



Fig. 10. Distribution of selected species of *Roystonea* in the Maisí of Cuba. Inset: Cuba, arrow indicates the Maisí region.

**Local names and uses.** Palma conga, palma de seda, palma india. Trunks are used for timber; leaves and leafbases are used for thatch and wrapping material. Fruits are used as hog feed.

**5. *Roystonea maisiana*** (L. H. Bailey) Zona, stat. nov.

*R. regia* var. *maisiana* L. H. Bailey, Gentes Herb. 3: 376. 1935. Type. Cuba. Guantánamo: Los Llanos, El Beril ["El Veril"], back of Cape Maisí, 17 Mar 1931, *Bailey 15143* (holotype, BH; isotypes, HAC, NY).

Trunk gray-white, to 20 m tall, 26–40(–51) cm diam. Leaves ca. 15, lowest leaves hanging below the horizontal; crownshaft ca. 1.5 m long; rachis ca. 4.8 m long; middle segments 106–118 cm long and 4.2–4.9 cm wide. Inflorescence 0.8–1.1 m long and ca. 1 m wide; prophyll and peduncular bract not seen; rachillae 20–24 cm long and 1.2–2.1 mm diam. Staminate flowers white, sepals triangular, 1–1.4 mm long and 1.3–1.5 mm wide; petals elliptical to ovate, 4.2–5.7 mm long and 2.5–2.9 mm wide; stamens 6, 3.7–6.5 mm long, filaments awl-shaped, 2.4–4.4 mm long, anthers 2.5–4.2 mm long; pistillode minute. Pistillate flowers white, 2–3.5 per cm; sepals reniform, 1.3–1.7 mm long and 2.5–3.5 mm wide; petals ovate, 2.7–3.5 mm long; staminode 6-lobed, 2.1–2.3 mm

long, free for 0.7–1 mm; gynoecium 2.3–2.6 mm long and 1.7–2.2 mm diam. Fruits ellipsoid, gibbous, 10–13.7 mm long, 7.9–9.2 mm dorsiventral thickness, and 7.5–9.5 mm wide; epicarp black, stigmatic scar plain; endocarp ellipsoid, 8.8–10.3 mm long, 5.9–7.4 mm dorsiventral thickness, and 5.8–7.4 mm wide; seed ellipsoid, 7.6–10 mm long, 4.6–5.9 mm dorsiventral thickness, and 5.2–6.8 mm wide; raphe circular. Eophyll linear-lanceolate, 12–15 cm long and 1.2–2.2 cm wide, stipitate, short costate.

**Distribution** (Fig. 10). Endemic to the Maisí region of the province of Guantánamo, eastern Cuba, at 350–420 m altitude.

**Specimens examined.** CUBA. GUANTÁNAMO: Mpio. Maisí, Los Llanos de Maisí, *Zona et al. 393* (FLAS, HAJB, RSA), *Zona et al. 393a* (fr) (FLAS), *León & Seifriz 18280* (fl, fr) (HAC); Puriales Abajo, *Zona & Moreno 395* (fr) (FLAS, HAJB).

A copy of a letter from Bailey to León dated 8 Jan 1943 (preserved with the holotype at BH) suggests that León believed Bailey's variety was described from a mixed specimen. Liogier (1969), in a note in the supplement to the Flora of Cuba, rejected *R. regia* var. *maisiana*, indicating that it was a nomen nudum based on a mixed collection. León and Liogier did not reveal which other species they believed comprised

the mixed collection. Liogier's treatment of this taxon was apparently followed by subsequent workers including Muñiz and Borhidi (1982). However, collections of the endemic Cuban *Roystonea* made recently in Maisí (Zona, 1991) clarify the confusion surrounding the type of *R. regia* var. *maisiana* and give some clue as to why Liogier rejected this taxon.

First, this name is certainly not a nomen nudum: Bailey (1935) provided as accurate a description as was possible from his scanty collections. He provided a Latin diagnosis, a description of vegetative and reproductive parts, and even a photograph of the palm, leaving little doubt that he was describing the slender palms endemic to Maisí. The name cannot be rejected as a nomen nudum.

