## **GERANIACEAE**

## LECTOTYPIFICATION OF PELARGONIUM MULTIBRACTEATUM

In the description of *Pelargonium multibracteatum* in Richard's *Tentamen florae abyssinicae* 1: 119 (1847), two Schimper collections are referred to in the heading of the protologue and a locality for a Schimper collection is given as near Axum in the list of material seen. A further three collections from various localities made by Dillon are cited in the list of material seen. These collections can all be considered to be syntypes.

Up to now no lectotype has been designated for *Pelargonium multibracteatum* in accordance with Art. 9.2 of the ICBN (Greuter *et al.* 1994). In all Kokwaro's papers on the Geraniaceae of northeast Africa (1969, 1971a, 1971b) in which he treated this species, only the syntypes were cited without selecting a lectotype, possibly because

he considered *P. multibracteatum* to be a subspecies of *P. alchemilloides* (L.) L' Hérit. and therefore thought the selection of a lectotype of minor importance. Van der Walt & Vorster (1988: 91) cited all the syntypes seen by them, again declining to select a lectotype. However, for the treatment of *Pelargonium* for the *Flora of Ethiopia* by the senior author, it has become necessary to select a lectotype.

The first question to be addressed is: who is the validating author of the name? Knuth (1912: 433), Dyer (1940: t. 794), and Richard (1847: 119) cited Hochstetter as the author; Engler (1895: 225), Cufodontis (1956: 351), and Kokwaro (1969: 530; 1971a: 666) cited Hochstetter ex A. Richard; Kokwaro (1971b: 21) cited A. Richard; and Van

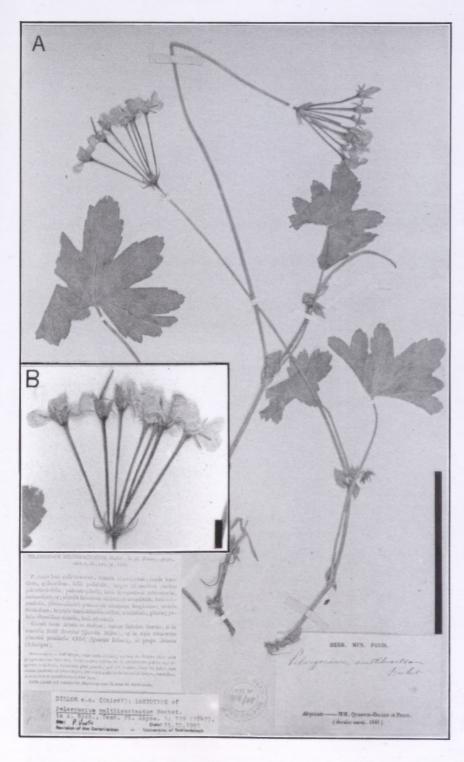


FIGURE 4.—Pelargonium multibracteatum: lectotype sheet (Dillon s.n. in P). Scale bar: A, 100 mm; B, 10 mm

der Walt & Vorster (1988: 91) cited Hochstetter in A. Richard. According to Friis (1993: 185) practically none of Hochstetter's new names were accompanied by descriptions. The name *Pelargonium multibracteatum* first appeared in print on a herbarium label for *Schimper 51*, distributed by Hochstetter on 26 October 1837; and again on a label for *Schimper 1489*, distributed on 23 November 1842. It also appeared in Hochstetter's (1841) list of Schimper collections. None of these publications satisfies the conditions for valid publication (ICBN Art. 32; Greuter *et al.* 1994), and the first description of the species was only published in 1847, by Richard. There is no evidence that Hochstetter contributed towards this description, and therefore Richard is the sole validating author.

The second question is: which specimens did Richard use to compile his description? Following the description, four collections are cited, namely, *Dillon 316* (inter Adoua et Ocbasa), *Dillon 205* (Taccazé), *Dillon s.n.* (Chiré), and *Schimper 1489* (Axoum). However, as authority for the name, Hochstetter's label for *Schimper 51* is also cited. We here accept that Richard did indeed see *Schimper 51*. It is unlikely that he saw a detached label only, and we surmise that he would have been unable to link the name with a species unless he saw an actual specimen.

