

Africa this species is found in the south-eastern Transvaal, Natal and south-western Cape Province (Figure 6). It occurs in damp places, often growing in water, and on stream and river banks and on the edge of dams.

The disjunct distribution may be attributed to the fact that seeds could have been transported to the main harbours of southern Africa, and spread from there. It flowers from December to April.

Voucher specimens: *Codd 6944* (PRE); *Esterhuysen 20155* (BOL); *Germishuizen 1640, 1858* (PRE); *Ward 5830* (NU, PRE).

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G. GERMISHUIZEN\*, P.D.F. KOK\*\* and P.J. ROBBERTSE\*\*

\* Botanical Research Institute, Private Bag X101, Pretoria 0001.

\*\* Department of Botany, University of Pretoria, Pretoria 0002.

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## ARECACEAE

### NEW BOTANICAL PERSPECTIVES ON THE ORIGIN OF THE *RAPHIA* PALMS AT MTUNZINI

The natural distribution of raphia palms in South Africa is limited to the Kosi Bay area in the extreme north-east of Zululand. However, early this century a grove of raphia palms was established at Mtunzini about 250 km further south on the Zululand coast (Figure 7).

There has been much speculation as to exactly when, why and how the first raphia palms were introduced to Mtunzini. Secondary sources, past and present, verbal and non-verbal, (Austen 1953; C.C. Foxon Jr pers. comm. 1987; Harrison 1986; Oberholster 1972; Palmer & Pitman 1972) differ somewhat with respect to the 'when' and 'why'.

The original supply of seed was in fact sent from Pretoria to Mtunzini by the then Secretary for Justice and Director of Prisons, Jacob de Villiers Roos (1916), who wrote to the magistrate at Mtunzini on the 21st July 1916, that it would be economical to grow the raphia palm in the marshy Government ground there, to supply the fibre for the Prison brush and broommaking industry, instead of importing it from West Africa via London.

This directive from Roos to C.C. Foxon, who was magistrate at Mtunzini from 1905 to 1921, clearly fixes the date and the reason for the establishment of raphia palms at Mtunzini. The origin of the seed supplied by Roos is not stated. However, on the 19th July 1916, A.M. Bottomley (1916) of the Division of Botany in Pretoria, wrote to Roos stating, 'I am forwarding you herewith the seed of *Rafia* (sic) *vinifera* which we obtained from Zululand'. It seems likely but not certain, that this was the seed, which, two days later, was forwarded to Foxon by Roos.

Two further parcels of raphia seed were sent to Foxon on behalf of the Director of Prisons, Pretoria, for planting.

The covering letter (Director of Prisons 1917a) for the second batch, dated 10th January 1917, gives no indication whatever of the source of the seed.

It may also have been Zululand or perhaps Portuguese East Africa, but it is not unreasonable to consider the possibility that the seeds may even have come from West Africa, since raphia produce was imported from that source on a regular basis.

However, the covering letter (Director of Prisons 1917b) for the third (and apparently final) batch, dated 20th January 1917 states, 'I am forwarding under separate cover a consignment of the abovementioned seed (*R. vinifera*) which has been received from Portuguese East Africa'. This batch may have been *R. australis*, a species described only in 1969 (see discussion below) or *R. vinifera*, both of which occur in what is today Mozambique.

It is clear that in no single instance can the identity of the original batches of seed be established beyond reasonable doubt. Obviously, at least one batch must have contained *R. australis* in order to account for the existence of the present population at Mtunzini. At the time it was believed that all these seeds were of the species *R. vinifera*, but this was to be disproved later, as we shall see.

The raphia palms indigenous to northern Zululand and southern Mozambique are geographically isolated from other giant raphia palms in Africa. Despite this they were originally presumed to be of the species *R. vinifera* which occurs commonly in West Africa. An indication to the contrary was recorded when specific differences between the fruits of the Kosi Bay palms and those of *R. vinifera*, were noted by Aitken & Gale (1921), who concluded that 'either



FIGURE 7.—*Raphia* palms at Mtunzini, Zululand coast.

this palm is a variety of *R. vinifera*, or it may be a new species of the genus'. King (1925) also referred specifically to 'the true Raffia Palm', *R. vinifera*, and 'the giant palms from Kosi Bay', clearly believing them to be different species.

Much later, 1967, two palms at the Botanic Station in Durban, which were grown from seed collected at Mtunzini by Dr V.A. Wager, developed large ( $\pm 3$  m), erect inflorescences growing centrally above the crown of the leaves. It was then realized that a previously undescribed species was involved since, amongst others, the inflorescence of *R. vinifera* is pendulous. Obermeyer & Strey (1969) described the new species and named it *R. australis*. Despite the inclusion of 'Historical Notes' in their paper, Obermeyer & Strey make no reference to the observations of Aitken & Gale and King, whose earlier reports appear to have been overlooked.

The very uncertain identity of the original seed and the proven ease with which the true identity of established raphias may be overlooked, suggest the strong possibility that one or even more raphia species other than *R. australis* were also introduced to Mtunzini. Further support for this possibility is contained in a letter addressed to the Conservator of Forests, Pietermaritzburg, by King (1925), who stated that, 'The seeds supplied by Mr de V. Roos were of the true Raffia Palm. In addition to these certain seed of the giant palms from Kosi Bay was planted'. Yet today only *R. australis* is known to grow in the Mtunzini area. It could be speculated that the exotic species died out because they were less well adapted to local conditions.

The increase of *Raphia* trees in the immediate vicinity of Mtunzini was facilitated in the 1940's by L.E. Davis who collected seeds from the original grove and planted them while visiting the surrounding swamplands in the course of his duties as malaria control officer (Palgrave 1977; Wicht 1969).

In 1942 the original grove was declared a national monument (Government Gazette 1942). The grove is of no great historic significance and the procedures which led to the declaration were somewhat unorthodox. In spite of this, Mtunzini's raphia palms joined about 17 other botanical specimens which form about 5% of the list of the country's official national monuments (Oberholster 1972). The grove at the original site was virtually destroyed in 1948 when a spark from a passing locomotive set the trees ablaze (Oberholster 1972). The remaining trees were able to regenerate and a fine grove of palms may be seen at the site today.

Over the last three decades Mr Ian Garland has made a substantial contribution to the population of raphia palms by planting and distributing almost a thousand *R. australis* on, and in the vicinity of his farm 'Twin Streams', which borders Mtunzini (I.F. Garland pers. comm. 1987).

In recent years the Mtunzini Town Board has played an active role in promoting the raphia palm (Figure 7), which along with the closely associated palm nut vulture, *Gypohierax angolensis*, has been incorporated into the official town emblem (Government Gazette 1981).

Even though it is doubtful whether the exact origin of Mtunzini's raphia palms will ever be known their present status is secure and improving.

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G.D. PECKHAM\* and F.A. VAN JAARSVELD\*

\* University of Zululand, Private Bag X1001, KwaDlangezwa 3886.  
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