

## ASPHODELACEAE

OCCURRENCE OF *HAWORTHIA BOLUSII* VAR. *BLACKBEARDIANA* IN THE FREE STATE, SOUTH AFRICA

The genus *Haworthia* Duval, which consists of ± 85 species and 200 taxa, is endemic to southern Africa (Bayer *et al.* 1999). It occurs predominantly in the Western and Eastern Cape Provinces, with outliers extending into Namibia and Mozambique (see Smith & Van Wyk 1991 for a distribution map of the genus).

To date, the climatically severe grasslands of the Free State have been known to harbour only a single species of *Haworthia*, viz. *H. venosa* (Lam.) Haw. subsp. *tessellata* (Haw.) M.B.Bayer (Scott 1985: xxvii; Smith *et al.* 2000). However, the occurrence of a second species of *Haworthia*, *H. bolusii* Baker var. *blackbeardiana* (V.Poelln.) M.B.Bayer, has been suggested for the Free State, but confirmation of this has thus far remained elusive (Bayer 1999: 45). In a comprehensive interpretation of the *H. cooperi* Baker and *H. bolusii* var. *blackbeardiana* complexes, Bayer (2002) concentrated his discussion on their Eastern Cape distribution ranges. *Haworthia bolusii* var. *blackbeardiana* is a miniature (the size of a golf ball), rosulate plant with flattish, incurved leaves that are adorned with hair-like marginal spines.

*Haworthia bolusii* var. *blackbeardiana* was recently found in the Rouxville District, Free State at the following locality:

FREE STATE.—3027 (Zastron): Brandwacht 190, Rouxville, vegetative plant, 1 640 m, S 30° 30' 11.3" E 27° 03' 26.0", (–AC), 23-05-2008, P.C. Zietsman 4410 (NMB).

This locality falls within the vegetation unit Besemkaree Koppies Shrubland (Gh 4) of the Grassland Biome (Mucina & Rutherford 2006).

The plants were found on the western slope of a *koppie* (hill). Most of them grow tucked away in cracks between the dolorite rocks and are well protected from direct sunlight during the early morning and late afternoon. They are fully exposed for most of the day (Figure 3).

## REFERENCES

- BAYER, M.B. 1999. *Haworthia revisited. A revision of the genus*. Umdaus Press, Hatfield.
- BAYER, M.B. 2002. *Haworthia update. Essays on Haworthia*, vol. 1. Umdaus Press, Hatfield.
- BAYER, M.B., EGGLI, U., VAN JAARSVELD, E., SMITH, G.F. & SUPTHUT, D.J. 1999. *From Adrian Haworth to Haworthia. Haworthia and related South African succulents*. Haworthia Society, St Michaels on Wyre.
- MUCINA, L. & RUTHERFORD, M.C. (eds). 2006. The vegetation of South Africa, Lesotho and Swaziland. *Strelitzia* 19. South African National Biodiversity Institute, Pretoria.
- SCOTT, C.L. 1985. *The genus Haworthia (Liliaceae). A taxonomic revision*. Aloe Books, Johannesburg.
- SMITH, G.F. & VAN WYK, B-E. 1991. Generic relationships in the Alooidae (Asphodelaceae). *Taxon* 40: 557–581.
- SMITH, G.F., ZIETSMAN, P.C., STEYN, E.M.A. & BREUER, I. 2000. The distribution of *Haworthia venosa* subsp. *tessellata* in southern Africa. *Haworthiad* 14,2: 40–43.

P.C. ZIETSMAN\* and G.F. SMITH\*\*

\* National Museum, P.O. Box 266, 9300 Bloemfontein, South Africa / Centre for Environmental Management, University of the Free State, P.O. Box 339, 9300 Bloemfontein, South Africa. ziets@nasmus.co.za.

\*\* Biosystematics and Biodiversity Collections, South African National Biodiversity Institute, Private Bag X101, 0001 Pretoria, South Africa / Acocks Chair, H.G.W.J. Schweickerdt Herbarium, Department of Botany, University of Pretoria, 0002 Pretoria, South Africa. g.smith@sanbi.org.za.  
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FIGURE 3.—*Haworthia bolusii* Baker var. *blackbeardiana* in its natural habitat near Rouxville in the Free State. Photograph: P.C. Zietsman.