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New Tropical American Ferns—I[1]

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Among the large collections of tropical American plants received at frequent intervals by the National Herbarium there are many hundreds of ferns for identification, these including a considerable number of undescribed species. Frequently the names are needed for immediate use; and since very often it is not practicable to prepare revisions of the groups to which the new species belong, it is thought desirable to assemble descriptions of some of the more important ones in a series under a common heading, as above. Critical group studies or synoptical revisions are, of course, the most pressing present need in the taxonomy of the ferns, but the number of students is so small that current demands of identification leave scant time for more important work.

Cyathea dryopteroides Maxon, sp. nov.

Trunk erect, about 60 cm. high; fronds (incomplete) about 1 meter long, nearly or quite exstipitate; blades oblanceolate, gradually narrowed to a tapering base, abruptly acuminate at the apex, 30 cm. broad above the middle, nearly bipinnate; primary rachis dull castaneous, 5 mm. thick at the terete base, minutely and deciduously furfuraceo-puberulous beneath, laxly paleaceous on the upper side, the scales mostly filiform, 5–7 mm. long,

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about 0.1 mm. broad, yellowish brown, curved; pinnae numerous, spreading, alternate, sessile, subdistant, the lowest somewhat deflexed, about 1 cm. long; largest pinnae narrowly elongate-triangular, 16 cm. long, 3.5 cm. broad at base, evenly long-acuminate in the apical third, fully pinnate at base (the first proximal pinnule usually free), deeply pinnatifid throughout (to 0.5 mm. from the costa); costae densely hirsute-strigose above, deciduously imbricate-paleaceous beneath, the scales lance-ovate to lance-attenuate, about 2 mm. long, dark lustrous brown with pale borders; segments 22–27 pairs, linear-oblong, 1–1.8 cm. long, 3.5–5 mm. broad, slightly oblique, subfalcate, lightly joined at the dilatate base, coarsely crenate-serrate, deeply so at the acutish tips, the margins closely revolute; costules subflexuous, elevated above and bearing a few curved spinous hairs, nearly naked beneath, a few minute, deciduous, yellowish brown, subbullate, lanceolate scales borne along the basal half; veins 7–9 pairs, mostly once-forked, elevated above, the branches diverging at a wide angle; sori 3–6 pairs, inframedial but clear of the costule; indusia cyathiform, dark brown, firm, glabrous, about 1.3 mm. broad, the receptacle large, capitate, included. Leaf tissue herbaceous, dull green above, much paler beneath, glabrous.

Type in the U. S. National Herbarium, no. 1,145,760, collected in mountain forest, Monte Cerrote, near Adjuntas, Porto Rico, at 900 to 1,050 meters elevation, March 15, 1915, by N. L. Britton and Stewardson Brown (no. 5424). A second specimen of the same number in the herbarium of the New York Botanical Garden has yielded additional data.

Cyathea dryopteroides belongs to the small group of *C. minor* D. C. Eaton and is closely allied to *C. Abbottii* Maxon,[2] of the Dominican Republic. The latter species differs, however, in its closely placed, ligulate pinnae (which are not broadest at the base), in its more numerous, closer, narrower, and much less strongly crenate-serrate segments, and in the character of the costular scales, these ovate to orbicular in outline, very deeply bullate, persistent, and evident to the naked eye.

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[2] Proc. Biol. Soc. Washington 37: 99. 1924.

Leptochilus hemiotis Maxon, sp. nov.

Plants terrestrial. Rhizome horizontal, creeping, about 8 cm. thick, subterete, densely paleaceous at tip, the scales dark castaneous, oblong-lanceolate, 8–10 mm. long; fronds few, closely distichous, suberect. Sterile fronds 50–65 cm. long, the stipe a little shorter than the blade, 3 mm. thick, light brownish-olivaceous from a darker base, subangulate, glabrate; blades orbicular-oblong, 30–35 cm. long, 28–30 cm. broad, pinnate, the rachis subflexuous; pinnae 2 or 3 pairs and an enlarged terminal one, the lateral ones subalternate, slightly oblique, elliptic-oblong to oblanceolate-oblong, 18–21 cm. long, 6–7.5 cm. broad, acuminate at apex, mostly gemmiparous in the axils; the basal ones short-stalked (2–4 mm.), with a rounded nearly equilateral base, the others sessile, strongly inequilateral at base, rounded-auriculate below, above abruptly excavate (2–3 mm.) and cuneate, the base thus semicordate; terminal pinna broadly rhombic-ovate, acuminate at base and apex, up to 25 cm. long and 13 cm. broad; margins lightly sinuate; main veins arising 8–15 mm. apart on either side at an angle of 45° to 50°, elevated, subflexuous, slightly arcuate; transverse veins 7 or 8 pairs, flexuous-arcuate, elevated, hardly thicker than the minor venation; areoles large, polygonal, the elongate costular ones with a pair of produced free vein-branches, these divaricate, simple or 1–2-forked; leaf tissue dark green, membrano-papyraceous, the venation evident. Fertile fronds 75 cm. long or more, the stipe and rachis dull stramineous, distantly appressed-paleaceous; blades oblong, 22–32 cm. long, 12–13 cm. broad, pinnate; pinnae 2 or 3 pairs and a slightly larger terminal one, alternate, sessile or the lower ones petiolulate, elliptic-oblong to ovate-oblong, 6–10 cm. long, 2.5–5 cm. broad, rounded-acutish at apex, all but the basal ones semicordate at base; midribs evident beneath, appressed-paleaceous at base; veins wholly concealed.

Type in the U. S. National Herbarium, no. 833896, collected in the island of Trinidad, British West Indies, 1877–1880, by A. Fendler (no. 101). Two other sheets of the same collection are at hand; also a juvenile specimen collected in a wet forest gully at Morne Bleu, Trinidad, March 13, 1921, by Britton, Freeman & Bailey

(no. 2256).

Leptochilus hemiotis belongs to the group of *L. nicotianaefolius* and is well distinguished by the semicordate bases of the pinnae, these mostly gemmiparous as in *L. Bradeorum* Rosenst., of Costa Rica.

Notes on Scolopendrium vulgare Sm.

MABEL R. HUNTER

Some time ago an article was published on the status of *Scolopendrium vulgare* Sm. in New York State.[1] Since the observations there recorded were made several interesting items have been noted.

Station E, West White Lake Substation, has been covered with the blastings of quarrying operations. The writer was able to rescue some of the plants, a few of which were planted in the Jamesville Woods region. The remainder were sent upon request to Dr. McFarland at the University of Kentucky. While it is probable that the colony is entirely destroyed there is a possibility that a few plants may have survived as was apparently the case in the Split Rock region several years ago. A very careful survey of the region will be made as soon as the quarrying work ceases.

The excavations are being continued along the ridge between this station and station C, the Green Pond Substation. Before the end of the season this colony will also be blasted out. Fortunately, through the recommendation of Dr. Homer D. House, State Botanist, the New York State Museum, of which Dr. John M. Clarke is director, came to the rescue and offered financial aid necessary to move all the plants in this colony to a place of safety. When the work was started it was seen that

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[1] Hunter, Mabel R. 1922. The Present Status of Scolopendrium vulgare Sm. in New York State. Am. Jour. Bot. 9: 28–36.