

som 3243 (MO); *J. Folsom & J. Kauke* 2648 (MO); *G. de Nevers et al.* 6384 (MO); *B. Hammel* 2421, 4094 (MO). COSTA RICA. Guanacaste: Río Negro, *W. Haber ex E. Bello* C. 5874 (MO). Alajuela: Río Laurencito de San Ramón, *I. Chacón et al.* 2200 (CR). Heredia: Braulio Carrillo National Park, *R. Chazdon* 196 (CR). San Jose: Braulio Carrillo National Park, *D. R. Hodel et al.* 971, 975, 976 (BH, CR). CULTIVATED. United States. California: Los Angeles, in greenhouse, *D. R. Hodel* 828, 857 (BH), originally collected at the type locality. Costa Rica. Puntarenas: San Vito, Jardín Botánico Robert y Catherine Wilson (JBRCW), *D. R. Hodel* 624 (BH), originally collected at the type locality.

The name honors Hodel's son Robert who, at age seven, made the walk from El Copé to the Continental Divide and assisted in collecting the type.

Chamaedorea robertii is an attractive and unusual species because of its simple, bifid, heavily nerved leaves, acaulescent habit, and spicate inflorescences. The flower-bearing portion of the staminate inflorescence is pendulous (Fig. 3) and densely crowded with relatively large, white-tinged-with-green flowers. The pistillate inflorescence has densely crowded, yellow flowers and the peduncle is sheathed in attractive, burgundy-colored bracts.

When it flowered for the first time in the greenhouse in Los Angeles, we originally thought this taxon was a member of subgenus *Stephanostachys* because of the densely placed staminate flowers. However, subsequent collections from this cultivated material show that the staminate flowers of *C. robertii*, while closely placed, are clearly distinct and not contiguous,

thus excluding it from *Stephanostachys*. *C. robertii* is most closely related to *C. pumila* and *C. sullivaniorum*. *C. robertii* can be distinguished from both by its forest-green leaves with more remotely toothed margins, spicate staminate inflorescences with whitish flowers, and yellow pistillate flowers. It differs from *C. pumila* in the larger, broader leaf with more nerves (12–15 rather than 10) and from *C. sullivaniorum* in the leaf being more deeply bifid.

Chamaedorea palmeriana D. R. Hodel & N. W. Uhl. **sp. nov.** (Figs. 4,5).

Subgeneris *Chamaedorea* Mart. ex H. A. Wendl. *C. amabili* H. A. Wendl. ex Dammer affinis sed laminis bifidis usque ad medi vel ultra, nervis multo paucioribus, floribus masculis angulatis differt; *C. simplicis* Burret affinis sed laminis pluribus nervis, marginibus dentatis, inflorescentiis masculis non spicatis differt. Typus: *D. R. & M. A. Hodel* 726A (holotypus, BH; isotypus, PMA).

Stem solitary, erect but often creeping or procumbent and rooting along its length, to 1 m high, 7–10 mm diam., smooth, green, ringed, internodes 5–10 cm long, often with aerial roots at the base.

Leaves 7 or sometimes more, simple and bifid (Fig. 4), held horizontally; sheath 5–7 cm long, cylindric, green, minutely white-spotted, obliquely open apically, faintly longitudinally striate-nerved; petiole to 15 cm long, green and flattened adaxially, green and rounded abaxially and there with a faint pale yellow or light green band extending from the rachis to the sheath; rachis 8–12 cm long, green and angled adaxially, green and rounded abaxially;

4. *Chamaedorea palmeriana*, *D. R. & M. A. Hodel* 726B, in wet forest at the type locality in Chiriquí, Panama. 5. Staminate inflorescence of *C. palmeriana* cultivated in Los Angeles, California. The plant was originally collected at the type locality in Panama. 6. Herbarium specimen of *C. correae*, *R. Liesner* 1001, showing simple, bifid leaves and spicate inflorescences. 7. Herbarium specimen of *C. correae*, *B. Hammel* 2413, showing prostrate stem rooting at the nodes.

blade bright emerald green, \pm thin, \pm papery, to 25×25 cm, deeply bifid apically to more than one-half its length, lobes to 15×9 cm, corrugated with 12–14 prominent nerves at the top of each ridge adaxially, exterior margins dentate.

