Additional specimens examined. ECUADOR. MORONA-SANTIAGO: road Plan de Milagro-Gualaquiza, Km 3, 1600 m, 10 Oct 1993, *Borchsenius 172* (AAU), cross road between Limón and Indanza, 1600–1700 m, 24 Apr 1985, *Harling & Andersson 24557* (AAU). NAPO: Cantón Archidona, road Hollín-Loreto, Río Huataraco, 0° 43'S 77°32'W, 800–1000 m, 23–30 Aug 1989, *Cerón & Factos 7472* (MO).

Specimens of this taxon were identified by Skov (1989) and Borchsenius et al. (1998) as *Geonoma paradoxa* Burret, which it resembles in its spicate, long-pedunculate inflorescences, staminate flowers with diverging thecae borne on a short connective, and pistillate flowers with a digitately lobed staminodial tube. However, it differs from that species in its pinnate (vs. mostly simple) leaves with wider angles of basal pinna divergence (29–62° vs. 25–36°), and peduncular bracts longer than the prophylls (vs. shorter). It also differs in habitat. *Geonoma paradoxa* occurs at 60–400 m in lowland rainforest in coastal regions of southwestern Colombia and has recently been recorded also in northwestern Ecuador (*Beck 1757, 2251*); *G. ecuadoriensis* occurs at 800–1700 m in montane rainforest on eastern Andean slopes in Ecuador (Fig. 2B). It grows sympatrically with *G. macrostachys* Mart. var. *acaulis* (Mart.) A. J. Hend., from which, without staminate flowers, it is difficult to distinguish.

Geonoma hollinensis A. J. Hend., Borchsenius & Balslev **sp. nov.** Type: Ecuador. Napo: Hollin-Loreto road to Coca 27 km from take-off from Baeza-Tena road, 0°42'S 77°40'W, 1000–1100 m, 28 Sep 1995, *H. Balslev 6418* (holotype: AAU; isotype: QCA). (Fig. 4)

A *Geonoma triandra* differt foliis angustioribus, simplicibus, venis ad angulum angustius divergentibus et foveis floralibus spiraliter dispositis.

Stems clustered, 2–3 m tall, 0.9 cm diam., light brown, the internodes 0.4 cm at apex of stem. *Leaves* simple; sheaths 8.5 cm long; petioles 6–10.5 cm long; rachis 24.4–26.7 cm long, 2.9–3.4 mm wide at the base; veins diverging at an angle of 26–30° from the rachis; apical divisions 14.5–17.5 cm long, the veins diverging at an angle of 22–26° from the rachis. *Inflorescences* interfoliar at anthesis, branched to two orders; prophyll 9.9–10 cm long, brown tomentose, longitudinally furrowed, splitting apically, persistent; peduncular bract not seen, inserted 0.9 cm from prophyll; peduncles 9.5 cm long, 2.6 mm wide at the first branch; rachilla 34, 8.2 cm long at base of inflorescence, 1.3 mm wide, sparsely covered with white, wooly, branched indument; flower pits spirally arranged, tricussately at apices of rachillae; upper lips hooded, without a central split, not ciliate, lower lips scarcely developed; staminate flowers 1.8 mm long; sepals free, imbricate, keeled, 1.8 mm long, ciliate; petals connate for ca. half their length, valvate above, 1.7 mm long; stamens 3; filaments united below for 1 mm, free above; thecae free, inflexed, borne on a short, bifid connective; pistillodes inconspicuous; pistillate flowers 1 mm long; sepals free, imbricate, keeled, 1 mm long; petals connate for ca. half their length, valvate above, 1 mm long; staminodial tube blunt at the apex; *fruits* not seen.

Local names and uses.—None recorded.

Distribution and habitat.— Ecuador (Napo), known only from the Hollín-Loreto-Coca road (Fig. 2C); montane rainforest on eastern Andean slopes at 1000–1200 m elevation.

Additional specimen examined. ECUADOR. NAPO entre el Rio Pucuno y el Caserío de Guamaní, carretera Hollín-Loreto-Coca, 0°46'S 77°26'W, 1200 m, 12 Dec 1987, *Cerón 2968* (AAU, MO).

Until now, the only known species of *Geonoma* with three stamens was *G. triandra* (Burret) Wess. Boer. This species, previously collected only from northwestern Colombia and adjacent Panama, has recently been found in northwestern Ecuador (*Bonifaz 3799, Rubio 1336* - Fig. 2C). *Geonoma hollinensis* resembles *G. triandra* in its staminate flowers with three stamens, but differs in its narrower, simple leaves with narrower angles of divergence, and in its spirally arranged rather than decussately arranged flower pits.

