

PLANT SPECIES DESCRIBED BY GEORGE BENTHAM AND JOSEPH HOOKER IN HENDERSON AND HUME'S *LAHORE TO YĀRKAND*

I. M. TURNER

Five plant species (*Apocynum hendersonii* Hook.f. (Apocynaceae), *Deyeuxia anthoxanthoides* Munro ex Hook.f. (Gramineae), *Hololachna shawiana* Hook.f. (Tamaricaceae), *Iphiona radiata* Benth. (Compositae) and *Saussurea ovata* Benth. (Compositae)) were described from specimens collected by George Henderson on the political mission to Yarkand (now in Xinjiang Province of China) in 1870. The names, with accompanying descriptions and illustrations, appeared in *Lahore to Yārkand* by Henderson and A. O. Hume. An exact publication date of 1 April 1873 is established for this work of relevance to avian as well as plant taxonomy. The typification of the plant species names to specimens in the Kew herbarium is reviewed. Four new lectotypes are proposed.

Keywords. Central Asia, George Bentham, George Henderson, Joseph Hooker, lectotype, Xinjiang.

INTRODUCTION

Geopolitical manoeuvring during the 19th century provided an impetus for many journeys of exploration through Central Asia (Hopkirk, 1990). One such was the Forsyth political mission to Yarkand in 1870. This involved travel from British India to Yarkand, in what was then termed East Turkistan (now Xinjiang Province of China), via Kashmir; and back again. The British members of the mission were the leader T. D. (later Sir Douglas) Forsyth; Robert Barkley Shaw, who had been in Yarkand the previous year; and, as Medical and Scientific Officer, George Henderson. A considerable entourage of assistants and servants from various parts of the subcontinent and further afield made up the bulk of the party.

Henderson travelled from Lahore, leaving on 15 May 1870, to join the expedition, hence the title of the book that includes Henderson's account of the expedition. The purpose of the visit was to curry favour with the local leader, Yakub Beg, who was considered to be open to promoting British interests in the area. To this end, the mission was fruitless, because Yakub Beg was away from Yarkand when they arrived on 23 August 1870. However, Henderson made ample use of the opportunity in collecting natural history specimens, particularly plants and birds. Allan Octavian Hume helped write up the ornithological account of the expedition, including the description of a

THE BOOKSELLER, APRIL 1, 1873.

Now ready, with 32 Coloured Plates of Birds, 6 of
Plants, 26 Photographic Views, a Map and
Geological Sections, price 42s.

LAHORE TO YARKAND. Incidents
of the Route and Natural History of the
Countries traversed by the Expedition of 1870, under
T. D. FORSYTH, Esq., C.B. By GEORGE HENDER-
SON, M.D., F.L.S., F.R.G.S., Medical Officer of the
Expedition, and ALLAN O. HUME, Esq., C.B.,
F.L.S., Secretary to the Government of India.
J. REEVE & Co., 5, Henrietta St., Covent Garden.

FIG. 1. Advertisement for *Lahore to Yarkand* that appeared in *The Bookseller* of 1 April 1873.

number of new species. Henderson worked on the botanical part but sought assistance from George Bentham and Joseph Hooker with describing the new species. Five of these were included in the book: two composites, a grass, a tamarisk and a dogbane. Henderson deposited specimens from the expedition in the Kew herbarium (Jackson, 1901: 31). Except for a single specimen in Edinburgh distributed from Kew, I am not aware of plant specimens collected on the Yarkand mission in any other herbarium.

The purpose of this short paper is to review these plant names and their typification. The work stems from attempts to establish priority between the Henderson and Hume book and Bentham and Hooker's *Genera Plantarum*, because the name *Iphiona radiata* is published in both works. When it was found that the original material for this name was not in a type cover in the Kew herbarium, I decided to check the other names published in *Lahore to Yarkand*. The text (p. vii and the individual species accounts) makes it clear that the names and descriptions of the new species are attributed to either Bentham or Hooker.

The publication of both *Lahore to Yarkand* and volume 2 part 1 of *Genera Plantarum* occurred in April 1873. Stearn (1956) narrowed the date of publication for the relevant part of *Genera Plantarum* to 7–9 April. Both *The Bookseller* (Fig. 1) and *The Publishers' Circular* of 1 April carried advertisements stating that *Lahore to Yarkand* was now ready. Therefore, I take 1 April 1873 as the publication date of *Lahore to Yarkand*, and so I consider that 'Henderson and Hume' have priority over 'Bentham and Hooker' by about 1 week in this case.

