## *Beccariophoenix* Flowers in Cultivation

JOHN DRANSFIELD Herbarium, Royal Botanic Gardens, Kew, Richmond, Surrey, TW9 3AE, UK



Stan Walkley poses next to the inflorescences of *Beccariophoenix* (Photo: Hugh Kunze).

*Beccariophoenix* has flowered for the first time in cultivation, in the garden of Stan Walkley near Brisbane, Australia (Back Cover and Figs. 1 and 2).

Stan bought his plant as a seedling at a PACSOA (Palm and Cycad Society of Australia) show about 14 years ago and he assumed that it originated from the first batch of seeds imported into Australia by nurseryman Rolf Kyburz. The plant was kept in a pot for several years and was finally planted out in its present location eight years ago. The location is on the top of a small ridge of coastal sandy loam that is very well drained. The original vegetation was open eucalypt forest, with

the surrounding lower areas being covered in melaleucas that prefer slightly swampy conditions. The palm has not been watered regularly and has relied mainly on rain water (1100 mm/year in nearby Brisbane), although it was watered whenever the weather was very dry. The ground was prepared initially with chicken manure, but since then it has not been regularly fertilised apart from occasional applications of chicken manure and Nitrophoska. Many growers of palms will be aware of the fact that there appear to be two different types of *Beccariophoenix* in cultivation – one with juvenile leaves displaying rather soft broad terminal leaf segments with pronounced "windows," the other with much stiffer leaflets with the terminal segments with very few "windows." The former type was illustrated in Palms of Madagascar (Dransfield & Beentje 1995). In the wild Beccariophoenix is known from two distinct habitat types – montane forest at c.900–1000 m above sea level, where it grows on ridge-tops, and coastal forest on white sand. In 'Palms of Madagascar' we illustrated palms from both habitats but were unaware at the time the book went to press that there were two seedling types. There are some differences between the palms in the coastal forest and those in the montane forest, the former having short inflorescence stalks (peduncles) while the latter have strikingly long stalks. The latter is definitely the true Beccariophoenix madagascariensis, as it occurs today more or less where the type specimen was collected by Perrier de la Bâthie almost 90 years ago and matches the type specimen in the Paris herbarium. Larry Noblick, of the Montgomery Botanical Center, Miami, Florida, USA, made a collection from a third locality near to the coast but not from white sands, where the population apparently consists of a This individual single individual. has inflorescences with very short peduncles, that make it appear rather different from the true *B*. madagascariensis. Seedlings from this individual have been planted out at the Montgomery Botanical Center and they all have leaves with broad apical segments with conspicuous "windows." Unfortunately I cannot say with certainty, which of the two distinct juvenile forms belongs to the true Beccariophoenix madagascariensis. There are apparently more populations of Beccariophoenix in Madagascar but they have yet to be documented scientifically. Since its rediscovery in 1986 (Dransfield 1988), many commercial shipments of Beccariophoenix seeds have been exported from Madagascar, and as far as I am aware, there has been no documentation of the natural source of these shipments.

I am still not sure whether we are dealing with one variable species or with two or more. The differences in the juveniles, both in the leaf shape and in their performance and survival, suggests that there is important variation that is not yet reflected in a formal taxonomy. We are hoping that colleagues in Madagascar will start to make a detailed study of the population size, structure



Close-up of the flowers of *Beccariophoenix* (Photo: Hugh Kunze).

and variation as part of a new project funded by the Friends of Kew Threatened Plants Appeal.

Stan Walkley's handsome *Beccariophoenix* has small inflorescences that, astonishingly, do not resemble those of any of the wild individuals; perhaps the inflorescences being produced at present are small and in the future, as the palm matures, more normal inflorescences will be produced. In the meantime, we have to assume that the palm is *B. madagascariensis*.

## Acknowledgements

I thank Stan and Jane Walkley for providing information about their palm, Mike Gray for helping in many ways and Hugh Kunze for alerting me to this, the first flowering in cultivation of this very special palm and for providing the photographs.

LITERATURE CITED

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