

Habenaria kilimanjari newly recorded for Namibia



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Dates:

Received: 03 June 2016 Accepted: 30 Aug. 2016 Published: 25 Oct. 2016

How to cite this article:

Bytebier, B. & Mannheimer, C., 2016, 'Habenaria kilimanjari newly recorded for Namibia', Bothalia 46(1), a2107. http://dx.doi. org/10.4102/abc.v46i1.2107

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© 2016. The Authors. Licensee: AOSIS. This work is licensed under the Creative Commons Attribution License. Background: The orchid flora of Namibia is depauperate and as a result is poorly studied.

Objectives: To further document the orchid flora of Namibia.

Method: New herbarium collections were studied and the relevant published literature consulted.

Results: Habenaria kilimanjari is newly recorded for Namibia.

Conclusion: The newly recorded species increases our understanding of the orchid diversity in Namibia and underlines the need for continued botanical inventory work.

The orchid flora of Namibia is depauperate compared to the rest of sub-Saharan Africa because most of the country is arid and thus not good habitat for orchids. Despite this, new country records are occasionally discovered (Bytebier 2013). The wetter, more suitable habitats are found in the Caprivi Strip, but they are difficult to access during the wet season and are therefore less well explored.

In the course of 2015, the second author collected an orchid specimen (*Mannheimer 4850*, Figure 1a) of which the identity could not be established immediately and which was therefore sent by the Windhoek Herbarium (WIND) to the first author for identification.

Close examination of the plant and the accompanying photographs showed that this specimen belongs to the genus *Habenaria*, but is a taxon that has not been recorded in South Africa (Johnson & Bytebier 2015) or Namibia. With the help of the keys in the Flora of Tropical East Africa (Summerhayes 1968) and Flora Zambesiaca (La Croix & Cribb 1995), its identity was established as *Habenaria kilimanjari* Rchb.f., previously only recorded from Angola, D.R. Congo, Kenya, Malawi, Tanzania and Zambia (WCSP 2016).

The dissected flowers of the specimen closely match the drawings made by Summerhayes on the holotype sheet of *H. kilimanjari* (*New s.n.*) lodged at K and downloaded from JSTOR Plant Science. The white flowers, which are not common in *Habenaria*, and the pincer-like ends of the rostellum arms make this a fairly easy species to identify. Furthermore, the first author is familiar with the species as he collected it before in Shimba Hills National Park in Kenya (*Bytebier 3160*, 24/7/2008, NU, BR; see Figure 1b).

Habenaria kilimanjari is usually found in 'periodically flooded grassland, often with scattered bushes' (Summerhayes 1968). This particular specimen was found in a seasonally inundated depression.

Taxonomic treatment

Habenaria kilimanjari Rchb.f. in Otia Bot. Hamburg. 119 (1881).

Type: TANZANIA, Northern Province, Moshi District, Around Kilimanjaro, *New s.n.* (K000415765, holo, JSTOR Plant Science image!).

Specimen examined

NAMIBIA.—1724 (Caprivi), Lake Liambezi, depression next to road D3507 between Lake Liambezi and Ngoma, 17°57′17″S, 24°31′44″E (–DD), 924 m, 19 Feb. 2015, *Mannheimer* 4850 (WIND).

Acknowledgements

We would like to thank the Curator of the National Herbarium of Namibia (WIND) for sending the specimen on loan to NU.

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Source: a) Coleen Mannheimer; b) Benny Bytebier (a), Mannheimer 4850 (Namibia); (b), Bytebier 3160 (Kenya). FIGURE 1: Habenaria kilimanjari in situ.

Competing interests

The authors declare that they have no financial or personal relationships which may have inappropriately influenced them in writing this article.

Author's contribution

B.B. identified the material and wrote the paper; C.M. collected the material and edited the paper.

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