

67h. *Geonoma undata* subsp. *tacarunensis* Henderson, subsp. nov. (Appendix IV, Plate 67)

A subspeciebus aliis foveis remote stilis differt.

Type: PANAMA. Darién: Parque Nacional del Darién, Panama/Colombia border, near gold mine at head waters of N branch of Río Pucuro, slopes of Cerro Tacarcuna, ca. 6 km N of Cerro Mali, 8°09'N 77°15'W, 1300–1500 m, 27 October 1987, *C. de Nevers, B. Hammel & H. Herrera 8511* (holotype NY!, isotype MO!).

Leaves veins raised and rectangular in cross-section adaxially; basal pinna 2.6(2.4–2.7) cm wide; apical pinna no data. *Inflorescences* prophyll margins with irregular, spine-like projections; flower pits usually spirally arranged, distantly spaced.

Distribution and habitat:—At 8°09'N and 77°15'W on Cerro Tacarcuna on the Panama-Colombia border at 1612(1400–1825) m elevation in montane rainforest (Fig. 43).

67i. *Geonoma undata* subsp. *tumucensis* Henderson, subsp. nov. (Appendix IV, Plate 68)

A subspeciebus aliis foveis decussatis differt.

Type: SURINAME. Inselberg Talouakem, Massif des Tumuc-Humac, 2°29'N, 54°45'W, 620 m, 16 August 1993, *J.-J. de Granville, P. Acevedo, A. Boyer & L. Hollenberg 12322* (holotype NY!, isotype US!).

Leaves veins raised and rectangular in cross-section adaxially; basal pinna 3.0 cm wide; apical pinna no data. *Inflorescences* prophyll margins with irregular, spine-like projections; flower pits decussately arranged, not closely spaced.

Distribution and habitat:—From 2°15'–2°29'N and 54°25'–54°45'W on the Tumuc-Humac mountains in French Guiana and Suriname at 610(600–620) m in lowland rainforest (Fig. 44).

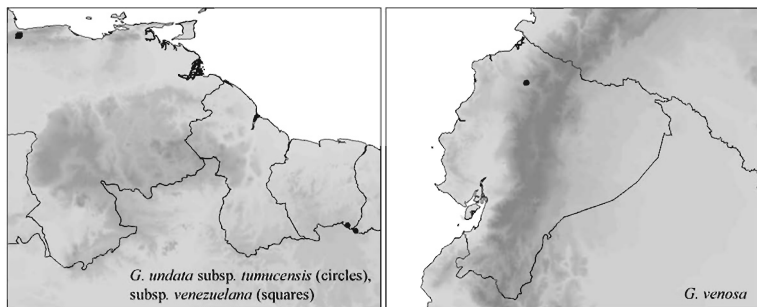


FIGURE 44. Distribution maps of *Geonoma undata* subsp. *tumucensis*, *G. undata* subsp. *venezuelana* and *G. venosa*.

67j. *Geonoma undata* subsp. *venezuelana* Henderson, subsp. nov. (Appendix IV, Plates 69–71)

A subspectiebus aliis pinnis basalibus atque apicalibus angustis differt.

Type: VENEZUELA. Carabobo: Mpio. Bejuma, parte superior de la Fila La Mesa, Valle de Chirgua, finca Monte Sacro, 1250–1300 m, 28 November–1 December 1996, *F. Stauffer, A. Fernández, R. Riina & K. Walther-Weissbeck 262* (holotype VEN *n.v.*, isotype NY!).

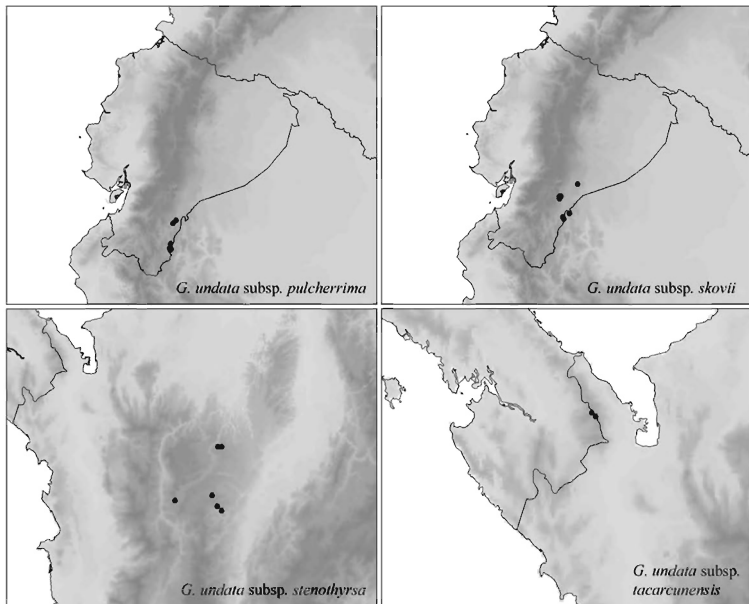


FIGURE 43. Distribution maps of *Geonoma undata* subsp. *pulcherrima*, *G. undata* subsp. *skovii*, *G. undata* subsp. *stenothyrsa*, and *G. undata* subsp. *tacarcunensis*.

67g. *Geonoma undata* subsp. *stenothyrsa* (Burret) Henderson, *comb. & stat. nov.*

Basionym: *Geonoma stenothyrsa* Burret (1930a: 197). Type: COLOMBIA. Antioquia: San Carlos, 1650–2650 m, 28 January 1880, *W. Kalbreyer 1372* (holotype B, destroyed). Neotype (designated by Bernal *et al.* 1989): COLOMBIA. Antioquia: carretera Granada-San Luis, 5.5 km adelante de El Chocó, 1750 m, 20–21 September 1987, *R. Bernal & L. Tobón 1387* (neotype COL!, isoneotypes AAU!, BH!, NY!).

Geonoma euterpoidea Burret (1930a: 196). Type: COLOMBIA. Antioquia: Alto Guatapé, 1950 m, 26 February 1880, *W. Kalbreyer 1477* (holotype B, destroyed). Neotype (designated by Bernal *et al.* 1989): COLOMBIA. Antioquia: Mun. Guatapé, vereda Santa Rita, ca. 1900 m, 20 May 1980, *R. Bernal & C. Galeano 190* (neotype COL!, isoneotype NY!).

Leaves veins raised and rectangular in cross-section adaxially; basal pinna 1.8(0.7–3.8) cm wide; apical pinna 4.8(0.1–8.5) cm wide. *Inflorescences* prophyll margins with irregular, spine-like projections; flower pits usually spirally arranged, not distantly spaced.

Distribution and habitat:—From 6°01'–6°54'N and 75°01'–75°40'W in the Central Cordillera in Colombia (Antioquia) at 1675(1500–1900) m in montane rainforest (Fig. 43).

One specimen (*Bernal 190*, neotype of *G. euterpoidea*) has leaves with more pinnae than the others (23 versus 8–13).