About sticks and pencils (part 1): Euphorbia ephedroides E. Mey. ex Boiss.

Rolf W. Becker*, Alma Moller* & Rikus van Veldhuisen ^

*P. O. Box 928, Fauna Park, 0787, South Africa. E-mail: rbecker@mweb.co.za. ^Samuel Gerssenlaan 63, 3861 HB Nijkerk, The Netherlands. E-mail: rikus@u4ba.nl

Luphorbia species of the subgenus Tirucalli (Boiss.) S.Carter are not usually the most appreciated by collectors of succulent euphorbias. These species are often referred to as pencils, sticks, brooms or even weeds and only a few are grown in cultivation.

So it happens that lovers of succulents, when visiting southern Africa, may not pay much attention to these interesting and variable species, mostly because they all seem to appear boringly similar. However, when one knows what to look for, quite a few of these confusing species may be easily identified. Moreover, some species are so widespread, that in the right area, they are not to be missed. Thus the authors thought it might be interesting to pay some attention to these "stick" euphorbias and give some clues to assist with their identification. Since quite a few readers of these articles will be travelling in the areas where the stick-species grow we hope that this information will assist in enhancing their enjoyment of the travelling experience.

The Richtersveld is one of the top attractions in South Africa for the lovers of succulent plants. It is in

this area that *Euphorbia ephedroides* grows in vast numbers, but the distribution already starts well south of Springbok. The bushes can grow up to 1m high and the thin branches are spread from the base in a somewhat regular way. The colour of the branches is variable, and mostly green in the south (Fig. 1) and more greyishgreen or purple-green in the north (Fig. 2). However, it must be noted that many colour variations exist over the entire range.

Specifically, the following characteristics are typical for *E. ephedroides*:

- The branches are separated into smooth, brittle internodes, usually 2 to 7 cm in length and each section in separated from the next by a brown circular node where the stem sometimes branches (Fig. 3).
- The small cyathium is surrounded by five yellow glands, giving it a flat circular appearance and is wedged between two rather big green bracts (Fig. 4).

The name "ephedroides" refers to "Ephedra-like Euphorbia", with "ephedra" derived from the old Greek for "Equisetum", a genus which includes the horsetails.



Fig. 1: Euphorbia ephedroides growing to the east of Port Nolloth



Fig. 2: A much smaller plant of Euphorbia ephedroides close to the Orange River in the Gariep Zone, typically greyish-green, as is usual in its northern distribution area

E. ephedroides was first collected by Drège in about 1830 between Koper Berg and Kookfontein in the vicinity of Springbok, from where it was described by E. Meyer in 1843. The status quo remained as such until 1990 when Leach & Williamson recognised two additional varieties, viz. variety imminuta from near Alexander Bay and variety debilis from north of Rosh Pinah, Namibia. (Both varieties will be discussed in a subsequent text of this series.)

Euphorbia ephedroides will probably not be the most striking species seen on your trip, but it can be easily identified and thus serves to enhance your species list for the trip.

Acknowledgements

The authors gratefully acknowledge the support of the United States National Science Foundation through the Planetary Biodiversity Initiative project entitled "EuphORBia: a global inventory of the spurges".



Fig. 3: Brittle internode segments separated by light brown circular nodes are typical for the branches of Euphorbia ephedroides.

References

LEACH, L. C. & WILLIAMSON G. (1990): The identities of two confused species of Euphorbia (Euphorbiaceae) with descriptions of two closely related

new species from Namaqualand, S. Afr. J. Bot., 56(1): 71-78

White, A., Dyer R. A. & Sloane B. L. (1941): The Succulent Euphorbieae (Southern Africa). Abbey Garden Press, Pasadena (California)



Fig. 4:Typical for the inflorescence of Euphorbia ephedroides are the flat circular yellow glands between two green leaves (bracts).



Figure 5: Often Euphorbia ephedroides is the dominant vegetation type for large tracts of land in the Richtersveld.