Inflorescences interfoliar, erect; peduncles to 20–30 cm long, slender, 5–7 mm wide at the base and there \pm flattened, 2–3 mm diam. at the apex and there rounded, greenish at anthesis, orange in fruit; bracts 4–5, green at anthesis, tightly sheathing, longitudinally striate-nerved, acuminate, bifid, prophyll 5 cm long, 2nd–4th bracts 15 cm long, uppermost not exceeding the peduncle. Staminate inflorescence (Fig. 5) with a rachis 1–5 cm long, flexuous, greenish at anthesis; rachillae 2–7, ascending-spreading, to 15 cm long, 1–1.5 mm diam., longitudinally ridged, green. Pistillate inflorescence spicate or rarely with 2–3 rachillae; rachis or flower-bearing portion erect, 15–20 cm long, greenish at anthesis and 1.5–2 mm diam., orange and thickened in fruit to 2.5 mm diam.

Staminate flowers in moderately dense spirals, angular-globose, 2.5×2.5 mm, greenish apically, yellowish basally, slightly immersed; calyx low-cupular, 0.5×1.75 mm, brownish, 3-lobed, lobes broadly rounded; corolla with petals connate at their tips and there adnate to the pistillode and opening by small basal apertures, these elliptic, 0.5 mm long, corolla greenish-yellow except orange-brown around the apertures, petals 2.5×2 – 2.5 mm, rounded-triangular, acute; stamens included; pistillode columnar, 2.5 mm high. Pistillate flowers rather densely arranged, 3–4 mm apart, depressed-globose, 2×2 mm, pale green, slightly immersed; calyx low-cupular, very briefly imbricate or connate basally, shallowly 3-lobed, lobes broadly rounded, 0.25–0.5 mm high; corolla with the petals imbricate basally, spreading apically, greenish or yellowish, 2–2.5 mm long at anthesis, 3 mm wide at the base, acute, broadly rounded, 3 mm

long in fruit, petals and sepals very lightly nerved on the inside; pistil globose-subglobose, green, rounded, acute. Fruits when immature ellipsoid, 12×6 mm, green, closely spaced on rachillae, black when mature, ovoid to globose, 12×8 – 10 mm.

Distribution: PANAMA. Chiriquí. Veraguas. COSTA RICA. Alajuela. Heredia. San José. Limón. Dense, wet forest, 450–1,800 m elevation on the Atlantic slope up to and just over the Continental Divide.

Specimens Examined: PANAMA. Chiriquí: Boquete, *D. R. & M. A. Hodel 726A* (holotype, BH; isotype, PMA); *726B* (BH, PMA); La Zorrea, Río Mali, *J. Kirkbride Jr. & J. Duke 735* (MO); Fortuna, *S. Knapp & M. Vodica 5535, 5064* (MO); *K. Sytsma & W. Stevens 2246* (MO); *T. Croat 49890, 49926* (MO); *R. Hampshire & C. Whitefoord 945* (BM); *B. Hammel 2312* (MO); *H. & A. Churchill 6115, 6124, 6116, 6123* (MO); *H. Churchill 5757, 5941, 5539, 5538* (MO); *T. Antonio 5065* (MO); *S. Knapp 5077* (MO). Veraguas: Santa Fe, *S. Mori & A. Bolten 7667* (BH, MO). COSTA RICA. Alajuela: near San Miguel along the Río Sarapiquí, *L. Gómez & G. Herrera 23328* (MO); *I. Chacón & G. Herrera 1204* (MO). Heredia: upper Río Sarapiquí, *H. E. Moore, Jr. 6644* (BH); Braulio Carrillo National Park, *L. Gómez 20086* (MO); *R. Chazdon 181, 193, 194* (CR); *M. Grayum & G. Herrera 7827* (CR). San Jose: Braulio Carrillo National Park, *M. Grayum & P. Sleeper 6121, 6122* (MO); *R. Chazdon 128, 140, 144, 146* (BH); *217* (CR); *L. Gómez et al. 20873* (MO, CR); *N. Zamora et al. 518* (MO); *I. Chacón & G. Herrera 1704, 1731* (MO, CR), *1742* (CR); *D. R. Hodel et al. 972* (BH, CR); Zurquí, *R. Chazdon 241* (CR); *B. Hammel et al. 17340* (CR). Cartago: Moravia, *H. E. Moore Jr. 6693* (BH). Limón: Cerro Chimu, *L. Gómez & G. Herrera 23548* (MO); Río Peje, *L. Gómez & G. Herrera 23514* (MO). CULTIVATED. United States. California: Los Angeles, in greenhouse, *D. R. Hodel 726A bis* (BH).