The second aspect of Liogier's argument, that the type of *R. regia* var. *maisiana* is a mixed collection, is predicated on Liogier's knowledge of another Maisí endemic, the violet-trunked *R. violacea*. The type of *R. violacea* (León & Seifriz 18280) is composed of vegetative material that agrees in all details with that of recent collections of violet-trunked individuals. Flowers and fruits from the type sheet, however, match those taken from slender palms that must be *R. regia* var. *maisiana*. In fact, a packet of staminate flowers included with the isotype at US bears the anonymous annotation "*maisiana*." It now seems apparent that it is León's type of *R. violacea* that is a mixed collection, containing elements belonging to *R. regia* var. *maisiana*, and that the description of *R. violacea* drawn from this mixture is what led to Liogier's confusion about the identity of *R. regia* var. *maisiana*. Thus, Bailey's taxon stands, and León's *R. violacea* (q.v.) requires lectotypification and circumscription.

Because this taxon does not seem to be phylogenetically close to *R. regia* (see under "Evolutionary Relationships and Biogeography"), it is here elevated to specific rank.

**Local name and uses.** Palma negra. The palm is used, as other species are in eastern Cuba, for timber, thatch, and hog feed.

## 6. *Roystonea oleracea* (Jacquin) O. F. Cook.

Trunk gray, to 40 m tall, 46–66 cm diam. Leaves 20–22, lowest leaves held at or above horizontal; crownshaft ca. 2 m long; petiole 60–100 cm long, rachis 4–4.6 m long; middle segments 65–94 cm long and 3–4.9 cm wide. Inflorescence ca. 1.4 m long and 0.7 m wide; prophyll 46.5–53 cm long and 8.8–16 cm wide; peduncular bract ca. 1.5 m long, widest above

the middle, apex caudate; rachillae 16–30 cm long and 1.5–2.8 mm diam. Staminate flowers white; sepals triangular, 1.4–1.7 mm long and 1.6–2.6 mm wide; petals elliptical to ovate, 3–4.8 mm long and 1.4–2.7 mm wide; stamens 6–8, 4.4–8.8 mm long; filaments awl-shaped, 3–6.9 mm long; anthers 3.5–4.7 mm long, apices recurved; pistillode minute. Pistillate flowers white, 2.5–4.5 per cm; sepals reniform, 1.5–1.8 mm long and 3.3–4.3 mm wide; petals ovate, 2.6–3.4 mm long; staminode 6-lobed, 1.8–2.5 mm long, free for 0.9–1.2 mm; gynoecium 1.8–2.9 mm long and 1.6–2.5 mm diam. Fruit ellipsoid, gibbous, 12.6–17.6 mm long, 8.2–10.8 mm dorsiventral thickness, and 7.6–10.4 mm wide; epicarp purplish black, stigmatic scar plain; endocarp ellipsoid, 9.8–13.7 mm long, 6.8–7.7 mm dorsiventral thickness, and 6.8–7.7 mm wide; seed ellipsoid, 7.5–10.5 mm long, 4.6–6.1 mm dorsiventral thickness, and 5.1–6.8 mm wide; raphe circular. Eophyll linear-elliptical, short- or exstipitate, weakly costate.

**Distribution.** Lesser Antilles, Barbados, Trinidad and Tobago, northern Venezuela, and northeastern Colombia. Naturalized in Guyana, Surinam, and French Guiana.

Contrary to reports in the literature (Bailey, 1935, 1949; McCurrach, 1960; Tomlinson, 1961), the leaf segments of *R. oleracea* are not arrayed in a single plane or "series." The segments are arrayed in two planes on either side of the rachis, as is shown in Figure 2.

The leaves of the crown typically do not hang much below the horizontal, unlike other species in which the leaves droop and obscure the crownshaft. This characteristic allows one to identify palms of this species from a distance. *Roystonea oleracea* is also noteworthy for its unopened peduncular bract which is strongly clavate with an acuminate tip. Groups of rachillae are undulate, forming wavy curves with amplitudes of 4 cm or more.

### Key to the Varieties of *Roystonea oleracea*

1. Lowermost leaves more or less horizontal . . . . . 6a. var. *oleracea*
1. Lowermost leaves held well above the horizontal . . . . . 6b. var. *jenmanii*

### 6a. *Roystonea oleracea* (Jacq.) O. F. Cook var. *oleracea*

*Areca oleracea* Jacquin, Select. stirp. amer. hist. 1: 277. 1763. *Oreodoxa oleracea* (Jacquin) Martius, Hist. nat. palm. 3: 166. 1837. *Roystonea oleracea* (Jacquin) O. F.