

Type: PERU. Amazonas: Condorcanqui Province, Distrito El Cenepa, Comunidad de Mamayaque, 4°34'S, 78°14'W, 400 m, 9 August 1997, R. Rojas, A. Peña & E. Chávez 256 (holotype NY!, isotype MO *n.v.*).

Leaves undivided or pinnate; veins not raised or slightly raised and triangular in cross-section adaxially; pinnae 1(1–2) per side of rachis. *Inflorescences* branched; staminate flowers deciduous after anthesis.

Distribution and habitat:—From 4°29'–4°45'S and 77°58'–78°14'W in the northwestern Amazon region of Peru (Amazonas) at 310(250–400) m elevation in lowland rainforest (Fig. 39).

60g. *Geonoma stricta* subsp. *pliniana* Henderson, subsp. nov. (Appendix IV, Plate 64)

A subspeciebus gulanensibus aliis foliis pinnatis venis prominentibus atque inflorescentiis simplicibus differt.

Type: FRENCH GUIANA. D.Z. 5, route Régina-Saint-Georges, bassin de l'Approuague, 4°02'N, 52°01'W, 100 m, 26 November 1995, J.-J. de Granville & C. Cremers 13148 (holotype NY!, isotype CAY *n.v.*).

Leaves pinnate; veins raised and rectangular in cross-section adaxially; pinnae 3 per side of rachis. *Inflorescences* unbranched; staminate flowers deciduous after anthesis.

Distribution and habitat:—From 3°45'–5°17'N and 51°48'–53°03'W in the northeastern Amazon region of French Guiana and Brazil (Amapá) at 53(5–100) m elevation in coastal, terra firme forests (Fig. 39).

60h. *Geonoma stricta* subsp. *quibdoensis* Henderson, subsp. nov. (Appendix IV, Plate 65)

A subspeciebus extraamazonicis aliis bractea petunculari prophylo propiore inserta differt.

Type: COLOMBIA. Chocó: ca. 10–15 km S of Quibdó on road to Istmina (Panamerican Highway), and 8–10 km E on road to petroleum exploration camp, 5°35'N, 76°37'W, 90 m, 9 July 1986, M. Grayum, B. Hammel, J. Kress & C. Brown 7645 (holotype MO!).

Leaves undivided; veins not raised or slightly raised and triangular in cross-section adaxially; pinnae 1 per side of rachis. *Inflorescences* unbranched; staminate flowers deciduous after anthesis.

Distribution and habitat:—From 5°35'–5°50'N and 76°35'–76°37'W on the Pacific coast of Colombia (Chocó) at 96(50–150) m elevation in lowland rainforest (Fig. 40).

60i. *Geonoma stricta* subsp. *submontana* Henderson, subsp. nov. (Appendix IV, Plate 66)

A subspeciebus aliis foliis pinnatis venis prominentibus atque inflorescentiis ramosis differt.

Type: PERU. Pasco: Prov. Oxapampa, W side of Cordillera de San Matias between Iscosacin and summit, 10°11'S, 75°12'W, 680–850 m, 21 June 1982, D. Smith 2019 (holotype NY!, isotype MO *n.v.*).

Leaves undivided or pinnate; veins raised and rectangular in cross-section adaxially; pinnae 1(1–2) per side of rachis. *Inflorescences* branched; staminate flowers deciduous after anthesis.

Distribution and habitat:—From 9°50'–10°18'S and 75°12'–75°15'W on eastern Andean foothills in central Peru (Huánuco, Pasco) at 437(350–760) m elevation in lowland rainforest (Fig. 40).

61. *Geonoma talamancana* Grayum (1998: 324). Type: COSTA RICA. Limón: Cantón de Limón, Cordillera de Talamanca, N flank of Fila de Matama in headwaters of Rio Boyei, 9°45'N, 83°19'W, 1200–1300 m, 17 August 1995, M. Grayum 11033 (holotype MO!, isotypes CR!, INB!, K, NY!).

Plants 1.1(0.5–2.0) m tall; stems 1.1(1.0–1.3) m tall, 1.3 cm in diameter, solitary or clustered; internodes

Leaves pinnate; veins not raised or slightly raised and triangular in cross-section adaxially; pinnae 3(3–4) per side of rachis. *Inflorescences* branched; staminate flowers deciduous after anthesis.

Distribution and habitat:—From 9°03'–10°12'S and 74°47'–75°30'W on eastern Andean slopes in central Peru (Huánuco, Pasco, Ucayali) at 542(320–800) m elevation in lowland rainforest (Fig. 39).

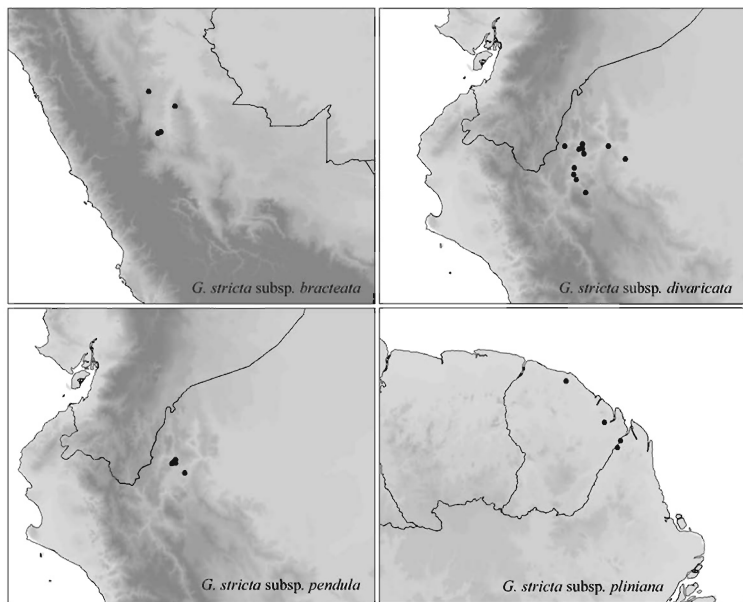


FIGURE 39. Distribution maps of *Geonoma stricta* subsp. *bracteata*, *G. stricta* subsp. *divaricata*, *G. stricta* subsp. *pendula*, and *G. stricta* subsp. *pliniana*.

60e. *Geonoma stricta* subsp. *divaricata* Henderson, subsp. nov. (Appendix IV, Plate 62)

A subspeciebus aliis foliis pinnatis venis haud prominentibus. rachillis crassis, atque inflorescentiis ramosis differt.

Type: PERU. Amazonas: Distr. El Cenepa, comunidad de Tutino, 4°33'S, 78°12'W, 500 m, 20 July 1997. R. Rojas, A. Peña & E. Chávez 101 (holotype NY!, isotype MO *n.v.*).

Leaves pinnate; veins not raised or slightly raised and triangular in cross-section adaxially; pinnae 3(3–4) per side of rachis. *Inflorescences* branched; staminate flowers deciduous after anthesis.

Distribution and habitat:—From 4°28'–5°24'S and 77°20'–78°30'W on eastern Andean slopes in northern Peru (Amazonas, Loreto) at 510(170–950) m elevation in lowland rainforest (Fig. 39).

60f. *Geonoma stricta* subsp. *pendula* Henderson, subsp. nov. (Appendix IV, Plate 63)

A subspeciebus aliis foliis plerumque simplicibus venis haud prominentibus atque inflorescentiis ramosis differt.