

Two Palms with Surprising Qualities

JEAN-MICHEL DUPUYOO
Jardin d'Oiseaux Tropicaux
Conservatoire Biologique Tropical
83250 La Londe-les-Maures
France
jmdupuyoo@yahoo.fr



1. *Heterospathe uniformis* growing with *Cocos nucifera* in the background (Magam, North of Ambrym).

The Vanuatu archipelago, situated in the southwest Pacific Ocean, is composed of some 80 islands. It benefits from a tropical, humid climate, with certain variations according to latitude and altitude. Of the 21 indigenous palm species, 14 are endemic (Dowe & Cabalion 1996). This article concentrates on two species: *Heterospathe uniformis* and *Neoveitchia brunnea*.

Heterospathe uniformis and *Neoveitchia brunnea* are both endemic in Vanuatu, more precisely to one or a small group of islands in the archipelago. They are therefore rare in the wild, and information about them is equally scarce.

The genus *Heterospathe* contains 38 species found in an area from the Philippines to the islands of the western Pacific (Govaerts & Dransfield 2005). *Heterospathe uniformis* is the only species present on Vanuatu. Dowe and Cabalion (1996) considered it to be endemic in the west of Ambrym. *Heterospathe uniformis* is of medium height, the trunk reaching 7 m tall, with a diameter at breast height of 15 cm (Figs. 1 & 2). The leaves are pinnate and measure 140 cm in length. The inflorescence is interfoliar. The fruits are elliptic 2.2 long

and 1 cm in diameter (Fig. 3). The color changes from green to orange and finally red at full maturity. The seeds are pointed at the apex and rounded at the opposite (calyx) end (Dowe & Cabalion 1996).

Neoveitchia is a genus of two species (Govaerts & Dransfield 2005). *Neoveitchia storckii* is found exclusively on Vitu Levu, Fiji (Watling 2005). The species which concerns us here, *N. brunnea*, is endemic to a single island in the center of the Vanuatu archipelago, Pentecost Island (Dowe & Cabalion 1996). *Neoveitchia brunnea* is also a medium tall palm. The trunk can reach 10 m in height and a diameter of 30 cm at breast height (Figs. 4). The base is noticeably wider, even in young trees less than 1 m tall (Fig. 6). The pinnate leaves can be up

2. *Heterospathe uniformis* is protected by people from destruction (Liro, Paama). 3 (inset). Mature fruits of *H. uniformis*.



to 5 m in length (Fig. 7). The inflorescence is infrafoliar; the fruits are oval and 7 cm in length. They change from green to dark red at maturity (Fig. 5). The seeds are oval and 3.5 cm in length (Dowe & Cabalion 1996).

Observations from the field

My first encounter with *Heterospathe uniformis* was on the island of Paama, where this species is known locally as *Fakul*. The palms in Paama, the island with the highest population density of the archipelago, grow in the undergrowth of coconut groves and orchards. It is uncommon for a “useless” species to survive on these islands where the vegetation is controlled to a very great extent, but *H. uniformis* is far from being useless. The *Fakul*

is renowned for its qualities against sexual impotence. The fruit is used for this purpose, mainly by older men. I also learned that a similar remedy could be obtained from the bark. These palms are therefore conserved and seedlings protected.

In September 2003 at the tribal festival in Paama, I met some inhabitants of northern Epi who confirmed that *Heterospathe uniformis* was present on the island and known also for its stimulant powers. The tree also appears to be spontaneous on the totally deserted volcanic island of Lopevi. In the north of Ambrym, *H. uniformis*, or *Lioleniere*, is likewise known for its qualities as a sexual stimulant. There the bark is consumed mixed with grated coconut. This mixture can be given to children



4. *Neoveitchia brunnea* growing in a village (North of Pentecost Island). 5 (inset). Mature fruits of *N. brunnea*.





5 (left). The base of *Neoveitchia brunnea* is noticeably wider, even in young trees (North of Pentecost Island).

6 (right) The ornamental pinnate leaves of *Neoveitchia brunnea* (North of Pentecost Island).

to give strength and ensure growth. The bark is also used as a fertilizer. In gardens of yams sprinkled with pulverized palm bark, the yams at harvest are much bigger than usual. Finally the stem is sometimes used to make walking sticks for the elderly.

Neoveitchia brunnea seems unfortunately to be considerably rarer, confined to the north of Pentecost Island and is little known by local people apart from the most aged. It is sometimes called *Niu Niu Tatu*, which means "fruit which rolls to the ground." It is also known as the *Devil Palm*, as its fruit were thought to be eaten by demons, giving the tree a very bad reputation. At one time, children were forbidden to touch it, as it was thought that simple contact would provoke a serious illness of the stomach. According to the elders, the sap could be used to concoct a dangerous poison capable of killing men or rendering women sterile. Other less fearsome stories are known among the local people, that the first man came out of the trunk of *Neoveitchia brunnea* for example. I was unable to discover many details about the folklore associated with this palm, because traditional

knowledge is rapidly eroding and new generations have generally very little interest in these matters.

I did not have sufficient time to carry out a full and detailed study of the populations *Neoveitchia brunnea*. In fact the trees that we saw were mainly close to inhabited areas, in coconut or other orchards. I found very few young specimens and no seedlings. I did not find specimens elsewhere in the archipelago. It does not benefit from any conservation measures. It is regrettable that unlike another rare palm, *Carpoxydon macrospermum*, it has not been introduced to the gardens of the capital Port-Vila or Luganville.

Epilogue

These two rare palms are among those most admired by palm enthusiasts. Both grow naturally at low altitudes and should be relatively easy to cultivate in tropical, humid climates. If the survival of *Heterospatha uniformis* seems to be assured, the same cannot be said for *Neoveitchia brunnea*. Its utilization as an ornamental palm is one great hope for this attractive tree, and a program of

cultivation should be organized as soon as possible.

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Literature Cited

DOWE J.L. AND P. CABALION. 1996. A taxonomic account of Arecaceae in Vanuatu, with

description of three new species. *Australian Systematic Botany* 9: 1–60.

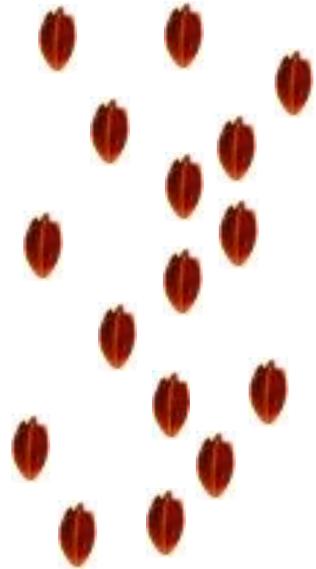
GOVAERTS, R. AND J. DRANSFIELD. 2005. *World Checklist of Palms*. Royal Botanic Gardens, Kew, UK. 223 p.

WATLING, D. 2005. *Palms of the Fiji Islands*. Environmental Consultants. Suva, Fiji. 192 p.



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