

RIO PALENQUE FERN NOTES

David B. Lellinger*

Among the ferns now known from the Río Palenque Field Station due to the collecting efforts of Dr. C. Dodson and his associates, one is a new, rather wide-ranging species, and another requires transfer to the correct genus. Since the "Flora of the Río Palenque Science Center" soon will appear, the purpose of this paper is to validate the names of these species.

Dicranoglossum polypodioides (Hooker) Lellinger, comb. nov. Plate 1-A

Taenitis furcata var. *polypodioides* Hooker, Sp. Fil. 5: 188. 1864.

TYPE: ECUADOR: "Base of the Andes on the road to Guayaquil," Jameson (K not seen).

Eschatogramme polypodioides (Hooker) C. Chr. Dansk Bot. Ark. 6(3): 38. 1929.

Among the species of *Dicranoglossum*, this is the only one with discrete, usually round or rarely elongate or confluent sori.

Diplazium striatastrum Lellinger, sp. nov. Plate 1-B

Planta terrestris. Rhizoma erectum ca. 1-3 cm diam. usque ad 1 m longum, radicibus serpentinis fuscis 1-2 mm diam. suffultum; paleis lineari-lanceolatis, usque ad 15 mm longis 3 mm latis leviter bicoloribus, parte centrali atrobrunneis fibrosis nitidis, marginibus stramineis subfibrosis integris vel leviter repandis. Stipites 20-50(57) cm longi 2.5-6 mm lati straminei vel brunnei sulcati, ad basin paleis eis rhizomatis similibus praeditis, juventute omnino pilosuli glabrescentes. Rachides 25-90 cm longae 0.5-4 mm latae stramineae vel bruneae sulcatae omnino pilosulae, pilibus usque ad 0.5 mm longis subcatenatis cinnamomeis. Laminae 30-100 cm longae 20-30(40) cm latae papyraceae lanceolatae pinnato-pinnatifidae, ad basin obtusae vel truncatae, ad apicem acuminatae pinnatifidae; pinnis alternis vel suboppositis lineari-lanceatis uniformiter pinnatifidis apice excepto leviter crenulatis, costis sulcatis omnino leviter pilosulis, venis curvatis simplicibus parum prominulis 4-8 paribus per costulam; pinnis inferioribus usque ad 20 cm longis 3 cm latis 1/3-1/2 ad costam incisissimis petiolulatis (usque ad 4 mm); pinnis superioribus 5-8 cm longis 1-1.5 cm latis 1/4-1/3 ad costam incisissimis sessilibus; apice pinnatifidis 6-10 cm longis 3-5.5 cm latis, lobis connatis et adnatis acutis vel obtusis. Sori lineares. Indusia continua ca. 0.15 mm lata membranacea integra, seriebus unicus inter costulam et marginem segmenti dispositae.

TYPE: COSTA RICA: CARTAGO: Tuis, near Turrialba, alt. 620 m, Pittier 11248 (HOLOTYPE: US; ISOTYPE: BM, MO).

DISTRIBUTION: Southern Mexico, Guatemala, Honduras, Costa Rica, Panama, Venezuela, Colombia, and Ecuador, at altitudes of 0-1400 (2200) m in Central America and 0-1200 m in South America.

PARATYPES: MEXICO: OAXACA: W from Jalapa de Díaz, 2000-3300 ft. alt., 5 Oct. 1971, Hallberg 1332 (NY, US). GUATEMALA: ALTA VERAPAZ: Finca Seamay, Senahu, Cerro Sobre, ca. 3000 ft. alt., 24 Jul 1936, Hatch & Wilson 109 (US). STA. ROSA: Volcán Tecuamburro, 6000 ft. alt., Feb 1893, Heyde & Lux (Donn.-Sm) 4676 (US). ZACAPA: Sierra de Las Minas, Volcán de Monos, along the Rillito del Volcán de Monos, 1150-2100 m alt., 10

*U. S. National Herbarium, NHB No. 166, Smithsonian Institution, Washington, DC 20560