NEW PLANT SPECIES

Apocynum hendersonii Hook.f. in Henderson & Hume, *Lahore Yarkand*: 327–328, unnumbered plate (1 April 1873). – Type: China, Xinjiang, Yarkand, *G. Henderson 491*, 23 August 1870 (lecto K (2 sheets), designated here (or possibly holo)).
= *Apocynum pictum* Schrenk, Bull. Cl. Phys.-Math. Acad. Imp. Sci. Saint-Petersbourg 2: 115 (1844).

There are two sheets from Yarkand in the Kew herbarium. They are both labelled 'bis', which was Kew herbarium practice to indicate that material from the same collection was mounted on more than one sheet, so the two sheets are considered to represent

one specimen. Because Hooker did not make a type designation or cite any specimen explicitly, a lectotype designation is made here.

Deyeuxia anthoxanthoides Munro ex Hook.f. in Henderson & Hume, Lahore Yārkand: 339–340, unnumbered plate (1 April 1873). – Type: China, Xinjiang, Sanju Pass, Yarkand, 15–16,000 feet, *G. Henderson s.n.*, 9 August 1870 (lecto K (K000838303), designated here; isolecto K (K000838302)).

≡ **Calamagrostis anthoxanthoides** (Munro ex Hook.f.) Regel, *Trudy Imp. S.-Peterburgsk. Bot. Sada* 7: 640 (1880).

In this case, there are two sheets representing the original material of the species, but there is no indication that they make up the same specimen. Therefore a lectotype is designated. There is little to choose between the specimens, but the lectotype sheet selected has a more extensive label.

Hololachna shawiana Hook.f. in Henderson & Hume, Lahore Yārkand 313–314, unnumbered plate (1 April 1873), as *Hololachne*. – Type: China, Xinjiang, Yarkand, common along Karakash and Sanju rivers, *G. Henderson s.n.*, August 1870 (lecto K (K000641967), designated here (or possibly holo)).

= **Reaumuria songarica** (Pallas) Maxim., *Fl. Tangut.* 1: 97 (1889), as *R. soongorica*.

Presumably, Hooker commemorated expedition member Robert Shaw with the epithet of this species. Because Hooker did not make a type designation or cite any specimen explicitly, a lectotype designation is made here.

Iphiona radiata Benth. in Henderson & Hume, Lahore Yārkand: 323–324, unnumbered plate (1 April 1873); Bentham & Hooker, *Gen. Pl.* 2(1): 333 (7–9 April 1873). – Type: [China, Xinjiang, Yarkand], *G. Henderson 512*, 23 August 1879 (lecto K, designated here).

= **Inula salsoloides** (Turcz.) Ostenf. in Hedin, *S. Tibet* 6(3): 39 (1922).

There are four specimens mounted on one sheet in the Kew herbarium. Each specimen has a ticket with Henderson's field number and a date. From these four syntypes, one specimen, marginally better than the rest, is selected as lectotype.

Saussurea ovata Benth. in Henderson & Hume, Lahore Yārkand: 325–326, unnumbered plate (1 April 1873). – Type: China, Xinjiang, Yarkand, 12,000 ft, *G. Henderson 356*, 10 August 1870 (lecto K (K000035727), designated here (or possibly holo)).

Because Bentham did not make a type designation or cite any specimen explicitly, a lectotype designation is made here.

ACKNOWLEDGEMENTS

Comments from two anonymous reviewers helped to improve the paper.

REFERENCES

- HENDERSON, G. & HUME, A. O. (1873). *Lahore to Yārkaṅd. Incidents of the Route and Natural History of the Countries Traversed by the Expedition of 1870, Under T.D. Forsyth, Esq., C.B.* London: L. Reeve & Co.
- HOPKIRK, P. (1990). *The Great Game: On Secret Service in High Asia*. London: John Murray.
- JACKSON, B. D. (1901). A list of the collectors whose plants are in the herbarium of the Royal Botanic Gardens, Kew to 31st December, 1899. *Bull. Misc. Inform. Kew* 1901(169–171): 1–80.
- STEARNS, W. T. (1956). Bentham and Hooker's *Genera Plantarum*: its history and dates of publication. *J. Soc. Bibliogr. Nat. Hist.* 3(2): 127–132.

*Received 11 April 2016; accepted for publication 6 July 2016;
first published online 31 August 2016*