

# **The genus *Sarcocaulon* (De Candolle) Sweet (1826)**

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The genus *Sarcocaulon* is now included in the genus *Monsonia* since 1996. After molecular studies begun by F. Albers, evidence pinpointed an important resemblance between the genus *Monsonia* and the genus *Sarcocaulon*. In spite of the evident morphological differences between the two genera, it was thus decided to absorb the genus *Sarcocaulon* into the genus *Monsonia*, divided into 2 groups: the group *Sarcocaulon*, among which 14 species have woody and succulent stems, and the group *Monsonia*, with 5 recognized succulent species, with herbaceous stems and succulent roots.

Not to disorientate the reader, and in agreement with the publisher-editor, it was decided to keep the naming “*Sarcocaulon*” for the elaboration of this article.



*Sarcocaulon patersonii*, habitat, Alexander Bay, RSA (Photo : J.A. Audissou).

## *Summary description*

Small bushes with long-lived, fleshy and stiff stems, being able to reach 1m high, with woody main root. Deciduous, lacinate leaves, with short or long petiole, being slowly transformed into spines to most of the species. Hermaphrodite, hypogynous, solitary flowers, in 5 petals and 5 sepals, generally in a long peduncle, white, yellow, orangey, pink, purple or red.



*Sarcocaulon ciliatum*, habitat, Oograbies Hills (Photo : J.A. Audissou).



*Sarcocaulon crassicaule*, Blesberg.RSA, habitat (Photo : J.A. Audissou).

## List of the species

### Section *Sarcocaulon*

1. *S. spinosum* L'Héritier (RSA: Namaqualand)
2. *S. camdeboense* Moffett (RSA: Great Karoo)
3. *S. vanderietiae* L. Bolus (RSA: Eastern Cape, Great Fish River Valley)
4. *S. salmoniflorum* Moffett (Namibia, Kalahari, RSA: Great Karoo, Tanqua Karoo, Richtersveld)
5. *S. patersonii* De Candolle (RSA: coastal zone of Richtersveld, Namibia: from Rosh Pinah to Luderitz)
  
6. Section *Crenatum*
7. *S. crassicaule* Rehm (RSA: Great Karoo, Tanqua Karoo, Namaqualand, Bushmanland, Namibia: southwest)
8. *S. ciliatum* Moffett ( Namaqualand Nord)
9. *S. flavescens* Rehm (the North and South of the mouth of the river Orange)
  
10. Section *Denticulatum*
11. *S. marlothii* Engler (Namibia: quotes(estees) the West)
12. *S. mossamedense* Welwitsch ex Oliver (Angola: Mossâmedes, Namibia: from Henties Bay to Hoanib River)
13. *S. inerme* Rehm (Namibia: from Rosh Pinah to Witputz)
  
14. Section *Multifidum*
15. *S. herrei* L. Bolus (RSA: Southeast Richtersveld)
16. *S. multifidum* E. Meyer ex R. Knuth (RSA and Namibia: Oranjemund)
17. *S. peniculinum* Moffett (Namibia: South of Rosh Pinah)

### Habitat and ecology

The genus *Sarcocaulon* grows in the dry regions of South Africa, Namibia and Angola (*S. mossamedense*). It grows in sandy or rocky grounds, quartzitic, granitic or calcareous (Desert of Namib), at a height included between 0 and 1800m.

The various species of *Sarcocaulon* are met on grounds with scattered vegetation. They grow individually, openly. They lack leaves for most part of the year and produce leaves after important fogs or sufficient rains.

Also, the flowering is often triggered by the rainfall. Stems are coated with a waxy substance which allows plants to limit the loss of water during periods of intense aridity. This wax is flammable and allows the stems to be used as candle, hence the name "Bushmen Candle".



*Sarcocaulon herrei*, habitat, Eenriet, RSA  
(Photo : J.A. Audissou).



*Sarcocaulon inerme*, habitat, Spitzkof, RSA (Photo : J.A. Audissou).



*Sarcocaulon peniculinum*, habitat, Rosh Pinah, Namibia  
(Photo : J.A. Audissou).



*Sarcocaulon vanderietiae* (Photo : J.A. Audissou).



*Sarcocaulon spinosum*, one year seedlings  
(Photo : J.A. Audissou).



*Sarcocaulon salmoniflorum* with yellow fl., habitat, Aus, Namibia (Photo : J.A. Audissou).



*Sarcocaulon spinosum*, Steinkopf, RSA, habitat (Photo : J.A. Audissou).

### *Cultivation*

The substrate must be very well draining and rather mineral in composition. Plants are grown in full light. The waterings must be made according to the growing period. Stop watering when the plants lose their leaves. It is advisable to space out the waterings at any time.

Apart from *S. vanderietiae* which is, generally resting during the winter, the other species are mainly watered at the end of winter / beginning of spring and at the end of summer / beginning of autumn. In every case, the resumption of the vegetation must be attentively watched. It is advised to maintain plants at a minimal temperature of 8°C during the winter.

### *Propagation*

Propagation by cutting is rarely satisfactory. On one hand, exception can be made with *S. vanderietiae*, which in certain cases may take 2 years to get new roots. On the other hand, a cutting rarely branch out.

Sowing is the best means of propagating these plants. Use preferably seeds from cultivation because seeds taken in habitat are often destroyed by larvae of insects. The best



*Sarcocaulon multifidum*, habitat, Beauvallon, RSA (Photo : J.A. Audissou).



*Sarcocaulon flavescens*, habitat, Swartpoort, RSA (Photo : J.A. Audissou).



*Sarcocaulon multifidum* à fl. blanches, habitat, Jakkalsberg, RSA (Photo : J.A. Audissou).

results are obtained with seeds not older than 3 years. Seeds often germinate in a few days but can take up to 6 months germinating. Sow seeds in a mixture 100 % mineral, rather sandy and incorporate in it a fertilizer. It is advised to sow in deep containers like hyacinth pots and water with a fungicide until the germination occurs. Maintain pots in mid-shadow or right in the sun, watching that the sowing does not dehydrate.

### *Conclusion*

The genus *Sarcocaulon* deserves all our attention and should be in all collections. With a little dexterity and experience, we manage to grow these plants in good conditions and the beautiful and numerous flowers are the reward for the supplied efforts. But why not to go to observe them in their habitat?

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