

***BRACHYSTEMMA ALBIPILOSUM*, A NEW DWARF SPECIES FROM ZIMBABWE**

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Fig. 1. *B. albipilosum* growing in habitat in Zimbabwe in a sandy loam soil.

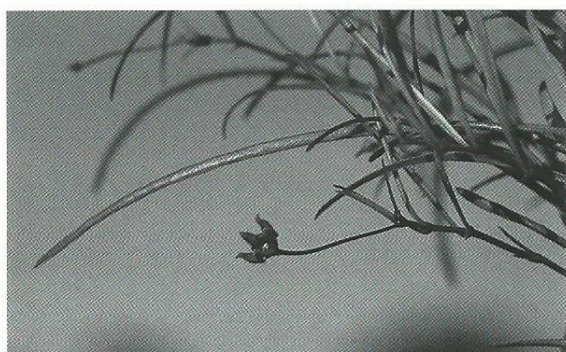


Fig. 2. (a) *B. albipilosum* with its pilose flower on a long pedicel. (b) The flower of *B. minimum* is also borne on a long pedicel.

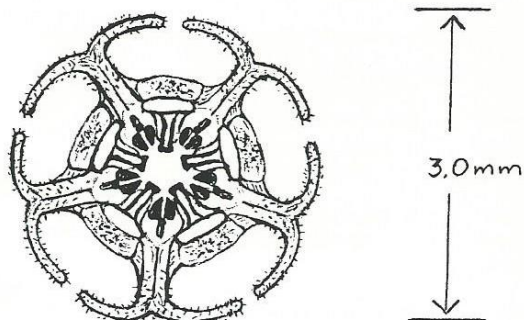


Fig. 3. Corona of *B. albipilosum*. Drawing by author.

This species was originally found at the end of 1985 by the late Alan Lancaster from Burma Valley, south of Mutare, and he gave it a provisional name. It was also subsequently found at Chegutu and also on the Sanyati-Chinhoyi road by him on later visits. At the locality near Chinhoyi (Sanyati-Chinhoyi road) it was found growing on a white quartzitic ridge (which had been almost completely mined out) in association with a number of other asclepiads, namely *Ceropegia stenantha*, *C. racemosa* ssp. *racemosa*, *Brachystelma tavalla*, *B. gracile* and two natural hybrids between this new species and *B. gracile*. *Ceropegia nilotica* was found growing nearby in this fairly well-wooded area. At another site with a more greyish silty soil, a few kilometres farther on, plants of this species were found near cultivated lands, and four hybrid plants were also observed (*B. albipilosum* × *B. tavalla*). The flowers are nodding, a pretty green color, and are covered with a mat of almost purplish hairs. Unfortunately, no *B. tavalla* plants were observed. About 500 m away, two plants which could be hybrids with *B. gracile* as one parent were also observed. It appears strange that so many hybrid plants occur in such a small area, but, with most of the land having been ploughed, the



Fig. 5. Flowering plant of a natural hybrid between *B. albipilosum* and *B. tavalla*. Photos: Figs. 1-2b, 4a and 5 by author, 4b by Roger Dixon.

answer to what was here perhaps 50 years ago is gone forever. A buried hand grenade and a stick of AK 47 bullets were discovered, adding a somewhat sinister atmosphere to the visit—this was dangerous country 20 years ago.

Brachystelma albipilosum Lancaster ex Peckover sp. nov., *Brachystelma minimum* R. A. Dyer. affinis sed structura florali differt, lobis corollae recurvatis lobulisque divergentibus erectis, appendicibus corollae exterioribus insidentibus.

Plant a perennial herb. *Tuber* 25-60 mm wide and up to 20 mm thick, somewhat depressed above. *Stem* single at first and spreading slightly, up to 80 mm long and 1.5 mm broad at the base, sparingly branched, sparsely pilose, internodes 5-10 mm apart, red. *Leaves* arranged on opposite sides of the stem, lanceolate, 60-100 mm × 2-5 mm, glabrous, margin entire. *Petiole* 3 mm × 1 mm, light green, glabrous. *Flowers* lateral at the nodes, single, with no noticeable scent. *Pedicels* 20-50 mm × 0.5 mm, sparingly pilose, red, each with a basal bract. *Bracts* at base of

