

## A NEW SPECIES OF EUTERPE (PALMAE) FROM PERU

ANDREW HENDERSON, GLORIA GALEANO, AND ELSA MEZA

Henderson, Andrew (New York Botanical Garden, Bronx, NY 10458-5126), Galeano, Gloria (Instituto de Ciencias Naturales, Universidad Nacional de Colombia, Apartado 7495, Bogotá, Colombia), and Elsa Meza (Universidad Nacional del Centro del Perú, Facultad de Ingeniería Forestal, El Tambo, Huancayo, Peru). A new species of *Euterpe* (Palmae) from Peru. *Brittonia* 43: 178-180. 1991.—*Euterpe luminosa*, a new species from Peru, is described and illustrated. The differences between it and its congeners are discussed.

**Key words:** Palmae, *Euterpe*, Peru.

As part of a revision of *Euterpe* and *Prestoea* being undertaken by Henderson and Galeano, the following species has been discovered.

*Euterpe luminosa* A. J. Henderson, Galeano & Meza, sp. nov. (Figs. 1, 2)

**TYPE:** PERU. Pasco: Prov. Oxapampa, Distr. Huancabamba, Cordillera Yanachaga, ridge SE of Cooperative 3 de Mayo (off road between Oxapampa and Huancabamba), 10°27'S, 75°26'W, ca 2000 m, 24 May 1989, A. Henderson, G. Galeano & E. Meza 1032 (HOLOTYPE: USM!; ISOTYPES: AAU!, COL!, FTG!, K!, NY!).

Imprimis fructibus ellipsoideis (nec globosis), ulterius perianthio elongato, rachillarum pilis brevibus rufis (nec appressis albido-brunneis), floris staminati sepalis inter se connatis, eophyllo pinnato (nec palmato nec bifido), pinnisque angustis omnibus ab aliis congeneribus diversa.

*Stems* cespitose but generally only one developed with suckers at base, erect, 5-11 m tall, 5-7 cm diam at base, 3 cm diam at apex, grayish, slightly fissured longitudinally. *Leaves* 9-12, spreading, arching; sheaths closed and forming a crownshaft, 48-65 cm long, green, distally with moderate covering of woolly, reddish-brown trichomes; petiole 20-35 cm long, concave adaxially, rounded abaxially, green (reddish, as the rachis, in young plants), densely covered on both surfaces with woolly, reddish-brown trichomes; rachis 112-145 cm long, ridged adaxially, slightly rounded abaxially, densely covered on both surfaces with woolly, reddish-brown trichomes; pinnae 48-69 per side, subopposite, regularly spaced, linear-lanceolate, inserted in one plane, almost pendulous (forming a roof shape), with mid-vein prominent adaxially and abaxially and with 2 submarginal lateral veins, pinnae margins and veins adaxially and abaxially with scattered brown scales; proximal pinna 20-25 cm long, 1-2 mm wide; middle pinna 35-41 cm long, 6-10 mm wide; apical pinna 14-15 cm long, 5 mm wide. *Inflorescence* infrafoliar at anthesis; peduncle 4-5 cm long, 1 cm diam at peduncular bract scar; prophyll 32 cm long; peduncular bract 32 cm long, 2 or 3 smaller peduncular bracts present to 4 cm long; rachillae ca 30, to 30 cm long, 2 mm diam, slightly swollen at base, each subtended by a small bract, with a dense covering of short, reddish-brown trichomes, these straight or slightly undulate, fasciculate, less than 0.5 mm long; triads not sunken into rachillae, surrounded by a prominent, apiculate bract to 1 mm long; *flowers* in triads proximally, paired or solitary staminate distally, or occasionally inflorescence almost all staminate; staminate flowers (immature) to 4 mm long, glabrous; sepals briefly imbricate and free distally, connate proximally, gibbous, deltate, apiculate, 2.5 mm long; petals valvate, lanceolate, to 3 mm long; stamens 6; anthers basifixed, shortly sagittate, 1 mm long; filaments 0.3-0.6 mm long; pistillode much longer than stamens, 3 mm long; pistillate flowers (immature)



