

ment of Ayacucho, Peru, altitude 3500 to 3600 meters, March 13, 14, 1926, by A. Weberbauer (no. 7591). Duplicate in the U. S. National Herbarium.

In Urban and Gilg's monograph of Loasaceae this species would come between *Loasa poissoniana* Urb. & Gilg and *L. schlimiana* Pl. & Linden. From both it is readily distinguished by the very dense, white or brown indument on the under side of the leaves.

Tournefortia curvilimba Killip, sp. nov.

Branchlets sulcate, finely rufo-hirsutulous; petioles 3 to 4 cm. long, canaliculate above, glabrescent; leaves alternate, ovate-oblong, 12 to 15 cm. long, 6 to 7 cm. wide, attenuate-acuminate at apex, acute and subdecurrent at base, undulate, penninerved (lateral nerves 10 to 12 pairs), reticulate-veined, glabrous, finely and sparsely pilosulous with whitish hairs; inflorescence terminal, dichotomous, the flower-bearing portion of the branches about 5 cm. long, though apparently not fully developed; flowers short-stipitate; calyx lobed nearly to base, the lobes linear-lanceolate, 4 to 5 mm. long, 1 mm. wide at base, glabrous or with a few fine whitish hairs; corolla 8 to 10 mm. long, the tube about 2 mm. in diameter, the limb 6 to 7 mm. wide, strongly recurved, the lobes obtuse; stamens borne near middle of tube; anthers linear, about 2 mm. long; stigma subsessile.

Type in the herbarium of the Botanical Museum, Upsala, collected at El Chaco, Province Sur Yungas, Department La Paz, Bolivia, altitude, 1900 meters, December 3, 1920, by E. Asplund (no. 1360).

Allied to *T. undulata* R. & P., which it rather closely resembles in foliage, the proposed species is distinguished by larger flowers, the limbs of which are strongly recurved, and by more elongate anthers and a subsessile stigma.

BOTANY.—A new species of *Aristida* from Florida.¹ JASON R.

SWALLEN, Bureau of Plant Industry. (Communicated by A. S. HITCHCOCK.)

In a collection of grasses recently received for identification at the Grass Herbarium of the U. S. Department of Agriculture from Dr. Paul Weatherwax, there was an unusual species of *Aristida*. The North American species of this genus were revised in 1924 by Professor A. S. Hitchcock,² and Dr. J. Th. Henrard³ has published a study of the types of *Aristida* for the whole world, preliminary to a monograph of the genus. Since the species sent by Dr. Weatherwax is not accounted for in either of these works, it may be described as new. It differs from most species of *Aristida* in the presence of rhizomes, which character suggests the specific name.

¹ Received April 2, 1929.

² Contr. U. S. Nat. Herb. 22, pt. 7. 1924.

³ A critical revision of the genus *Aristida*. Med. Rijks Herb. Leiden 54: 1-220. 1926; 54A: 221-464. 1927; 54B: 465-701. 1928.



Fig. 1.—*Aristida rhizomophora*, base of plant, $\frac{1}{2}$ nat. size; spikelet, $\times 2$ dia.; two views of callus, $\times 10$ dia.

Aristida rhizomophora sp. nov.

Plants perennial; culms tufted, simple, erect, 65 to 80 cm. tall, producing well developed scaly rhizomes; leaves one or two, the lower internodes short; sheaths persistent, becoming fibrous with age, smooth, with a tuft of hairs at the mouth, especially on those of the innovations, nearly lacking on those of the culm; ligule nearly obsolete; blades firm, flat or folded, somewhat scabrous above, smooth beneath, 7 to 10 cm. long, 1 to 2 mm. wide, those of the innovations flexuous, as much as 30 cm. long; panicle flexuous, 20 to 30 cm. long, the branches two at a node, distant, flexuous, somewhat spreading, few-flowered, spikelet-bearing from near the base, the lower ones as much as 7 cm. long; glumes acuminate and usually awned, the awn 1 to 6 mm. long, the first 1 to 3-nerved, 8 to 14 mm. long, the second 1-nerved, 12 to 17 mm. long including the awn; lemma glabrous, 9 to 12 mm. long, the callus 1 mm. long, sharp-pointed, short-bearded on the sides above, the awns scabrous, flexuous, curved or loosely twisted at the base, spreading, the central often reflexed by a semicircular bend, 18 to 24 mm. long, the lateral 15 to 20 mm. long.

