

lombia between 6°01'–6°55' N and 75°01'–75°04' W at a mean elevation of 1599 (1495–1750) m (Fig. 4).

Discussion. Although an isoneotype is reported to be at NY (Bernal et al., 1989), it is not there. Other isoneotypes supposedly at AAU and BH have not been received on loan for this study. This name is therefore interpreted from *R. Bernal* & *L. Tobón 1389* (COL, FTG), from the same locality and with the same collection date as the neotype.

4. *Hyospathe frontinensis* Henderson, sp. nov.—TYPE. COLOMBIA. Antioquia: Municipio de Frontino, corregimiento de Murri, camino desde la quebrada Peñitas hacia Cienegetas, 1200–1500 m, 19 Sep 1983, *R. Bernal, G. Galeano & I. Turner 706* (holotype: COL!; isotype: NY!).

Ab omnibus speciebus generis his notulius differt: inflorescentiis infrafoliis, rachillis non filiformibus, triadibus non elevatis, regularibus, floribus pistillatis sessilibus, et sepalis pistillatis tubularibus.

Stem length: 2.0 (1.4–2.5) m, CV 0.2, *N* = 7. **Stem diameter:** 0.7 (0.5–0.9) cm, CV 0.2, *N* = 8. **Internode length:** 6.9 (3.7–9.5) cm, CV = 0.3, *N* = 7. **Sheath length:** 11.5, *N* = 1. **Petiole length:** 10.5 (7.0–14.5) cm, CV 0.2, *N* = 10. **Rachis length:** 18.0 (13.0–26.0) cm, CV 0.2, *N* = 10. **Rachis width:** 2.9 (2.9–4.1) mm, CV 0.2, *N* = 10. **Number of divisions:** 1, *N* = 11. **Proximal pinna angle:** 31.5° (25°–40°), CV 0.2, *N* = 10. **Distal pinna angle:** 23.6° (20°–27°), CV 0.1, *N* = 10. **Distal pinna length:** 23.9 (20.0–33.0) cm, CV 0.2, *N* = 10. **Sterile basal part length:** 3.3 (1.7–7.2) cm, CV 0.5, *N* = 10. **Sterile basal part width:** 3.0 (2.1–4.0) mm, CV 0.3, *N* = 10. **Prophyll length:** 10.9 (6.0–19.5) cm, CV 0.4, *N* = 6. **Peduncular bract length:** 32.5 (21.5–50.0) cm, CV 0.3, *N* = 6. **Interbract distance:** 3.8 (2.3–6.5) cm, CV 0.4, *N* = 10. **Peduncle length:** 14.0 (7.9–18.0) cm, CV 0.2, *N* = 10. **Rachis length:** 1.9 (0.1–5.5) cm, CV 0.8, *N* = 11. **Rachis width:** 1.6 (1.2–2.0) mm, CV 0.2, *N* = 11. **Rachillae number:** 3.2 (2–5), CV 0.3, *N* = 11. **Proximal rachilla length:** 18.6 (12.5–23.0) cm, CV 0.2, *N* = 8. **Distal rachilla length:** 17.4 (11.0–22.5) cm, CV 0.2, *N* = 7. **Fruit length:** 8.7 (8.2–9.2) mm, CV 0.1, *N* = 2. **Fruit diameter:** 6.1 (5.9–6.3) mm, CV 0.1, *N* = 2.

Distribution. Western slopes of the Cordillera Occidental in Colombia between 6°29'–6°45' N and 76°14'–76°25' W at a mean elevation of 1370 (1000–1725) m (Fig. 4).

5. *Hyospathe pittieri* Burret, Notizbl. Bot. Gart. Berlin-Dahlem 14: 137. 1938. TYPE. VENEZUELA. Aragua: Valle de Ocumare, 1000 m, 17 Sep 1937, *H. Pittier 14146* (holotype: B, destroyed; lectotype (Stauffer and Stauffer, 1996): VEN; photo in Stauffer and Stauffer, 1996!).

Stem length: 4.7 (2.0–8.0) m, CV 0.4, *N* = 14. **Stem diameter:** 2.3 (1.3–5.0) cm, CV 0.4, *N* = 19. **Internode length:** 3.2 (1.5–7.0) cm, CV = 0.6, *N* = 10. **Sheath length:** 35.3 (24.0–39.0) cm, CV 0.1, *N* = 9. **Petiole length:** 21.8 (11.5–41.0) cm, CV 0.3, *N* = 19. **Rachis length:** 76.1 (41.0–105.0) cm, CV 0.3, *N* = 12. **Rachis width:** 8.0 (3.9–11.3) mm, CV 0.2, *N* = 28. **Number of divisions:** 19.5 (10–27), CV 0.2, *N* = 14. **Proximal pinna angle:** 49.9° (30°–90°), CV 0.3, *N* = 24. **Distal pinna angle:** 16.5° (11°–30°), CV 0.3, *N* = 15. **Distal pinna length:** 28.7 (23.0–37.0) cm, CV 0.1, *N* = 11. **Sterile basal part length:** 1.9 (1.2–3.3) cm, CV 0.3, *N* = 31. **Sterile basal part width:** 10.8 (5.8–15.8) mm, CV 0.2, *N* = 22. **Prophyll length:** 27.5 (14.0–45.0) cm, CV 0.5, *N* = 4. **Peduncular bract length:** 32.7 (20.0–31.0) cm, CV 0.3, *N* = 3. **Interbract distance:** 2.2 (1.4–3.4) cm, CV 0.2, *N* = 31. **Peduncle length:** 4.0 (1.2–8.2) cm, CV 0.4, *N* = 29. **Rachis**