According to Stafleu & Cowan (1983: 764), the original set of specimens on which Richard's *Tentamen* is based, is lodged in P. They also state that the *Tentamen* 

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is based on material collected by R. Quartin Dillon and Antoine Petit, but *P. multibracteatum* is clearly also based on *Schimper 51* and *1489*. In P there are indeed specimens of all the collections cited by Richard.

For lectotypification purposes, the three Dillon collections are not particularly suitable, being relatively poor specimens with few duplicates in other herbaria. Of Schimper 51 there are six sheets in P with numerous duplicates in other herbaria, and of Schimper 1489 there are two sheets in P with several duplicates in other herbaria. However, the only really good sheets of the Schimper collections bear stamps 'Herb. A. Bunge', 'Herbier E. Drake', and 'Ancien Herbier E. Cosson'. Strictly these are not part of the original material and were probably not seen by Richard, being incorporated into P in 1904 and 1913 (Stafley & Cowan (1976: 407, 552, 678)). Of the remainder of the sheets in P, the best is Dillon s.n. which, although not well annotated, is presumed to be from Chiré. In the absence of contradictory evidence, this sheet is accepted as being one of those studied by Richard, and is here designated as lectotype (Figure 4):

ETHIOPIA.—'in provinciae Chiré', *Dillon s.n.* [P, lecto., here selected; MEL (*sub MEL 94226*), P, W, isolecto.].

Other original material seen: ETHIOPIA.—'in convalle fluvii Taccazé', *Dillon 205* [P, MEL (sub MEL 94227)]; 'Crescit inter Adoua et Ocbasa', *Dillon 316* (P); 'montis Scholoda', *Schimper 52* [BM (2 sheets), CGE, G, K (2 sheets), L (3 sheets), OXF (2 sheets), P (6 sheets), S (2 sheets), and W (4 sheets)]; 'prope Axoum', *Schimper 1489* [BM, CGE, G (3 sheets), K, L, MO, P (2 sheets), TUB, W].

## REFERENCES

CUFODONTIS, G. 1956. Enumeratio plantarum aethiopiae spermatophyta (Sequentia). Bulletin du Jardin botanique de L'État, Bruxelles 26, Supplement: 350, 351.

DYER, R.A. 1940. Pelargonium multibracteatum. The Flowering Plants of South Africa 20: t. 794.

ENGLER, A. 1895. Die Pflanzenwelt Ost-Afrikas und der Nachbargebiete. Reimer, Berlin.

FRIIS, I. 1993. C.F. Hochstetter's scientific names for G.W. Schimper's early collections of African plants. *Fragmenta Floristica et Geobotanica*, Supplementum 2, part 1: 183–201.

GREUTER, W. et al. 1994. International code of botanical nomenclature. Koeltz Scientific Books, Königstein.

HOCHSTETTER, C.F. 1841. Erste Lieferung der vom Reiseverein ausgegebenen durch Wilhelm Schimper gesammelten Pflanzen. Flora (Jena) 24, Intelligenzblatt 1: 17–32.

KNUTH, R. 1912. Pelargonium. Das Pflanzenreich 4, 129, 53: 316–545. KOKWARO, J.O. 1969. Notes on east African Geraniaceae. Kew Bulletin

23: 527–530.

KOKWARO, J.O. 1971a. The family Geraniaceae in northeast tropical

Africa. Webbia 25: 623–669.

KOKWARO, J.O. 1971b. Pelargonium. Flora of tropical East Africa, Geraniaceae: 14–23. Crown Agents, London.

RICHARD, A. 1847. Tentamen florae abyssinicae. Bertrand, Paris.

STAFLEU, F.A. & COWAN, R.S. 1976. Taxonomic literature edn 2, 1: 407, 552, 678. Bohn, Scheltema, & Holkema, Utrecht.

STAFLEU, F.A. & COWAN, R.S. 1983. Taxonomic literature edn 2, 4: 764. Bohn, Scheltema, & Holkema, Utrecht.

VAN DER WALT, J.J.A. & VORSTER, P.J. 1988. Pelargoniums of southern Africa 3: 90–92. National Botanic Gardens of South Africa, Cape Town.

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MS. received: 1994-06-03.