## SHORTER NOTES

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**Corrections and Additional Information on Ferns from the Semi-Arid Region of Brazil.**—The publication by Ambrósio and de Melo (Amer. Fern J. 91(4): 227–228. 2001) of three new records from the semi-arid region in northeastern Brazil requires clarification. The purported new records involve *Acrostichum danaeifolium* Langsd. & Fisch., *Thelypteris interrupta* (Willd.) Iwatsuki, and *Marsilea quadrifolia* L. The taxonomic conclusions by Ambrósio and de Melo were based on a comparision of their findings with a list published by Barros et al. (Biol. Bras. 1: 143–159. 1989a). Although the paper by Barros et al. (1989a, op. cit) presented an interesting list of species for the "Caatinga" in Pernambuco State ("Caatinga" is a local name to referring to semi-arid vegetation), it is only a preliminary account of the pteridophytes found in this region, and is by no means a complete statement of our knowledge of the ferns from this area.

According to Proctor (Ferns of Jamaica: 591. 1985), M. quadrifolia is native to southern Europe, Asia, and Japan, and is naturalized in North America. Johnson, in a revision of Marsilea for the New World (Syst. Bot. Monogr. 11: 1-87. 1986), showed its distribution in North America and also presented interesting comments on accidental dispersal of M. quadrifolia by man, birds, and water in United States. Johnson did not mention this species for Brazil. Kuhn (in Martius, Flora Brasiliensis v. 2, part 1: 650–652, tab. 80, fig. 1–5. 1881) cited two species of Marsilea for semi-arid regions in Brazil: M. polycarpa Hook. & Grev. and M. deflexa A. Braun. Johnson also cited the same two species and presented a distribution map showing M. polycarpa in the Petrolina region (Pernambuco State). The material cited by both Kuhn and Johnson (Martius s.n., M) was collected during the historic travels of Martius through Brazil, in the state of Bahia, near Juazeiro. It is well known that the Martius expediton visited several Brazilian semi-arid regions including those in northern Minas Gerais, Bahia (city of Juazeiro), Pernambuco (city of Registro do Juazeiro: oldest name for Petrolina), and Piauí (city of Oeiras) states. Juazeiro is located south of the city of Petrolina and between the two cities is the São Francisco River. Barros et al. (Acta Bot. Brasil. 2(1-2): 47-84. 1989b) also recorded M. quadrifolia from "Sertão do Araripe", another semi-arid zone in the state of Pernambuco. No information about these historical occurrences or literature was included in the note by Ambrósio and de Melo (2001, op. cit.). I conclude that M. quadrifolia is a misidentification and thus not a new record for the area. Most likely, the material from Petrolina collected by Ambrósio (Ambrósio 52, TSAH) is one of the species previously cited by Kuhn and Johnson for that region in Brazil. Marsilea polycarpa can be distinguished from M. deflexa by its numerous, small (less than 3 mm long), terete sporocarps borne on the proximal 2/3 of the stipes

(vs. 1–4 sporocarps 4–6 mm long, angled in cross section, with several lateral ribs, and on proximal  $\frac{1}{4}$  of the stipes).

Thelypteris interrupta was previously cited for this same region by Baker (in Martius, Flora Brasiliensis v. 2, part 1: 486–487, t. 30, fig. 13. 1870) and by Andrade-Lima (Anais XX Congr. Nac. Bot.: 33–39. 1969) as Nephrodium unitum R. Br., and by Barros et al. (1989b, op. cit.) as Thelypteris totta (Thunb.) Schelpe. This species is recognized by its long-creeping rhizomes, proximal pinnae the longest or nearly so, basal veins from adjacent segments united at an obtuse angle below the sinus with an excurrent vein to the sinus, and laminae chartaceous to subcoriaceous, 1-pinnate-pinnatifid, abaxially with sessile reddish glands.

Acrostichum danaeifolium was previously cited by Baker (in Martius, 1870, op. cit.) as common and widespread in Brazil, but its occurrence in Pterolina could be, in fact, a new record.

I am greatful to Dr. Alan R. Smith for constructive comments on the manuscript.—JEFFERSON PRADO, Instituto de Botânica, Seção de Briologia e Pteridologia, C. P. 4005, 01061-970 São Paulo – SP, Brazil.

Diellia mannii (D. C. Eaton) Robins. (Aspleniaceae) Rediscovered in Hawai'i.—Diellia mannii (D. C. Eaton) Robins. is a rare endemic species of the island of Kauai. It was first collected by H. Mann and W. T. Brigham as *Microlepia mannii* D. C. Eaton (Mann, Enumeration of Hawaiian plants. Proc. Amer. Acad. Arts and Sci. 7, 1867) sometime between 1864 and 1865. Last known collections were probably made by V. Knudsen during the period 1871–1886. About 24 collected specimens of *D. mannii* are deposited in different herbaria around the world. Some of those may originate from the same individuals (Wagner, Univ. Calif. Publ. Bot. 26:1–167, 1952). Although these collections provide little information about exact sites and habitats, all the specimens probably were collected in Western Kauai in the general area of Halemanu, in dry or mesic forests on the steep slopes of gulches, at an altitude of 500–1000 m (Wagner, Wagner & Flynn, Contr. Univ. Michigan Herb. 20: 241–260, 1995).

Diellia mannii has probably always been a rare and very local fern species. Already in 1902, Diels (Polypodiaceae, pp. 139–339 in Engler & Prantl Die natürlichen Pflanzenfamilien Bd.1 (Abt.4), Verlag von Wilhelm Engelmann, Leipzig) referred to it as a rarity of Kauai. The note of A. S. Knudsen from 1914 (Wagner et al., 1995) included mention of *D. mannii* as a very rare fern that has almost disappeared from the Halemanu in Koke'e Mountains. The status of the species has been assessed as probably extinct (Fosberg & Herbst, Allertonia 1: 1–72. 1975; Wagner, Wagner, Palmer & Hobdy, Contr. Univ. Michigan Herb. 22: 135–187. 1999), not seen after 1900 (Wagner et al. 1999; U.S. Fish & Wildlife Service species List. 2000), but considered to be a species of concern as "further field research may reveal that *D. mannii* still exists somewhere in western Kauai" (Wagner et al., 1995). On April 23, 2002, a single individual of *D. mannii* was found by resource conservation technician Laura Arnold



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