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Disa staerkeriana (Orchidaceae): a new species from Mpumalanga, South Africa

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Abstract

A new orchid species, *Disa staerkeriana* is described from the Hartebeesvlakte in the Mpumalanga Province of South Africa. It is a member of *Disa* section *Stenocarpa* and is affiliated to *D. amoena* and *D. montana*. An updated artificial key to *Disa* section *Stenocarpa* is provided.

Introduction

The orchid genus *Disa* Bergius (1767: 348) (Disinae, Orchideae, Orchidoideae) currently consists of 184 species (Govaerts 2014). It is largely endemic to continental Africa but extends to Madagascar (five species), Réunion (one species) and the Arabian Peninsula (one species). In South Africa, 143 species occur of which 128 are endemic to the country and 88 are endemic to the Cape Floristic Region, its centre of diversity (Galley *et al*. 2007). Following a molecular phylogenetic analysis (Bytebier *et al*. 2007a), the segregate genus *Schizodium* Lindley (1838: 358) was included in *Disa* and the genus was subdivided into 18 sections (Bytebier *et al*. 2008).

After the publication of the authoritative "Orchids of Southern Africa" (Linder & Kurzweil 1999), six new *Disa* species have been described from South Africa. Three of these, *Disa albomagentea* E.G.H.Oliv. & Liltved in Oliver *et al.* (2011: 313), *Disa linderiana* Bytebier & E.G.H.Oliv. in Bytebier *et al.* (2007b: 558) and *Disa remota* H.P.Linder in Linder & Hitchcock (2006: 627) belong to section *Disella* and are endemic to the fynbos biome of the Cape Floristic Region. The other three, *Disa vigilans* McMurtry & T.J.Edwards in McMurtry *et al.* (2006: 551), *Disa klugei* McMurtry in McMurtry *et al.* (2008: 465) and *Disa roseovittata* McMurtry & G.McDonald in McMurtry *et al.* (2008: 466) are endemic to the grassland biome of Mpumalanga Province. Another new species is here described from these high altitude grasslands, which are very species-rich but under considerable threat.

Taxonomy

Disa staerkeriana McMurtry & Bytebier, *sp. nov*. (Figs. 1–4)

Type:—SOUTH AFRICA. Mpumalanga: Lydenburg, west of Sabie, Hartebeesvlakte, 2200 m, 25°05'S, 30°39'E (2530BA), 25 January 2014, *McMurtry 15222* (holotype: NU!; isotypes: BOL!, BNRH!, HSMC!, WAG!).

Diagnosis—similar to *Disa amoena* from which it can be distinguished by the shorter spur and the smaller flowers; and to *Disa montana* from which it can be distinguished by smaller and differently shaped petals, and by the much shorter inflorescence with fewer flowers (Table 1).

Erect terrestrial herb 250–350 mm tall. Leaves 6–8, slightly spreading at 5–15° from axis, rigid, conduplicate, linear-lanceolate, (56–) 80–90 (–105) mm long × 1.5–2.8 mm wide, 3–5 mm wide when flattened, with three main veins, veins and margins translucent, light straw-coloured. Inflorescence compact, subsecund, 55–75 mm long × 30–35 mm wide, 5–13-flowered. Bracts 16–28 mm long × 4.5–5 mm wide, acute to acuminate, pale maroon-pink, scarious at anthesis. Ovary green, tinged reddish, obliquely patent, ± 15mm long. Flowers white often suffused pale pink, lightly

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FIGURE 4. Close-up comparison of the petal of *Disa montana* (left), *Disa staerkeriana* (middle) and *Disa amoena* (right).

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