

Chamaedorea binderi Hodel sp. nov. (Figs. 4–6).

Subgeneris *Chamaedoropsi* Oerst. inflorescentiis masculis solitariis, floribus masculis solitariis petalis patentibus apicaliter pertinens. *C. brachycladae* H. Wendl. affinis sed habitu, foliis et inflorescentiis minoribus, pinnis paucioribus minoribus flavivirentibus recitis, inflorescentia feminea reclusiori, rachillis gracilioribus distantibus, fructibus majoribus differt. Typus: Costa Rica, Puntarenas, *Hodel & Binder 1340* (Holotypus BH, isotypus CR).

Solitary, erect, to 50 cm tall (Fig. 4). Stem short, nearly lacking, subterranean or buried in leaf litter, prominently ringed, nodes congested, internodes 3–5 mm long. Leaves 3–4, ascending, pinnate; sheath 8 cm long, obliquely open apically, splitting deeply opposite petiole, tubular near base, longitudinally striate; petiole 15 cm long, grooved adaxially, rounded and green abaxially; rachis 28 cm long, angled adaxially, rounded abaxially; pinnae 20 per side, to 9×1.5 cm, decreasing progressively toward apex and there 4.5×0.8 cm, basal pinnae 6×0.8 cm, all pinnae straight, acuminate to long-acuminate, lower margin decurrent on rachis, midrib and 2 submarginal nerves conspicuous adaxially but only midrib whitish, others green, abaxially 5-nerved, midrib and 2 submarginals whitish, 1 nerve each between midrib and submarginal green to whitish. Inflorescences arising from base, long-pedunculate, arcuate; staminate inflorescence with peduncle (Fig. 5) 28 cm long; bracts 8, prophyll 5 mm long, 2nd bract 1 cm long, 3rd 2 cm long, 4th and 5th 5 cm long, 6th–8th 7 cm long, thin-papery, longitudinally nerved, lower 6 bifid, acute, upper 2 acuminate; rachis 5 cm long, 4 mm diam., narrowing toward tip; up to 60 rachillae, to 5 cm long, slender, filiform, undulate apically, diverging from rachis at right angles; pistillate inflorescence (Fig. 6) similar to staminate, peduncle 18 cm long; bracts as in staminate but smaller; rachis 8 cm long, 1–2 mm diam., slender; up to 30 rachillae, to 5 cm long, slender, filiform, diverging from rachis at right angles. Staminate flowers not seen; pistillate flowers (Fig. 6) remote, scattered, 4–6 mm distant, 2×1.5 mm, superficial; calyx cupular, 0.5–0.75 mm high, membranous, sepals connate nearly to apex, acute; petals 2×2 mm, imbricate nearly to apex, acute; pistil 1.9×1 mm, ovary ovoid, style exerted 0.5 mm above ovary, slender, stigma lobes long, slender, pointed, only slightly recurved;

staminodes conspicuous, toothlike. Fruits 6–8 mm diam., globose, black (Fig. 6). Eophyll pinnate.

Distribution: COSTA RICA. Puntarenas. San José. Moist to wet forest on the Pacific slope, 1 140–1 900 m elevation.

Specimens Examined: COSTA RICA. Puntarenas: Fila Las Cruces, *Hodel & Binder 1339* (BH, CR), 1340 (holotype BH; isotype CR); *Maas & McAlpin 1387* (U); Jardín Botánico Robert y Catherine Wilson, ridge west of Río Jaba, *Grayum 9280* (MO). San José: Fila Aguabuena, *Candelaria, Chavarria et al. 107* (CR).

The epithet honors Mark Binder of Los Angeles, California, who brought this species to my attention, assisted in collecting the type, and did exemplary work with the palm collection, chamaedoreas in particular, at the Jardín Botánico Robert y Catherine Wilson. *Chamaedorea binderi* is very close to *C. brachyclada* with which it has been confused. *C. brachyclada* differs in its much larger (2–4 times as large) habit, leaves, and inflorescences, more numerous, larger, dark green, conspicuously falcate pinnae, more compact pistillate inflorescence with more numerous and thicker, close-set rachillae, and smaller fruits. The two species grow sympatrically in forest remnants not too far from the Jardín Botánico Robert y Catherine Wilson near San Vito in southeastern Costa Rica. That there are no intermediate forms lends credence to their validity as distinct species. *C. binderi*, along with *C. brachyclada*, *C. stenocarpa*, *C. scheryi*, *C. undulatifolia*, and *C. pygmaea*, belongs to a natural subgroup of species characterized by its essentially stemless habit, pinnate leaves with lower margins decurrent on the rachis, and long-pedunculate inflorescences arising from the base (Hodel and Uhl 1990).

In the key to subgenus *Chamaedoropsis* (Hodel 1992a, p. 124), *Chamaedorea binderi* would key out next to *C. brachyclada* and *C. stenocarpa*. Differences of the former were discussed above. The latter differs in its spicate or forked pistillate inflorescence.

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