

BORAGINACEAE

THE TAXONOMIC STATUS OF *LOBOSTEMON HORRIDUS*

Levyns (1934) in describing *L. horridus* Levyns, lists a *Levyns 2881* collection. She did not, however, personally collect this material as it is clear from the particular herbarium label that J. Rennie was the collector. Levyns based her description on two herbarium specimens available to her, namely *Compton 2971* (BOL) and *J. Rennie s.n. sub Levyns 2881* (BOL, STE). Subsequent collections have been few and far between. A total of four collections,

the last being *Acocks 23698* (PRE) in 1965, had been made at the onset of the current revision of the genus. The aforementioned scarcity of collections resulted in *L. horridus* being included in the *Red Data List of southern African plants* (Hilton-Taylor 1996). All attempts to re-collect the taxon at the type locality have failed. The most recent collection close to the type locality has been *M.H. Buys 523* at Pienaarskloof, about 40 km northwest of Mat-

jiesfontein. Examination of all available herbarium specimens as well as field work led us to suspect that *L. horridus* and *L. paniculatus* are conspecific.

According to the diagram presented by Levyns (1934: 412), *L. paniculatus* and *L. horridus* are closely related. Although Levyns provides no summary of differing characters in her diagnosis of *L. horridus*, one can catch a glimpse at what her thoughts might have been through her choice of the specific epithet. The herbarium specimens at her disposal both exhibit leaves with an extremely spinous indumentum. The current revision has confirmed that leaf characters based on the indumentum are unreliable for systematic purposes. Levyns (1934) warns against the undue use of morphological characters in *Lobostemon*, yet leaf shape and indumentum type distinguish *L. paniculatus* from *L. horridus* in her key.

A critical comparison of characters between *L. paniculatus* and *L. horridus* reveals no significant diagnostic differences between them. The difference in hairiness of the leaves, the pronounced midrib and thickened margins are ascribed to arid habitats. The less spiny forms (= *L. paniculatus*) are generally to be found near water in and amongst the larger mountain ranges of the Swartberg. The spiny forms (= *L. horridus*) become more abundant as one proceeds further into the interior of South Africa. The variation allowed here in the indumentum with the sinking of *L. horridus* is no greater than that allowed for in *L. echiioides* for example.

L. paniculatus and *L. horridus* share the following character states to the exclusion of the other members of the section *Lobostemon*: 1, adaxial surface of young leaves appearing glabrous, becoming hairy with age; 2, possession of two distinct trichome lengths; 3, two corolla lobes slightly larger than the rest; 4, hairs on the abaxial side of the corolla lobes largely confined to the midveins (this differs markedly from *L. echiioides* where the hairs are confined to the distal parts of the lobes); 5, identical fruit structure.

It is for the above reasons that *L. horridus* Levyns is viewed to be conspecific with *L. paniculatus*. The nomenclatural history of *L. paniculatus* therefore reads as follows:

***Lobostemon paniculatus* (Thunb.) Buek** in Linnaea 11: 139 (1837); DC.: 8 (1846); C.H. Wright: 33 (1904); Levyns: 418 (1934). Type: Cap. b. Spei, Thunberg s.n. sub UPS 4109 (UPS, holo.).

Echium paniculatum Thunb.: 33 (1794); Willd.: 784 (1798); Pers.: 163 (1805); Schrad.: 41 (1806); Poir.: 675 (1808); Thunb.: 9 (1811); Lehm.: 425, 473 (1818); Roem. & Schult.: 11 (1819); Lehm.: t. 23 (1823); Thunb.: 165 (1823).

Lobostemon horridus Levyns: 419 (1934). Type: Whitehill near Matjiesfontein, J. Rennie s.n. sub Levyns 2881 (BOL, lecto.; STE, iso.).

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