A New Cultivar of Sabal palmetto

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A distinctive, naturally occurring form of *Sabal palmetto* (Walt.) Lodd. ex J.A. & J.H. Schultes, which we name 'Lisa,' has entered the horticulture trade.

In the spring of 1998, the senior author came upon a group of three unusual palms growing in southwestern Florida. These palms were immediately distinguished from the common *Sabal palmetto* by their leaf form, which is less divided, less filiferous, and more rigid than is typical for the species. Upon seeing this unusual palm, the senior author was impressed enough to gather seeds and begin a propagation program. While ordinary *Sabal palmetto* has been ignored and even treated with derision by landscaping elitists, the remarkable appearance of this cultivar makes it worthy of propagation and placement in the landscape.

A single individual of this unusual form of Sabal palmetto was found growing over 161 km (100 miles) from the original site. This cultivated individual (Fig. 1), growing alongside the typical form of S. palmetto, has been the source of seeds for the nursery trade. Of the seedlings produced from this source, show approximately 68% the leaf characteristics of the mother plant. Careful culling ensures that the distinctive new form, which we name 'Lisa,' is available for cultivation.

Initially, the senior author, in consultation with a plant geneticist, believed this palm to be an autopolyploid, based solely on heavy texture and robustness of the leaves. We have been unable to test this hypothesis using young root tips and standard methods for obtaining mitotic cell preparations. The likelihood of this palm representing a polyploid is remote, as polyploidy is not known to occur in the genus. Indeed, polyploidy is very rare throughout the entire palm family.

Sabal palmetto 'Lisa' is just as vigorous as the typical form of the species and hardy to USDA Zone 7 (depending on the number of hours of cold). As with all Sabal palms, Sabal palmetto 'Lisa' has minimal recurring maintenance costs in parking lots, rights of way, median strips and other municipal settings. The recent spate of hurricanes in Florida has demonstrated the virtues of Sabal palms in wind storms. They are less likely to be uprooted in high winds than many other ornamental trees, and they came through the recent storms relatively unscathed. Strategic planting of Sabal palms adds a lush, tropical look to municipal settings while preserving street access after storms, thus enhancing public safety.

We believe this cultivar has great potential as an ornamental landscape plant for Florida and elsewhere along the Gulf Coast and Mid-Atlantic States, wherever *Sabal palmetto* can be grown.

Sabal palmetto 'Lisa'

Stocky, solitary palm to ca. 10 m tall; trunk ca. 40–50 cm DBH, brownish gray, with leafbases



1 (left). A mature specimen of *Sabal palmetto* 'Lisa' showing its distinctive leaf morphology. Leaves of the typical form of *S. palmetto* are visible behind and to the left. Note the more divided leaves with pendulous leaflet apices in the typical form compared to those of *S. palmetto* 'Lisa.' (Photo by R. Riefer) 2 (right). A seedling of *Sabal palmetto* 'Lisa' already showing distinctive leaf morphology. (Photo by R. Riefer)

persisting. Leaves ca. 15 in crown, blade evenly deep green, somewhat undulate, costapalmate but costa only weakly recurved, not filiferous; petioles 3 cm wide and 70 cm long; hastula 9-12 cm long, glabrous, acute, margins flat, entire; segments ca. 86 per leaf, in groups of 2-7, segment groups united for ca. 33% of their length, segments within groups united for 90-95% of their length, middle segment (on one side of leaf) 107 cm long and 3 cm wide (at base of free portion), transverse veins short and conspicuous, segment apices scarcely bifid, stiff, not pendulous. Inflorescence interfoliar, arching, shorter than leaves, branched to two orders, rachillae 11-14 cm long and 1.1-1.3 mm diam, with 6–8 flowers per cm. Flower ca. 4.2 mm long; calyx urceolate-cupulate, not costate when dry, 1.4-1.8 mm long, 1.4-1.6 mm wide, sinuses 0.3–0.5 mm deep; petals obovate-spatulate, alternating with the outermost whorl of stamens, ca. 3.4 mm long and ca. 1.6 mm wide; stamens six, in two whorls, exserted just beyond petals, filaments narrowly triangular to awl-shaped, ca. 3.6 mm long, basally adnate to the petals for ca. 0.7 mm, anthers ca. 1.1 mm long and 0.4 mm wide; gynoecium 2.6-2.7 mm long, ovary 0.6–0.8 mm \times 0.8 mm in diameter. Fruit oblatespheroidal, 6.8–8.1 mm long \times 7.0–8.4 in diameter, brownish-black; seed 4.3–4.7 mm long \times 5.2–5.7 mm in diameter, embryo equatorial.

A specimen of this palm, *Riefer s.n.*, is preserved in the herbarium of Fairchild Tropical Botanic Garden. The cultivar epithet honors Lisa Riefer, wife of the senior author.

Sabal palmetto 'Lisa' is distinctive by virtue of its leaves, which are less strongly costapalmate and less filiferous than the wild type, traits that are apparent even in seedlings (Fig 2). Moreover, leaf segments are in groups (similar to Sabal yapa Wright ex Becc.) the apices of which are not pendulous.

The advantage of seed-grown *Sabal* palms over those transplanted from the wild lies in the smaller size of seed-grown palms. Field-grown or wild individuals of *Sabal palmetto* with 1–3 m of overall height are difficult to transplant successfully. Most die soon after transplanting. While larger, mature specimens transplant with ease, their height in most landscapes gives them all the aesthetic appeal of utility poles. *Sabal palmetto* 'Lisa' adapts easily to container culture. Seedlings in 10-gallon containers readily produce up to 2 m of foliage and can be installed in landscapes with relative ease.