

## A NEW PELLAEA FROM SOUTH AFRICA\*

ALICE F. TRYON

*PELLAEA rufa* sp. nov., A. F. Tryon. Rhizoma gracile repens dichotomum paleis concoloribus rufis elongato-lanceolato-triangularibus acumine filiformi basi cordata. Folia 12–30 cm. longa stipite rufo rachide rufa apicem versus flexuosa. Laminae elongato-triangulares bi-tripinnatae segmentis ellipticis vel ovatis vel nonnullis ternatis coriaceis nervis immersis. Sporangia brevissime stipitata. Sporae pallide luteolo-fuscae triplatae laeves. Typus: *Compton 16402* (US).

Rhizome slender, cord-like, dichotomously branched, long creeping. Scales of the rhizome and stipe-base concolorous, ruddy-tan, elongate lanceolate-triangular, sparsely dentate, the tip filiform, the base cordate, scales surrounding the meristem pinkish or red. Fronds 12–30 cm. long, approximate, the buds paleaceous. Stipe and rachis convex or plane on the upper surface, nearly glabrous, ruddy-tan to red becoming darker and gray with age, the upper portion of the rachis usually flexuous. Blade 10 cm. long and 2 cm. broad to 25 cm. long and 5 cm. broad, bi-tripinnate, elongate-triangular, the pinnae ascending at a broad angle to the rachis, the rachises somewhat flexuous. Segments 3 mm. long and 2 mm. broad to 10 mm. long and 6 mm. broad, elliptical or oval (some ternate), retuse, coriaceous, the veins immersed and obscure, the margin reflexed or revolute, border lutescent, crenulate, the young segments reddish. Sporangia with short stalks less than one-fourth the capsule length. Spores 64 per sporangium, tetrahedral, pale yellowish-brown, essentially smooth.

### Specimens examined:

CAPE PROVINCE: Rock crevices, Ngaap Kop, Laingsburg Dist., Nov. 6, 1944, R. H. *Compton 16402* (US); Same locality, Dec. 1, 1941, R. H. *Compton 12619* (US); Foothills of Witteberg, April 19, 1925, R. H. *Compton 2961* (K); Rocky hillsides among succulents, The Great Karoo, near Matjiesfontein, Jan. 24, 1948, Robert J. *Rodin 3342* (UC, K, MO); Karoo, Groote Fontein, Mr. *Dickson*, Lady Barkly recd. 5/75 (K); Locis rupestribus montosis, siccis in dumetris, Kendo, alt. 3000–4000, 1838, *Drège* (BM, K, MO, P).

Additional localities from the Cape Province have been cited by *Compton*<sup>1</sup> from—Whitehill Ridge; Klipbank, Beaufort West Div.; and by *Alston and Schlepe*<sup>2</sup> from—Sutherland: Klein Roggeveld, Schietfontein.

This fern of the South African Karroo has had an elusive record for some hundred years. It is not surprising for the species is strange among African ferns having its closest ally, *Pellaea myrtillofolia* in the xermorphic flora of central Chile. These and two species in the southwestern United States form an alliance so close

<sup>1</sup>Trans. Roy. Soc. South Africa 19:270. 1931.

<sup>2</sup>Jour. South African Botany 18:170. 1952.

\* This paper was prepared in connection with a grant from the Bache Fund of the National Academy of Sciences for the study of desert ferns.

Issued March 24, 1955.





Tryon, Alice F. 1955. "A New Pellaea from South Africa." *Annals of the Missouri Botanical Garden* 42, 101–102. <https://doi.org/10.2307/2394662>.

**View This Item Online:** <https://www.biodiversitylibrary.org/item/86342>

**DOI:** <https://doi.org/10.2307/2394662>

**Permalink:** <https://www.biodiversitylibrary.org/partpdf/21759>

#### **Holding Institution**

Missouri Botanical Garden, Peter H. Raven Library

#### **Sponsored by**

Missouri Botanical Garden

#### **Copyright & Reuse**

Copyright Status: In copyright. Digitized with the permission of the rights holder.

License: <http://creativecommons.org/licenses/by-nc-sa/3.0/>

Rights: <https://biodiversitylibrary.org/permissions>

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <https://www.biodiversitylibrary.org>.