

Euphorbia susannae Marloth

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One of the most beautiful and most characteristic species of the genus *Euphorbia* is undoubtedly *Euphorbia susannae*. It can be found in only a few limited localities in the Little Karroo. In some well-known habitats it is absent or very scarce, probably as a result of collecting by so-called “plant-lovers”.

In recent years in succulent literature *Euphorbia susannae* got frequent attention. Your writer believes, however, that there are some useful details which can be added to what we already know.

Euphorbia susannae was discovered in 1925 by Dr. John MUIR and was described 4 years later by Dr. MARLOTH. It was named after Dr. MUIR’s wife, Susanna. By the way, according to some writers, the name was spelt Suzanna, with a z, and so the plant’s name was written *E. susanna*. I however use the way of writing used by WHITE, DYER & SLOANE. Dr. John MUIR, incidentally, was better known for the genus *Muiria*, in the *Mesembryanthemaceae*. This genus has only one species, *Muiria hortenseae*. Hortense was John and Susanna’s daughter.

Euphorbia susannae grows only at a few, geographically close localities in the Little Karroo. The Little Karroo is one of the most beautiful succulent areas in the world with many remarkable species which do not grow anywhere else. Haworthias and Euphorbias and above all many species of Mesembs come from this dry area which begins in the west at Worcester and ends in the east at Oudtshoorn. The most famous places in the Little Karroo are Ladismith and Calitzdorp. The area gets no more than 150 mm rain

in a year and is in the rain-shadow of some mountain chains. To the south these are the Langebergen and to the north they are the Klein and Groot Swartberge. The various mountain passes are breathtaking beautiful and a high point for every visit to this region.

On our trip in 1999 we sought for *Euphorbia susannae* in vain. Two years later we were more successful. In several publications we read about how difficult it is to find *Euphorbia susannae* in nature. Your writer however was only two steps out of the car when he sighted the first plant. The plants grew mostly in full sun. They caught your attention by their bright green colour and some of them were more than 30 cm in diameter.

Fig. 1: Growing in the shade *Euphorbia susannae* has a bright green colour. This is the larger bodied form, north-east of Riversdale, the most eastern locality found.



This first place was the most eastern locality where we found *Euphorbia susannae*. The population consisted of more than 200 plants. They were very healthy and there were older and big plants with many heads as well as seedlings of only a few centimetres. It was striking that the older bigger plants had two different growth types. Normally it grows completely withdrawn into the ground with only the tips of the shoots above the ground. At this place however the plants grew totally above the ground and were shaped like a half-sphere or cushion. This way of growing was much more like the way they grow in cultivation. WHITE, DYER & SLOANE describe the thickness of the shoots of this species as 2.5 to 3.5 cm. At this locality however the shoots grew to a thickness of no less than 7 centimetres. Furthermore these plants were bigger and stronger in all their measurements than as described in WHITE, DYER & SLOANE.

A second locality, only a few kilometres further to the west, appeared to be at the verge of a dirt road. Here were less plants, estimated around forty. Here also we found a good number of seedlings so it seems that this population is able to maintain itself, in spite of the fact that it was easily accessible. All plants at this locality grew withdrawn in the soil and these plants were much smaller.

Much further to the east, a bit north of Barrydale, we found a population of Euphorbias that showed clear differences from *E. susannae*. Where *E. susannae* has 12 to 16 ribs per stem, this new shape had 6 to 8 ribs per stem. Almost all plants grew completely in the shade under small bushes. The stems grew completely above ground and were more than 25 cm long. The plants had mostly a dirty brown/green colour. Only the ones in the sun were dark brown/red. Remarkable was the fact that the ribs, just like those of *E. susannae*, had clearly visible tubercles of which the tip was curved back downwards. This population consisted of approximately 50 plants and showed within this population little variation.

These unusual plants exhibited a superficial resemblance to *E. pseudoglobosa*, the closest related species of *E. susannae*. However *E. pseudoglobosa* does not have the distinctly recurved tubercles. Unfortunately



Fig. 2: In bright sunlight in a little quartzfield *Euphorbia susannae* is doing fine, eastern locality.

Fig. 3: A still young *Euphorbia susannae* reacts to the high light intensity by colouring the tips of the tubercles a nice purple, eastern locality.

Fig. 4: At the eastern locality we found some plants with an atypical semi-spherical, above-ground growth form.

Fig. 5: A seedling of *Euphorbia susannae* finds protection under a little shrub, western locality.



we did not find any flowering plants or plants with fruit, or seedlings. Some unique characteristics of *E. susannae* are the striking colour of their fruit, dark-purple, and the hair-shaped leaf-remains on the tubercles of seedlings. Furthermore the tubercles of seedlings are thinner and longer than those of adult plants and seem therefore almost hairy.