Jan 1942, *Steyermark* 42390 (F, US). HONDURAS: CORTÉS: Río Lindo near Carrizal, 550 m alt., 12 Apr 1951, *Williams & Molina* 17837 (EAP, US). COSTA RICA: ALAJUELA: NW of Volcán Arenal, ca. 2 km NE of Tabacón, ca. 500 m alt., 16 Aug 1970, *Lellinger* 1639 (US); Llanuras de S. Carlos, 200 m alt., *Brade & Brade* 793 (UC); near Zapote on the road to Villa Quesada, 4000-4500 ft. alt., 24-27 Mar 1955, *Scamman* 7681 (GH, US); Río S. Rafael, 2 km W of La Marina, 550 m alt., 17 Feb 1966, *Molina, Williams, Burger & Wallenta* 17307 (EAP, F, US). CARTAGO: Vicinity of Turrialba, 600 m alt., 24-26 Apr 1906, *Maxon* 154 (NY, US); Valley of the Río Reventazón, 3 km SE of Turrialba, 500-600 m alt., 23 June 1949, *Holm & Iltis* 83 (GH, MO, NY, US); road to Tuis, 650 m alt., Oct 1897, *Tonduz* 11340 (CR, US). HEREDIA: N slope of Cerro Chompipe, ca. 10 km NNE of Heredia, 2200 m alt., 8 July 1970, *Lellinger* 1022 (US); Río Puerto Viejo at its confluence with the Río Sarapiquí, Apr 1892, *Biolley* 6926 (BR, US), Feb 1893, *Pittier* 7502 (BR, US); Finca La Selva near Puerto Viejo, 125 m alt., 16 Aug 1967, *Lellinger* 908 (US), ca. 300 ft. alt., 18-28 Feb 1955, *Scamman* 7472 (GH, US), 125 m alt., 18 June 1967, *de la Sota* 5123 (LP, US), ca. 150 m, 30 Aug 1961, *Weber* 6120B (GH, US). LIMÓN: Suerre, 300 m alt., Feb 1896, *Donnell-Smith* 6884 (US); Los Diamantes, Rubber Plant Station, ca. 1000 ft. alt., 9-10 Apr 1953, *Scamman* 7140 (GH, US), ca. 200 m alt., 9 Jul 1949, *Holm & Iltis* 366 (GH, MO, NY, US); Jiménez, 650 ft. alt., Apr 1894, *Donnell-Smith* 5078 (US), 200 m alt., Mar 1902, *Alfaro* 162 (US). S. JOSÉ: basin of the Río El General, 675-900 m alt., Mar 1940, *Skutch* 4804 (US). PANAMA: BOCAS DEL TORO: vicinity of Nievécita, ca. 0-50 m alt., 8-19 Aug 1938, *Woodson, Allen & Seibert* 1801 (MO, US). CHIRIQUÍ: vicinity of El Boquete, 1380 m alt., 3 Feb-15 Mar 1938, *Bro. Maurice* 668 (US). COCLÉ: El Valle de Antón, 30 June 1973, *Aguilar* 20 (PMA, US), 29 Aug 1970, *Ebinger* 1118 (US), 30 June 1973, *González* 4 (PMA, US), 30 June 1973, *Vergara* 7 (PMA, US); La Mesa, 810 m alt., *Croat* 25309 (MO). VERAGUAS: Valley of the Río Dos Bocas above Sta. Fe, 450 m alt., *Croat* 27517 (MO). VENEZUELA: MIRANDA: Oripoto, 1200 m alt., Apr 1951, *Hno. Gines* 5295 (US). NUEVA ESPARTA: Isla Margarita, Juan Griego trail, 450 m alt., 29 Jul 1903, *Johnston* 153 (GH, US); Isla Margarita, El Valle, 16 Aug 1901, *Miller & Johnston* 161 (GH, US). COLOMBIA: CHOCÓ: Quebrada Jellita, Bahía Solano, 50-100 m alt., 22 Feb 1939, *Killip & Garcia* 33499 (US). EL VALLE: branch of the Río Anchicayá between Pavas and Miramar, 350-450 m alt., 15 Apr 1943, *Cuatrecasas* 14389 (US); Río Digua valley between La Elsa and Río Blanco, 920 m alt., 2-5 Apr 1939, *Killip* 34745 (US). PUTUMAYO: ca. 40 km NW of Puerto Asís, ca. 1000 ft. alt., 28-29 Jul 1965, *King* 6090 (US). ECUADOR: COTOPAXI: road between Quevedo and Quito, ca. 500 m alt., 28 Oct 1939, *Haught* 2919 (US). Los Ríos: Río Palenque Field Station, 200 m alt., 13 Feb 1974, *Gentry* 9907 (MO, US), 150-220 m alt., 31 Mar 1971, *Dodson & McMahon* 4304 (SEL, US). PICHINCHA: 20 km W of Sto. Domingo de los Colorados, 1000 ft. alt., 25 Oct 1961, *Cazalet & Pennington* 5153 (US); vicinity of Sto. Domingo de los Colorados, 500 m alt., 2-4 Apr 1943, *Holdridge* 1608 (US). MANABÍ: El Recreo, *Eggers* 14874 (US); Estero Don Pablo, E of Olmedo, ca. 100 m alt., *Haught* 3485 (US).

