



6. *Chamaedorea matae*, D. R. & M. A. Hodel 715, at Marenco Biological Station on the Osa Peninsula, Costa Rica. 7. Leaf and inflorescence of *Chamaedorea matae*, D. R. & R. J. Hodel 715, showing broad terminal pinnae and pendulous fruiting rachillae.

ble the number of pinnae and spreading, rather than pendulous, pistillate rachillae.

#### **Chamaedorea serpens** D. R. Hodel sp. nov. (Figs. 8,9).

Subgeneris *Chamaedoreae* Mart. ex H. A. Wendl. floribus masculis petalis connatis apicaliter corollis aperturis lateralibus. *C. pinnatifrondi* (Jacq.) Oerst., *C. warscewiczzii* H. A. Wendl. et *C. murriensi* Galeano affinis sed habitu minori, repenti et repullulanti ramificanti differt. Typus: D. R. & M. A. Hodel 745 (holotypus, BH; isotypus, PMA).

Stems cespitose, procumbent and sprawling and twisting along ground and through adjacent vegetation to 3–4 m long then shortly erect to 1.5 m tall (Figs. 8,9), 5–10 mm diam., rooting and sprouting at

nodes, smooth, green, prominently ringed, internodes 5–10 cm long. Leaves 4–5, erect-spreading, glossy green, pinnate or rarely simple and bifid; sheath to 20 cm long, tubular, tightly clasping, obliquely open apically, green, longitudinally striated; petiole to 20 cm long, green and flat above, pale and rounded below; rachis to 25 cm long, green and angled above, rounded and with a pale yellow or light green band extending onto sheath; pinnae 2–5 on each side of rachis, all but apical pair lanceolate, 12–18 × 2.5–4 cm, sigmoid, acuminate, narrowed at base, 4–5 prominent primary nerves above, 1 secondary between each pair of primaries, tertiaries numerous, faint, apical pair of pinnae (or if bifid) 27–30 × 8–12 cm, slightly sigmoid, acuminate, 9–12 prominent nerves above, these 1–2 cm apart.

Staminate inflorescences infrafoliar or interfoliar; peduncle to 15 cm long, 5 mm wide at base and there flattened, 1.8–2 mm diam. at apex and there ± rounded, pale to green at anthesis; bracts 4–5, long-lanceolate, obliquely open apically, finely longitudinally striate-nerved, papery, greenish to brown at anthesis, lower ones acute, upper ones acute-acuminate, prophyll 2 cm long, 2nd bract 6 cm long, 3rd 9 cm long, 4th 10 cm long and exceeding peduncle, 5th 4 cm long and sometimes concealed by the larger 4th; rachis to 3 cm long, greenish in flower; rachillae 6–10, to 10 cm long, slightly drooping.

Staminate flowers in ± dense spirals, 1–2 mm apart, only slightly immersed in superficial elliptic depressions 3 × 1.5 mm, ± globose, 2–2.5 × 1.8–2.5 mm, greenish yellow at anthesis, drying brownish; calyx 0.8–1 × 1.8–2 mm, deeply 3-lobed nearly to base, lobes rounded to acute, only lightly nerved; petals valvate, connate apically and there adnate to pistillode and the corolla opening by basal and lateral apertures, petals 2.5 × 2 mm, acute, ± thin, lightly longitudinally striate-nerved; stamens 1.25–2 mm long, anthers sessile or nearly so, 2 mm long, longitudinally bilobed; pistillode columnar, 2–2.5 mm tall, very slender, slightly flared apically. Pistillate flowers and fruits not seen.

**Distribution:** PANAMA. Panama. Coclé. Dense, wet forest and cloud forest at or near the Continental Divide, 800–1,000 m elevation.

**Specimens Examined:** PANAMA. Panama: Cerro Campana, letter and photograph from H. F. Loomis to H. E. Moore, G. Fairchild & H. Loomis s. n. (BH). Coclé: El Valle de Antón, D. R. & M. A. Hodel 745 (holotype, BH; isotype, PMA).

The epithet is from a Latin word meaning creeping and rooting, in reference to the stems of this species. *C. serpens* is one of the most unusual members of the genus with its sprawling, procumbent, slender stems rooting and sprouting at the nodes along their length. The stems appear to

grow upright until about a meter tall at which point they tend to fall over. In this manner, they form a rather loose colony of tangled stems several meters across and a meter high. The only other member of the genus approaching it in the branching habit of the stems is a form of *C. elatior* from Veracruz and Oaxaca, Mexico, that is easily distinguished by its long, vining, climbing stems and leaves with 10 or more, often deflexed, pinnae on each side of the rachis.

Florally, *C. serpens* is close to *C. pinnatifrons* from northern South America and related species including *C. warscewiczii* and *C. murriensis*. However, *C. serpens* is amply distinct in its creeping stems rooting and sprouting at the nodes and generally much smaller overall habit.

*Chamaedorea serpens* occurs in wet forest and cloud forest at about 1,000 meters elevation in western central Panama. It is not a common plant. We found it on the sides of steep ravines near El Valle where it occurs in dense forest often shrouded in clouds. This is an area rich in chamaedoreas; nearby grow *C. allenii*, *C. amabilis*, *C. correae*, *C. costaricana*, *C. pinnatifrons*, *C. sullivaniorum*, *C. tepejilote*, *C. warscewiczii*, and *C. woodsoniana*.

### ***Chamaedorea selvae* D. R. Hodel sp. nov.** (Figs. 10–12).

Subgeneris *Chamaedoropsi* Oerst. inflorescentiis masculis solitariis, floribus masculis solitariis petalis patentibus apicaliter. *C. tepejilote* Liebm. ex Mart., *C. deneversianae* Grayum & Hodel et *C. murriensi* Galeano habitu affinis sed subgeneri diverso pertinens subgenere differt. *C. vista* Hodel & Uhl, *C. carchensis* Standl. & Steyermark, et *C. woodsonianae* L. H. Bailey affinis sed pinnis paucioribus (3–8 utrinque versus 20 vel plus) latioribus differt. Typus: Costa Rica, W. Burger & G. Mata 4337 (holotypus, CR; isotypus, F).

Stem solitary, (rarely cespitose? Ste-



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8. A clump of *C. serpens*, D. R. Hodel & M. A. Hodel 745, grows on the near vertical side of a ravine, El Valle, Panama. 9. Portion of a clump of *C. serpens* showing rooting and sprouting stems.