

## Notes on African plants

VARIOUS AUTHORS

### ASCLEPIADACEAE

#### THE NOMENCLATURE OF SEVERAL *BRACHYSTEMMA* SPECIES FROM SOUTHERN AFRICA

In the course of revisionary studies of the Australian Asclepiadaceae, with particular reference to *Microstemma* R. Br., it became evident that a problem of priority existed with relation to the congeneric and predominantly African genus *Brachystelma* Sims (non R. Brown, see Forster 1985). The nomenclatural problems involved have been outlined elsewhere (Forster 1985) and if accepted, conservation of *Brachystelma* will avoid the recombination of some 100 or more names into *Microstemma*.

The protologue for *Brachystelma* (as recognized by Dyer 1976, 1980) includes two different elements, namely the illustration of *Stapelia tuberosa* Meerburg: t. 54 fig. 1 (1789) (Figure 1), listed in synonymy of *Brachystelma tuberosa* R. Br. ex Sims (1822: t. 2343) and the illustration accompanying the generic description. Sims in describing *Brachystelma* evidently considered the plants depicted in the two illustrations to be conspecific and his listing in synonymy of *S. tuberosa* Meerburg makes his name *B. tuberosa* R. Br. ex Sims a new combination. Dyer (1976, 1980, 1983) chooses to regard *B. tuberosum* as a new species based on the illustration in *Curtis' Botanical Magazine* and excludes *S. tuberosa* Meerburg from synonymy, which is contrary to Art. 55.2.

Dyer (1976, 1980, 1983) lists *S. tuberosa* Meerburg in the synonymy of *Brachystelma caudatum* (Thunb.) N.E. Br., therefore, due to priority, the name *Brachystelma tuberosum* R. Br. ex Sims must be used for this species. This effectively leaves *B. tuberosum* sensu Dyer, without a name, as no later synonyms exist (Dyer, 1976, 1980, 1983). There would seem to be little difference between *B. decipiens* N.E. Br. and *B. tuberosum* sensu Dyer, with the two taxa distinguished by the absence of cilia on the corolla lobes, a glabrous corolla tube and slightly more slender corolla lobes in *B. decipiens* (Dyer 1983). Few collections have been made of either taxon and their distributions as mapped by Dyer (1983) are not greatly disjunct. Further collections may well prove that variation between these taxa is continuous. Dyer (1983: 34) stated '*Brachystelma decipiens* was so similar to *B. tuberosum* that N.E. Br. thought he was being deceived and gave it that name in consequence. Even now one wonders whether it should rather be regarded as a subspecies of *B. tuberosum*'.

The degree of ciliation in Asclepiadaceae floral structures has often been found to be quite variable on examination of many populations and individuals (cf. *Stapelia*, Plowes 1976) and may change on individuals grown under different environmental conditions (cf. *Ceropegia*, Field & Collenette 1984).

Examination of herbarium and live material of *Brachystelma microstemma* Schltr. (syn. *Microstemma tuberosum* R. Br.) from Australasia demonstrated collections with or without cilia on the corolla lobes and with variability in corolla lobe length (Forster unpublished). The Australasian collections were in many instances more disjunct than the African material being considered.

Despite the apparent restricted endemism of many southern African Asclepiadaceae, there is little basis on which to recognize two distinct species or even subspecies for the populations recognized by Dyer as *B. decipiens* and *B. tuberosum*.

As the two publications by Dyer (1980, 1983) are likely to remain as the only treatments of the genus



FIGURE 1. — *Stapelia tuberosa* Meerburg in *Plantae rarioris vivis coloribus depictae* t.54 fig. 1 (1789), here selected as lectotype.

in southern Africa for the foreseeable future, these nomenclatural changes need to be clearly outlined.

The relevant synonymy is given below. Details of types are from Dyer (1980, 1983).

***Brachystelma tuberosum* (Meerburg) R. Br. ex Sims**, in Curtis' Botanical Magazine 49: t. 2343 (1822), (not the plant depicted).

*Stapelia tuberosa* Meerburg: t. 54 fig. 1 (1789). Lectotype, selected here.

*Stapelia caudata* Thunb.: 46 (1794). *Brachystelma caudatum* (Thunb.) N.E. Br.: 169 (1878); R. A. Dyer: 54 (1976); R. A. Dyer: 8 (1980); R. A. Dyer: 24 (1983). Type: Cape. *Thunberg s.n.* Herb. No. 6326 (UPS, holo.; PRE, photo).

*Brachystelma spatulatum* Lindl.: t. 1113 (1827). Iconotype: Botanical Register t. 1113 (1827).

*Brachystelma crispum* Grah.: 170 (1830); N.E. Br.: 839 (1908). Type: no precise locality. *Bowie* (no collector indicated) (E-GL, holo.).

***Brachystelma decipiens* N.E. Br.** in *Flora capensis* 4,1: 842 (1908). Type: Cape, near Grahams-town, *Bolton s.n.* (K, holo.).

*Brachystelma tuberosum* sensu R. A. Dyer in *Bothalia* 12: 54 (1976); R. A. Dyer: 11 (1980); R. A. Dyer: 32 (1983).

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