

Nypa fruticans, a Weed in West Africa

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Nypa fruticans, the mangrove palm, was introduced into West Africa in the early Twentieth Century and is now becoming a serious weed.

The natural range of the mangrove palm, *Nypa fruticans* Wurmb, occurs from Sri Lanka and the Ganges Delta to Australia and the Solomon and Ryukyu Islands (Uhl & Dransfield 1987). However, the ability of *Nypa* to colonize areas outside its existing natural range has been reported from Trinidad (Bacon 2001), Panama (Duke 1991) and probably most extensively, West Africa (Zeven 1973). It is speculated that the source of the germplasm that has led to the establishment of colonies of *Nypa* in the Neotropics originated in West Africa (Bacon 2001), where it was introduced during the early and middle parts of the 20th century. Unlike in West Africa, the colonies of *Nypa* reported from the Neotropics are said to be somewhat localized and do not currently cover vast expanses of coastline.

Nypa in West Africa

Although *Nypa fruticans* is currently restricted to SE Asia, its historical distribution was much greater, and pollen and fruits of *Nypa* are common fossils in many parts of the world. *Nypa* has not been present in West Africa since the end of the Eocene (Gee 1989); however, *Nypa fruticans* was introduced to West Africa at two main locations in Nigeria. In 1906, seeds from the Botanic Gardens of Singapore were used to establish a trial plantation in Old Calabar from where a subsequent plantation was initiated in Oron in 1912 (Holland 1922) – the Cross River Delta population. In 1946, a further 6000+ seeds originating from Malaya were planted throughout

the brackish swamps of the Niger Delta (Zeven 1971). It is from these two single points of entry that the species has today colonized large areas of coastline throughout West Africa.

Zeven hinted at the potential capacity of the species to become naturalized and forecast that “.. [*Nypa*] will eventually spread rapidly throughout the coastal districts of West Africa” (Zeven 1973: 36). Today, *Nypa* has colonized large areas along the coastline of the Bight of Biafra, particularly in brackish and sheltered tidal areas such as river deltas – areas where the dicotyledonous mangrove species are more commonly found. The species has now established itself as far south as the Wouri Estuary near Douala, Cameroon and westwards to Lagos.

Unfortunately, this colonization has considerable ecological implications. It has been observed that *Nypa* is a highly opportunistic species and the dense monospecific stands that the species forms are out-competing the indigenous mangrove vegetation. This opportunism is exacerbated by the fact that much of the mangrove forest of Nigeria and Cameroon is being felled to provide fuel wood for smoking fish for commercial sale. The resulting exposed mudflats are ideal colonization areas for *Nypa*, and the indigenous mangroves are unable to re-colonize the areas.

Recent environmental impact assessments carried out for the oil industry observed that *Nypa* has invaded the mangrove areas of the Niger Delta especially around the Bonny and Imo Rivers and