

In the Begoniaceae account for the *Flora of southern Africa (FSA)*, Hilliard (1976) treated only two regional taxa that possess bilamellate placentae, the naturalized *Begonia hirtella* Link, and the indigenous *B. sonderiana* Irmsh., with only the former reported by her from KwaZulu-Natal. However, subsequent regional checklists (Van Wyk 1993; Bredenkamp 2003, 2006) record *B. sonderiana* as occurring in KwaZulu-Natal, based, seemingly, on a misidentified specimen of *B. sutherlandii* Hook.f. collected in 1980 from Karkloof Falls (*Hildyard 102* PRE). The previously documented occurrence of *B. sonderiana* falls within the Afromontane Archipelago-like Centre of Endemism (Van Wyk & Smith 2001), reported from the eastern highlands of Zimbabwe/western highlands of Mozambique through mountainous sites in the Limpopo and Mpumalanga Provinces of South Africa, to northwestern Swaziland (Figure 4). In the *FSA* region, the altitude range for *B. sonderiana* has been given as 1 000–1 850 m (Hilliard 1976), whereas in the *Flora zambesiaca (FZ)* region, plants have been found at expectedly higher elevations of between 1 650 and 2 000 m (Kupicha 1978). Herbarium records further reveal a single collection (*J. Culverwell 789* PRE) from the Lebombo Mountains in Swaziland; plants were found growing in Chilobe Forest at an altitude of 600 m, in deep shade with very moist conditions.

During a recent search for *Begonia homonyma* Steud. in the vicinity of Gwalaweni (Hlatikulu) Forest in the southern Lebombo Mountains, KwaZulu-Natal, plants of *B. sonderiana* were unexpectedly encountered growing at a site overlooking the Jozini Dam, close to the border with Swaziland, at an altitude of 680 m. The exact locality is the head of Devil's Dive. Although found on a southern aspect, the habitat was xeric, very unlike the mesic one recorded previously for this species: Kupicha (1978) described its occurrence on rocks in the spray of waterfalls or on damp mossy boulders in kloof forest, whereas Hilliard (1976) recorded it from forest or forest margins in which sites it favours rockfalls or broken cliff faces. Hilliard (1976) also reported its presence amongst shady rock outcrops in steep grasslands. At the Devil's Dive site, *B. sonderiana* grows in shallow humic pockets overlying rhyolite, together with *Euphorbia evansii*, *Streptocarpus confusus* subsp. *lebomboensis*, *Cheilanthes*

hirta var. *nemorosa*, *Kalanchoe rotundifolia*, *Dracaena aletiformis*, *Plectranthus verticillatus* and *Dioscorea sylvatica*. The vegetation type corresponds to Southern Lebombo Bushveld (Rutherford *et al.* 2006).

Subsequent consideration of herbarium materials revealed that this gathering on the western edge of the southern Lebombo range was actually the second collection from this vicinity, the first (*Vahrmeijer & Drijhout 2002* PRE) having been made nearly 30 years earlier, but misidentified as *Begonia homonyma*. These two records are the first to authenticate the occurrence of *B. sonderiana* in KwaZulu-Natal as well as the Maputaland-Pondoland Region of Plant Endemism (Van Wyk & Smith 2001), extending its known distribution in a southerly direction by 95 km. The plants grow at a lower altitude than northern subpopulations of the Lebombo Mountains, and here receive less than 800 mm of rain per annum on average (Rutherford *et al.* 2006). The plants conform in most respects to typical *B. sonderiana*, possessing tubers and glabrous aerial parts, in contrast to the thinly villous and atuberous *B. hirtella* which is known from the same general locality (*Vahrmeijer 2000* PRE). Further, in contrast to *B. homonyma*, the *B. sonde-*

