

## Kuk Swamp (UNESCO World Heritage Site)





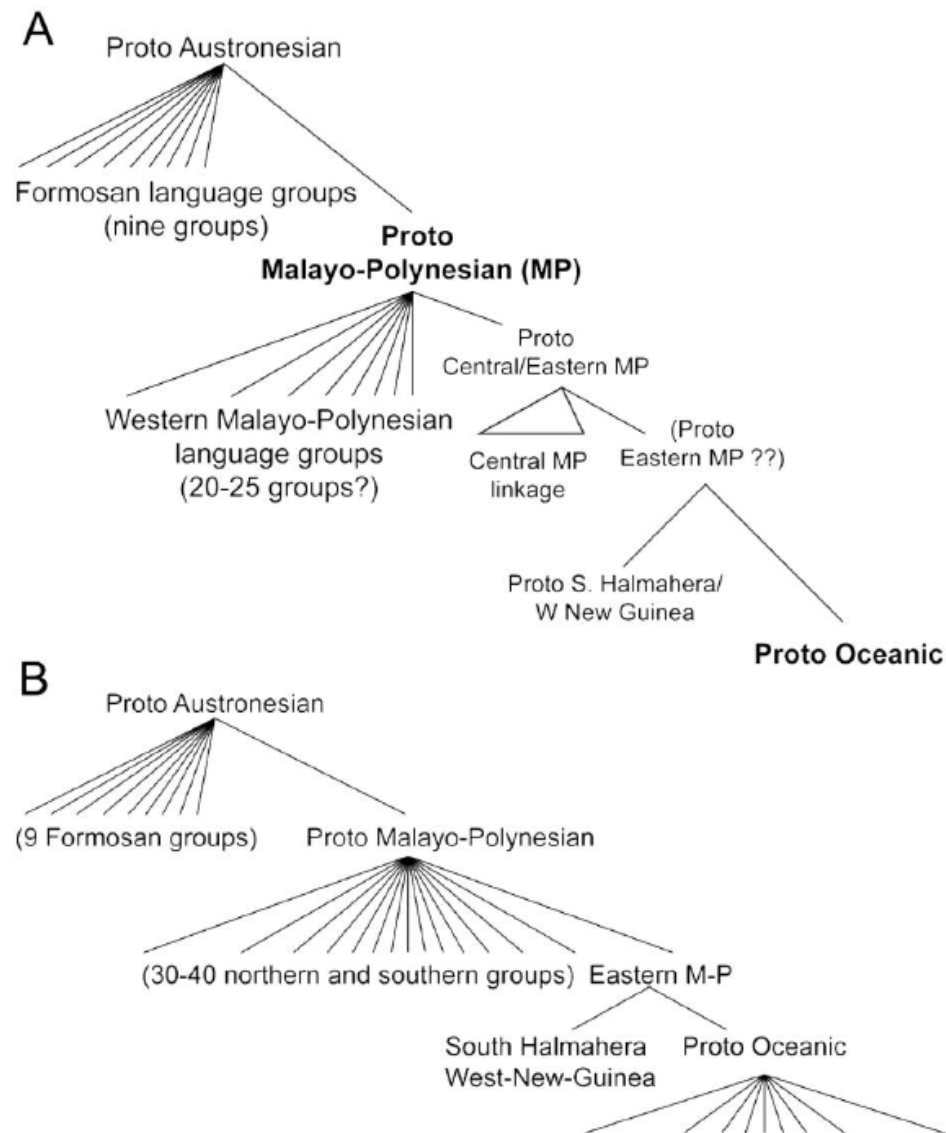


Figure 1. Representations of the Austronesian phylogeny. *A*, Earlier phylogeny (from Pawley 2007, after Blust 1995); *B*, revised phylogeny (following Donohue and Grimes 2008 and Ross, Pawley, and Osmond 2008). Earlier representations of the Austronesian family (*A*) have a very hierarchical structure, but recent revisions (*B*) show a flatter structure with multiple starbursts.

## Origins of Lapita Domestic (?) Animals

Pigs (*Sus scrofa*): multiple, but for ISEA and Pacific, S. China and Vietnam (2 clades)

Dogs (*Canis Familiarus*): ancient, probably dozens or hundreds of domestication events, including S. China

Chickens (*Gallus gallus*): wild ancestor is red junglefowl (SE Asia, India), but variant seen in Oceania seems to have origins in mainland SE Asia (8,000 BP)

Pacific Rat (*Rattus exulans*): 2 groups, E Indonesia and New Guinea, multiple pathways

Cuscus (*Phalanger sp.*): New Guinea, moved to other islands long pre-lapita

## Origins of Lapita Domestic (?) Plants

Bananas (*Emusa* sp.): Kuk (10,000 BP? Reliably 6,000 BP), then Philippines, then everywhere else, but controversial—possible center in Sri Lanka

Breadfruit (*Artocarpus altilis*): wild ancestors in E. Indonesia, Philippines, New Guinea, Micronesia, oldest domesticates in Near Oceania and Micronesia (at least 2 groups)

Taro (*Colocasia* sp.): wild ancestors in Philippines, possibly SE India, domesticate at K

Yams (*Dioscoria* sp.): many (and ancient) domestications in Asia and Africa (bit not Americas), esculenta at Kuk is same as species found in Lapita sites

Coconuts: (*cocos nucifera*): ?? Pacific or Indian ocean, could not have made it to eastern Polynesia without people's help