An Unusual Form of Reinhardtia latisecta in Cultivation

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1. Reinhardtia latisecta "compact form" at Floribunda Palms; note the short-stemmed habit and erect inflorescences emerging above the leaves, one white inflorescence at anthesis is just visible in the background.

This beautiful palm, growing in the garden of Floribunda Palms and Exotics in Mountain View, the island of Hawai'i, has perplexed visitors (Fig. 1).

The palm was received in the 1990s as a seedling from Dr. Arden Dearden of Cairns, Australia, carrying the name *Hydriastele montana*, a species from New Guinea. Dr. Dearden does not know with certainty where his original plant came from; he thinks, perhaps, seed was sold by the late De Armand Hull, possibly from Panama, and grown on by the late Queensland palm grower, Maria Boggs. Dr Dearden has lost any such plants in his own garden.

In contrast, the mystery palm has flourished in JM's collection and has been commented on by many visitors. Now that the palm is performing well, regularly flowering and fruiting, the true affinities of the plant with the New World genus *Reinhardtia* are obvious. It is a very striking, beautiful dwarf palm, with its gleaming white inflorescences at anthesis, followed by crimson infructescences, held above the leaves, with an overall aspect unlike other species of *Reinhardtia*. Yet, the stems are

2. Reinhardtia latisecta "compact form": details of leaves, showing the rather inconspicuous windows, and infructescence.





3. Seedlings of three different *Reinhardtia* compared: **A.** *R. latisecta*. **B.** *R. latisecta* "compact form." **C.** *R. qracilis*.

covered with a network of fibers formed by the disintegration of the leaf sheaths and there is no crownshaft; the leaves are irregularly divided into leaflets with unequal, almost toothed tips, and the base of the lamina displays the windows that are so much a feature of most species of *Reinhardtia* (Fig.2). The inflorescence is interfoliar and bears both staminate and pistillate flowers. Staminate flowers have approximately 29 stamens, while the pistillate flower has a tricarpellate, triovulate gynoecium and many staminodes. The fruit is one-seeded, and the endosperm is ruminate. All these characters are congruent with its being a species of *Reinhardtia*.

Currently, six species of the genus are accepted, viz: *R. gracilis*, *R. paiewonskiana*, *R. latisecta*, *R. elegans*, *R. simplex* and *R. koschnyana* (see Henderson 2002). Henderson (2002) carried out a phenetic and phylogenetic analysis of the genus, confirming the species delimitation of Moore (1957) with the addition of *R. paiewonskiana* described from the Dominican Republic (Read et al. 1987). Henderson did not provide descriptions or keys. In the treatment of Moore, the only detailed monograph, the Floribunda plant keys to *R. latisecta*, based on the indumentum on the petioles, stamen number and endosperm rumination. However, the appearance of the Floribunda plant is at

odds with R. latisecta. Reinhardtia latisecta is usually a relatively tall clustering palm with stems to 8 m tall and about 7 cm in diameter. The leaves are divided into two to three broad leaflets on each side of the rachis, occasionally with a few single-fold leaflets in between, and usually display striking "windows" (short basal splits) at the proximal end of the folds in the broad segments. In the Floribunda palm, the stems are very short, scarcely exceeding 50 cm tall, and the leaves are much smaller and are irregularly divided, into many leaflets, the basal pair being multifold and displaying windows, while most other leaflets are singlefold, some even displayed in different planes (Fig. 2). Finally, the inflorescences are erect and exserted from the leaves (Fig. 1), whereas in R. latisecta they are usually held below the crown. However, we can see no differences between the flowers and fruit of the Floribunda palm and R. latisecta.

At first we thought that the Floribunda palm might be an undescribed taxon, but with the lack of differences in flowers and fruit and with the limited material available to us we have decided to determine it as an unusual compact form of *R. latisecta*. This compact form appears to come true from seed and, indeed, there are some slight differences in seedling morphology between *Reinhardtia latisecta* as grown at Floribunda and *R. latisecta* "compact form" (Fig. 3).

This is a beautiful palm and we believe it has considerable potential as an ornamental. By featuring it in this article, we draw attention to it and with the informal moniker "compact form" provide a reference point for it in horticulture while we have insufficient evidence to describe it formally.

LITERATURE CITED

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