

TWO NEW SPECIES OF *BRACHYSTELMA*

Brachystelma canum R. A. Dyer, sp. nov., *B. macropetalo* (Schltr.) N.E. Br. affine, foliis oblongo-ellipticis breviter pubescentibus canis, floribus minoribus lobis intus glabris, corona breviter campanulata, lobis interioribus parvis pulvinatis differt.

Herba erecta, usque 30 cm alta, breviter pubescens, basi 1–2 ramosa, (? radicibus fasciculatis incrassatis), internodiis 2–4 cm longis. *Folia* elliptico-oblonga, 2–4 cm longa, 5–10 mm lata, sensim basin versus attenuata, molliter pubescentia cana, marginibus leviter undulatis, plus minusve plicatis. *Flores* (1) 2 extra axillares producti; pedicelli circiter 1 cm longi. *Sepala* lineari-lanceolata, circiter 4 mm longa. *Corolla* 9–11 mm longa, basi 1,5 mm connata; lobi lineari-lanceolati, extus pubescentes, intus glabri, leviter replicati. *Corona* 0,25 mm supra corollae basin expansa, campanulata, 1,75–2 mm diam., 5-saccata margine integro; coronae lobi interiores parvi pulvinati.

TYPE: Transvaal, 2625 (Delareyville): 25 km N.E. of Setlagoli, on road to Mafeking, sandy *Terminalia*-veld (–AB), rare, about 1300 m alt., 16th February 1956 J. P. H. Acocks 18774 (PRE, holo.).

Herb erect, up to about 30 cm tall, with underground stem up to 6 cm long or more (roots not recorded but assumed to be succulent, fascicled, more or less cylindric or fusiform); branches 1–2 from the base, unbranched above, shortly and softly pubescent, basal internodes 2–4 cm long becoming gradually shorter as growth continues. *Leaves* elliptic-oblong, 2–4 cm long, 5–10 mm broad, gradually tapering to the base with no distinct petiole, finely pubescent, grey, margins slightly undulate inclined to fold upwards. *Flowers* usually 2 together, extra axillary, opening in succession. *Calyx* divided to base, with segments linear-lanceolate, about 4 mm long, pubescent. *Corolla* 9–11 mm long, lobed almost to the base (united for 1,5 mm); lobes linear-lanceolate, with

margins somewhat replicate, finely pubescent on outer surface, glabrous on inner surface. *Staminal column* 1,5 mm high. *Corona* appearing to arise $\frac{1}{3}$ up staminal column 1,5 mm high, more or less campanulate, 1,75–2 mm broad, forming 5 pockets with outer margin entire; inner corona lobes represented by 5 swellings at base of filaments; filaments conspicuous, oblong with slight narrowing at the middle. *Pollinia* subpyriform, about 0,25 mm long with very short connectives to carrier. FIG. 5.

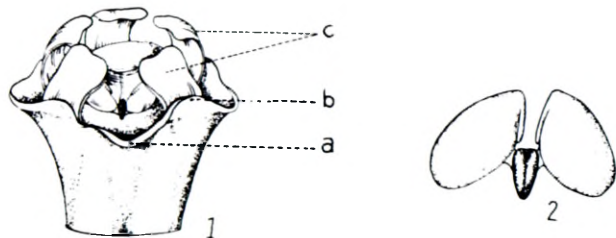


FIG. 5.—*Brachystelma canum*. 1, staminal column and corona, $\times 15$; 1a, outer margin of outer corona-pocket; 1b, rudimentary inner corona lobes pressed on base of anther; 1c, anthers; 2, pollinia, with carrier, $\times 60$. (Acocks 18774).

This is a further species known only from a single specimen collected by J. P. H. Acocks nearly twenty years ago. Because of the sandy nature of the soil the root system was comparatively deeply buried below ground level and the collector did not record whether it was a single tuber or a cluster of fleshy roots. The habit of growth and floral structure indicate a close relationship with *B. macropetalum* (Schltr.) N.E. Br., and for this reason it is suggested that the plant has a cluster of fleshy roots. This was one of the characters on which Schlechter in Bot. Jahrb. 20, Beibl. 51:50 (1895), established the genus *Brachystelmaria* as distinct from *Brachystelma* R. Br., but N.E. Brown in Fl. Cap. 1908 did not uphold Schlechter's segregations.

