

Notes on *Entada* in South Africa

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ABSTRACT

Miscellaneous information concerning the *Entada* species which occur in the area delimited for the Flora of Southern Africa is presented, and the distribution of each species within this area is indicated.

Of the four species of *Entada* which occur in the area delimited for the Flora of Southern Africa, three were known to Harvey when he wrote his account of the genus in Fl. Cap. 2: 276 (1862).

The first species dealt with by Harvey was *E. pursaetha* DC. [Harvey referred to this taxon as *E. scandens* (L.) Benth., a species which is now known to be a synonym of *E. phaseoloides* (L.) Merr.]. The only specimen cited by Harvey was "Wahlberg" and the locality given was "South Africa".

Harvey l.c.p. 277, described *E. wahlbergii*, basing his description of the species on a specimen in the Stockholm herbarium collected by Wahlberg. Once again, the locality recorded was "South Africa". Examination of this type specimen revealed that the label bears the locality "Goda Hopps-udden" (Cape of Good Hope). The Wahlberg specimen cited by Harvey under *E. scandens* carries the same locality. However, neither *E. wahlbergii* nor *E. pursaetha* occurs in the Cape Province. The only area within the territories covered by Flora Capensis where each of these two species occurs and could have been collected is in Natal or, more probably, in Zululand. Fortunately it is known that Wahlberg visited Natal and Zululand in 1843 (Folliott & Liversidge, Ludwig Krebs—Cape Naturalist to the King of Prussia: 138, 1971). There was a rather casual attitude towards localities from which specimens were alleged to have come on the part of some collectors during the eighteenth century and this probably accounts for the locality "Cape of Good Hope" on the labels.

E. pursaetha is found in low lying areas along the Zululand coast in riverine fringing vegetation and in swamp forest. Some years ago a solitary plant (Ward 5315) was found at Isipingo just south of Durban, but it is not known whether or not this plant was introduced. In any event the plant has since disappeared and the species is now not known to occur south of the Mtunzini district (see Fig. 1). Seeds of *E. pursaetha* are frequently washed up on Natal beaches and are sometimes even found on the Transkei coast.

In our area *E. wahlbergii* is found almost entirely in Zululand and at altitudes below 350 metres. There is a single collection (Edwards 1659) from just south of the Tugela river in the lower Tugela valley (see Fig. 1). As *E. wahlbergii* occurs north and south of the Tugela river it is unfortunately not possible to establish whether Wahlberg collected the type specimen in Zululand or in Natal.

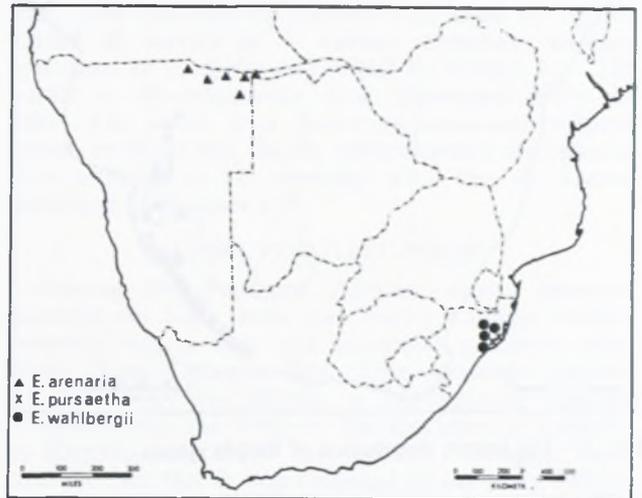


FIG. 1.—The known distribution of *Entada arenaria*, *E. pursaetha* and *E. wahlbergii* in the area delimited for the Flora of Southern Africa.

The third species dealt with by Harvey was *E. natalensis* Benth., now regarded as a synonym of *E. spicata* (E. Mey.) Druce. Harvey recognized var. *aculeata* within *E. natalensis*, basing the variety on "a garden plant raised at Cape Town from Natal seeds, Commis. Genl. J. D. Watt (Herb. Hk., D)". Recently the material housed at Trinity College, Dublin, was examined and among it were two specimens from J. D. Watt's garden; one in flower and the other in fruit. Despite Harvey's mention of the presence of a specimen in Hooker's herbarium, there is apparently no specimen in the Kew Herbarium now.

The young stems and leaf-rhachides of the two syntypes of *E. natalensis* var. *aculeata*, particularly those of the fruiting specimen, are covered with numerous scattered recurved prickles, whence the varietal epithet. Recurved prickles are very variable in their occurrence in *E. spicata*, some specimens having only a few, some none at all, while others are very heavily armed. Consequently, the numerous prickles on the syntypes of var. *aculeata* are considered as no more than part of the range of variation of the species and not worthy of varietal rank. Harvey also drew attention to the broader and more glabrous leaflets in var. *aculeata* but, once again, with the more abundant material now available, it is apparent that these characters likewise form part of the overall range of variation of the species and do not serve to distinguish var. *aculeata* from the remainder of the material.

