# New Pellaea from Brazil

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The following new species is described as a result of work on the cheilanthoid ferns (*Pteridaceae*, subfamily *Cheilanthoideae*) from the Espinhaço Range, Minas Gerais. This work was done as part of my Master's thesis at the University of São Paulo (Prado, 1989).

Pellaea cymbiformis J. Prado, sp. nov. Figure 1, A–G. *P. riedelii* Baker, cui affinis, frondibus monomorfis, erectis; petiolo ac rachidi sulcatis; folis lamina coriacea, 2–3 pinnato-imparipinnatis; pinnulis cymbiformibus; nervis immersis occultis differt. Type: Brazil, Minas Gerais: Gouveia, Km. 66 of the road from Curvelo-Diamantina, 9 April 1982, *Furlan* et al. s.n. *CFCR* 3271 \*Collection Flora of "Campos Rupestres". (Holotype SPF; isotypes K, HB, MBM).

Plants terrestrial. Rhizome short, ascending, ca 0.9 cm broad, bearing many scales; scales long-lanceolate, 0.3–0.9 cm long, reddish, concolorous. Fronds erect, monomorphic or nearly so, 5.5–17.0 cm long, borne in a cluster; stipe with 1 "U-shaped" vascular bundle at the middle, 2.0–9.5 cm long, ca. 0.1 cm diam., stipe and rachis sulcate adaxially, ruddy-tan to red becoming darker and gray with age, the distal portion of the rachis usually flexuous; lamina bi-tripinnate, imparipinnate, glabrous, coriaceous; segments ca 0.5 cm long and 0.1 cm broad, cymbiform, the margin revolute, border modified as indusium; veins free. Sporangia with short stalks; spores trilete, cristate.

Although the distinction of the two sections, *Pellaea* and *Ormopteris*, as presented by Tryon & Tryon (1982), is not clear, I believe that the new species described here, belongs to the *Ormopteris* section. *Pellaea cymbiformis* is closely related with other species (*P. pinnata* (Kaulf.) Prantl, *P. gleichenioides* (Hook.) Christ and *P. riedelii* Baker) previously included in this section (Tryon & Tryon, 1982) I think that a good character that distinguishes these two sections is the morphology of the indusium. In the section *Ormopteris* the indusium is abruptly and strongly differentiated from the margin while in the section *Pellaea* it is gradually and slightly to moderately differentiated from the margin.

Thus, *Pellaea cymbiformis* belongs to the section *Ormopteris*, a small section of 5–7 species of South America, all but one in Brazil (Tryon & Tryon, 1982). This placement is evinced by short stems with clustered stipes, rachises, and pinna-stalks strongly grooved on the adaxial side, indusium strongly differentiated from the margin, and cristate spores. Within the section *Ormopteris*, the species is caracterized by the cymbiform segments with differenciated, revolute margins modified as indusia. The plants are usually about 11 cm long. This species resembles *Pellaea riedelii* in the 2–3-pinnate division of the lamina, but differs by the smaller, cymbiform segments. So far, this new species is known only from the type, which was collected in open, sunny places between rocks. It is probably endemic to the Espinhaço Range, Minas Gerais, Brazil.

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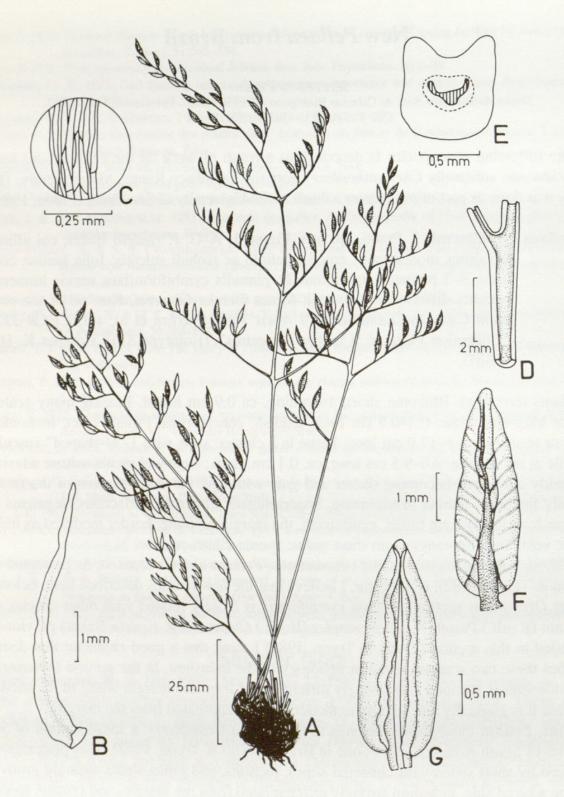


Fig. 1 A-G. Pellaea cymbiformis J. Prado. A, habit. B, rhizome scale. C, detail of the cells of a rhizome scale. D, stipe, E, transverse section of the stipe middle showing the vascular bundle. F, venation of sterile frond. G, venation of fertile frond.

#### LITERATURE CITED

Prado, J. 1989. Os representantes da família *Pteridaceae*, subfamília *Cheilanthoideae* (Div. *Pteridophyta*)

Ocorrentes nos Campos Rupestres da Cadeia do Espinhaço no Estado de Minas Gerais, Brasil.

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