

## PREHISTORIC ETHNOBOTANY AND WEST INDIAN ARCHAEOLOGY

By Louise Krasniewicz

Reports on prehistoric subsistence patterns in the entire West Indian area often have been based more on conjecture than on solid environmental and archaeological evidence. Until recently, most of the researchers have relied on indirect sources to support their hypotheses: *e.g.*, 'The settlement pattern was one of sedentary or semi-sedentary small villages with exploitation of marine resources and the cultivation of manioc, as indicated by the presence of fish and shellfish remains and of griddles for the baking of cassava' (MacLaury 1970:44). While this hypothesis may be legitimate, data to support it is far from complete. The argument for the cultivation of manioc which uses the presence of ceramic griddles as its only evidence does not take into account the numerous other uses that the griddles may have been put to (*cf.* De Boer 1975), nonetheless it surfaces regularly in articles on the region: *e.g.*, 'The presence of griddles (about 3 per cent of the total sherd count) implies that at least manioc was grown and made into bread or cakes' (Hoffman 1970:16), and: 'Manioc undoubtedly was raised as implied by the presence of griddles' (*ibid.*).

The main question is not, of course, whether we can prove the cultivation of manioc by the presence of griddles. Rather, we should become more concerned with directing our efforts toward collecting more substantial supportive data. It should be apparent that the collection of environmental materials (including samples of pollen) is essential to an understanding of many aspects of West Indian archaeology. Without these materials we cannot be certain of the patterns of resource exploitation employed at various times in the region. We cannot really understand continuous changes in material culture unless we can relate these changes to adaptive strategies.

It should be emphasized that there has not been a complete lack of interest in collecting environmental data in this area (*cf.* Bradstreet 1975). Excavators have collected much faunal material which has proven invaluable in discovering patterns of resource use (*cf.* Figueredo *in press*). The collection of botanical materials, unfortunately, has been neglected. Whether a researcher is trying to determine the extent of the gathering of plant materials in an initial hunting-gathering-fishing adaptation, or is more concerned with studying the adaptation or introduction of agricultural crops into the region, he or she should be aware that the collection of botanical samples is essential. We cannot evaluate fully the use of either wild or domesticated plant materials until we have this direct evidence.

Many researchers believe that here (as in many other parts of the world) botanical materials are not preserved. For researchers who use the more recently developed techniques, however, these materials are readily available. Figueredo (1974), for instance, reports on the recovery of nuts from Krum Bay. Since charcoal is recovered and used for radioisotopic dating, it is quite conceivable that carbonized seeds are also available. Under certain conditions (such as dry caves, ash lenses, shell middens, and similarly favored contexts) non-carbonized materials may be preserved also. With the many improved techniques in the sampling and processing of data that are available (*vid.* Renfrew 1973), this sort of information certainly *can* and *must be* recovered.

## Bibliography

### Bradstreet, Theodore E.

1975 Ceramic culture site location parameters for the Virgin Islands. *Journal of the Virgin Islands Archaeological Society*, no. 2, pp. 5-12.

### De Boer, Warren R.

1975 The archaeological evidence for manioc cultivation: a cautionary note. *American Antiquity*, vol. 40, no. 4, pp. 419-433.

### Figueredo, Alfredo E.

1974 Current research in the Virgin Islands. Centre d'Études Régionales Antilles-Guyane: *Bulletin de Liaison et de Recherche Archéologique*, no. 2, pp. 1-5.

*in* Prehistoric ethnozoölogy of the Virgin Islands. *Proceedings of the Seventh International Congress press for the Study of Pre-Columbian Cultures of the Lesser Antilles*.

### Hoffman, Charles A., Jr.

1970 The Palmetto Grove Site on San Salvador, Bahamas. Contributions of the Florida State Museum: *Social Sciences* no. 16, pp. 1-26.

### MacLaury, James C.

1970 Archaeological investigations on Cat Island, Bahamas. Contributions of the Florida State Museum: *Social Sciences* no. 16, pp. 27-50.

### Renfrew, Jane M.

1973 *Palaeoethnobotany*. The prehistoric food plants of the Near East and Europe. New York: Columbia University Press.