

FABACEAE

THE IDENTITY OF *CALPURNIA SERICEA* HARV.

Harvey, in Fl. Cap. 2: 267 (1862), based his description of *Calpurnia sericea* on a specimen collected by Von Schlicht in Lesotho. Few, if any, specimens have been referred to *C. sericea* subsequently and the identity of the species has remained in doubt. Phillips, in Ann. S. Afr. Mus. 9: 479 (1917), cited *C. sericea* as a synonym of *C. robinoides* (DC.) E. Mey. but this was clearly because he did not have the opportunity of studying the type material, while Yakovlev in his treatment of the genus in Nov. Syst. Vyssh. Rast. 8: 181–184 (1971) made no mention of *C. sericea* at all.

Through the courtesy of Prof. B. Nordenstam, Curator of the Botany Section of the Museum of Natural History, Stockholm, the holotype of *C. sericea* was received on loan from the Sonder Herbarium. The holotype consists of a small flowering twig. The leaves have 6–8 pairs of leaflets which are densely appressed-villous on both surfaces but especially along the midrib on the lower surface. The inflorescences are shorter than the leaves and the ovaries are pubescent on the margins only. Although Harvey stated that the holotype was collected by Von Schlicht in Lesotho (Basutoland), a note on the specimen written by Sonder says that Harvey was in error in assuming that Von Schlicht collected the specimen. According to Sonder the specimen was collected in Lesotho by a missionary whose name was unfortunately unknown to him. As far as is known Von Schlicht only collected in Namaqualand.

On examining the holotype it was at once apparent that *C. sericea* and *C. obovata* Schinz, in Bull. Herb. Boiss. 4: 426 (1896), are conspecific and that *C. sericea*, being the earlier name, must be adopted for

this species. Yakovlev recognized two varieties within *C. obovata* Schinz, namely, var. *obovata* in which the ovaries are pubescent on the margins only, and var. *pubescens* in which the ovaries are pubescent throughout. As *C. sericea*, as it is now to be called, is a fairly polymorphic species, all of the available material was examined in an attempt to evaluate the significance of the degree of pubescence of the ovary in delimiting varieties within the species.

Examination of the material revealed that the degree of pubescence of the ovary is not correlated with the degree of pubescence of the leaflets, with leaflet size, shape or number, or with geographical distribution. *Codd & Dyer* 6263 from the Utrecht district of northern Natal is a fairly good match of *Thode* A270 from Kafir Drift-Tweekloof, Utrecht district, northern Natal, the holotype of var. *pubescens*, but differs in having slightly larger leaves. *Tinley* 628 from Giants Castle, Natal, which is a good match of *Codd & Dyer* 6263, differs, however, in that the ovaries are pubescent on the margins only. Thus, two specimens with an almost identical facies key out to two different varieties. Likewise, specimens with a dissimilar facies key out to the same variety on the basis of the degree of pubescence of the ovary. Even among the specimens which have ovaries pubescent throughout there is considerable variation in the degree of pubescence of the leaflet surfaces. In the holotype of var. *pubescens* the upper and lower leaflet surfaces are densely appressed-villous, in *Codd & Dyer* 6263 the upper leaflet surfaces are sparsely appressed-villous and the lower $\pm$ glabrous, while in *Marais* 1275 from the eastern Orange Free State the leaflets are $\pm$ glabrous

throughout. A similar range of variation in the indumentum of the leaflets is present among specimens with ovaries pubescent on the margins only.

The degree of pubescence of the ovary has been used for delimiting subspecies within *C. aurea* (Ait.) Benth. but in this species the degree of pubescence of the ovary is correlated with the degree of pubescence of the leaflets and with geographical distribution. In the case of *C. sericea*, however, the degree of pubescence of the ovary is not correlated with any other morphological character or with geographical distribution. Consequently, it is not intended to uphold the varieties within *C. sericea*.

The relevant changes in nomenclature are summarized as follows:

***Calpurnia sericea* Harv.** in Fl. Cap. 2: 267 (1862).
Type: Lesotho, *collector unknown* 82, (S, holo.!).

C. obovata Schinz in Bull. Herb. Boiss. 4: 426 (1896). Type: Natal, Ingunga, *Schlechter* 6310 (Z, holo.!). *C. obovata* var. *pubescens* Yakovlev in Nov. Syst. Vyssh. Rast. 8: 183 (1971). Type: Natal, Utrecht district, Kafir Drift-Tweekloof, *Thode* A270 (K, holo.!, PRE, iso.!).

C. mucronulata Harms ex Kuntze, Rev. Gen. 3 (2): 54 (1898). Type: Natal, Klip River district, Van Reenen's Pass, *Kuntze* (K, iso.!).

C. intrusa auct., non (R. Br. ex Ait.f.). E. Mey. sensu stricto.

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