principal premises that make reference to the adaptive strategies and the relational aspects that take place between humans and their biophysical and cultural landscapes. The idea of a “hybrid” conceptual framework responded to the search of archaeological interpretations that could show the dynamic role of human agency in the adaptive cultural processes that took place during this early part of the ancient history of the Antilles.

After articulating the theoretical framework, it was possible to elaborate an investigative archaeobotanical program based on the study of starch grains applied to two lithic assemblages associated to plant processing. First, a set of protocols for the analysis of starch grains was established. Then, a reference collection of important plants from the region was assembled. This

reference collection made possible to contrast archaeological starch grains with the ones obtained from known plants. The analyzed archaeological tools were inserted within three temporal phases for each archaeological site, which allowed us to address diachronically shifts in production and use (i.e., subsistence, medicinal, ritual) of plants. The obtained results suggest that what we know as the La Hueca culture of the Antilles was initially the product of human movements that started around 500 BC, from the territories of Costa Rica, Panama, Colombia and lowland Ecuador. The initial adaptive strategy of the Huecoid inhabitants of Vieques consisted on the application of a continental (isthmo-colombian) agroecological system, in which plants such as manioc, maize, sweet potato, and *yautía*, among others, were highly important not only as foodstuffs, but also as cultured objects employed for dealing with their new landscapes. In that same light, the differential use of plants after their arrival to Vieques and Puerto Rico shows that the studied groups were adopting and adapting, gradually, Antillean plants into their system of food preferences while continuing to incorporate new continental plants.

This investigation offers the first archaeological interpretations, supported by a systematic archaeobotanical study, of some of the socio-cultural processes that made possible for two Huecoid communities to persist and evolve in a dynamic landscape of human and natural interactions in the northern Antilles.