Stone Mortar and Pestle Distribution in New Britain Revisited

PAMELA SWADLING

Visiting Fellow, Department of Archaeology and Natural History, Research School of Pacific and Asian Studies, Australian National University, Canberra ACT 0200, Australia pamelas@coombs.anu.edu.au

ABSTRACT. This is the first of a series of regional studies on the distribution of stone mortars and pestles in Papua New Guinea (PNG). The pan distribution of these artefacts in New Britain, in conjunction with preliminary results from other parts of PNG, supports the view that there is a positive correlation in the distribution of stone mortars and pestles and taro cultivation. This result raises the possibility that these artefacts provide a signature of where people were growing taro in PNG from about 7,000 to 3,500 years ago.

SWADLING, PAMELA, 2004. Stone mortar and pestle distribution in New Britain revisited. In A Pacific Odyssey: Archaeology and Anthropology in the Western Pacific. Papers in Honour of Jim Specht, ed. Val Attenbrow and Richard Fullagar, pp. 157–161. Records of the Australian Museum, Supplement 29. Sydney: Australian Museum.

By using the distribution of stone mortars and pestles in Papua New Guinea, it may be possible to track the geographic extent of human settlement dependent on taro from about 7,000 to 3,500 years ago, the age range for dated mortar finds. This paper is the first of a series of regional studies that aims to test this hypothesis by examining the distribution of these artefacts and the subsistence potential of each study area.

The possibility that most mortars and pestles might be quite old was first proposed by White & O'Connell (1982: 192). Four mortars have been dated; they all come from the highlands. Two dated respectively at c. 4,560 B.P. and 7,000–7,500 B.P. are from Warrawau and Kuk, both swamp sites near Mount Hagen in the Western Highlands (Golson, 2000: 231–248). The third dating to <4,500 B.P. is from Nombe cave site in Simbu (Ambrose, 1996–1967: 1087; White, 1972: 134). The fourth dating to c. 3,500 B.P. is from NFB, an open site just south of Kainantu in the Eastern Highlands (Ambrose, 1991: 462; Watson & Cole, 1977: 193). What was initially identified as a mortar fragment from Wanelek is now confirmed as being a potsherd (S. Bulmer, pers.

comm., 2000). No pestles have been dated. Some mortars may have been made in the recent past until the 1970s for use in ritual purposes in the Southern Highlands. Mortars were also made for pounding puddings in the 1960s at Mbiche village on Nggatokae Island in the Solomon Islands (Swadling, 1981: 52–53).

Pretty (1965) was the first to attempt a PNG wide distributional study but, apart from regional studies such as that by Specht (1966), there has been little attempt to update his work until now.

Results and discussion

Jim Specht's comprehensive article on stone mortars and pestles in New Britain was published in 1966 in the *Journal of the Polynesian Society*. After the passing of more than three decades it seems fitting to revisit this topic in a volume produced in his honour.

Specht (1966) listed 11 mortars and pestles for what is now West New Britain province, 15 for East New Britain (Tables 1 and 2), as well as large rocks with mortar-like