Geonoma lanata A. J. Hend., Borchsenius & Balslev, **sp. nov.** Type: Ecuador. Carchi:

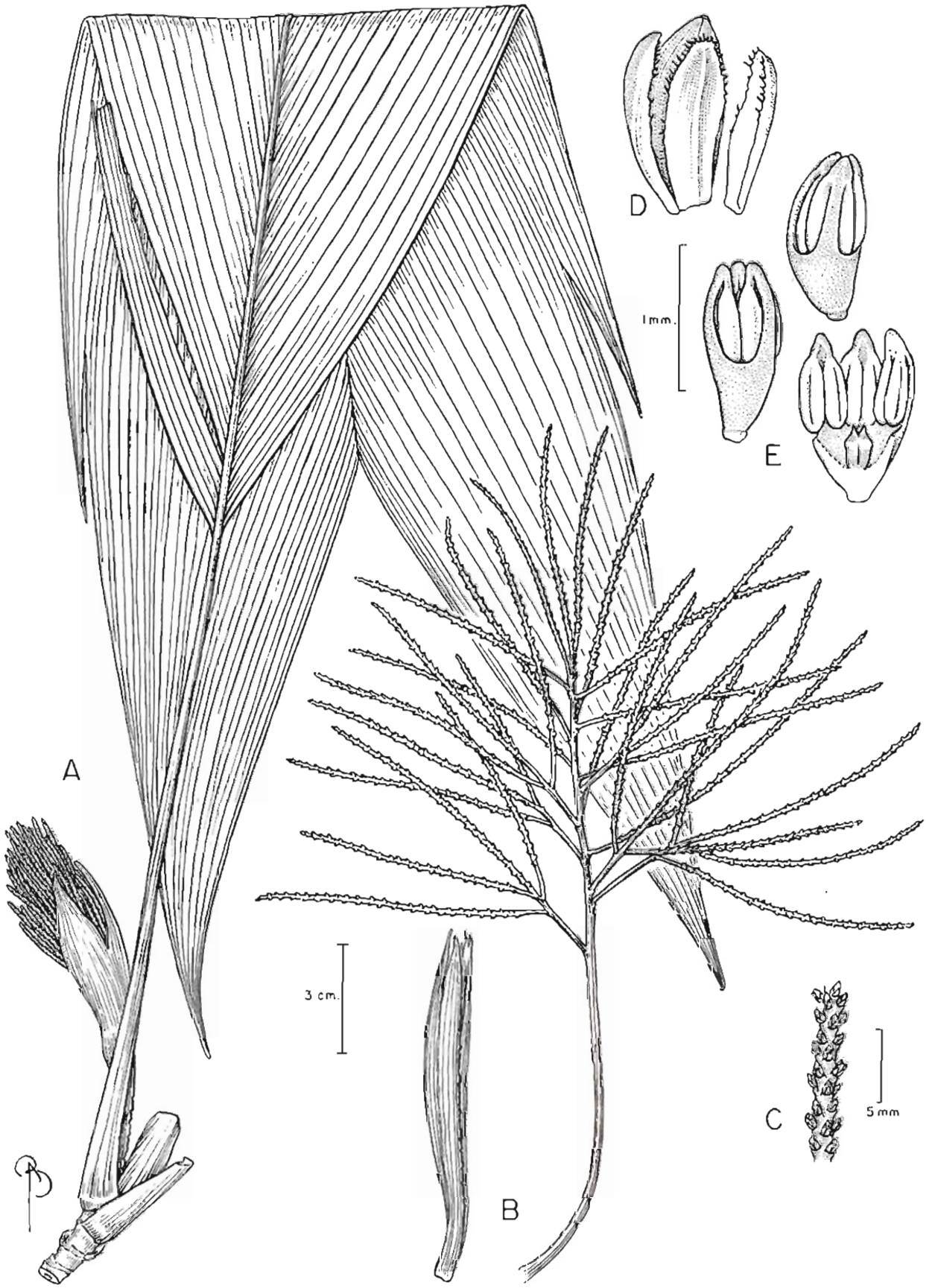

FIG. 4. *Geonoma hollinensis*. **A.** Leaf and inflorescence. **B.** Inflorescence and prophyll. **C.** Section of rachilla. **D.** Staminate perianth, sepal removed. **E.** Stamens in three views. (A from *Ceron 2968*, B-E from *Balslev 6418*.)