FIG. 1. *Euterpe luminosa* in the type locality (Henderson et al. 1032). Photo by A. Henderson.

surrounded by 2 low bracts; sepals free, imbricate, deltate, 1.5 mm long; petals similar to sepals; staminodes absent; fruit ellipsoid,  $1 \times 2$  cm, with prominent subapical stigmatic residue ca 2.5 mm long, and with an expanded perianth to 7 mm long; epicarp black; mesocarp to 0.5 mm thick, prominently 2-layered, with parallel fibers; endocarp thin, adherent to seed; seed ellipsoid; raphe branches few, anastomosing; hilum basal, elongate; endosperm homogeneous, with central air space; embryo basal; eophyll pinnate.

Distribution: Known only from the type locality in Peru.

Other specimens examined. PERU. Pasco: Prov. Oxapampa, Distr. Huancabamba, Cordillera Yanachaga, W slope at base of highest peaks, side road to NE halfway between Oxapampa and Huancabamba, ridge SE of Cooperativa 3 de Mayo,  $10^{\circ}27'S$ ,  $75^{\circ}26'W$ , 2000-2500 m, 18-21 Sep 1984, R. Foster et al. 11155 (F); Prov. Oxapampa, Palmazú,  $10^{\circ}32'S$ ;  $75^{\circ}23'W$ , 2100 m, 20 Sep 1984, D. Smith et al. 8514 (MO), 28 Sep 1984, D. Smith 8534 (MO).

Local names and uses. Guayaquil, palma palanca. The trunks are used as poles.

This unusual species differs from all others of *Euterpe* in its ellipsoid (vs globose) fruits with an elongated perianth; its short, reddish-brown trichomes on the rachillae (vs whitish or brownish appressed trichomes); its connate (vs free) staminate sepals; its pinnate (vs palmate or bifid) eophyll; and its narrow pinnae. Its relationships within the genus are still not clear, but it is anticipated that it will shed light, whence the epithet, on specific relationships within the genus, and intergeneric relationships within the Euterpeinae.

*Euterpe luminosa* is an abundant understory palm growing in moist cloud forest, with many epiphytes, dominated by another palm, *Dictyocaryum lamarckianum* (C. Martius) H. A. Wendl.

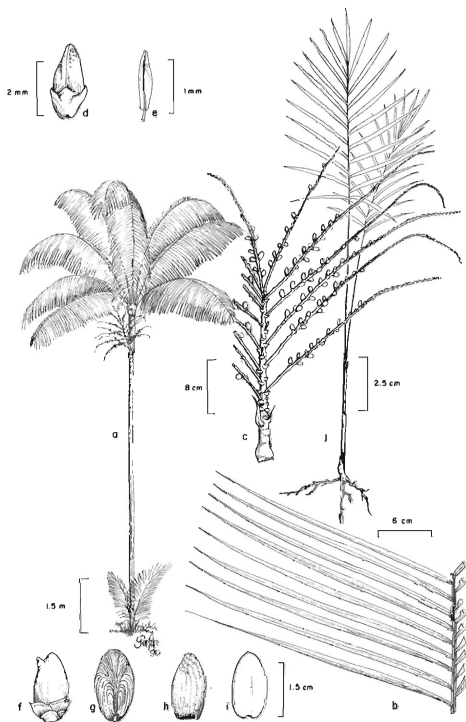


FIG. 2. *Euterpe luminosa*. A. Habit. B. Section of rachis with pinnae. C. Part of inflorescence with immature fruits. D. Staminate flower. E. Stamen. F. Fruit. G. Fruit with epicarp removed and showing fibers of mesocarp. H. Seed. I. Seed in section. J. Seedling. (Drawn from Henderson *et al.* 1032, COL.)

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