Further investigation of this new form, especially of the flowers, fruits and seedlings, should indicate the taxonomic position of these plants. The obvious differences with the mentioned species and the little variation in the population seem to point to the rank of a new species.

By the way it remains to be seen if this population is so new. WHITE, DYER & SLOANE mention in their description of *Euphorbia tubiglans* a deviating form found by Dr. J LUCKHOFF in the surroundings of Barrydale. This form had 7 to 8 ribs instead of the 5 ribs per stem which is typical for *E. tubiglans*.

Although *E. tubiglans* is also related to *E. pseudoglobosa* and *E. susannae*, it has a closer relation to *E. juglans* and *E. jansenvillensis*. Possibly WHITE, DYER & SLOANE did not see these plants in the flesh. At that time all these plants were only recently becoming known, which makes it much more difficult (because of ignorance) to put these plants into proper relationship.

The soil of the Little Karroo is very sandy. In some places layers of stony ground, often white quartz, come to the surface. These places are often a few hundred square metres in size, or sometimes just a few square metres. They stand out with the white colour and the more or less absence of bushy-like vegetation. If these places are located on or near a top of a low hill, no matter how small the places are, they will be often real "hotspots" for succulent plants. Many species grow only on these pebbly spots and are often characterized by dwarf-growth.

Euphorbia susannae also grows at or close to such pebbly areas. However also other jewels of plants appear to grow here, like the spherical *Crassula columnaris*, *Haworthia arachnoidea* var. *nigricans*, *Adromischus filicaulis* ssp *marlothii* and *Pelargonium laxum*, just to mention a few. At other similar places nearby we

Fig. 6: In the very stony soil of the western locality *Euphorbia susannae* grows totally under the soil level.

Fig. 7: Even more to the west, north of Barrydale, grows *Euphorbia species nova* J&R 260, entirely above soil level.

Fig. 8: If *Euphorbia species nova* J&R 260 grows in full sunlight the growth stays much more compact.

Fig. 9: *Euphorbia species nova* J&R 260 rebranches above the ground.

found *Gasteria brachyphylla*, *Quaqua ramosa*, *Conophytum sp.*, several species of *Gibbaeum* and the already mentioned *Muiria hortenseae*. Above all finding *Gibbaeum album* in full bloom was an unforgettable experience. Dark-violet flowers contrasted beautifully with an almost white plant body, although some plants in this population had white flowers.

Various species of the genus *Gibbaeum* are called in Afrikaans, 'Haaibekkie'. In English this means 'beak of a shark'. This very apt name is derived from the shape of the two leaves that together form the plant growth. They differ in size and because these leaves grow closely together the fissure of most species looks exactly like the beak of a shark, though without the teeth of course. *Gibbaeum album* itself has also a South-African name, Bababoutjie, which means baby's bottom. The local name for *Muiria hortenseae* is Muiskopvygie: 'vygie' means 'mesemb', and 'muiskop' is 'mouse-head'. And indeed this plant looks much like a little mouse-head. So we get back to *Euphorbia susannae*, and its African name is Knoppiesnoors. 'Noors' is the common name for a spurge and 'knoppies' is something like 'little buttons'.

Euphorbia susannae can be grown reasonably well, though it sure has a mind of its own. Often the loss of this plant can be blamed on the use of soil that does not drain well enough. Another reason can be that it is in full sun without good ventilation. It prefers a place in the greenhouse with lots of light but without being in full sun too much.

In cultivation it will be less or not at all withdrawn into the ground, compared with the situation in nature. We do not have the extreme temperatures or dryness in our greenhouses that makes that necessary. Besides this it will branch more, making older plants grow into a pillow shape.

This species can be propagated by either sowing seed or taking cuttings. A cutting will grow into a typical plant which can not be distinguished from a seedling when it gets older.

Striking is the rather great tendency of *Euphorbia susannae* to form cristate growth. Sometimes these crests are completely or almost completely without chlorophyll. These plants can only be propagated by cuttings. To people that are fond of cristates they can be a welcome addition to their collection.

And so this article about this very attractive species coming from a very interesting area comes to an end. I hope that your interest in *Euphorbia susannae* has been awakened and that if you ever encounter this lit-



Fig. 10: Adult plant of *Euphorbia susannae* with probably a seedling to the right, western locality.

Fig. 11: Close to the western locality a colony of *Gibbaeum album* is also growing.

tle plant at a fair or a nursery you will feel a bit different about this little dwarf.

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