Type in the U. S. National Herbarium, no. 1,435,634, collected in the prairie region north of Lake Okechobee, near Fort Bassenger, Florida, June 30, 1928, by Dr. Paul Weatherwax (no. 1081).

The other North American species of *Aristida* which produce rhizomes are *A. stricta* Michx., and *A. patula* Chapm. In the former they are exceptional (Garber in 1877, Hitchcock 19767, Standley 13076, and Weatherwax 1088) and such specimens can be distinguished from *A. rhizomophora* by the strict panicle with more numerous, smaller spikelets, and the dense pubescence on the upper surface of the blades near the base. In the latter they occur frequently, but the species, which belongs to a different group, has large panicles with stiffly spreading branches, as much as 20 cm. long, naked below.

In the form of the panicle and spikelets, *A. lanosa* Muhl. resembles *A. rhizomophora*, but the plants are stouter, usually solitary, with densely lanate pubescent sheaths and flat blades, as much as 4 mm. wide, tapering to a fine involute point.

BOTANY.—*A diminutive new hollyfern from Ecuador.*¹ WILLIAM R. MAXON, U. S. National Museum.

Among some plants collected in the Andes of Ecuador by H. E. Anthony and G. H. H. Tate in 1923, and submitted to the U. S. National Herbarium for identification, is the following hollyfern, which seems never to have been described.

***Polystichum pumilio* Maxon, sp. nov.**

Rhizome (incomplete) relatively stout, 2.5 cm. long, about 3 cm. in diameter, decumbent, conspicuously paleaceous; scales thin, lustrous, ferruginous in mass (discoloring with age), mostly oblong-ovate to broadly oblong-attenuate, hair-pointed, the margins laxly and distantly long-fibrillose, some of the underlying scales narrowly lance-attenuate, subdenticulate toward the apex. Fronds several, closely cespitose, erect from a curved base, 10–17 cm. long, the stipes short (2–5 cm. long), 1–1.5 mm. thick above the base, paleaceous, the scales broad, mostly erose-denticulate and freely fibrillose; blades narrowly lance-attenuate, 8–12 cm. long, 1.5–2 cm. broad in the lower part, bipinnate; rachis strongly paleaceous, the scales large, spreading, similar to those of the stipe but soon fuscous; pinnae 25–30 pairs, contiguous, slightly oblique, those of the lower half 9–12 mm. long, elongate-triangular from a subequilateral base (here 6–7 mm. broad), pinnate, with 4 or 5 pairs of spreading or reflexed, inequilateral, deeply concave, subdistant segments, the leaf tissue dull green, subcoriaceous, bearing a few minute fibril-like scales; segments spatulate to rounded-trapeziform, cuneate at base, unequal, the distal basal one largest, bilobed (the minute rounded distal auricle rarely free), the others simple; upper pinnae gradually simpler, with broad acutish or rounded subentire tips, much reduced, those of the attenuate tip minute; margins subentire or remotely dentate; sori small, apparently exindusiate, solitary in the smaller segments, 4 or 5 in the larger ones.

Type in the U. S. National Herbarium, no. 1,424,988, collected at Urbina, Chimborazo, Ecuador, at an altitude of 3,475 meters, Oct. 22–28, 1923, by H. E. Anthony and G. H. H. Tate (no. 394).

¹ Published by permission of the Secretary of the Smithsonian Institution. Received March 23, 1929.