

A Note on *Erythrophleum* R. Br. in South Africa

by

J. H. Ross

ABSTRACT

The Natal specimens of *Erythrophleum* have in the past been variously referred either to *E. lasianthum* Corbishley or to *E. suaveolens* (Guill. & Perr.) Brenan (= *E. guineense* G. Don). It was found that all specimens are referable to *E. lasianthum* and that *E. suaveolens* is absent from southern Africa. *E. guineense* G. Don var. *swaziense* Burt Davy was found to be a synonym of *E. lasianthum*. *E. lasianthum* and *E. africanum* (Benth.) Harms are the only two species encountered in southern Africa. A synopsis of the differences between these two species is given.

Whilst preparing the Caesalpinoideae for the revision of The Flora of Natal and Zululand (Bews, 1921) irregularities in the naming of specimens of *Erythrophleum* became apparent. The Natal specimens, although fairly uniform, have in the past been variously referred to *E. lasianthum* Corbishley or to *E. suaveolens* (Guill. & Perr.) Brenan (= *E. guineense* G. Don). Consequently it was necessary to establish the identity of the Natal specimens.

The stamen filaments in the Natal specimens are woolly tomentose to near the apex and cannot therefore be referred to *E. suaveolens*, which has glabrous stamen filaments. The Natal material is therefore all referable to *E. lasianthum*.

Burt Davy in Fl. Transv. 2:330 (1932) based his *E. guineense* var. *swaziense* on a specimen collected by *Nicholson* in Swaziland (without a precise locality). This variety differed from typical *E. guineense* "in the much smaller and relatively broader leaflets, which are more obtuse and rounded at base, and less acuminate at apex." Following the placing of *E. guineense* as a synonym of *E. suaveolens* by Brenan in Taxon 9:194 (1960), *E. guineense* var. *swaziense* has been regarded as a synonym *E. suaveolens* [De Winter *et al.* in Sixty Six Transvaal Trees:170 (1966)].

The type of var. *swaziense* is a fruiting specimen. However, four other specimens from Swaziland, all from the Stegi district, have been examined. Of these, one collected by the *Assistant Commissioner* H 30333 (PRE) in Nov. 1924, which is vegetatively indistinguishable from the type of var. *swaziense*, is in flower. The stamen filaments are woolly tomentose to near the apex thus proving the specimen to be referable to *E. lasianthum*. Since no other species of *Erythrophleum* is present in Natal, Swaziland or in southern Mozambique whilst none is present in the Transvaal, it is assumed that Burt Davy's type specimen is also referable to *E. lasianthum*. There is certainly no distinguishing character to enable any other conclusion to be reached.

Gomes e Sousa in Dendrologia Mozambique 1:244 (1966) records *E. lasianthum* from south of the Limpopo River, but I have seen no specimen from Mozambique. *E. lasianthum*, which is only recorded from Natal (Zululand), Swaziland and southern Mozambique, is apparently geographically isolated from any other species of *Erythrophleum*.

It seems necessary to clarify the various references in literature relating to *E. lasianthum*.

E. lasianthum Corbishley in Kew Bull.:27 (1922). Type: Natal, Ingwavuma, Nov. 1919, District Magistrate sub PRE H 1228 (K, holo.; PRE).

E. guineense G. Don var. *swaziense* Burt Davy in Fl. Transv. 2:330 (1932); v. Breitenbach in Indig. Trees of S. Afr. 3:319 (1965). Type: Swaziland, without precise locality or date, *B. Nicholson* s.n. (K, holo.; PRE sub H 30335, iso.). *E. guineense* sensu Henkel in Woody Pl. of Natal and Zululand: 236 (1934). *E. suaveolens* sensu Compton in Annotated Check List of the Flora of Swaziland, J.S. Afr. Bot., Suppl. 6:46 (1966); sensu De Winter *et al.* in Sixty Six Tvl. Trees:170 (1966); sensu Moll in Forest Trees of Natal:69 (1967).

The only other species of *Erythrophleum* encountered in the area delimited for the Flora of Southern Africa is *E. africanum* (Benth.) Harms, which occurs in South West Africa. As in *E. lasianthum*, the stamen filaments in *E. africanum* are woolly tomentose to near the apex although on occasional specimens (not in our area) the filaments are subglabrous. However, *E. africanum* and *E. lasianthum* differ in a number of characters and are readily distinguishable (see Table 1). Furthermore, there is a large geographical discontinuity between the species, *E. lasianthum* having a very restricted distribution in relation to *E. africanum* which is widespread in Africa.

TABLE 1.—Synopsis of the differences between *Erythrophleum africanum* and *E. lasianthum*

<i>E. africanum</i>	<i>E. lasianthum</i>
pinnae 2-5 pairs	pinnae 2-4 pairs
leaflets (6-) 8-17	leaflets 4-13
leaflets narrowly elliptic to elliptic or with ovate tendency, often somewhat asymmetric	leaflets ovate, ovate-elliptic, \pm symmetric
leaflets 1.2-6 \times 0.9-3 cm in South West Africa	leaflets 1.8-6.5 \times 1-3.5 cm
leaflets obtuse or sometimes rounded apically, not acuminate, \pm emarginate	leaflets usually with \pm pronounced acumen apically, emarginate
leaflets usually appressed-pubescent ab- and adaxially, often \pm glabrous above, or glabrous above and below except for pubescence on midrib abaxially	leaflets glabrous, midrib rarely slightly pubescent abaxially
leaflets coriaceous, venation conspicuous ab- and adaxially	leaflets thin, venation relatively inconspicuous apart from midrib
Petiolule pubescent, up to 4 mm long	Petiolule glabrous, up to 7 mm long
Rachides pubescent	Rachides glabrous

The differences between *E. suaveolens* and *E. africanum* were well amplified by Brenan in Fl. Trop. E. Afr. Legum.—Caesalpinioideae 18-21 (1967). As mentioned by Brenan *E. africanum* is "a distinctly variable species". *E. suaveolens* is readily distinguished from *E. lasianthum* in having glabrous or occasionally subglabrous stamen filaments. Certain vegetative specimens of *E. lasianthum* closely resemble some of those of *E. suaveolens*, but the leaflets in the former are usually smaller. However, because of the geographical discontinuity between the two species, it is unlikely that difficulty will be experienced in naming specimens.

I am grateful to Mr. E. G. H. Oliver, South African liaison botanist at the Royal Botanic Gardens, Kew, England, for information concerning type specimens.