

fleshy, ripening from green to yellow to red, borne in the cupule of the enlarged and coriaceous to cartilaginous perianth parts, stigmatic remains apical, exocarp smooth in life but often finely pebbled when dry, mesocarp watery, with few fibers, sometimes containing abundant raphides, endocarp terete in cross section (sometimes five-lobed in *D. hentyi* and *D. subdistichus*), finely fibrous, straw-colored, netted externally, chartaceous internally, the inner wall of the endocarp caramel-colored, brown, or black, vitreous. Seed spheroid to ellipsoid, hilum apical, raphe reticulate; endosperm homogeneous or ruminant; embryo minute, basal. Germination adjacent-ligular; *eophyll* bifid with erose apices or entire and ovate with erose margins.

KEY TO THE SPECIES

- 1a. Fruits more than 30 mm long **7. *D. whitmeeanus***
 b. Fruits equal to or less than 30 mm long 2
 2a. Endosperm ruminant 3
 b. Endosperm homogeneous 4
 3a. Stilt roots sometimes present, interior of endocarp caramel-colored; seed terete
 **3. *D. litigiosus***
 b. Stilt roots absent, interior of endocarp shiny black, seed usually slightly lobed . .
 **1. *D. hentyi***
 4a. Emergent palms, terminal leaf segments not united, prophyll and peduncular bract
 caducous, pistillode shorter than stamens 5
 b. Understory palms, terminal leaf segments usually united into a single flabellate
 segment, prophyll and peduncular bract persistent, pistillode longer than stamens
 **4. *D. oliviformis***
 5a. Stamens more than 150, endocarps with a single flattened ridge on one side . 6
 b. Stamens fewer than 100, endocarp terete, lacking a flattened ridge
 **2. *D. lepidotus***
 6a. Peduncle longer than rachillae-bearing rachis of inflorescence; inflorescences
 branched to 2 orders **5. *D. pachycladus***
 b. Peduncle shorter than rachillae-bearing rachis, inflorescence branched to 3 or 4
 orders **6. *D. subdistichus***

1. *Drymophloeus hentyi* (Essig) Zona, *comb. nov.*

Ptychosperma hentyi Essig, Principes 31 (1987) 113. — Type: Papua New Guinea, West New Britain Province, Kandrian Subprovince, along west side of Pulie River, *Henty & Frodin NGF 27237* (holo LAE; iso BH).

Solitary, understory palm bearing 10(–13) pendant leaves. *Stem* 5–8(–10) m tall, 6–8 cm diam.; stilt roots absent. *Leaf* 157–261 cm long; petiole 15–21 cm long; sheath 45.5–75 cm long; 12–21 pairs of segments, middle segment 29–54 cm long, 9.5–30 cm wide, cuneate; terminal segments not united. *Inflorescence* c. 75 cm long; prophyll 14–27.5 cm long, 1.3–3 cm wide; peduncular bract 9–24.5 cm long, c. 4.5 cm wide; peduncle 12–17 cm long; rachillae 110–200 mm long, c. 1.5 mm diam. (at base), with 7–9 pistillate flowers per 5 cm. *Staminate flower* 6–7(–10) mm long, c. 3.8 mm diam.; sepals reniform to semi-orbicular, c. 2.9 mm long, 4 mm wide; petals linear-elliptical,

c. 5.4 mm long, 3 mm wide; stamens 25–36, c. 3 mm long; filament c. 1.5 mm long; anther c. 2.5 mm long, c. 0.4 mm wide; pistillode conical, 0.3–2 mm long, style absent. *Pistillate flowers* not seen. *Fruit* red when ripe, broadly fusiform to nearly globose, fleshy and juicy, 15–16.1 mm long, 9–13 mm diam.; exocarp slightly striate when dry; endocarp fusiform, inner wall black, vitreous, 15–15.6 mm long, 9.6–10.3 mm diam.; *seed* globose or slightly oblate spheroid, sometimes weakly to strongly five-lobed, brown, 7.8–9.1 mm long, 7.5–8.3 mm diam.; endosperm ruminant. *Eophyll* bifid, apical margins erose.

Common names — None recorded.

Distribution — Known only from the island of New Britain, at 0–670 m elevation (Fig. 2). Occasionally cultivated outside its native range.

Notes — The above description relies heavily on the original description by Essig (1987), supplemented by observations taken from additional specimens and living material in cultivation.

This species was originally described in the genus *Ptychosperma* because of its (sometimes obscurely) lobed endocarps. Examination of the endocarps of *D. subdistichus* revealed that they are also obscurely lobed at the apex of the endocarp, so *D. hentyi* is not unique in the genus in possessing lobed endocarps. Endocarp lobing has evolved several times in the Ptychospermatinae (Zona, 1999); hence, it cannot be used as the sole criterion for identification at the generic level.

Although few specimens exist, illustrations of this palm (as *Drymophloeus* sp., *Ptychosperma* sp., or *Ptychosperma hentyi*) were published in Hay (1984) and Essig (1987, 1995).

2. *Drymophloeus lepidotus* H.E. Moore

Drymophloeus lepidotus H.E. Moore, Principes 13 (1969) 75, 76. — Type: British Solomon Islands Protectorate, San Cristobal: ultrabasic hill east of Wainoni, 10 Aug. 1965, *Dennis 53* (holo BH; iso BSIP, K, L, LAE).

Solitary, emergent palm. *Stem* c. 9 m tall, 7.5–10 cm diam.; stilt roots absent. *Leaf* sheath not seen; middle leaf segment 41–54.5 cm long, c. 4.6 cm wide, linear-cuneate; terminal segments not united. Prophyll c. 29 cm long, c. 2.5 cm wide, caducous; peduncular bract c. 33 cm long, c. 4.5 cm wide, caducous; peduncle 10–11 cm long, 1.4–1.6 cm wide; rachillae more than 10, c. 190 mm long, c. 2.4 mm diam., with 9–12 pistillate flowers per 5 cm. *Staminate flower* 4.4–4.8 mm long, 2.8–3.1 mm diam.; sepals reniform to semi-orbicular, 2.2–2.6 mm long, 2.8–3.3 mm wide; petals ovate, creamy white, 3.6–4.3 mm long, 2.7–3.2 mm wide; stamens 34–45, c. 3.2 mm long; filament c. 1.5 mm long; anther 1.9–2.5 mm long, 0.4–0.5 mm wide; pistillode 1.9–2.2 mm long, 0.3–0.4 mm diam., style present. *Pistillate flowers* borne proximally on the rachillae, spirally or subdistichously arranged; not seen. *Fruit* red when ripe, elongate ovoid, fleshy and juicy, 23.5–25.7 mm long, 9.3–10.5 mm diam.; exocarp finely rugose when dry, fiber ends visible; endocarp fusiform, bearing a single flattened ridge on one side, inner wall shiny ochre in color; *seed* ellipsoid to ovoid, flattened at the base, brown, 14.1–15.8 mm long, 7.2–7.8 mm diam.; endosperm homogeneous. *Eophyll* not seen.

Common names — None recorded.