



Brachystelma thunbergii in its natural habitat

Notes on *Brachystelma perditum*, *B. thunbergii* and the continued existence of *B. praelongum*

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The Drakensberg is a mountain range on the eastern shoreboard of South Africa and is home to a wide range of plants and animals. Most of the plants are adapted to survive the extreme climatic conditions experienced there. During summer, snow may fall and during December the temperature on one visit was only 12 degrees Celsius at midday. The rainfall is high, 1500 mm and more having been measured per annum, and the rain may frequently be accompanied by hail.

Despite these climatic extremes, a large variety of plants, including a few succulents, can be found. The famous *Aloe polyphylla* is found there as well as a grass aloe. *Euphorbia clavaroides* is often seen growing on a north-western aspect in very shallow soil, thus giving the plant its characteristic dome shape.

During several visits to the Montaux-Sources area, the odd exposed corm of a brachystelma was encountered. After cultivation it was discovered that these plants were in fact *Brachystelma thunbergii* N.E. Br. They grow in association with *Euphorbia clavaroides* at an elevation higher than 2500 m.

Dyer (1983) indicates that *Brachystelma praelongum* S. Moore had been collected in a similar habitat. The only difference given between *B. thunbergii* and *B. praelongum* is that the fine hairs found on the corolla of *B. thunbergii* are absent on the corolla of *B. praelongum*. The tips of the corolla (petals) of *B. praelongum* are also stated to be of a different colour to those of *B. thunbergii*. From

observations made on a substantial colony which grows in association with *E. clavaroides*, the corolla tips varied in colour from green through yellow to a brown. An interesting observation was that the flowers of these plants appeared before the majority of the leaves and that the inflorescence was compact. This could be due to the low temperatures experienced during early summer, as plants in cultivation lose this compact growth form. The fine hairs on the inside of the corolla tube were present on all plants inspected. The flower stalks were also 25–35 mm long, as mentioned by Dyer.

As these plants grew at an elevation comparable to that where *B. praelongum* was discovered, it is very difficult to substantiate the existence of a species of *Brachystelma* where the preserved specimen (only one!) is placed separately because of its fine corolla hairs and other minor differences. The variations within a single population observed, covered not only the differences in the colour of the corolla tips but also the flower sizes, leaves and shapes of the plants. In my opinion *B. praelongum* is only

one of a vast number of variations around the *B. thunbergii* gene pool.

A classic example of natural variation is to be found in a rare brachystelma from the same area, namely *Brachystelma perditum* R.A. Dyer.

This beautiful brachystelma ranks with *B. barberae* Harv. ex Hook.f. in having large conspicuous flowers, which can be 60 mm in diameter. They also share the trait of smelling like rotten meat. *B. perditum* grows in a dark brown humic soil which is moist throughout the summer growing period. The aspect is as for *B. thunbergii*, a northern to western aspect which is warmer than other aspects and can dry out during winter. The plants grow in small flat areas among grass. The soil has a reasonable depth, being about 300 mm to the underlying parent material.

Although pollination takes place in cultivation in the warmer Pretoria climate, the early abortion of the seed capsules which was observed is probably due to the high temperatures. Seed germination is successful, however, and it is hoped that the seedlings will develop to maturity in

order that the natural variation may be observed.

REFERENCE

- Dyer, R. Allen (1983). *Ceropegia, Brachystelma and Riocreuxia in Southern Africa*. A.A. Balkema, Rotterdam.



Brachystelma perditum in habitat