

PORTULACACEAE

PORTULACA RHODESIANA, A SUCCULENT HITHERTO UNRECORDED IN SOUTHERN AFRICA

A miniature, mat-forming species of Portulacaceae was unexpectedly collected by EJvJ during a field trip undertaken in April 1996 to re-collect *Crassula cymbiformis* Toelken at Groothoek in the extreme western part of the Waterberg, Northern Province (Figure 7). Plants grew in association with the poikilohydric resurrection

plant, *Myrothamnus flabellifolius* Welw. EJvJ subsequently identified the portulacaceous specimen at the National Herbarium (PRE), Pretoria, as *Portulaca rhodesiana* R.A.Dyer & E.A.Bruce (1949). Plants were found in shallow, gravel-filled pockets in sandstone and conglomerate of the Alma Formation, Waterberg Group.

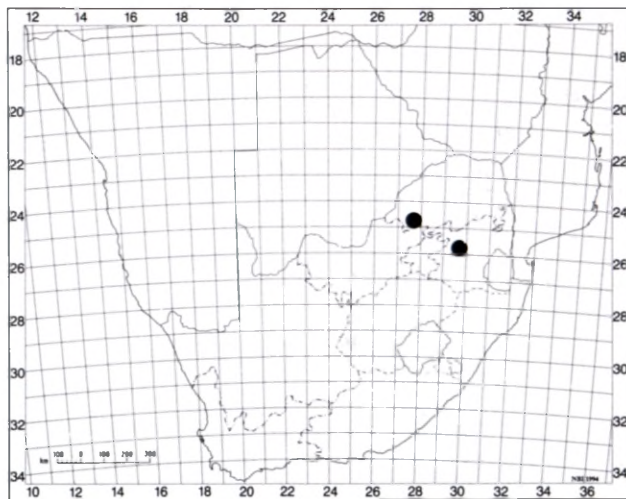


FIGURE 7.—Known distribution of *Portulaca rhodesiana* in South Africa.

Plants collected by EJvJ are kept in the living collection of GFS and at the Kirstenbosch National Botanical Garden, whence they will be distributed to other botanical gardens of the National Botanical Institute. This new collection (*E.J. van Jaarsveld 15051*) represents a significant southward expansion of the distribution of the species. It had previously been known only from Zimbabwe, with the southernmost record from the Matopo Hills where it grows as a pioneer on granite outcrops (Dyer & Bruce 1949; Wild 1961).

More recently three of the authors (all except EJvJ) collected the species near Middelburg, Mpumalanga, where it had been observed by ST some years ago (Figure 7). The identity of this specimen, too, was confirmed as *P. rhodesiana*, by Mrs Marie Jordaan of PRE. The occurrence of this species at this locality represents a further significant southeasterly extension of its known distribution range.

These collections came at an opportune time since they complement the list of succulent portulacas being compiled by M. Jordaan for the *List of southern Africa succulent plants* project, a joint effort of the National Botanical Institute and the Succulent Society of South Africa.

The species is a true miniature of the genus, mature sterile plants hardly exceeding a height of 10 mm. It is therefore not surprising that it has not been recorded for southern Africa before. The habitat of the species near Middelburg is seasonally wet, shallow soil pockets on red porphyritic rhyolite of the Selons River Formation, Rooiberg Group. The surrounding vegetation is grassland, which has been significantly transformed by grazing cattle. At both localities plants grew in fully exposed, sunny places.

The entry for the species in the taxon component of PRECIS is as follows:

2421000-12# *Portulaca rhodesiana* R.A.Dyer & E.A.Bruce in *The Flowering Plants of Africa* 27: t. 1069 (1949). Type: Zimbabwe, 67 km east of Salisbury (now Harare), *Eyles 8821* (K, holo., photocopy!).

Specimens examined

NORTHERN PROVINCE.—2427 (Thabazimbi): Rankin's Pass, 25 km from Alma on road to Thabazimbi, via Bakker Pass, in gravel-filled holes, on flat outcrops of rock on top of mountain. Petals white, (–DB), *E.J. van Jaarsveld 15051* (PRE).

MPUMALANGA.—2529 (Witbank): pan, 6 km from Middelburg on road to Hendrina, eastern side of road, ± 30 m from fence line, on flat rock outcrops which are seasonally flooded. Petals pinkish white, opening in hot, overcast weather, (–DC), *G.F. Smith 252* (PRE).

REFERENCES

- DYER, R.A. & BRUCE, E.A. 1949. *Portulaca rhodesiana*. *The Flowering Plants of Africa* 27: t. 1069.
WILD, H. 1961. 23. Portulacaceae. In A.W. Exell & H. Wild, *Flora zambesiaca* 1.2: 362–372.

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See Germishuizen (1997: *Bothalia* 27: 146).