This species previously has been confounded with *Diplazium striatum* (L.) Presl and was identified also with *D. crenulatum* Liebm., a synonym of *D. striatum*. The confusion has occurred because entire fronds are needed for easiest separation, and in the past most collections were incomplete. The median and apical portions of the two species look quite a bit alike, but there is no mistaking the basal portions. *Diplazium striatastrum* pinnae are quite uniform in width and division from the base of the blade to near the apex, whereas the basal pinnae of *D. striatum* are wider and more dissected (fully pinnate) than the median and subapical pinnae. That *D. striatastrum* is not a juvenile phase of the larger *D. striatum* is shown by differences in range and in rhizome scales, which have rather straight walls in *D. striatastrum* but have sinuous walls in *D. striatum*.

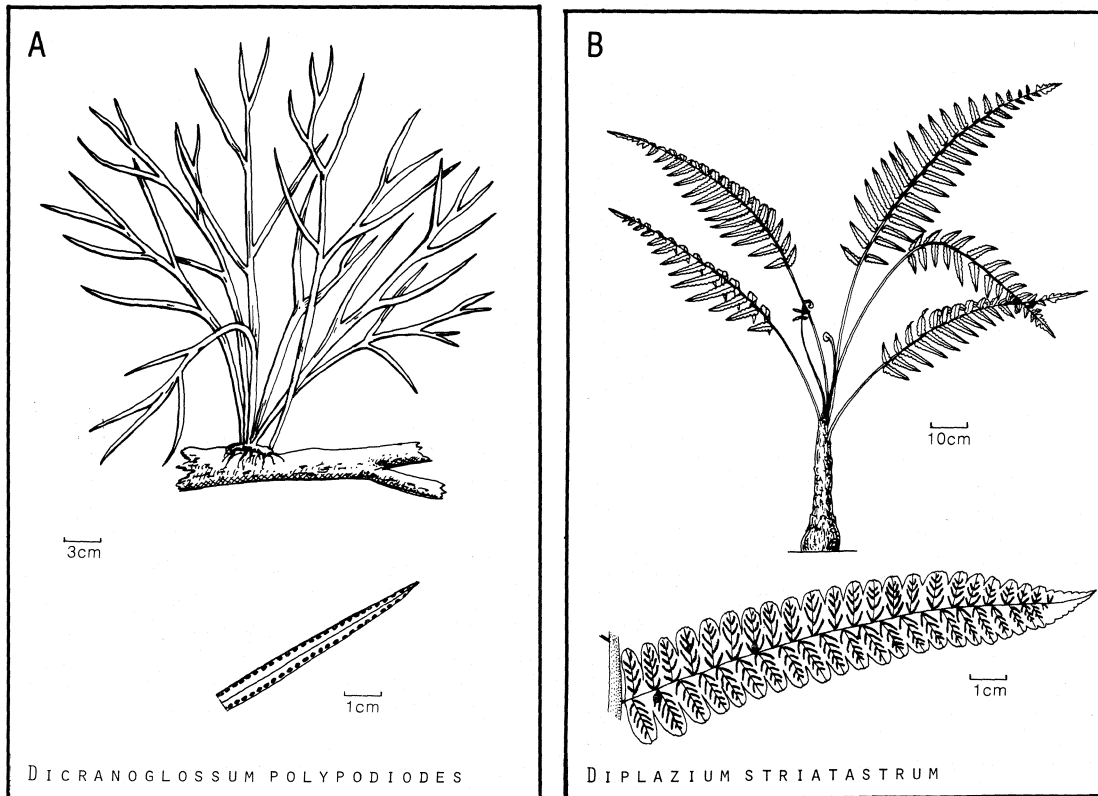


Plate 1