(1682) Proposal to conserve the name *Paeonia broteri* against *P. lusitanica* (*Paeoniaceae*)

De-Yuan Hong¹ & Santiago Castroviejo²

¹Laboratory of Systematic & Evolutionary Botany, Institute of Botany, Chinese Academy of Sciences, Xiangshan, Beijing 100093, China. hongdy@ns.ibcas.ac.cn (author for correspondence)

²Real Jardin Botánico, CSIC, Plaza de Murillo 2, 28014 Madrid, Spain. castroviejo@ma-rjb.csic.es

- (1682) **Paeonia broteri** Boiss. & Reut., Biblioth. Universelle Genève 38: 196; Diagn. Pl. Nov. Hisp. 4 Mar 1842 [Dicot.: Paeon.], nom. cons. prop. Typus: "Paeonia nov. sp.? Colmenar viejo, Choras [Chozas] et Miraflores, in dumetis, 14.15.16. mai 1841", Reuter s.n. (G; isotypi: BM, G, K).
- (=) Paeonia lusitanica Mill., Gard. Dict. ed. 8: Paeonia No. 6. 16 Apr 1768.

 Neotypus (hic designatus): Spain, Madrid, Sierra de Guadarrama, El Escorial, La Herrería, 30TVK0309, 700 m, 2 Jun 2004, Carrasco & al. 17437SC (MA No. 714084; isoneotypi: BM, G, K, PE).

In Portugal there is a peony that also occurs in Spain and is endemic to the Iberian Peninsula. Miller (Gard. Dict. ed. 8: *Paeonia* No. 6. 1768) described it with the name *Paeonia lusitanica*, and some years later, in the ninth edition of his Gardener's Dictionary (vol. 2, 1807), treated it as *P. officinalis* L. var. *lusitanica* (Mill.) Mill. At specific rank it was recognized only by Tausch (in Flora 11: 81–89. 1828), Sampaio (Samp., Man. Fl. Portug.: 183. 1910; Fl. Port.: 219. 1947), and Coutinho (in Bol. Soc. Brot., sér. 2, 10: 91. 1935). Candolle (DC., Syst. Nat. 1: 386–396. 1817) considered *P. lusitanica* Mill. as a synonym of *P. lobata* Desf. ex DC.

Based on plants collected in Central Spain, Boissier & Reuter (Diagn. Pl. Nov. Hisp.: 4. 1842) described a peony as a new species, *P. broteri* Boiss. & Reut. Most subsequent authors adopted Boissier & Reuter's name for the Portuguese and Spanish plant: e.g., Amo, Fl. Fan. Peníns. Ibérica 6: 746. 1873; Willkomm in Willkomm & Lange, Prodr. Fl. Hispan. 3: 975. 1880; Lynch in J. Roy. Hort. Soc. 12: 436. 1890; Lázaro Ibiza, Comp. Fl. Españ., ed. 2, 2: 356. 1907; Stebbins in Univ. Calif. Publ. Bot. 19: 260. 1939; Stern in J. Roy. Hort. Soc. London 68: 127. 1943 & Genus Paeonia: 127. 1946). Others adopted this epithet at infraspecific rank, as P. mascula var. broteri (Boiss. & Reut.) Gürke (in Richter, Pl. Eur. 2: 401. 1897) or as P. corallina var. broteri (Boiss. & Reut.) Coss. (Comp. Fl. Atlant. 2: 53. 1887), the latter name also used by Huth (in Bot. Jahrb. Syst. 14: 267. 1892) and Schipczinsky (in Bot. Mater. Gerb. Glavn. Bot. Sada RSFSR 2(11–12): 45. 1921).

F. C. Stern (l.c. 1946) stated: "It is not, in my opinion, certain which plant Miller was describing; his description... might well fit *P. humilis* (= *P. officinalis* ssp. *microcarpa*)...

I am not satisfied that the plant described by Miller as *P. lusitanica* is indeed the Portuguese plant and therefore am keeping to the well-known name of *P. broteri* for the Portuguese plant". According to Stern, *P. lusitanica* was an ambiguous name and thus could not be used. All botanists thereafter followed Stern in using *P. broteri* [broteroi] (Cullen & Heywood in Tutin & al., Fl. Eur. 1: 243. 1964; Akeroyd in Tutin & al., Fl. Eur., ed. 2, 1: 293. 1993; Muñoz Garmendia & Navarro in Castroviejo & al., Fl. Iber. 3: 146. 1993). A lectotype for *P. broteri* has been designated by Burdet & al. (in Candollea 45: 729. 1988), and we have confirmed its identity in all types cited above.

Because some references have adopted the alternative spelling "broteroi" for this epithet, we would like to point out that the real name of Brotero was Félix da Silva de Avellar (1744–1828). He used the name Brotero only as a botanist. In his *Flora Lusitanica* he latinized his name as Broterus, and all subsequent authors followed him. Thus, Broterus is a well-established latinized form, in nominative, the genitive of which is Broteri. The formation of this epithet conforms to Rec. 60C.2 of the ICBN (Greuter & al. in Regnum Veg. 138. 2000) and thus it is not correctable under Art. 60.11.

As Miller (l.c.) explained in the protologue, the seeds of *P. lusitanica* "...were sent to Chelsea Garden by Jussieu, who brought them from Portugal, where the plants grow naturally. The root of this sort is not composed of roundish tubers or knobs, but hath [has] two or three long, taper, forked fangs like fingers... leaves composed of three or four oval lobes, of a pale colour on their upper side, and hoary on their under...". Since original material of *P. lusitanica* is lacking at BM, we have only the locality and the description of its roots and leaves upon which to base our determination of its identity.

According to Muñoz Garmendia & Navarro (l.c.: 144–150), in the Iberian Peninsula there are only four different *Paeonia*: *P. broteri*, *P. officinalis* subsp. *microcarpa* (Boiss. & Reut.) Nyman, *P. mascula* (L.) Mill. (subsp. *mascula*) and *P. coriacea* Boiss.; two of them—*P. broteri* and *P. officinalis* subsp. *microcarpa*—occur also in Portugal. Miller's description fits very well the Portuguese peony known as *P. broteri*, which has carrot-shaped roots and oval leaf lobes. Our interpretation is that Miller's description can only apply to *P. broteri* because *Paeonia officinalis* subsp. *microcarpa* (= *P. humilus* Retz.) has roots composed of rounded knobs or tubers and Miller distinguished clearly

this type of roots. Besides, *P. mascula* subsp. *mascula* has carrot-shaped roots but is confined to northern Spain, and its leaf segments are oval-rounded, not "oval lobes"; and *P. coriacea* is found only in southern Spain and Morocco.

To clarify and stabilize the application of this name, we have here designated a neotype for *P. lusitanica* Mill. With this designation, *P. lusitanica* would be the earliest available name for the Portuguese and central Spanish peony and, as a consequence, P. broteri would become its synonym. But, as we have stated before, P. broteri has been commonly accepted in floras, catalogues, and books on horticulture or gardening, and changing the correct name for this plant would create confusion. To avoid these potential problems, we propose to conserve P. broteri Boiss. & Reut. against P. lusitanica Mill. Alternatively, we could have proposed P. lusitanica for outright rejection under Art. 56, a course that would not have required its typification. But because we believe that a complete evaluation of Miller's long-neglected name is the only proper approach, we have chosen conservation as our remedy.

Acknowledgements

The authors wish to thank Steve Cafferty for checking the BM herbarium for original material of *P. lusitanica* and to John Wiersema for correcting the manuscript.