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# Chrysalidocarpus decipiens

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Readers of the bulletin of the Southern California Chapter of the International Palm Society, the Palm Journal, will be well aware of the horticultural interest in *Chrysalidocarpus decipiens* Beccari. *C. decipiens* is one of the grandest palms there is. Native to the central plateau of Madagascar, it is now rare in the wild and, perhaps surprisingly, it has only relatively recently become widespread in cultivation outside Madagascar. In fact we know of no mature adult palms in cultivation outside its native country.

### **Early Confusion**

The name Chrysalidocarpus decipiens was established by Beccari in 1906, based on specimens collected by the English missionary, the Reverend Baron (after whom Neodypsis baronii is named), from "Central Madagascar" (probably Andrangolaoka, east of Antananarivo) and by the German plant collector, Hildebrandt (after whom Dypsis hildebrandtii is named), from Ankafina forest near Fianarantsoa, in the southern plateau area. At this time (1906) the fruit was still unknown.

Eight years later, in 1914, more specimens had been collected, notably by the French collector Perrier de la Bâthie, and Beccari could amplify his description of *C. decipiens* when he wrote his monumental work "Palme del Madagascar." Unfortunately he mixed two palms in his description—true *C. decipiens*, including some fruiting material, and *Neodypsis basilongus* of Jumelle and Perrier, a more coastal species with ruminate endosperm that was held to be typical for *Neodypsis*.

Since the resulting "species" combined characters from two genera, Beccari felt it necessary to establish a new genus *Macrophloga*. The resulting species, *Macrophloga decipiens* (Beccari) Beccari existed for eight years, until Jumelle sorted out the confusion and put all the constituent parts back in their proper species.

However, this is not the end of the story. During

our research on the palms of Madagascar over the past eight years, it has become increasingly apparent that the major differences between groups of species that allow us to define and maintain genera as distinct from each other just do not exist in the group of palms, the Dypsidinae, to which Chrysalidocarpus belongs. A wealth of new species and complete material of many of the previously described species have provided the evidence that has forced us to regard all members of the Dypsidinae as belonging to a single large and very varied genus Dypsis. The extremes of this genus are very distinct but they are connected to each other by series of intermediates that have completely blurred any previously conceived boundaries. The dreaded name changes that will ensue have not yet been formalized so we can continue in the mean time to use the name Chrysalidocarpus decipiens. Our complete findings will be published as a book on the palms of Madagascar, we hope in 1995.

#### C. decipiens in Cultivation

Within Madagascar, this wonderful squat "bottle" palm, Chrysalidocarpus decipiens, is grown in gardens on the plateau, but only rather rarely. There are fine examples in the Parc de Tzimbazaza in the center of the capital, Antananarivo, as illustrated in Nancy Edmonson's article in the May 1993 issue of the Palm Journal, and a few young individuals in gardens on the road between the airport at Ivato and the capital. South of Tana, in the nearby town of Ambatolampy there are some really splendid old trees along the roadside near the town center. When one sees mature trees of C. decipiens, one wonders why so few people grow them. Who needs Hyophorbe when there is such a fine alternative? There is another feature of the palm that should particularly excite palm growers in the cooler tropics and subtropics and of which growers in southern California are already aware. Chrysalidocarpus decipiens is a palm of the high plateau of Madagascar, an area that is



1. Cultivated hillslope south of Ambositra; Chrysalidocarpus decipiens survives as a small population here. 2. Chrysalidocarpus decipiens in open native scrub south of Ambositra.



3. Henk Beentje stands beside an almost mature individual of *Chrysalidocarpus decipiens* in cleared land south of Ambositra. 4. Two stems of *Chrysalidocarpus decipiens* in cleared land south of Ambositra. 5. A fine clump of mature *Chrysalidocarpus decipiens*, south of Ambositra. 6. A lone individual of *Chrysalidocarpus decipiens* growing beside a river on the plateau north of Antananarivo.



 Large population of Chrysalidocarpus decipiens growing in open vegetation on a rocky hillslope west of Ambositra. Photo by David DuPuy.
Flowering and fruiting Chrysalidocarpus decipiens, west of Ambositra. Photo by David DuPuy.

relatively cool and, at times, quite dry. Here is a palm that should do really well in, for example, southern California or coastal New South Wales, perhaps even in the south of France. Another extraordinary feature of the palm is that in early growth, while the palm is still establishing itself in a rosette phase, the still underground stem forks, apparently dichotomously, and two aerial stems can develop. In the July 1993 issue of the Palm Journal, mention is made of Mardy Darian's remarkable C. decipiens with seven trunks; in the wild we have not seen more than two equal sized trunks growing together, but it is always difficult in the wild to decide whether small shoots at the base of a palm represent suckers or seedlings. A few mature individuals in Tzimbazaza retain paired stems, but it seems that, quite often, one of the pair is weaker than the other and may eventually die.

Where does this palm actually survive in the wild and what is its natural habitat?

## **Distribution in the Wild**

All of our records of Chrysalidocarpus decipiens in the wild are from the high plateau at elevations of 1200-2000 m above sea level. We have observed the palm growing beside water courses, on steep slopes among boulders, and on the tops of plateaux. In all localities where we have observed it, the vegetation has already been much modified by man, and regeneration of the palm seems very limited indeed. In one locality south of Antananarivo, we found a population of about 50 individuals of varying age scattered in scrubland composed of native Madagascar species and in man-made grassland. Nearby there was a rare relict stand of high-plateau primary forest, a forest composed of small-leaved trees with much moss and the scrambling bamboo, Hickelia madagascariensis, but with no palms at all. Perhaps C. decipiens is adapted to growing in rather open habitats such as steep slopes and boulder fields, rather than in closed primary forest, and this may provide a clue as to why it seems to perform so well in subtropical gardens. However, we have observed it once north of Ranomafana in remnants of wet forest and once in submontane mist forest with low canopy east of Ambositra.

Our observations suggest that this is a palm of restricted distribution and with limited regeneration in the wild. Even though it may occur in remoter areas in some abundance, as has been reported by a friend for an area west of Ambositra, its survival in the wild must be a cause for concern. Yet, as a horticultural subject, it promises to be a popular, easily grown and adaptable species for subtropical gardens, the only major requirement for which is space—space to develop its splendid trunks and spreading crowns of plumose leaves.

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