

Notes on African plants

VARIOUS AUTHORS

CAMPANULACEAE

THEILERA ROBUSTA, THE CORRECT NAME FOR THEILERA CAPENSIS

When Hong (2003) described *Theilera capensis*, he overlooked important contributions to the taxonomy of the South African Campanulaceae, particularly that of Sonder (1865). In his epic work in *Flora capensis*, Sonder provided the first keys to species of *Lightfootia* and *Wahlenbergia*, described new species and made numerous new combinations. Among these was the transfer of *Lightfootia robusta*, a species described by De Candolle (1839), to *Wahlenbergia*. De Candolle based his name on a collection by Drège from Zwaanepoelpoortberg near Willowmore in the Eastern Cape. It would appear from the question mark after the generic name, that he was uncertain of the placement of this species. Additionally, Sonder reduced *Wahlenbergia rigida* Bernh. to synonymy under *W. robusta*. This species was described in 1844 based on a collection by Krauss from the Groot Winterhoekberge near Uitenhage in the Eastern Cape. In an unusual move, Kuntze (1891) transferred *W. robusta* (A.DC.) Sond. to *Campanopsis* R.Br., a name of different rank, regarded by him as having priority over *Wahlenbergia*.

Even after the account by Sonder, the identity of *Wahlenbergia robusta* remained confusing, and authentic material of the species appears unavailable. Von Brehmer (1915) omitted the species from his account of African *Wahlenbergia* and it is not clear what rationale he followed. When L. Bolus (1915) described *W. guthriei* from the southern Cape based on the description of Sonder, she suggested that this species is allied to *W. robusta*. According to her, the two species differ in leaf, calyx and corolla characters, with *W. guthriei* having 'sessile leaves widened at the base and usually lobed, the corolla tube 2–3 times as long as the segments, and the calyx segments sometimes much longer than the valves of the capsule. The corolla is a deep blue and very fugitive'. Despite these differences pointed out by Bolus, many of the specimens of *W. guthriei* in BOL, NBG, PRE and SAM are labelled as *W. robusta*. Following the establishment of the segregate genus *Theilera* to accommodate *W. guthriei* (Phillips 1927), in herbarium practice *W. robusta* was often misidentified as *T. guthriei*. After visiting the National Herbarium (PRE) in South Africa, Hong (2003) described *T. capensis* based on unnamed specimens [Viviers & Vlok 181 (PRE), Acocks 16019 (PRE)] from Willowmore and Steytleville, respectively.

The search for the identity of *Wahlenbergia robusta* led to the examination of images of the type specimens of *Lightfootia robusta* (Drège 7691) and *W. rigida* (Krauss s.n.) from The Swedish Museum of Natural History and www.aluka.org, respectively. Unexpectedly these species resemble *Theilera capensis*. After examining the type specimen of *T. capensis* [Viviers & Vlok

181 (PRE)] I found all three types conspecific. Since *W. rigida* is a later name for *W. robusta*, the latter name has priority over *W. rigida* as required by Art. 11.4 of the Code (McNeill *et al.* 2006). The name *T. capensis* is therefore a synonym of *W. robusta*. Goldblatt & Manning (2000) argued for the return of *Theilera* to *Wahlenbergia*, whereas Hong (2003) stated that the two genera are distinct. Evidence from phylogenetic studies using morphology and DNA sequence data suggest that it is premature to return *Theilera* to *Wahlenbergia* (Cupido 2008) and that the two genera should be best kept separate for now. Despite the fact that *Theilera* is embedded among the *Wahlenbergia* species, the latter genus appears non-monophyletic. However, the results support the close affinity between the two species of *Theilera*. In view of the above discussion, the new combination *Theilera robusta* is here proposed as the correct name for *T. capensis*.

***Theilera robusta* (A.DC.) C.N.Cupido, comb. nov.**

Lightfootia robusta A.DC. in DC., Prodr. 7: 420 (1839). *Wahlenbergia robusta* (A.DC.) Sond.: 584 (1865). *Campanopsis robusta* (A.DC.) Kuntze: 379 (1891). Type: South Africa, Cape of Good Hope (Caput Bonae Spei), Drège 7691 (S, –photo!).

Wahlenbergia rigida Bernh.: 820 (1844). Type: South Africa, Uitenhage, Groot Winterhoekberg, Krauss s.n. (M, –photo!).

Theilera capensis D.-Y.Hong: 732 (2003). Type: South Africa, Cape Province, Solitree, Witteberg, peak north of farm 'World View', 1 200 m, 4 Jul. 1987, Viviers & Vlok 181 (PRE, holo!).

Additional specimens examined

Acocks 16019 PRE; Cupido 317 NBG; Long 1376 PRE; Taylor b PRE.

ACKNOWLEDGEMENTS

I wish to thank Prof. Thomas Lammers of the University of Wisconsin, Oshkosh for commenting on the first draft of this paper, and Dr Johannes Lundberg of The Swedish Museum of Natural History who kindly provided scanned images.

REFERENCES

- BERNHARDI, J.J. 1844. *Flora* 27: 820. Regensburg.
BOLUS, L. 1915. In *Novitates africanæ. Annals of the Bolus Herbarium* 1: 193.
CUPIDO, C.N. 2008. *Systematic studies of the South African Campanulaceae (Campanuloideae) with an emphasis on generic delimitations*. Ph.D. thesis, submitted, University of Cape Town.
DE CANDOLLE, A.P. 1839. *Campanulaceae*. In A.P. de Candolle, *Prodromus systematis naturalis regni vegetabilis* 7: 414–496. Paris.

- GOLDBLATT, P. & MANNING, J.C. 2000. Cape plants. A conspectus of the Cape flora of South Africa. *Strelitzia* 9. National Botanical Institute, Cape Town & Missouri Botanical Garden, St. Louis.
- HONG, D.-Y. 2003. Two new species of Campanulaceae from South Africa. *Taxon* 51: 731–735.
- KUNTZE, O. 1891. *Revisio generum plantarum* 2. Würtzburg.
- MCNEILL, J., BARRIE, F.R., BURDET, H.M., DEMOULIN, V., HAWKSWORTH, D.L., MARHOLD, K., NICOLSON, D.H., PRADO, J., SILVA, P.C., SKOG, J.E. & WIERSEMA, J.H. 2006. International Code of Botanical Nomenclature (Vienna Code), adopted by the Seventeenth International Botanical Congress Vienna, Austria, July 2005. GantnerVerlag, Lichtenstein. *Regnum Vegetabile* 146.
- PHILLIPS, E.P. 1927. Description of three new South African plants. *Bothalia* 2: 368, 369.
- SONDER, O.W. 1865. Campanulaceae. In W.H. Harvey. & O.W. Sonder, *Flora capensis* 3: 530–605. Hodges, Smith, Dublin.
- VON BREHMER, W. 1915. Über die systematische Gliederung und Entwicklung der Gattung *Wahlenbergia* in Afrika. *Botanische Jahrbücher* 53: 9–143.
- C.N. CUPIDO*
-
- * Compton Herbarium, South African National Biodiversity Institute, Private Bag X7, 7735 Claremont, Cape Town.
MS. received: 2008-06-23.