

FABACEAE

TAXONOMIC STATUS OF *ELEPHANTORRHIZA RANGEI* (MIMOSOIDEAE)

Elephantorrhiza rangei was first described by Harms (1913) from a specimen, *Range 455*, collected in January 1908 at Naute in the Keetmanshoop District, southern Namibia. Paul Range (1879–1952) was a government geologist by occupation but also an avid naturalist that travelled extensively throughout Namibia. He documented his travels to Namaland (1906–1914) in great detail and recorded many noteworthy and lesser-known facts of the plant life, climate and general ecology of the areas he visited. His observations were written up in a series entitled ‘*Die Flora des Namalandes*’ in *Feddes Repertorium* from 1932 to 1938. His personal herbarium collections exceed 2 000, most of which were sent to Berlin (B), resulting in the description of many new species (Gunn & Codd 1981).

In recent years, *Elephantorrhiza rangei* has been known for certain from the type collection only. Specimens attributed to *E. rangei* by Phillips (1923) were subsequently shown by Ross (1975) to be incorrectly identified as *E. elephantina* (Burch.) Skeels. In the absence of any further collections besides that of Range, Ross (1975) hinted that *E. rangei* might be extinct and he recommended a search at the type locality to evaluate and determine its conservation status. Ross nevertheless noted a superficial resemblance between the type material of *E. rangei* and *E. suffruticosa* Schinz, a species from further north in Namibia and beyond.

In 2005, the first author visited southern Namibia to conduct a search for plants matching the description of *Elephantorrhiza rangei* in the general area of Keetmanshoop, Seeheim and the Naute Recreation Resort. Since Range’s travels in southern Namibia a century ago, con-

siderable change has taken place. The Naute Dam, one of Namibia’s largest dams with a capacity of 84 million m³, was constructed in 1970–1972 to supply the arid southern areas of Namibia and specifically the town of Keetmanshoop with water. It is built in the Löwen River, a tributary of the Fish River. Initially it seemed that the dam was located where the mysterious *E. rangei* occurred and that its total habitat had been destroyed with the building of the dam, especially since the plant had not been recorded for the Namibian Tree Atlas Project (Curtis & Mannheimer 2005). However, a single plant of an *Elephantorrhiza* was located near the visitors’ centre, close to the dam wall. Since it was just at the start of the flowering season, the small tree did not have any leaves on it. Inflorescences, ready to undergo anthesis, were visible on all the branches. Some dried leaf material was collected from under the tree where it had fallen after senescence during the winter months. The racemes, leaves and especially the leaflets (*Krige 451* in PRE and PRU) were studied to determine if the plant could be the rediscovery of the elusive *Elephantorrhiza rangei*.

Comparative morphology confirms beyond doubt that this plant at the Naute Dam is conspecific with *Elephantorrhiza suffruticosa*. The original distinction between *E. rangei* and *E. suffruticosa* was based mainly on a character of the leaflets. In *E. suffruticosa*, the midrib of the leaflet is usually described as marginal throughout. In *E. rangei* it is marginal becoming central towards the apex (Ross 1974, 1975)—which is also the case in the leaflets of the plant at Naute. However, in *E. suffruticosa*, the midrib occasionally tends toward a central position and the leaflets from Naute clearly fall within the currently known range of variation in *E. suffruticosa*. In addition,

Ross (1975) claimed that in the flowers of *E. rangei*, the calyx is 2.0–2.25 mm long, whereas in typical *E. suffruticosa* it is 1 mm long. However, this claimed floral difference does not hold because measurements taken from several herbarium specimens showed the calyx length of the type material of *E. rangei* to comfortably fall within the range of calyx length variation displayed by *E. suffruticosa*, namely 0.4–1.5 mm. It is possible that Ross (1975) erroneously compared the measurement of the corolla in *E. rangei* with that of the calyx in *E. suffruticosa*. In all other characters the original description of *E. rangei* conforms to that of *E. suffruticosa*.

The outlier distribution at Naute is near the southernmost limit of the range of *Elephantorrhiza suffruticosa*. Hitherto the species has been recorded from northwestern and central Namibia whence it ranges north into Angola, but with an intriguing disjunct range extension in the extreme southeast of Namibia (grid: 2719 AD) represented by a single herbarium record, *Curtis 1530* in WIND (Curtis & Mannheimer 2005). The present confirmation of the presence of the species at Naute bridges this disjunction (Figure 12). Further sampling is recommended in the extreme southern and southeastern parts of Namibia, especially the botanically poorly explored Klein and Groot Karasberge, to ascertain the full range for the species in southern Namibia. Other possible localities were explored in the general area of Keetmanshoop, Seeheim and the Naute Recreation Resort, but no *E. suffruticosa* plants could be located. However, from the observations made and the plant found, it is evident that Harms had mistaken the rather poor specimen presented to him by Range for a new species. The name is therefore formally placed into synonymy with *E. suffruticosa*. Specimens seen on the Aluka Library website (<http://www.aluka.org/>) are distinguished by the code e! in the citations below.

***Elephantorrhiza suffruticosa* Schinz** in Mémoires de l'Herbier Boissier 1: 117 (1900). Type: Angola, Huila Dist., 'Kilevi am Kunene' (south of Humbe), Schinz 2071 (Z, lecto.).

E. rangei Harms (1913): 420 (1913), syn. nov. Type: South West Africa, Keetmanshoop Dist., Naute, near Keetmanshoop, Range 455 (B, holo.; BM, drawing, e!; BOL, iso.; SAM, e!).

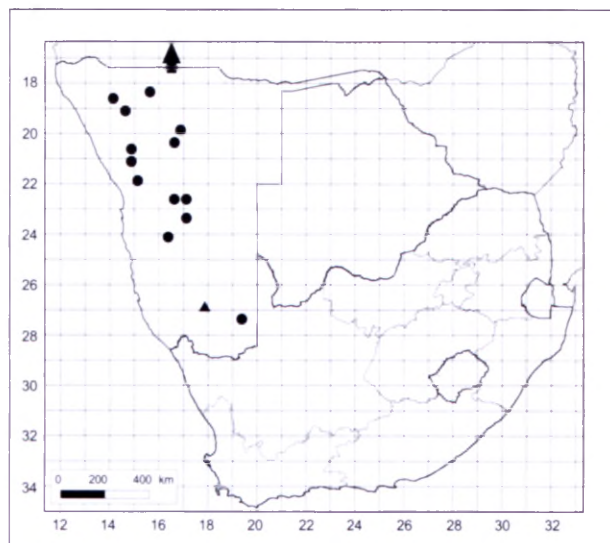


FIGURE 12.—Known distribution of *Elephantorrhiza suffruticosa* in the Flora of southern Africa region. ● The type locality of *E. rangei*, here proposed as conspecific with *E. suffruticosa*, is also indicated, ▲.

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