

MISCELLANEOUS NEW TAXA OF BROMELIACEAE (X)

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ABSTRACT. Three new species of Bromeliaceae are described: *Guzmania pseudospectabilis* from Ecuador; *Puya robin-fosteri* from Peru; and *Puya butcheriana* without provenance. Miscellaneous New Taxa of Bromeliaceae IX appeared in *Phytologia* 74:449-458 (1993).

ECUADOR

Guzmania pseudospectabilis H.Luther, sp. nov.

FIGURE 1.

TYPE. Ecuador: Prov. Imbabura, mountains above Lita, elev. 2000 m, Jan 1991, *J. Kent legit*; flowered in cultivation, Nov 1994, *J. Kent s.n.* (Holotype: SEL.).

A *G. spectabilis* (Mez & Wercklé) Utley, cui similis affinisque, foliis latioribus, bracteis florigeris permajoribus, sepalis minoribus differt; A *G. lychnis* L.B. Smith, cui similis, foliis latioribus, bracteis florigeris majoribus, petalis longioribus eburneisque differt.

Plant flowering to 55 cm tall. Leaves densely rosulate, 30 to 40 in number, spreading, 40-50 cm long, coriaceous. Leaf sheaths elliptic to ovate 10-15 × 10-12 cm, castaneous, densely appressed brown punctate lepidote. Leaf blades ligulate, broadly rounded and apiculate, 60-85 mm wide, densely punctate lepidote especially adaxially, somewhat nerved, dull green and somewhat red striate adaxially, heavily suffused with red-purple abaxially. Scape erect, 10 cm × 15 mm, densely brown lepidote. Scape bracts subfoliaceous, densely imbricate, erect with spreading to recurving blades. Inflorescence erect, bipinnately compound, cylindrical, 30 × 12 cm, ca 90-flowered. Primary bracts spreading with recurving blades, ligulate, rounded and apiculate, 5-15 × 3-5 cm, densely lepidote especially adaxially, concealing the fascicles of flowers except for the petals, bronzy-green tipped dull red-purple. Branches erect, densely 3-to 4-flowered (rarely 2-or 5-flowered) with a stout 2-3 mm sterile base. Floral bracts tightly enfolding the flowers, elliptic to subtriangular, falcate, rounded or retuse, 28-35 mm long, carinate, thin coriaceous, brown lepidote, pale green. Flowers with a stout 1-3 mm long pedicel, erect, opening at night. Sepals ligulate, rounded or retuse, 23-25 mm long, 1-2 mm connate, very thin, brown lepidote, pale green. Corolla slightly zygomorphic, erect with slightly spreading lobes. Petals narrowly oblanceolate, obtuse, 7 cm long, con-

glutinated for 40-45 mm, cream. Stamens and style included within the corolla tube, anthers 4-5 mm long.

Guzmania pseudospectabilis is a member of a complex of species (the "Thecophylloid" guzmanias) that is characterized by having abbreviated, few-flowered branches of the inflorescence that are concealed by large, subfoliaceous primary bracts. The species are mostly Andean in distribution. *Guzmania pseudospectabilis* seems most closely related to *G. spectabilis* of Costa Rica to Ecuador but differs by having broader leaf blades (60-85 vs 30-40 mm wide), longer floral bracts (28-35 vs 18-20 mm long) and shorter sepals (23-25 vs 30 mm long). *Guzmania lychnis* is also a similar species known from Colombia and Ecuador but it can be distinguished by its narrower leaf blades (to 40 mm wide), shorter floral bracts (18-22 mm long), and yellow (not cream) petals. The collector, Mr. Jeffrey Kent of Vista, California, states that he has also observed *G. pseudospectabilis* in the Dept. of Nariño, Colombia.

PERU

Puya robin-fosteri G.S. Varadarajan & H.Luther, sp. nov. FIGURE 2.

TYPE. Peru: Oxapampa, Cordillera Yanachaga, Cerro Pajonal "chacos", 12 km SE Oxapampa, elev. 2700-2800 m., terrestrial in wet seepage areas, 7 October 1982, *Robin Foster 9062* (Holotype:MO; Isotype:SEL).

Affine *Puyae tuberosae* Mez sed foliis minoribus, spinis gracilibus filiformibusque, sepalis et petalis majoribus differt. Etiam, affine *Puyae miti* Mez sed in magnitudine, laminis foliorum serrulatis, inflorescentia cum paucis floribus et petalis minoribus differt.

Plant single or forming mats of rosettes, flowering 25-40 cm tall. Leaves densely rosulate, erect to spreading, 35-45 in number, 7-12 cm long. Leaf sheaths ovate, 10-12 × 8-12 mm, blackish brown, inflated and forming a globose pseudo-

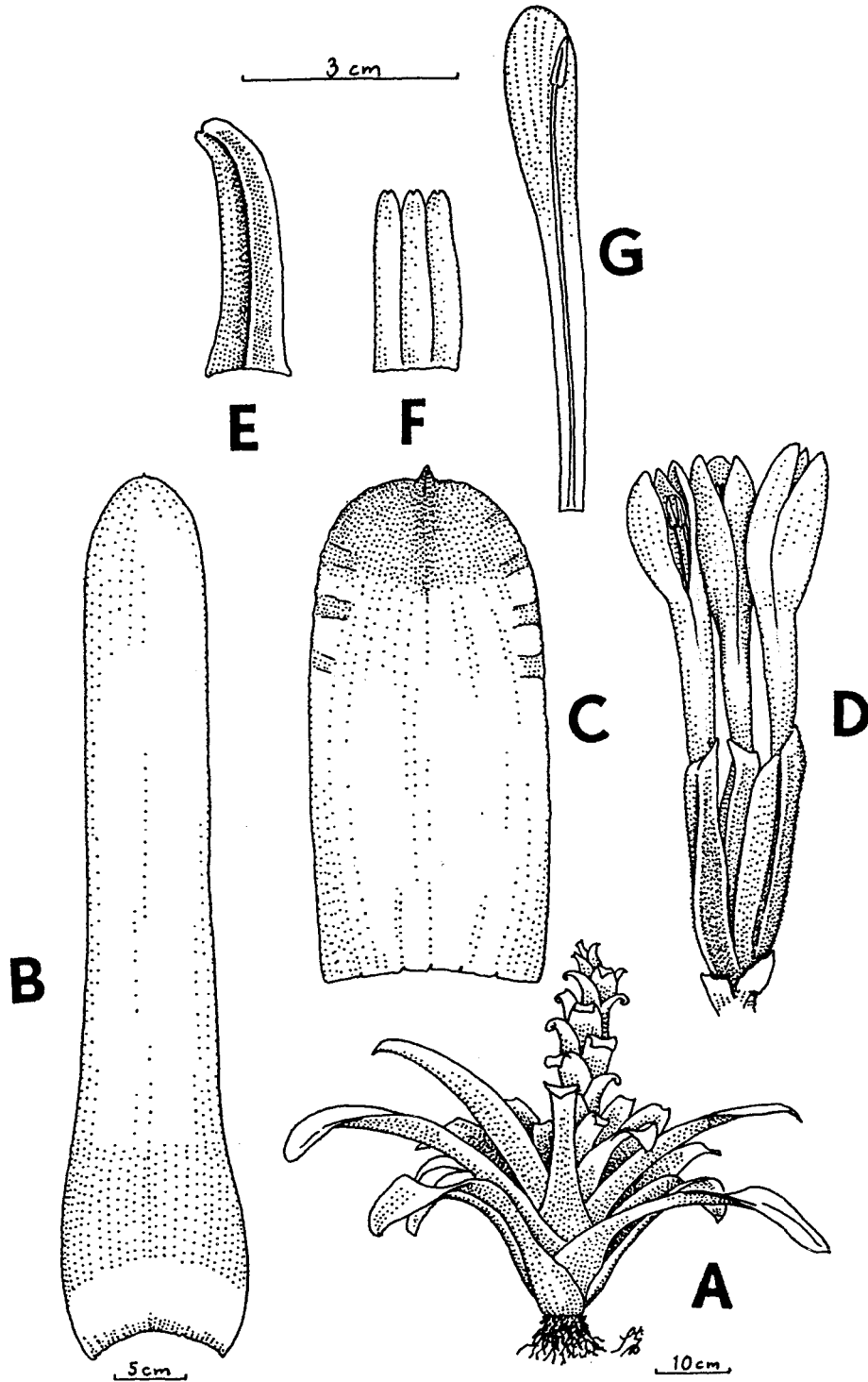


FIGURE 1. *Guzmania pseudospectabilis*. A, habit. B, leaf. C, upper primary bract. D, branch of inflorescence. E, floral bract. F, calyx. G, petal and stamen.

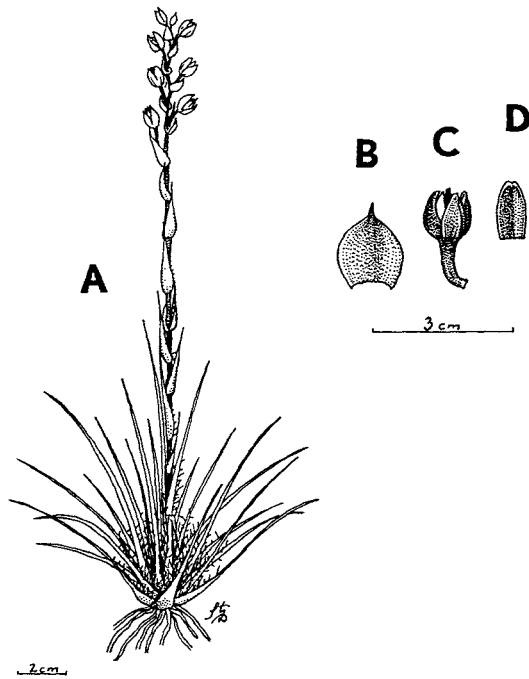


FIGURE 2. *Puya robin-fosteri*. A, habit. B, floral bract. C, flower, post anthesis. D, sepal.

bulb 2–3 cm in diameter. Leaf blades very narrowly triangular to linear, attenuate, pungent, 6–10 cm long, 7.5 mm wide at the base, 2 mm wide at the apex, involute, white subappressed lepidote especially abaxially, serrulate toward the sheath with filiform, brown 6–15 mm long antrorse spines, entire toward the apex. Scape erect, 15–18 cm × 5 mm, white floccose. Scape bracts subfoliaceous proximally, ovate distally, all serrate and equalling to exceeding the internodes. Inflorescence a simple raceme 4–7 cm long, often subsecund, 5-to 10-flowered. Floral bracts ovate, acute to attenuate, 10–17 mm × 9–14 mm, entire to inconspicuously and minutely serrulate, nerved, lustrous, castaneous. Flowers with a straight to curved ascending 6–13 mm long sparsely floccose pedicel. Sepals oblong lanceolate, broadly acute to retuse, 10–13 mm long, nerved, subcarinate, lustrous, castaneous. Petals imperfectly known, 16–20 mm long, unappendaged. Fruit a dry capsule, 8–10 mm long. Seeds winged, triangular-ovate [*Puya hamata* type (Varadarajan 1986)].

Puya robin-fosteri is similar to *P. tuberosa* Mez and *P. mitis* Mez, both dwarf species of *Puya*. All share a tuberous or bulbous habit and a slender racemose inflorescence. This new species differs from *P. tuberosa* by having much smaller leaf blades (6–10 cm long vs 15–20 cm long) with attenuate and involute leaf apices, filiform leaf

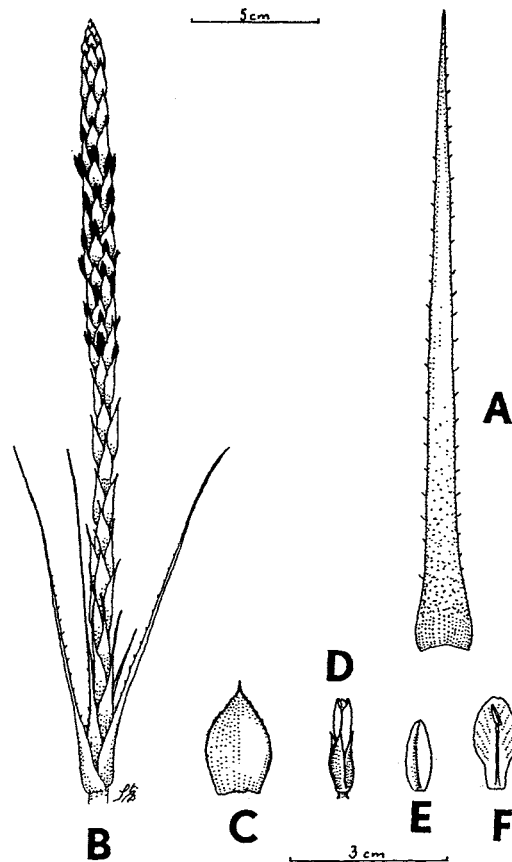


FIGURE 3. *Puya butcheriana*. A, leaf, adaxial surface. B, inflorescence. C, Floral bract. D, flower. E, sepal. F, petal and stamen.

spines, larger sepals (10–13 mm long vs 7–9 mm long) and petals (16–20 mm long vs 14 mm long). Inflorescences of *P. tuberosa* may be simple or few-branched; those of *P. robin-fosteri* are simple. From *P. mitis*, this new species may be distinguished by its much shorter stature (flowering to 40 cm tall vs 70 cm tall), serrulate leaf blades and shorter petals (16–20 mm long vs 32 mm long).

HORTICULTURE

Puya butcheriana H.Luther, sp. nov. Figure 3.

TYPE: Origin unknown, probably Peru or Bolivia, flowered in cultivation in Australia; grown from seed sold by K. Knize, Lima, Peru as “*Puya filifera*”, 24 January 1992, *D. Butcher s.n.* (Holotype:SEL).

A. P. humilis Mez, cui affinis similisque, planta majoribus, inflorescentia longiore exilique, brac-

teis florigeris minoribus et minute serratis differt; a *P. tunarensis* Mez, cui similis, planta minoribus, inflorescentia exili, bracteis florigeris minute serratis differt.

Plant flowering to 37 cm tall. Leaves densely rosulate, spreading, 25–30 cm long, grey-green adaxially, silver abaxially. Leaf sheaths broadly elliptic, 25 × 20 mm, somewhat castaneous, glabrous, lustrous. Leaf blades narrowly triangular, acute, pungent, 7–11 mm wide, appressed cinereous lepidote especially abaxially, serrate with slender, antrorse, reddish spines 3–4 mm long. Scape erect, 12 cm × 5 mm, white stellate lepidote. Scape bracts erect, imbricate, the lowest foliaceous; the upper elliptic, acute to attenuate, entire, thin coriaceous, nerved, cinereous lepidote, rose. Inflorescence erect, simple, very slenderly cylindrical, 21 × 1–2 cm, ca 80-flowered. Floral bracts erect and tightly imbricate in life, spreading to somewhat recurving at the apex when dried, elliptic to oblanceolate, broadly acute, apiculate to pungent, 12–21 mm long, inconspicuously and irregularly serrate, thin coriaceous, nerved, white lepidote, rose. Flowers with a stout 1–2 mm long pedicel, erect to slightly spreading. Sepals elliptic, broadly acute, 12–14 mm long, thin coriaceous, the adaxial pair car-

inate, white lepidote, pale green. Corolla with slightly spreading lobes. Petals spatulate, obtuse to emarginate, 16–18 mm long, dark blue-violet. Stamens and style included.

This new, rather dwarf species of *Puya* seems most closely related to the Bolivian *P. humilis*, but can be distinguished from it by its greater size and taller, very slender inflorescence and smaller, minutely serrate floral bracts. Using the latest key to the genus *Puya* (Smith & Downs 1974), dried material of *P. butcheriana* would (due to the recurving floral bracts) key out as *P. tunarensis*, also from Bolivia; but the former can be separated by its smaller stature, more slender inflorescence, and inconspicuously serrate floral bracts. The floral bracts of *P. butcheriana* are also softer and thinner-textured.

LITERATURE CITED

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