

A specimen (*Amorim 4208*) from central Bahia has unusual, elongate bracts, and is from a higher elevation (750 m). It may be a hybrid with *G. pauciflora*.

There is a gap in the distribution of subsp. *pohliana* in northern Espírito Santo, and this gap is occupied by subsp. *linharensis*. There are no differences between northern and southern populations of subsp. *pohliana*, although northern populations occur at lower mean elevations (287 versus 624 m).

Five specimens (*dos Santos s. n.*, *Fernandes 1135, 3107, Fraga 2117, Mello-Silva 1570*) from the central part of Espírito Santo in the Serra da Mantiqueira appear to be intermediate in morphology between subsp. *pohliana* and subsp. *schottiana* and may be hybrids between these subspecies.

Some specimens (e.g., *Fiaschi 163, 552*) from eastern São Paulo have more, narrower pinnae (mean of 8 versus 4) and appear larger than usual.

Two specimens (*Lombardi 348, 1550*), unplaced for morphotype, from the Rio Doce valley in Minas Gerais have three broad pinnae and narrow inflorescence bracts.

51b. *Geonoma pohliana* subsp. *fiscellaria* (Martius ex Drude & Wendland) Henderson, comb. & stat. nov.

Basionym: *Geonoma fiscellaria* Martius ex Drude (1882: 486). Type: BRAZIL. Rio de Janeiro: Retiro de Petropolis, no date, *A. Glaziou 1180* (holotype BR!, isotype P!).

Leaves pinnae 21(19–23) per side of rachis. *Inflorescences* rachillae 8(14–21), 3.7(3.0–4.8) mm in diameter, hairy, not filiform and not or scarcely narrowed between the flower pits; proximal and distal lips drying the same color as the rachillae; triads mostly spirally arranged.

Distribution and habitat:—At 22°00'–22°28'S and 42°03'–44°27'W in the Atlantic Coastal Forest of Brazil in the Serra do Mar and Serra da Mantiqueira in Rio de Janeiro at 1050(900–1100) m elevation in montane tropical rainforest (Fig. 33).

51c. *Geonoma pohliana* subsp. *gastoniana* (Glaziou ex Drude) Henderson, comb. & stat. nov.

Basionym: *Geonoma gastoniana* Glaziou ex Drude (1882: 496). Type: BRAZIL. Rio de Janeiro: haut de Tinguá, 7 June 1877, *A. Glaziou 9019* (holotype P!, isotypes BR!, *C. n. v.*, F!, K!).

Leaves pinnae 3 per side of rachis. *Inflorescences* rachillae 19, 0.5 mm in diameter, not hairy, filiform, narrowed between the flower pits; proximal and distal lips drying darker brown than the rachillae; triads mostly spirally arranged.

Distribution and habitat:—At 22°35'S and 43°28'W in the Atlantic Coastal Forest of Brazil in the Serra do Mar in Rio de Janeiro at 900 m elevation in lowland tropical rainforest (Fig. 34).

51d. *Geonoma pohliana* subsp. *kuhlmannii* (Burret) Henderson, comb. & stat. nov.

Basionym: *Geonoma kuhlmannii* Burret (1938b: 261). Type: BRAZIL. Rio de Janeiro: Nova Friburgo, 20 November 1922, *J. Kuhlmann 141* (holotype B, destroyed, isotype RB!).

Leaves pinnae 3(3–4) per side of rachis. *Inflorescences* rachillae 5(4–9), 2.8(2.3–3.2) mm in diameter, not hairy, not filiform and not or scarcely narrowed between the flower pits; proximal and distal lips drying darker brown than the rachillae; triads mostly spirally arranged.

Distribution and habitat:—From 22°15'–22°53'S and 42°30'–43°16'W in the Atlantic Coastal Forest of Brazil in the Serra do Mar in Rio de Janeiro at 783(300–1300) m elevation in lowland tropical rainforest (Fig. 34).