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E. spicata is endemic in South Africa (see Fig. 2). The record of *E. natalensis* Benth. (i.e. *E. spicata*) by Sim, For. Fl. P.E. Afr.: 53 (1909), probably refers to *E. schlechteri* (Harms) Harms although the description indicates *E. spicata*. *E. spicata* has not yet been collected in Mozambique but it may well occur in the southern part of that territory. Similarly, *E. schlechteri*, which is known only from southern Mozambique, may yet be found in our area. Unlike *E. spicata* which has yellowish-white flowers, *E. schlechteri* has red flowers.

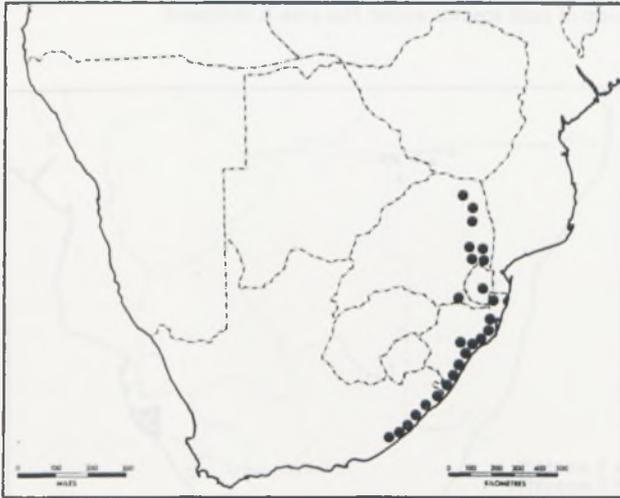


FIG. 2.—The known distribution of *Entada spicata*.

The earliest available name for the fourth taxon occurring in our area is *E. arenaria* Schinz. Schinz, in Mem. Herb. Boiss. 1: 118 (1900), based his description of *E. arenaria* on a specimen he collected in Amboland in South West Africa. The type specimen in the Zurich herbarium is a very poor one consisting of portion of a stem plus the remains of a few old pods. With such poor type material it is hardly surprising that the type description is very brief and rather unsatisfactory. Brenan, in Fl. Zamb. 3, 1: 20 (1970), adopted the name *E. nana* Harms for this taxon but, in doing so, stated: "It is possible that *E. arenaria* Schinz (in Mem. Herb. Boiss. 1: 118, 1900), based on a type from S.W. Africa, is conspecific with *E. nana*, and if this were proven it would be the earliest

name for the species. The type of *E. arenaria* is, however, so inadequate, consisting only of a few ancient fragmentary pods, that I consider that this name should be rejected as being of uncertain application."

I have examined Schinz 277, the type of *E. arenaria* and, despite its rather fragmentary nature and the above comment, am of the opinion that the specimen can be positively identified. All of the specimens collected in South West Africa, especially those from the type locality of *E. arenaria*, agree with Schinz 277 in having longitudinally striate and densely puberulous stems, and pods which are of similar dimensions and texture. The specimens also agree in habit. Consequently, I am satisfied that *E. arenaria* is an earlier name than *E. nana* and must therefore be adopted.

In some ways this is perhaps unfortunate because Harms provided a comprehensive description of *E. nana* in Warb., Kunene-Samb. Exped.: 244 (1903) and there is an excellent isotype in the Edinburgh herbarium. Furthermore, Brenan in Kew Bull. 20: 373 (1966) recognised subsp. *microcarpa* within *E. nana*, basing the subspecies on a specimen from Zambia. As *E. arenaria* is an earlier name than *E. nana* it becomes necessary, therefore, to transfer subsp. *microcarpa* to *E. arenaria*.

***Entada arenaria* Schinz** in Mem. Herb. Boiss. 1: 118 (1900). Type: South West Africa, mittellauf des Omuramba ua Matakato, Schinz 277 (Z, holo.!).

subsp. ***arenaria***.

E. nana Harms in Warb., Kunene-Samb. Exped. 244 (1903); Harms in Engl., Pflanzenw. Afr. 3 (1): 403 (1915); Bak.f., Leg. Trop. Afr. 3: 787 (1930); Torre in Consp. Fl. Angol. 2: 258, t.51 (1956); F. White, For. Fl. N. Rhod. 92 (1962); Brenan in Fl. Zamb. 3, 1: 19 (1970). Type: Angola, Habungu, Baum 471 (E, iso.!).

subsp. ***microcarpa* (Brenan) J. H. Ross**, comb. nov.

Entada nana subsp. *microcarpa* Brenan in Kew Bull. 20: 373 (1966); Fl. Zamb. 3, 1: 20 (1970). Type: Zambia, Mwinilunga Distr., Dobeka Bridge, Milne-Redhead 4496 (K, holo.!).

E. sp. 2, F. White, For. Fl. N. Rhod.: 92 (1962).

The material of subsp. *microcarpa* is still rather limited and by no means homogenous in its pods. The correct taxonomic status of subsp. *microcarpa* is still not absolutely clear at this stage but, as indicated by Brenan, it seems more prudent to regard it as a northern subspecies rather than to regard it as specifically distinct.