

Dypsis robusta Found in the Wild

JOHN DRANSFIELD
Herbarium, Royal Botanic
Gardens, Kew, Richmond,
Surrey, TW9 3AE, UK
j.dransfield@kew.org

JEFF MARCUS
Floribunda Palms,
P.O. Box 635, Mountain
View, Hawai'i, HI96771,
USA
info@floribundapalms.com

AND

DAN TURK
PC(USA) - SAF/FJKM, B.P.
623, Antananarivo 101,
Madagascar
daniellturk@hotmail.com

Dypsis robusta, a large palm named in 2005 from a specimen grown in Hawai'i but from seed that came from an unknown location in Madagascar, has been found in the wild, just east of Ranomafana National Park.

In June 1994, people from Masomanga, a village 2 km east of the town of Ranomafana near Ranomafana National Park in eastern Madagascar, found a palm seedling with leaves less than a meter long growing at a site being prepared for a growth trial of native Malagasy trees. As it was the only palm growing at the site, the seedling was protected. As the palm grew, it became apparent that it was probably a species of *Dypsis* but different from *Dypsis mananjarensis*, the only other similar large *Dypsis* known from the area. Dan Turk's efforts to identify the palm using *The Palms of Madagascar* (Dransfield and Beentje 1995) did not yield a match. The flora of the area nearby is quite well known; the Ranomafana National Park has been the center of intensive studies of lemurs and the flora and vegetation, yet no one who has seen the palm knows its local name or knows of other palms like it.

Fast forward to October 12th 2008, when a group of palm enthusiasts led by John

Dransfield came to the site and contemplated the palm that was beginning to flower for the first time. As he looked at it, Jeff Marcus, one of the group, suggested the palm might be *Dypsis robusta* and John Dransfield concurred. They were in a position to know, being two of the three authors who named *Dypsis robusta* Hodel, J. Marcus & J. Dransf. (Hodel et al. 2005) from a palm growing on Jeff Marcus's property on the island of Hawai'i. That tree had grown from seeds that came from an unknown location in Madagascar. The following month Dan Turk collected a proper herbarium specimen from the palm and when it eventually reached Kew, John Dransfield confirmed the identification by comparing the specimen with the type of *Dypsis robusta*.

As the only individual of its species known growing in the wild (Fig. 1), the specimen of *Dypsis robusta* at Masomanga has a legitimate claim to the title "Rarest Tree in the World in the Wild." Fortunately, *Dypsis robusta* is not



1. *Dypsis robusta* and Germain Andrianaivoson at the Ranomafana Arboretum, October 2011.

in immediate danger of extinction because seedlings from Jeff Marcus's tree in Hawai'i have been widely distributed, and seeds from the Masomanga tree also have yielded about 50 seedlings that will be planted at protected locations around Madagascar. We feel sure that at some time in the future it will be found elsewhere in eastern Madagascar in the wild.

In March 2007, the site of the 1994 tree trial was officially opened as the Ranomafana Arboretum, a place for tourists and local people

to appreciate Madagascar's amazing native trees. Located on a beautiful 4 ha site overlooking the Namorona river, the Arboretum has over 180 species of native trees including many, like *Dypsis robusta*, that arrived at the site on their own, without human intervention. The Arboretum serves as an *ex situ* protection site for rare Malagasy palms such as *Dypsis scandens*, *Dypsis basilonga* and *Tahina spectabilis*. Since 2009, the Ranomafana Arboretum also has the largest collection of fruit trees at one location in



2. The enormous inflorescence of *Dypsis robusta* at the Ranomafana Arboretum. Germain Andrianaivoson provides scale.

Madagascar (over 170 different varieties), including low-chill varieties of peaches and apples and ultra-tropicals such as mangosteen, pulasan, and breadfruit. The fruit trees are contributing to efforts to improve food security and increase income for farmers in southeastern Madagascar. The Ranomafana Arboretum is owned by the Commune of Ranomafana and managed by a local committee with technical assistance from the Development Department of the FJKM church.

Dypsis robusta is a very ornamental palm with one of the largest inflorescences in the genus. In October 2011, *Dypsis robusta* at the Ranomafana Arboretum had a tremendous inflorescence, 2.8 m wide and over 3 m long (Fig. 2).

Dypsis robusta is among a group of five Malagasy palms that were first described from specimens cultivated outside Madagascar without knowledge of the species' locations in the wild. Along with *Dypsis robusta*, *D. albofarinosa*, *D. carlsmithii* and *D. leptocheilos* have now been found in the wild (although *D. albofarinosa* has yet to be documented with a herbarium specimen), leaving only the natural habitat of *D. plumosa* yet to be discovered.

LITERATURE CITED

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