***Brachystelma ngomense* R. A. Dyer, sp. nov.**, herba tuberosa prostrata; corolla circiter 10 mm longa, infra medium connata tubulata; corona late campanulata, 4 mm diam. 2,5–3 mm alta, margine incurvata distinctur.

Tuber subglobosa, 2–3 cm diam.; rami 1–3 annui prostrati, usque 10 mm (cult. 20 mm) longi, sparsim ramulosi, glabri vel minute pubescentes. *Folia* ovata vel lanceolata, usque circiter 1,5 cm longa (cult. 2 cm \times 1,5 cm), breviter petiolata, glabra. *Flores* 1–2 extra axillares producti; pedicelli 5–10 mm longi. *Sepala* lanceolata, 2–3 mm longa. *Corolla* circiter 10 mm longa, infra medium connata, late campanulata: tubus circiter 5 mm diam., intus albidus rubromaculatus; lobi ovato-triangulares, ± 5 mm longi, patentes, leviter replicati, atropurpurei, apice albido. *Corona exterior* campanulata, 4 mm diam., 2,5–3 mm alta, 5-marsupiiiformis, margine incurvata, lobis interioribus confluentibus; lobi interiores breves. *Pollinia* $\pm 0,25$ longa, subpyriformes, caudiculis brevissimis.

TYPE: Natal, 2731 (Louwsburg), Ngotshe district, Ngome (–CD), near sawmill on rock-sheets, 7 December 1975, Hilliard & Burt 8441 (PRE, holo.; NU).

Tuber subglobose, 2,0–3,0 cm diam., with 1–3 annual stems. *Stems* slender, prostrate, glabrous or minutely pubescent, sparsely branched, about 10 cm long (up to 20 cm under cultivation). *Leaves* ovate to lanceolate, up to about 1,5 cm long (2 cm \times 1,5 cm under cult.) glabrous. *Flowers* 1–2, subaxillary; pedicels ± 1 cm long, ascending. *Sepals* lanceolate, 2–3 mm long. *Corolla* with the tube slightly bulging in bud, 1 cm long, divided to about $\frac{1}{3}$ way; tube campanulate, ± 5 mm diam. with flattish base, slightly bulged inwards below the sinuses, making the mouth obtusely 5-angled; white within and purple mottled; lobes triangular-ovate, ± 5 mm long, spreading-recurved, concave on upper side towards base, replicate towards apex, dark red or maroon, with the apex a small white mucro. *Corona* campanulate, 4 mm diam., 2,5–3,0 mm high, overtopping the staminal column, forming 5 deep pockets, with minutely toothed incurved outer margin, confluent with the short incurved inner corona-lobes; inner corona-lobes pressed to base of anthers. *Pollinia* $\pm 0,25$ mm long, subpyriform, with translucent upper-inner margin, attached by very short caudicles to carrier with minute lateral bulges. FIG. 6.

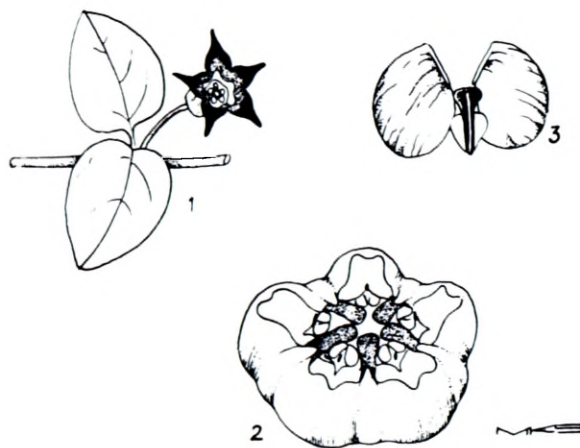


FIG. 6.—*Brachystelma ngomense*. 1, twig, natural size; 2, corona, $\times 7,5$; 3, pollinia, with carrier, $\times 60$. (Hilliard & Burt 8441).

This species was discovered by Dr Olive Hilliard and Mr Bill Burt on a collecting expedition in December 1975, when they were asked to make records of any form of *Brachystelma pulchellum* (Harv.) Schltr. which they might encounter. *B. ngomense* seems to have no close relationship to any known species. Several tubers were collected in Natal near Ngome in a small area on the edge of sheets of exposed rock, but no plants were seen in the open veld. The corolla-lobes were described as rich dark satiny-red, while inside the tube was white with crimson mottling; the corona was dull mustard, overlaid red. A tuber flowered at the Botanical Research Institute in February 1976, when it was figured for eventual publication in Flowering Plants of Africa.