

Typification of two Linnaean names in *Polygala* (*Polygalaceae*): *P. bracteolata* and *P. myrtifolia*

Estrela Figueiredo,^{1,2} Jorge Paiva² & Gideon F. Smith^{2,3,4}

1 Department of Botany, P.O. Box 77000, Nelson Mandela Metropolitan University, Port Elizabeth, 6031 South Africa

2 Centre for Functional Ecology, Departamento de Ciências da Vida, Universidade de Coimbra, 3001-455 Coimbra, Portugal

3 Office of the Chief Director: Biosystematics Research & Biodiversity Collections, South African National Biodiversity Institute, Private Bag X101, Pretoria, 0001 South Africa

4 H.G.W.J. Schweickerdt Herbarium, Department of Plant Science, University of Pretoria, Pretoria, 0002 South Africa

Author for correspondence: Estrela Figueiredo, estrelafigueiredo@hotmail.com

Abstract Two Linnaean names of *Polygala*, *P. bracteolata* and *P. myrtifolia*, are lectotypified.

Keywords Africa; nomenclature; *Polygala*; *Polygala bracteolata*; *Polygala myrtifolia*; typification

Received: 10 Mar. 2013; revision received: 6 June 2013; accepted: 14 June 2013. DOI: <http://dx.doi.org/10.12705/624.4>

■ INTRODUCTION

In the course of revising the genus *Polygala* L. in the Flora of Southern Africa region (South Africa, Namibia, Botswana, Lesotho, Swaziland), it was noted that two accepted Linnaean names (*Polygala bracteolata* L., *Polygala myrtifolia* L.) do not have types.

Polygala bracteolata is endemic to South Africa where it is widespread in the Western Cape, extending to the Eastern Cape. *Polygala myrtifolia* has a wide geographical distribution range in southern Africa, is easy in cultivation and popular in domestic horticulture (Pienaar & Smith, 2011). A native of South Africa, it has been introduced to, and subsequently became naturalized in, many parts of the world with a mild to temperate climate (Paiva, 1998). It shows some variability that was previously recognized by some authors at the varietal rank (see for example Harvey in Harvey & Sonder, 1860 and Chodat, 1893). Recent authors (Levyns, 1955; Paiva, 1998) did not accept these varieties.

The names *Polygala bracteolata* and *Polygala myrtifolia* are typified as follows. Acronyms of herbaria follow Index Herbariorum (Thiers, 2013).

■ POLYGALA BRACTEOLATA

Levyns (1955: 24) and Paiva (1998: 273) indicated that the holotype of *P. bracteolata* was deposited at LINN. Levyns merely noted that the type was in the Linnaean herbarium in London. Paiva cited the type as “Sudáfrica, s. loc., sine col. s/n (LINN)”. According to the data available for online examination, two specimens of *Polygala bracteolata* exist in LINN with the references LINN-HL882-12 and LINN-HS1176-21. According to Jarvis (2007) both collections are post-1753 and therefore cannot be part of the original material used by Linnaeus when he described the species.

The original material for *P. bracteolata* is given by Jarvis (2007) as consisting of:

(1) A specimen in the George Clifford Herbarium, Page 353, *Polygala* 2 (BM No. BM000646529; image: <http://www.nhm.ac.uk/research-curation/research/projects/clifford-herbarium/search/>);

(2) A specimen in the Bergius Foundation Herbarium (SBT), number L98 (image: <http://www.bergianska.se/english/collections/the-bergius-herbarium/search-the-collections/>);

(3) An illustration in Plukenet (1691: t. 53, f. 2; image: http://www.cervantesvirtual.com/obra-visor/leonardii-plukenety-phytographia--0/html/b4d22e97-0a82-4ed8-9149-27c882e882fc_114.htm) and referenced in Plukenet (1696: 300);

(4) Two illustrations in Burman (1739: 202, t. 73, f. 2, 3; images: http://books.google.co.za/books/about/Rariorum_Africanarum_plantarum_decas_pri.html?id=z5IWBMjncwMC&redir_esc=y).