length: 13.5 (4.5–20.5) cm, CV 0.3, *N* = 20. **Rachis width:** 5.3 (2.9–10.1) mm, CV 0.3, *N* = 22. **Rachillae number:** 38.7 (18–51), CV 0.3, *N* = 16. **Proximal rachilla length:** 23.6 (9.4–34.5) cm, CV 0.3, *N* = 16. **Distal rachilla length:** 12.6 (7.5–17.5) cm, CV 0.3, *N* = 5. **Fruit length:** 11.6 (8.4–14.2) mm, CV 0.2, *N* = 8. **Fruit diameter:** 6.0 (4.0–7.3) mm, CV 0.2, *N* = 8.

Distribution. Montane areas in northern Venezuela and Colombia and just reaching Panama between 1°08'–10°47' N and 66°35'–77°45' W at a mean elevation of 1459 (1100–1980) m (Fig. 4).

6. *Hyospathe elegans* Mart., Hist. nat. palm. 2: 1. 1823. TYPE. BRAZIL. Amazonas: Rio Negro, no date, *C. Martius 3122* (holotype: M!; isotype: P!; F neg. 18528a).

Stem length: 2.7 (1.0–7.0) m, CV 0.5, *N* = 91. **Stem diameter:** 1.0 (0.3–2.3) cm, CV 0.4, *N* = 291. **Internode length:** 3.9 (1.0–11.0) cm, CV = 0.4, *N* = 238. **Sheath length:** 16.8 (4.5–35.0) cm, CV 0.4, *N* = 149. **Petiole length:** 15.0 (1.0–41.0) cm, CV 0.5, *N* = 286. **Rachis length:** 41.0 (5.5–125.0) cm, CV 0.5, *N* = 264. **Rachis width:** 4.0 (1.4–8.5) mm, CV 0.3, *N* = 321. **Number of divisions:** 4.5 (1–28), CV 1.1, *N* = 290. **Proximal pinna angle:** 40.4° (10°–90°), CV 0.4, *N* = 297. **Distal pinna angle:** 23.4° (15°–35°), CV 0.2, *N* = 232. **Distal pinna length:** 26.4 (13.0–46.0) cm, CV 0.3, *N* = 155. **Sterile basal part length:** 1.6 (0.3–6.0) cm, CV 0.6, *N* = 351. **Sterile basal part width:** 5.3 (1.4–16.7) mm, CV 0.4, *N* = 286. **Prophyll length:** 13.1 (1.0–37.0) cm, CV 0.6, *N* = 49. **Peduncular bract length:** 24.5 (7.0–50.0) cm, CV 0.4, *N* = 34. **Interbract distance:** 1.7 (0.5–4.2) cm, CV 0.4, *N* = 349. **Peduncle length:** 3.6 (0.9–12.5) cm, CV 0.5, *N* = 347. **Rachis length:** 6.3 (0.1–22.0) cm, CV 0.6, *N* = 332. **Rachis width:** 3.3 (1.1–8.3) mm, CV 0.4, *N* = 335. **Rachillae number:** 15.9 (2–45), CV 0.5, *N* = 329. **Proximal rachilla length:** 18.0 (1.4–40.0) cm, CV 0.4, *N* = 234. **Distal rachilla length:** 15.1 (1.4–37.0) cm, CV 0.4, *N* = 199. **Fruit length:** 10.0 (1.3–15.7) mm, CV 0.3, *N* = 72. **Fruit diameter:** 6.2 (3.0–8.4) mm, CV 0.2, *N* = 72.

Key to the subspecies of *Hyospathe elegans*

1. Amazon region and eastern Andean slopes 6a. *H. elegans* subsp. *elegans*.
1. West of the Andes in Ecuador and Colombia, and Central America. 2.
2. Rachillae with dense crustose hairs; western Colombia and Ecuador 6f. *H. elegans* subsp. *sodiroi*.
2. Rachillae glabrous or with crustose hairs; Central America (just reaching Colombia on Cerro Tacarcuna) 3.
3. Pinnae 8–28 per side of rachis; rachillae 20–37; Costa Rica 6b. *H. elegans* subsp. *costaricensis*.
3. Pinnae 1–7 per side of rachis; rachillae 2–15; Panama and Colombia (Cerro Tacarcuna) 4.
4. Rachillae with crustose hairs; triads spirally arranged; staminate flowers red; Cerro Gaital and the eastern end of the Cordillera Central in Panama 6c. *H. elegans* subsp. *concinna*.
4. Rachillae glabrous; triads distichously or spirally arranged; staminate flowers white; Cerro Tacarcuna in Panama and adjacent Colombia, and western end of Serranía de San Blas, Panama 5.
5. Triads spirally arranged; western end of Serranía de San Blas, Panama 6d. *H. elegans* subsp. *sanblasensis*.
5. Triads distichously arranged; Cerro Tacarcuna in Panama and adjacent Colombia 6e. *H. elegans* subsp. *tacarcunensis*.

6a. *Hyospathe elegans* subsp. *elegans*

Hyospathe filiformis H. Wendl. ex Drude in Mart., Fl. bras.: