## A New Species of Puya (Bromeliaceae) from Central Peru

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ABSTRACT. Puya lutheri is described as a new species of Bromeliaceae: Pitcairnioideae. The diagnostic characteristics distinguishing it from P. fosteriana, the closest related species, are given.

While studying specimens of Bromeliaceae from ISC, I was unable to determine one of *Puya* with the available literature (e.g., Smith & Downs, 1974). The collector wrote "*Puya* aff. *clava-herculis*," while Harry Luther from SEL stated "*Puya* sp. nov., aff. *pygmaea* L. B. Sm. et *P. cryptantha* Cuatr." I agree with Luther that the present specimen respresents a new species, but disagree in its alliance.

After a critical check of many possibilities in the *Flora Neotropica* keys, and after comparison with the descriptions, respectively, I am convinced that the new species is allied to *P. fosteriana* L. B. Smith because of the overall similarity of both species (see also Foster, 1984). Using subkey IV of Smith & Downs's monograph (1974) and applying the given characteristics rigorously, the present specimen keys out as *P. trianae* Baker from Colombia. But if one assumes that the "outer bracts conspicuously serrate," is instead "entire or very obscurely serrate," is instead "entire or very obscurely serrate," in a closely related species, one reaches *P. fosteriana* L. B. Smith (1950). The serration of bracts is not a characteristic to infer natural alliances, but only a tool in an artificial key to separate taxa.

Puya lutheri W. Till, sp. nov. TYPE: Peru. Ancash: Yungay Province, Huascarán National Park, Quebrada Huaripampa between Quebrada Paria and Morococha, 77°33'W, 8°56'S, alt. 3,930-4,500 m, 13 Jan. 1985, Smith, Sanchez & Vidaurre 9196 (holotype, ISC 376409; isotype, MO not seen). Figure 1.

A P. fosteriana L. B. Smith vaginis foliorum angustioribus, laminis foliorum angustioribus subtus adpresso lepidotis spinis brevioribus, scapo longiori, inflorescentia simplici minore angustioribusque albido-lanuginosa, sepalis minoribus et petalis angustioribus pallide coeruleis differt.

About 1 m tall (according to Smith); leaves to 50 cm long; sheaths broadly triangular ovate, ca. 5 cm long and 5 cm wide, pale stramineous and glabrous on both faces, the margins entire except for the short spinulose transition with the blades; blades

narrowly triangular, 25-30 mm wide at the base, evenly tapering to a point, glabrous above, densely pale appressed-lepidote beneath, the margins laxly but coarsely antrorse-spinose, spines dark brown, strictly to slightly curved, 4-6 mm long; scape unknown but estimated from the complete height to be ca. 60 cm long, 15 mm diam. below the inflorescence; scape bracts unknown; inflorescence ca. 20 cm long, ca. 5 cm diam., dense, simple, whitish lanuginose; floral bracts covering the flowers except for the petals, their sheaths ovate, ca. 6 cm long and 3 cm wide, membranaceous, brownish when dry, densely white lanuginose, the margins entire, their blades long-acuminate, laxly short-spinose, and reflexed, glabrescent; sepals linear-lanceolate, broadly acute, ca. 27 mm long and 5 mm wide, rigidly membranaceous, adaxially glabrous, abaxially densely whitish lanuginose, free, the posterior ones slightly carinate; petals spathulate, ca. 45 mm long, unappendaged, their blades about 9 mm wide, pale blue (according to Smith). Anthers versatile, 5 mm long and 1 mm diam., dark brown when dry. Ovary conical, 10 mm long and 3 mm diam., style slender, 20 mm long, stigma lobes twisted.

Terrestrial in grassland with rare scattered shrubs or stands of *Polylepis* sp., "Queshque" bank of rivulet between two moraines.

Puya lutheri differs from P. fosteriana in its narrower leaf sheaths and blades (the blades in P. lutheri being appressed-lepidote beneath), the shorter leaf spines, the longer scape, the simple, smaller and narrower, whitish lanuginose inflorescence, the smaller sepals, and the narrower, pale blue petals. Puya lutheri and P. fosteriana both occur at high elevations (Foster, 1984). The populations of the species are separated by a distance of about 1,400 km. This fact should not be over-emphasized, as a similar disjunction is found in Puya raimondii Harms.

The species is dedicated to Harry E. Luther from the Bromeliad Identification Center at the Marie Selby Botanical Gardens, Sarasota, Florida, who first recognized it as a novelty.

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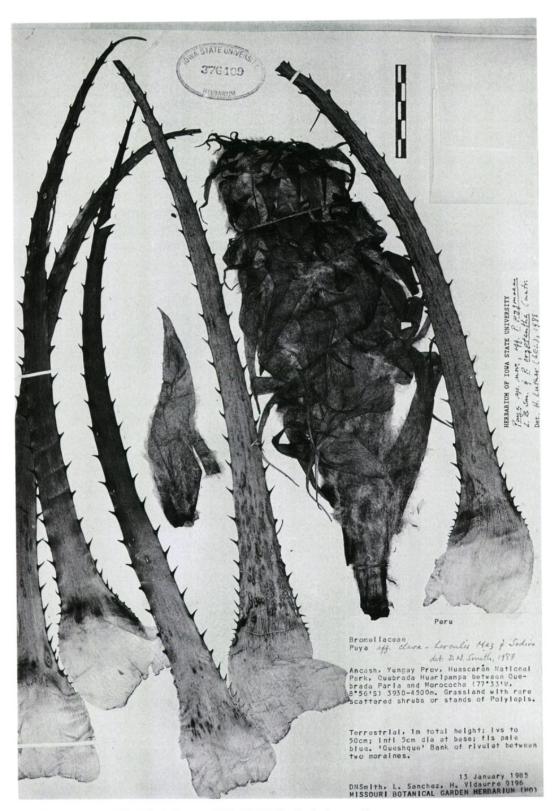


Figure 1. Puya lutheri W. Till, holotype (ISC 376409). Scale bar = 5 cm.

## Literature Cited

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