L98 (SBT) is a good specimen that matches the description of the species. Therefore, this specimen is here designated as lectotype of the name *Polygala bracteolata*.

***Polygala bracteolata* L., Sp. Pl.: 702. 1753 – Lectotype (designated here):** South Africa, coll. details unknown (SBT L98, n.v.; image!).

■ POLYGALA MYRTIFOLIA

Paiva (1998) previously cited syntypes of the name *Polygala myrtifolia* as existing at LINN. However, according to Jarvis (2007) the specimens referred to are post-1753 collections and therefore do not form part of the original material used by Linnaeus when he described the species.

According to Jarvis (2007) the original material for *P. myrtifolia* consists of:

(1) A specimen in the George Clifford Herbarium, Page

353, *Polygala* 3 (BM No. BM000646530; image: <http://www.nhm.ac.uk/research-curation/research/projects/clifford-herbarium/search>);

(2) A specimen in the Linnaean Herbarium at S, IDC [microfiche] no. 292.1 (S-LINN; image: <http://linnaeus.nrm.se/botany/fbo/p/welcome.html.en>);

(3) Illustration in Plukenet (1705: 153, t. 437, f. 4);

(4) Reference in Plukenet (1700: 153) and voucher in Sloane Herbarium 94: 52 (BM-SL);

(5) Illustration in Commelin (1697: 87, t. 46; image: <http://www.biodiversitylibrary.org/item/15229#page/147/mode/1up>);

(6) Illustration in Burman (1739: 200, t. 73, f. 1; image: http://books.google.co.za/books/about/Rariorum_Africanarum_plantarum_decas_pri.html?id=z5lWBmJncwMC&redir_esc=y).

As noted by Jarvis (2007), specimen number 292.1 (S-LINN) was previously suggested as lectotype by Wijnands (1983) but not formally designated. We here designate this specimen as lectotype of *P. myrtifolia*.

Polygala myrtifolia L., Sp. Pl.: 703. 1753 – **Lectotype (designated here)**: coll. details unknown (S-LINN, IDC [microfiche] no. 292.1, n.v.; image!).

■ ACKNOWLEDGEMENTS

We thank Dr. Charlie Jarvis for advice. Dr. Gerry Moore and two anonymous referees are thanked for comments on the manuscript.

■ LITERATURE CITED

- Burman, J.** 1739. *Rariorum africanarum plantarum*. Amsterdam: Boussière.
- Chodat, R.H.** 1893. Monographia Polygalacearum. *Mém. Soc. Phys. Genève* 31(2): 1–500.
- Commelin, J.** 1697. *Horti medici amstelodamensis*, pars prima. Amsterdam.
- Harvey, W.H. & Sonder, O.W.** 1860. *Flora capensis*, vol. 1. Dublin: Hodges, Smith & Co.
- Jarvis, C.** 2007. *Order out of chaos: Linnaean plant names and their types*. London: The Linnean Society & The Natural History Museum.
- Levyns, M.** 1955. The species of *Polygala* in the south-western Cape Province. *J. S. African Bot.* 21: 9–49.
- Paiva, J.** 1998. Polygalarum africanarum et madagascariensium prodromus atque gerontogaei generis *Heterosamara* Kuntze, a genere *Polygala* L. segregati et a nobis denuo recepti, synopsis monographica. *Fontqueria* 50: 1–346.
- Pienaar, K. & Smith, G.F.** 2011. *The southern African what flower is that?* Cape Town: Random House Struik.
- Plukenet, L.** 1691. *Phytographia*. London.
- Plukenet, L.** 1696. *Almagestum botanicum*. London.
- Plukenet, L.** 1700. *Almagesti botanici mantissa*. London.
- Plukenet, L.** 1705. *Almatheum botanicum*. London.
- Wijnands, D.O.** 1983. *The botany of the Commelins: A taxonomical, nomenclatural, and historical account of the plants depicted in the Moninckx Atlas and in the four books by Jan and Caspar Commelin on the plants in the Hortus Medicus Amstelodamensis, 1682–1710*. Rotterdam and Salem: A.A. Balkema.