

An Explanation for Tamarind and Baobab Trees Growing Together in Africa and the Caribbean: The Case of St. Croix

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THE PUZZLE

The baobab (*Adansonia digitata* L.) and the tamarind (*Tamarindus indica* L.) are two of Africa's better known fruit trees and both are adapted to the dry tropical regions of the continent. There are intriguing reports in the scientific literature of tamarinds growing at the base of giant baobabs with their branches entwining those of the baobabs, and in parts of Africa, this curious sight has been described as "fairly common" (Lely 1925:9) and "frequently seen" (Dalziel 1937:112). Yet, no systematic effort has been made to explain this unusual association in a theoretical way. Owen (1970:34), however, offers a suggestion that deserves consideration: "In a landscape [such as Northern Nigeria] dotted with baobabs and tamarinds (and few other trees) . . . [c]ould it be that the fruits of the tamarind are consumed by nomads in the shade of the baobab and some discarded seeds take root alongside this unusual 'guardian'?" I agree with Owen and my discovery of tamarinds and baobabs growing together in St. Croix lends support to his suggestion.

BAOBABS AND TAMARINDS IN THE CARIBBEAN

I had read about tamarinds entwining baobabs for some time, but did not consider the reasons for this until 1985 when I saw a tamarind growing next to a baobab in the Moravian Churchyard in St. Johns, Antigua. My interest increased in June 1986 when I discovered three tamarind seedlings growing at the base of Jamaica's largest and most impressive baobab on the grounds of Alpha Academy Girls School in Kingston. (Figure 1 and 2). In 1987, I became convinced this association was worth investigating when I found in St. Croix tamarind seedlings growing at the base of baobabs and two cases where the trees grew side by side.



Figure 1. The finest example of the baobab in Jamaica-- tree at the Convent of Mercy Academy (Alpha) Girls' School, Kingston, Jamaica.

BAOBABS AND TAMARINDS IN ST. CROIX

Over the past several years I have made a detailed study of the introduction, distribution and history of the baobab in St. Croix. This information also documented the plants found growing in association with it. I learned from this effort that genip seedlings (*Melicoccus bijugatus* Jacq.) were common under and around many of St. Croix's mature baobabs, including trees in bushy places removed from human activity. Tamarind seedlings, on the other hand, were only found with baobabs in areas of intense human activity. This leads me to agree with Owen: tamarinds are being incidentally dispersed around baobab trees by humans.

Consider, for example, the tamarind and baobab growing side by side on an old estate in central St. Croix that is now overgrown with shrubs and young trees. The large tamarind tree illustrated in figure 3 was only one of several tamarinds growing in the neighborhood of this baobab, and this group included seedlings and small trees.

To learn about the social significance of this baobab I went in search of someone who was familiar it. I was introduced to Heriberto Gonzalez who grew up on the estate in a community known at the time as Concordia. His comments suggests this Concordia baobab was a village tree. In addition to harvesting



Figure 2. Tamarind seedlings growing at the base of the baobab at the Convent of Mercy Academy (Alpha) Girls' School, Kingston, Jamaica.

the fruits, people gathered in its shade to watch cock fights and play dominos. It was under this tree (and the tamarind growing beside it) that horses were bathed, groomed and shod. Here also people cleaned fish, roasted pigs, and children played hide-and-seek and spin-the-bottle. In November 1990, I visited this baobab/tamarind grove with my friend and fellow baobab enthusiast, Veronica Gordon. A native Crucian

artist and gardener, she has done more to disperse the baobab in St. Croix than anyone else. Although the tamarind fruits were still green, Veronica picked a few (and along with her son who had accompanied us) began chewing them. From this single experience, and the comments of Heriberto Gonzalez, it is easy to understand why tamarinds grow in such close association with the concordia baobab.

HUMAN DISPOSAL OF TAMARIND SEEDS

The tamarind is one of the most common trees in St. Croix. Its fruit is eaten fresh, especially by children, and it is also used to make a refreshing drink and various sweets. Such uses of the fruit and the manner in which they influence the disposal of the seeds are significant factors in the human incidental dispersal of this species in St. Croix (Figure 4). In November of 1990, I bought four tamarind balls at the corner of King Street and Church Street in downtown Christiansted. They were 50 cents each and were very large in comparison to those sold in Jamaica. I also bought a full cup of "stewed tamarind" for a dollar (a half cup sold for 50 cents). I ate the four tamarind balls and counted the seeds. The first had 14, the second had 12, the third had 13, and the fourth had 16. This was four to five times as many seeds as found in a typical Jamaican tamarind ball! The cup of "stewed tamarind" had 41 seeds. When we consider the Crucian love of tamarind sweets (along with all other uses of the fruit), it is easy to understand why the tamarind is one of the most common trees in St. Croix.