The name honors Richard W. Palmer of Whittier, California, who has encouraged and supported Hodel's work on palms and especially that on *Chamaedorea*. Chazdon, in a report on the palm flora of Braulio Carrillo National Park (*Brenesia* 28: 107-116, 1987), referred to *C. palmeriana* as *Chamaedorea* sp. "bifida."

Similar to *C. amabilis* in habit, *C. palmeriana* can be distinguished by its blades bifid at the apex to at least half, rather than one-fourth, their length; half the number of nerves on each side of the rachis (12-14 rather than 20-25); and the staminate flowers angular rather than globose. From *C. simplex*, it is distinguished by the thinner blades with more nerves (12-14 rather than 6-7) and dentate margins; the erect and branched, rather than spicate and pendulous, staminate inflorescences.

Chamaedorea palmeriana is relatively widespread, occurring in very wet forest from Veraguas Province in Panama westward to at least the upper reaches of the Río Sarapiquí in Costa Rica. It occurs mainly on the Atlantic slope in Costa Rica and Panama. However, in Panama where the Continental Divide is at a lower elevation, *C. palmeriana* is sometimes found just over it on the Pacific slope.

An attractive species often flowering when no more than 30 cm tall, *C. palmeriana* is noted for its simple, deeply bifid, corrugated, emerald green leaves. In the wild or when well grown, it is a very leafy plant, often holding 7-10 leaves in a handsome and compact crown. Unfortunately, like other species of the genus from wet, cool, relatively high areas, *C. palmeriana* is somewhat difficult to cultivate.

Chamaedorea correae D. R. Hodel & N. W. Uhl. **sp. nov.** (Figs. 6,7).

Subgeneris *Chamaedoropsis* Oerst. Species egregia caulibus longis gracilibus repentibus, laminis simplicibus bifidis vel

raro pinnatis segmentis basalibus paucis, paribus apicalibus latioribus, inflorescentiis spicatis vel furcatis, petalis liberis viridiflavis; *C. guntherianae* D. R. Hodel & N. W. Uhl affinis sed laminis grandioribus, lobis latioribus magis divergentibus, pedunculis longioribus, floribus masculis maturiscentibus simul secus axem differt. Typus: *S. Knapp & R. Dressler 3801* (holotypus, MO; isotypus, PMA).

Stem solitary, procumbent with prostrate portion longer than erect portion, to 2-3 m long, briefly erect apically to 1 m tall, rooting at the nodes where touching the ground, slender, 5-10 mm diam., ringed, nodes swollen, internodes 5-10 cm long.

Leaves 4-5, erect-spreading, dull green or gray-green, \pm thick, simple and bifid or infrequently pinnate; sheath to 15 cm long, tubular, tightly clasping, obliquely open at the apex, light green, longitudinally striate-nerved; petiole to 10 cm long, gray-green and flat adaxially, rounded and gray-green abaxially with a pale yellow or light green band extending from the rachis onto the sheath; rachis 5-15 cm long, gray-green and angled adaxially, rounded and pale abaxially; rachis, petiole, and upperpart of sheath densely but minutely white-spotted; blade simple and deeply bifid apically to three-fourths its length, 15-25 cm long, lobes broadly divergent, 15-25 \times 4-12 cm, lanceolate, slightly sigmoid, acuminate, 8-10 primary nerves adaxially, exterior margin toothed toward the apex, or infrequently blade pinnate with a pair of small basal pinnae, these lanceolate, sigmoid, acuminate, narrowed at the base, 8-12 \times 1.5-3 cm, 2-3 prominent nerves adaxially.

Inflorescences infralioar, erect-ascending, slender. Staminate inflorescence with a peduncle 10-15 cm long; bracts 5-6, tubular, tightly sheathing, flaring abruptly apically, longitudinally striate-nerved, acute-acuminate, bifid, prophyll 5 mm long, 2nd bract 1 cm long, 3rd 2-3 cm long, 4th 4 cm long, 5th 6-8 cm long, 6th 8-

