assumes to settle. Mr. Clarkson has opened up one line for field work which should be followed up by many observers for a large number of plants. His method of year-round study of considerable numbers of plants in a hardy garden offers an excellent opportunity for definitive study. In any event, let us see if collectively we cannot arrive at an agreement of facts whatever may be the eventual interpretations.

BROOKLYN BOTANIC GARDEN

Two New Ferns from the Dominican Republic¹

WILLIAM R. MAXON

An additional lot of ferns received on loan from the Berlin Botanical Museum includes two new species, which are described herewith. One of these, represented by an identical specimen in the U. S. National Herbarium, had previously been recognized as new.

Elaphoglossum hispaniolicum Maxon, sp. nov.

Plants epiphytic; rhizome decumbent, short, 2 cm. long, 1 cm. thick, densely paleaceous, the scales tufted, lance-attenuate, 4-6 mm. long, up to 0.8 mm. broad, castaneous, lustrous, rigidly long-ciliate, the cilia dark, oblique. Sterile fronds 4-8, pendent, 12-20 cm. long, laxly paleaceous throughout; stipes delicate, 1.5-3 cm. long, 0.5 mm. thick, densely clothed with spreading rigid scales, these similar to the rhizome scales but shorter and often colored only at the borders; blades narrowly linear, attenuate in both directions, 10-18 cm. long, 9-12 mm. broad, the rachis elevated, clothed beneath with spreading, rigid, dark castaneous scales nearly to the tip; leaf tissue subcoriaceous, semitranslucent, the lower surface clothed with laxly imbricate, long-ciliate, ferruginous scales, the upper surface with a scant covering of similar but somewhat paler and smaller substellate scales; veins

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evident, diverging at 50°-60°, simple or once-forked, rarely twice-forked, abruptly arcuate at the clavate tip or sometimes with two short recurved apical branches, these casually joined to adjacent veinlets. Fertile fronds about 20 cm. long, the stipe 6 cm. long; blade conform or nearly so, 18 cm. long, 8 mm. broad, long-attenuate in both directions, the rachis dark-paleaceous beneath as in the sterile fronds.

Type in the Berlin Botanical Museum, collected on a tree trunk, Monte Culo de Maco, Azua Province, Dominican Republic, altitude 1,850 meters, August, 1912, by Father M. Fuertes (no. 1952).

Known only from this collection, which was determined by Brause as a varietal form of *E. hirtum* (Swartz) C. Chr. From that widely distributed species, of which a large series is at hand, including many specimens from Jamaica, the type region, *E. hispaniolicum* differs substantially in its lesser size and much more delicate vascular parts, its extremely narrow linear fronds, its more oblique veins, and its conform sporophylls, *E. hirtum* having strongly dimorphic fronds, veins diverging at an angle of 80°, and the blades of the sporophylls narrowly oblong-linear and invariably rounded at the base.

Diplazium alsophilum Maxon, sp. nov.

Rhizome wanting, presumably stout and erect or assurgent, the fronds rigidly ascending, short-stipitate, conform, 55–85 cm. long; stipe 13–20 cm. long, 2.5 mm. thick, stramineous from a darker base, trisulcate, glabrescent, conspicuously paleaceous at base, the scales borne in a dense tuft, bright glossy brown, linear-acicular, about 1.5 cm. long, 1–1.5 mm. broad, strongly denticulate at the attenuate flexuous tips; blade broadly ovate-triangular, 45–65 cm. long, 35–45 cm. broad, bipinnate-pinnatifid, the rachis similar to the stipe; pinnae 8 or 9 pairs below the long-acuminate tip, contiguous or imbricate, spreading, alternate, the second and third pair largest, 20–25 cm. long, 6–9 cm. broad, oblong-attenuate, the pinnules (about 13 pairs) subdistant, horizontal, mostly sessile or short-stalked, oblong to narrowly tri-

angular-oblong from a slightly inequilateral base, obtuse or acutish, the larger ones obliquely lobed more than halfway to the costa; lobes 6–9 pairs, subtruncate, acutish distally, lightly serrate-crenate, with 2 or 3 pairs of oblique alternate veinlets; sori linear, arcuate, 3–6 mm. long, mostly solitary, borne on the first distal veinlet of each group, extending from near the costule almost to the distal sinus, thus forming a double median row nearly clear of the lobes; indusia pale brownish, narrowly linear, diplazioid or not; leaf tissue bright green, membranous, glabrous.

Type in the U. S. National Herbarium, no. 695652, collected in shady forest near Constanza, Dominican Republic, at an altitude of 1,250 meters, April, 1910, by H. von Türckheim (no. 3218).

The description is drawn partly also from a large specimen, with identical data, in the Berlin Botanical Museum. Both were distributed as D. oreophilum Underw. & Maxon, a Jamaican species which differs widely in its broader atropurpureous rhizome scales, its essentially tripinnate subdimorphous blades, its long-acuminate, lanceolate, strongly inequilateral, long-stalked pinnules, and its copiously multisoriate segments. Both species are allied in a general way to D. Franconis Liebm., of Mexico and Central America.

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