Figure 3. The tamarind and baobab growing side by side in Central St. Croix.

THE CONSEQUENCE OF HUMAN DISPERSAL OF THE TAMARIND

From the perspective this paper presents, it is important to note that the association between tamarinds and baobabs is not an exclusive one. It certainly cannot be said that tamarinds and baobabs are only found growing together. What we find instead is that anywhere people eat tamarinds and dispose of the seeds, seedlings are likely to grow. The tamarind can accurately be described as a very weedy tree spreading

readily from incidentally discarded seeds. This accounts for its familiarity in the settlement environment of the people of St. Croix. It is very common along roadsides, plentiful on public and private grounds, and is frequently seen in pastures, home gardens, churchyards and graveyards.

On King Street in Christiansted (not far from the Friedensthal Moravian Church) is a large silk cotton tree (*Ceibapentandra* L.). Given its strategic location by a bus stop, it is always host to people seeking shelter from the fierceness of the tropical sun. There were two tamarind seedlings growing from the root of this tree. Tamarind seedlings at the root of this cotton tree and at the root of baobabs are only two of the many places where tamarinds occur in St. Croix as a result of human incidental dispersal. I agree with Owen because the situation he describes for Africa is similar, I would argue, to the one I have described for St. Croix. The baobab is one of Africa's most important trees, valued for its shade and for its great variety of useful products. On the hot, dry savannas to which the baobab is naturally adapted, Africans gather in its shade where they eat tamarinds and unwittingly disperse the seeds under and around the baobab.



Figure 4. A comparison of the fruits of the baobab and tamarind.

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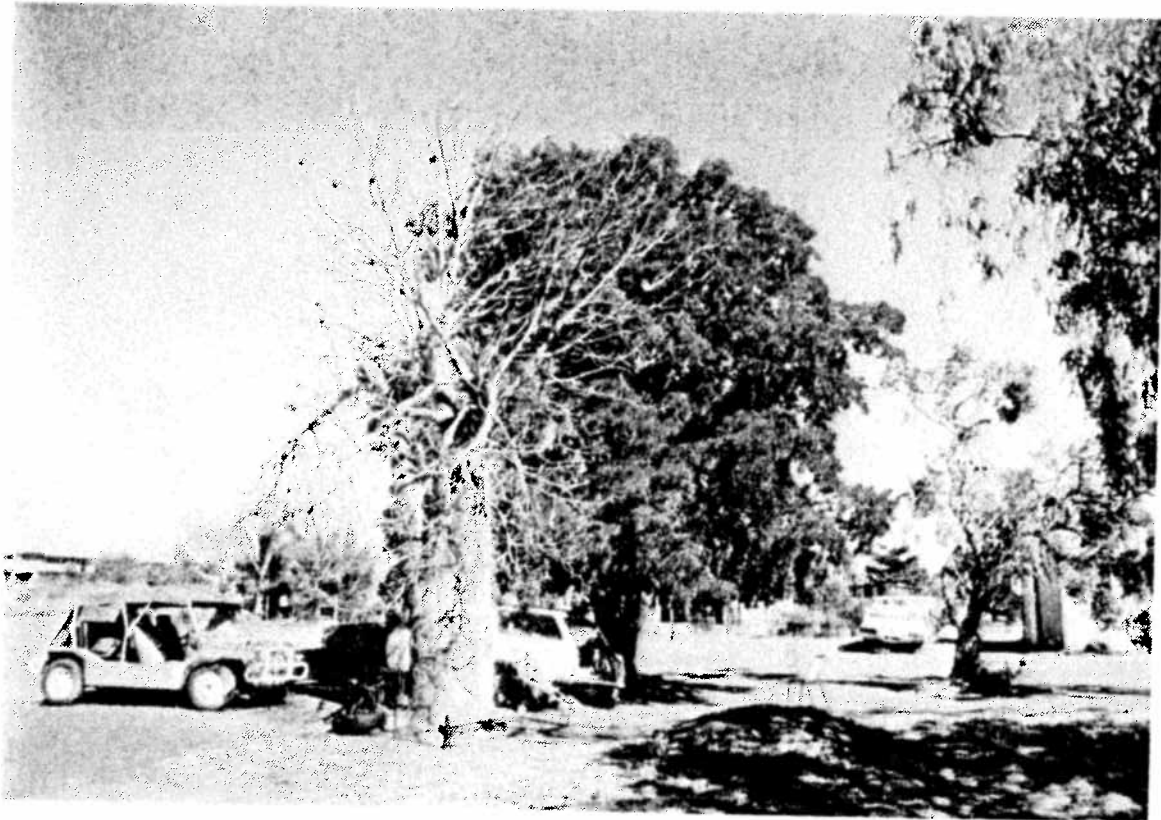


Figure 5. The tamarind and baobab growing side by side in Australia.

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