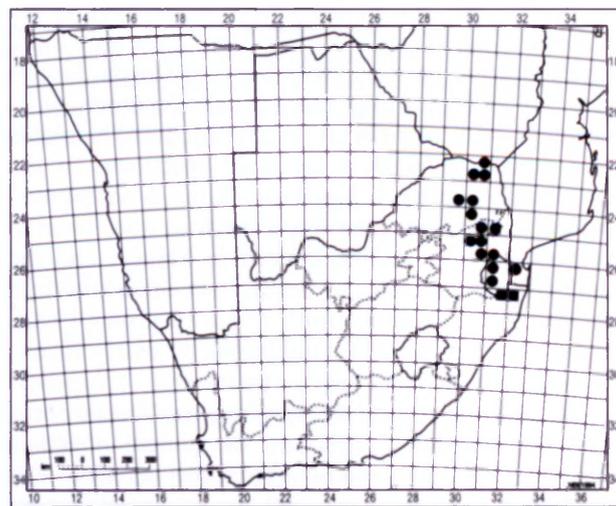


FIGURE 4.—Known distribution of *Begonia sonderiana* in *FSA* region based on specimens at J, NH, NU and PRE, ●, new provincial localities, ■.

riana plants presented female flowers with characteristic divided placentae, and ovate-acuminate leaves with lobed and toothed margins. However, tepal dimension differences warrant mention: the male flowers, which are white flushed pink, possess outer pairs up to 16 × 21 mm, and inner pairs up to 11 × 5 mm, relative to the respective dimensions of outer (8–13 × 11–17 mm), and inner (5–8 × 3–4 mm) pairs provided by Kupicha (1978). Hilliard (1976) described flowers as being up to 30 mm across, somewhat larger than tropical material (Kupicha 1978), but slightly smaller than the Lebombo form. In contrast to male flowers, tepals of female flowers from Devil's Dive were shorter than the maximum known from the tropics, attaining 12 mm rather than 17 mm (Kupicha 1978). Further, tubers of plants from the arid site were entire rather than presenting spaced swellings as noted for the mesic form (Hilliard & Burt 5962 NU). Despite their dry habitat, flowering specimens still attained a height of 350 mm and remained turgid whereas the surrounding vegetation, with the exception of stem and leaf succulents, showed signs of drought stress. The drought tolerance of these begonias may be attributed to their succulent tubers, one measured 75 × 29 mm.

An unconfirmed sight record by the second author places *Begonia sonderiana* still further south, in the mistbelt component of Ngome Forest (2731 CD) at ± 1 200 m elevation.

Specimens examined

Begonia hirtella

KWAZULU-NATAL.—2732 (Ubombo): Gwalaweni Forest, southern Lebombo Mountain range, (–AA), 08-01-1970, *J. Vahrmeijer 2000* (PRE).

Begonia sonderiana

MPUMALANGA.—2430 (Pilgrims Rest): cliffs on road to summit of Mariepskop, 1 830 m, (–DB), 16-01-1969, *Hilliard & Burt 5962* (NU).

KWAZULU-NATAL.—2731 (Golela): in humus on rocky ledge of steep dry southern slope at head of Devil's Dive on crest of Lebombo range overlooking Jozini Dam, 680 m, S 27°31'44", E 31°9'72", (–BD), 05-02-2008, *N. Crouch, T. Edwards & I. Johnson 1166* (NH). 2732 (Ubombo): Gwalaweni Forest, (–AC), 1969, *Vahrmeijer & Drij-hout 2002* (PRE).

SWAZILAND.—2632 (Bela Vista): Chilobe Forest, Lubombo Mountains south of Siteki, southeast of Jilobi, very close to Tikuba, climax wet canopy forest, 600 m, (–AC), 10-04-1977, *J. Culverwell 789* (PRE).

Begonia sutherlandii

KWAZULU-NATAL.—2930 (Pietermaritzburg): Karkloof Waterfalls, picnic spot in riverside forest remnant at waters edge, (–AD), 21-01-1980, *C.J. Hildyard 102* (PRE).

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