

specimen 1:3 (6C) on the said BM sheet as the type of *F. crispa*, even though it has dentate leaves and spinose spores. It was most probably collected by Ecklon, but it could not be ascertained which collection series the number 64 on the label refers to. Gunn & Codd (1981) remark that 'it may be difficult to determine whether a given specimen is collected by Ecklon, Zeyher, or both, or whether it is part of a type gathering or not'. The original plant name on the label, '*S. ... subtilis*' Hedw. (the genus name is illegible), has been scored through and *Jungermannia* is written above it and below it *Fossombronia crispa*. Details of the collection site and date are as follows, 'Feuchte Stellen an der Erde, 2° Höhe des Teufelsberges', 'cfr.' and the date 'Aug. 14, 1825' were added. In a footnote in Lehmann (1829: 358), reference is made to 'die zweite (Höhe) oder die Region der Silberbäume (*Leucadendron argenteum*) bis zu 1000 Fuss' (i.e. above 500 feet; the 'erste Höhe' being below 500 feet). As mentioned before, since Stephani (1900) the epithet *F. crispa* has been wrongly applied to specimen 6C and others like it. Stephani did not explicitly mention the leaf margins, but the spinose spores are described by him as 'papillis longiusculis confertis hispidissimae' (very hispid with longish crowded papillae). He cited an Ecklon specimen (apparently specimen 6C); a MacOwan collection (G024668) (evidently misnamed since it has entire leaf margins and is sterile); and a specimen of *Breutel* (G024665) from Genadendal, which has spinose spores and dentate leaves. Sim (1926) described the leaf margins of *F. crispa* as 'not dentate, the lower margin usually inflexed'. Some sterile Sim specimens at PRE, 7582 & 8024, have initially been identified by him as *F. zeyheri* and later as *F. crispa*, so his concept of the species may not always have been clear. According to Arnell (1963) the leaves of *F. crispa* are usually entire.

In the protologue of *J. (= F.) leucoxantha* (Lehmann 1829) the following is stated: 'foliis imbricatis horizontalibus subquadrato-rotundis involutis repando-crenatis inciso-dentatisque' (leaves imbricate, horizontal, subquadrate-rotund, rolled inwards, repand-crenulate and incised-dentate). It is stated to grow 'ad latus orientale et boreale montis Tafelberg, ad radicem montis Teufelsberg et in monte Löwenschwanz humi inter arbuscula'. I consider, *Ecklon 64* (specimen 6C), collected at Teufelsberg (Devil's Peak), to be a syntype of *F. leucoxantha*.

As already noted by Scott & Pike (1987), Stephani treated *F. leucoxantha* as a tumid-leaved plant (i.e. *F. tumida* Mitt.), because he studied a mixed collection of

these two species. The specimens he examined lacked spores, therefore he was unaware that the true *F. leucoxantha* (with incised dentate leaves) has spinose spores. My SEM micrographs of the spore ornamentation of the specimen *Ecklon L.29* (S) (Figure 5E, F), are slightly different from those published by Scott & Pike (1987), who selected it as the lectotype of *F. leucoxantha*, but they are nevertheless still within the acceptable range of variation in spore ornamentation for this species.

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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.

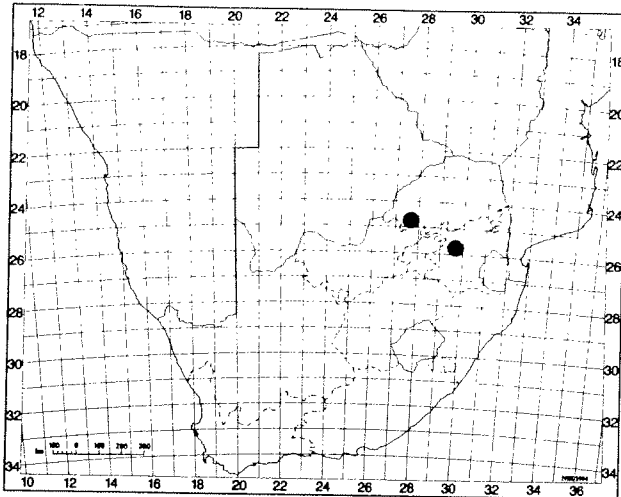


FIGURE 7.—Known distribution of *Portulaca rhodesiana* in South Africa.

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).

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

CAMPANULACEAE

VALID PUBLICATION OF *WAHLENBERGIA UITENHAGENSIS* VAR. *DEBILIS*

In a note in *Bothalia* 26: 157 (1996), the new combination *Wahlenbergia uitenhagensis* var. *debilis* was not validly published, as the basionym was not cited. This is now corrected.

Wahlenbergia uitenhagensis (H.Buek) Lammers var. *debilis* (Sond.) W.G.Welman comb. nov.

Lightfootia ciliata (Thunb.) Sond. var. *debilis* Sond.: 561 (1865). Holotype: Uitenhage, Winterhoek, *Zeyher 3131* (S).

L. divaricata H.Buek var. *debilis* (Sond.) Adamson: 182 (1955). Type as above.

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