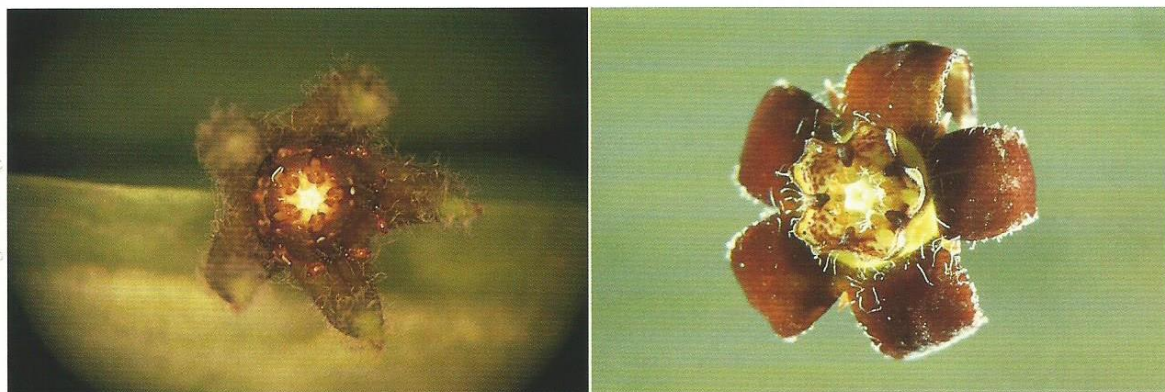


Fig. 4. (a) Corona and white corolla hairs of *B. albipilosum*. (b) Corona and thread-like corolla hairs of *B. minimum*.

Table 1.

	<i>B. albipilosum</i>	<i>B. minimum</i>
Plant size	8 cm tall	4-6 cm tall
Corolla lobes	Recurved longitudinally to form tubes	Recurved backwards to form a disc
Corona	i. Inner corona appendages reduced and not reaching top of staminal column, covered with white papillae ii. Edges of nectar pockets forming upright protrusions from which develop divergent bifid lobules covered with white papillae	i. Inner corona appendages thin and rounded, papillae absent ii. Edges of nectar pockets forming low squared lobules
Seed follicles	Long, thin, green mottled red, smooth, 45-75 mm × 3 mm	Short, thin, purple mottled red, smooth, 20-35 mm × 3 mm
Seed	Dark brown with lighter margin, 8 mm × 3 mm	Black with dark brown margin, 5-6 mm × 2-3 mm

each pedicel, 0.5 mm long, linear, red. *Calyx lobes* 1.5 mm × 0.75 mm at base, sparingly pilose. *Corolla* before anthesis forming a squat flat orb from the inflated basal corolla bulb; *bulb* 4 mm diameter, greyish-purple on outside, purple or blackish-green on inside; *lobes* 3-3.5 mm long, with strongly recurved margins that meet at the back forming a tube, purple or blackish-green; whole inner surface covered with fine white hairs up to 0.5 mm long, with short, whitish to green papillae over entire surface. *Corona* purplish red, 3 mm × 1 mm high. *Outer corona* appendages purplish red, forming the outer walls of the five nectar pouches, each with two bifid, divergent 1-mm-long lobules emanating from an erect stem-like protuberance of the nectar pouches, surface with white papillae. *Inner corona appendages* purplish red, not reaching the top of the staminal column, with white papillae. *Follicles* paired, upright, diverging 30 degrees at base, 45-75 mm × 3 mm, reddish green; follicular walls thin, each containing 20-30 seeds. *Seed* dark brown with a slightly lighter margin, 10 mm × 7 mm; *tuft* 15-17 mm long.

Type: Zimbabwe: 1729 AD, Chinhoyi, R.G. Peckover 256 (holotypus, PRE). This new species is named for the white hairs on the inside of the flowers.

The nearest relative of *B. albipilosum* is *B. min-*

imum from South Africa. The major difference between the two lies in the floral structure, with *B. albipilosum* having corolla lobes recurved longitudinally at the margins and pointed divergent lobules on the outer corona appendages, whilst in *B. minimum* the corolla lobes are recurved backwards to form a disc and the outer corona appendages form upright squared lobules. Plants of *B. albipilosum* are also more robust than the diminutive *B. minimum*. Figure 2a depicts a flowering plant of *B. albipilosum* and 2b, *B. minimum*. The relationship between the two species is quite apparent. Figure 4a depicts the distinct corona of the flower of *B. albipilosum* and 4b the corona of *B. minimum* (note the difference in the outer and inner corona appendages). The main differences are listed in Table 1.

Acknowledgement

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Reference

Percy-Lancaster, A. 1988. *Brachystelma* in Zimbabwe. *Excelsa* 13:63-77.