51e. *Geonoma pohliana* subsp. *linharensis* Henderson, subsp. nov. (Appendix IV, Plate 54)

A subspeciebus aliis pinnis in quoque latere 4(2–7) atque rachillis 9(5–10) crebre pilosis differt.

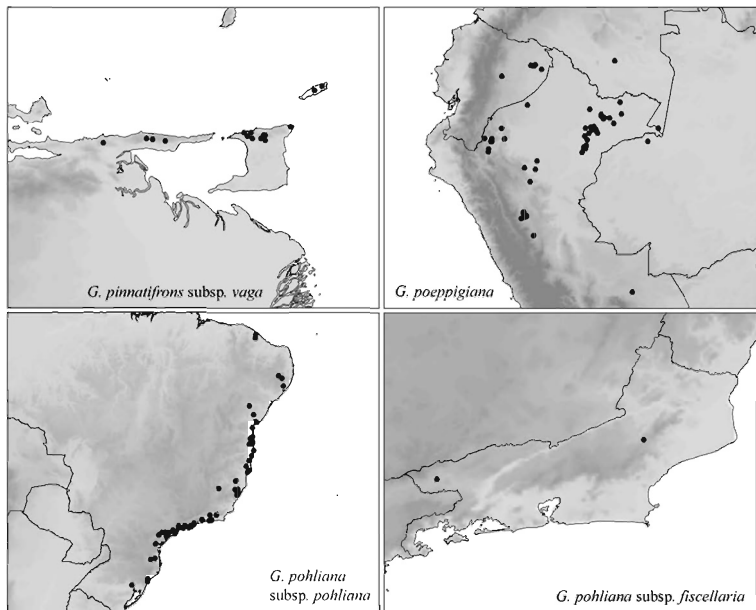


FIGURE 33. Distribution maps of *Geonoma pinnatifrons* subsp. *vaga*, *G. poeppigiana*, *G. pohliana* subsp. *pohliana*, and *G. pohliana* subsp. *fiscellaria*.

50. *Geonoma poeppigiana* Martius (1843: 35). Type: PERU. Loreto: Yurimaguas, February 1891, *E. Poeppig* 2295 (holotype M!).

Plants 1.9(1.0–4.0) m tall; stems 0.9(0.1–4.0) m tall, 1.6(1.2–2.0) cm in diameter, solitary, not cane-like or cane-like; internodes 0.5(0.3–0.8) cm long, yellowish and smooth, or, if short and congested, not scaly. *Leaves* 11(4–16) per stem, undivided or irregularly pinnate, not plicate, bases of blades running diagonally into the rachis; sheaths 16.9(10.0–25.0) cm long; petioles 49.8(30.0–100.0) cm long, drying green or yellowish; rachis 58.4(36.5–100.0) cm long, 4.8(2.3–7.9) mm in diameter; veins raised and rectangular in cross-section adaxially or not raised or slightly raised and triangular in cross-section adaxially; pinnae 4(1–11) per side of rachis; basal pinna 36.8(13.5–60.5) cm long, 4.9(0.5–15.3) cm wide, forming an angle of 40(12–90)° with the rachis; apical pinna 30.0(10.3–45.0) cm long, 15.1(3.3–24.5) cm long, forming an angle of 28(20–45)° with the rachis. *Inflorescences* unbranched or branched 1 order; prophylls and peduncular bracts not ribbed with elongate, unbranched fibers, flattened (if tubular, narrow, and elongate then not ribbed), deciduous or persistent; prophylls 27.8(15.5–40.0) cm long, not short and asymmetrically apiculate, the surfaces not ridged, without unequally wide ridges; peduncular bracts 25.8(21.0–38.0) cm long, well-developed, inserted 2.1(0.7–4.7) cm above the prophyll; peduncles 56.1(28.0–89.0) cm long, 5.6(1.9–11.1) mm in diameter; rachillae 4(1–10), 25.8(9.7–40.0) cm long, 4.2(1.9–7.1) mm in diameter, the surfaces without spiky, fibrous projections or ridges, drying brown or yellow-brown, without short, transverse ridges, not filiform and not narrowed