

Research Article
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Sri Lanka's Earliest Wild Musa Bananas?



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Abstract

In spite of their importance as a crop today, records of the use of wild banana and the antecedents of the modern domesticated bananas are relatively obscure. Banana dispersal pattern from their native range (e.g. Island South East Asia and New Guinea) is also poorly known. Excavation at Fahien Rockshelter in South Western Sri Lanka yielded phytolith sequence dating from 48,354 to 3900 cal BP. Phytolith evidence suggests that Rockshelter occupants used wild banana (Musa. acuminata and M. balbisiana) through the late Pleistocene to early Holocene, i.e. 8000 cal BP. After this age, occupants significantly decreased the use of wild bananas.

Keywords: Banana; Phytolith; Dispersal; Archaeology; Sri Lanka

Introduction

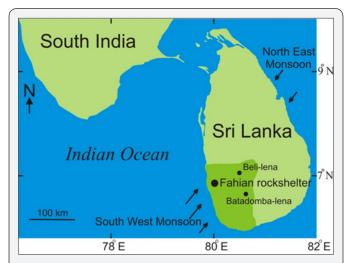


Figure 1: Location of the Fahien rockshelter in Sri Lanka. Area marked by dark green color receives relatively high rainfall (>2,500mm/yr) from the South West Monsoon while area marked by light green color receives relatively low (< 2,500mm/yr) rainfall from the North East Monson.

The earliest known banana cultivation is at 6,950-6,440cal BP at Kuk Swamp in the highlands of Papua New Guinea [1]. The dispersal of bananas from Papua New Guinea, the role of human agents and the arrival of the first cultivated bananas in many other geographical areas in the world have so far been poorly documented, but has recently been discussed using data from phytoliths, archaeology, genetics and linguistics [2-7]. Bananas are known from Munsa, Uganda by 5,492-5,100cal. BP [3,8]

and Kot Diji, Pakistan by 4,500-3,900cal. BP [5] although their domestication status is unclear. By 2,760-2,300cal. BP, banana had reached Nkang, Cameroon, West Africa [2,9-12]. But the route and chronology are still disputed on chronological [4,13], archaeological [14,15,16,17] historical and linguistic [18-20] and archaeobotanical [13,21] grounds. There is also discussion about the proposed mode of dispersal on terrestrial [6,7,22] and maritime routes [6,7,20,23] from South East Asia to South Asia and Africa. The island of Sri Lanka in the Indian Ocean has evidence of the prehistoric settlements from several Rock shelter sites dating from 36,000cal BP onwards, and one terminal Pleistocene sits yielded a few evidence of wild Musa banana used as one of the starchy food in prehistoric life [24,25], but no conclusive evidence has been presented for understanding the prehistory of wild Musa banana in their native region. This publication reports the very early occurrence of the phytoliths of wild bananas from the late Quaternary archaeological sequence (48,354 -3900cal BP) at Fahien Rock shelter (Figure 1).

Fahien Rockshelter

Fahien Rockshelter is situated at 80° 12′ 55″ E 6° 38′ 55″ N and 130m above mean sea level in Yatagampitiya village near Bulathsinhala in the Kalutara District, in the humid southwest of Sri Lanka (Figure 1). FaHien Rockshelter is one of the oldest prehistoric sites in Sri Lanka [26,27]. Investigations at FaHien Rockshelter included work on the stratigraphy, sediments, lithics, bone tools, beads, bones, terrestrial and marine shells, charcoal, macrofloral remains (Canarium sp. nuts, Artocarpus sp. epicarps), coprolites, and several interred anatomically