Amber Srivastava\textsuperscript{a}, Sangita Dey\textsuperscript{b,*}, Sunil Kumar Srivastava\textsuperscript{a} and Lakhi Ram Dangwal\textsuperscript{c}: Lectotypification of Eremostachys superba (Lamiaceae, Phlomideae)

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Summary: The lectotype is designated here for the name Eremostachys superba Royle ex Benth., the basionym of Phlomoides superba (Royle ex Benth.) Kamelin & Makhm. (Lamiaceae).

The genus Eremostachys Bunge (Lamiaceae) consists of ca. 60 species primarily distributed in Western and Central Asia (Mabberly 2008). Only a single species Eremostachys superba Royle ex Benth. currently accepted as Phlomoides superba (Royle ex Benth.) Kamelin & Makhm. is found in India and is reported from India, Pakistan and East Afghanistan (Srivastava et al. 2017).

The species is endangered due to its overexploitation (tuberous roots used to increase lactation in cattle) and habitat loss (natural habitat encroached for cultivation). In India it is nearly extinct from its type locality (Kheree Pass, Dehradun, Uttarakhand) and is now known only from ten localities of Jammu & Kashmir, Himachal Pradesh and Uttarakhand in India (Srivastava et al. 2017).

A search of the international herbarium databases B, BR, BSD, CAL, CGE, DD, E, G, K, LE, LIV [originally Royle’s herbarium, donated by his wife in 1859, after his death (Heywood 1956)], PH and TCD (Thiers 2017) and examination of type images made accessible by the Global Plants website (JSTOR 2017) was undertaken to find out the original material belonging to this name. In addition a thorough study of the relevant literature has also been done.

Typification

Bentham (1833) described Eremostachys superba based on John Forbes Royle’s gathering from Kheree Pass (now Mohand Pass), Dehradun, Uttarakhand, India. We traced specimens that could be considered as original material (Art. 9.4 of the ICN; Turland et al. 2018) at LIV (acc. no. 1952.121.6339) [one specimen mounted on several herbarium sheets, but clearly labelled as part of the same specimen (Art. 8.3 of the ICN; Turland et al. 2018)], K (K000894387 and K000894388), CAL (CAL0000026670), P (P00686229 and P00686230) and LE (LE01018491). According to the protologue (Bentham 1833), E. superba was collected from Kheree Pass and since Royle (1839a) collected it from the same locality, it can be assumed that all the Royle’s specimens are from this locality only.

The specimen in LIV bears sketches similar to the illustration of Eremostachys superba published by Royle (1839b), but it is in poor preservation status and the diagnostic characters of the species viz. pinnatisect leaves and ovate, acute floral bracts are not clear. The specimen housed in CAL (N-W India, J. F. Royle) is not well preserved and hence inflorescence features are not visible. The specimens at K (K000894388) and LE (LE01018491) both collected from NW India by J. F. Royle are well preserved showing all the details and bear original label of Royle herbarium. These specimens are however without any annotation.
and hence selected as lectotype to fix the current usage of the name *E. superba*.


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**References**


