

PROCEEDINGS  
OF THE  
BIOLOGICAL SOCIETY OF WASHINGTON

---

A THIRD SPECIES OF ATALOPTERIS.<sup>1</sup>

BY WILLIAM R. MAXON.

---



*Atalopteris*, a new genus of dryopteroid ferns from the West Indies, was described jointly<sup>2</sup> by Dr. Carl Christensen and the writer in 1922 to include two species: *A. aspidioides* (Griseb.) Maxon & C. Chr., the genotype, from Cuba (*Wright* 1827), and *A. maxoni* (Christ) C. Chr., from Jamaica (*Maxon* 2228). The taxonomic history, characters, and relationship of this extremely interesting small group were discussed at some length.

While the paper was in the printer's hands word was received from Dr. Christensen that Dr. Erik L. Ekman had collected specimens of the new genus in Haiti also, and that these tended to invalidate the supposed distinctions between the two species recognized. At the time, only brief mention of this was practicable.<sup>3</sup> Recently, however, the Haitian specimen (*Ekman* 124) has been lent from the Berlin Botanical Museum for study by the writer. Although nearer the Jamaican than the Cuban form, it proves to have characters distinguishing it from both, and may therefore be described as follows:

***Atalopteris ekmani* Maxon, sp. nov.**

Rhizome woody, about 2 cm. long, 1 cm. thick, upcurved, densely pale-aceous, the outer scales 8 to 11 mm. long, narrowly lance-attenuate, hair-pointed, castaneous, lustrous, entire, with a few distant weak caducous moniliform cilia. Sterile fronds 4 or 5, ascending, 17 to 20 cm. long; stipes 5 to 8 cm. long, shaggy with close-set, spreading or retrorse scales, these mostly 3 to 4 mm. long, paler and narrower than those of the rhizome; blades ovate-oblong, acuminate, about 12 cm. long, 6 to 8 cm. broad, sub-bipinnate, the rachis densely divaricate-paleaceous like the stipe, bearing

<sup>1</sup>Published by permission of the Secretary of the Smithsonian Institution.

<sup>2</sup>Contr. U. S. Nat. Herb. 24: 55. 1922.

<sup>3</sup>Op. cit. 63.

also a thick covering of flattish septate hairs, these extending also along the upper side of the midribs of the pinnae; pinnae about 10 pairs below the deeply and regularly pinnatifid apex, spreading, subdistant, sessile or nearly so, symmetrical, the middle ones the longest, 3 to 4 cm. long, 9 to 13 mm. broad, oblong to linear-oblong, abruptly obtuse, evenly and obliquely pinnatifid nearly to the midrib, the midrib sparsely divaricate-paleaceous beneath, the scales similar to those of the stipe; segments 10 or 11 pairs, oblique, oblong, distally acutish, the margins closely revolute in drying, subentire or, in the basal segments, distantly serrate, bearing a few weak jointed cilia; veins 5 or 6 pairs, very oblique, simple, slightly arcuate, not quite attaining the margin, minutely strigillose beneath with turgid 1 or 2-celled whitish glandular hairs (these extending to the leaf tissue), glabrous above; leaf tissue thin-herbaceous, brownish green in drying, glabrous above at maturity. Fertile fronds 2 or 3, greatly exceeding the sterile ones, about 30 cm. long, nonfoliose; stipes 15 cm. long, like those of the sterile fronds; blades lance-linear in outline, acuminate, 15 cm. long, 4 cm. broad, bipinnate; pinnae 10 or 12 pairs, distant, fully pinnate, the segments narrow, flattish, distant; sori distant, terminal on the veins, submarginal, globose, naked, the sporangia spreading in all directions.

Type a single complete plant in the herbarium of the Berlin Botanical Museum, collected near Aux Cayes, Département du Sud, Haiti, altitude about 800 meters, in rocky situations, June 10, 1917, by Erik L. Ekman (no. 124).<sup>1</sup> Fragments are in the U. S. National Herbarium (no. 1,069,217).

From *A. aspidioides*, of Cuba, *A. ekmani* is separated by several obvious characters, that species having the fertile frond much shorter than the sterile, the sterile blades about twice as long and broad as in *A. ekmani*, the pinnae distinctly acuminate, and the segments 12 to 14 pairs per pinna. In most respects *A. ekmani* is nearer *P. maxoni*, of Jamaica, which also has the fertile fronds greatly surpassing the sterile ones, and the sterile blades small, with rounded-obtuse pinnae; but in *P. maxoni* the pinnae are much broader and are mostly stalked, and the segments are fewer (7 or 8 pairs per pinna), broader, unequal, and distinctly serrate, the basal ones mostly constricted and subsessile. From both species *A. ekmani* is at once distinguished by the glabrous upper surface of the sterile fronds, both the others having not only the veins but the leaf tissue strongly glandular-strigillose above, as beneath.

---

<sup>1</sup>Mounted on the same sheet is a single detached broken frond, which very evidently came from another plant; it is obviously atypical, some of the pinnae being greatly developed at the expense of those broken off or malformed. Characters that could be drawn from it as to dissection and venation are, therefore, omitted in the above description.