

## Transfer of *Arthrocnemum* varieties to *Sarcocornia* (Chenopodiaceae)

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Three southern African varieties described under *Arthrocnemum* Moq. are transferred to *Sarcocornia* A.J. Scott.

Drie Suider-Afrikaanse variëteite wat onder *Arthrocnemum* Moq. beskryf is, word na *Sarcocornia* A.J. Scott oorgeplaas.

**Keywords:** *Sarcocornia*, *Arthrocnemum*

Tölken (1967) reviewed the taxonomy of the nine southern African species of *Arthrocnemum*. For each of three of the species, he recognized a second variety. However, when Scott (1977) transferred eight of these species to *Sarcocornia*, he failed to transfer the varieties. The new combinations are thus:

*Sarcocornia natalensis* (Bunge ex Ung.-Sternb.) A.J. Scott var. *affinis* (Moss) O'Callaghan comb. nov.

*Arthrocnemum affine* Moss: 8 (1954), basionym. Type: S.W. Africa (Namibia), Swakopmund, *Moss 18122a* (PRE, lecto., J). Lectotype chosen by Tölken (1967).

*Arthrocnemum natalense* var. *affine* (Moss) Toelken: 280 (1967). Type as above.

This variety is found on the western coast of southern Africa and is often partially covered with wind-blown sand. It is distinguished from the typical variety primarily by the larger size and puffed-up appearance of the segments. A number of specimens collected in the vicinity of Wadrif Soutpan (Clanwilliam district) during September (end of the rainy season) show the typical thickened segments of this variety. However, the young growth on the same plant is typical of var. *natalensis*. It would appear that the thickening of the segments is an adaptation to arid conditions. However, the distribution ranges of these two varieties overlap and Tölken (1967) regarded differences in branching pattern as the only constant character which distinguishes them. The var. *affinis* has a definite main branch. The lateral branches are shorter and arise in pairs. The branching of the typical variety is not as regular.

*Sarcocornia pillansii* (Moss) A.J. Scott var. *dunensis* (Moss) O'Callaghan comb. nov.

*Arthrocnemum dunense* Moss: 14 (1954), basionym. Type: S.W. Africa (Namibia), Lüderitz Bay, *Moss 18048* (PRE, holo., J).

*Arthrocnemum pillansii* var. *dunense* (Moss) Toelken: 286 (1967). Type as above.

This variety is found on the coast of the north-western Cape and southern Namibia. The obvious difference between the two varieties is again the nature of the segments. The var. *dunensis* has shorter and stouter segments which become corky with age. Similar to the above, this variety is found under arid and sandy conditions. However, Tölken (1967) quoted a number of specimens which show intermediate features. One of his specimens has both forms on the same plant. The distribution ranges of both varieties overlap and he regarded the longer stigma of var. *dunensis* (up to 5 mm) as the only constant distinguishing feature.

*Sarcocornia perennis* (Miller) A.J. Scott var. *lignosa* (Woods) O'Callaghan comb. nov.

*Salicornia lignosa* Woods (1851), basionym. Type: from England, n.v.

*Arthrocnemum perenne* (Miller) Moss ex Fourcade var. *lignosum* (Woods) Moss: 409 (1912). Type as above.

This variety is restricted to gravelly or very sandy marshes at Knysna and Lüderitz Bay as opposed to muddy substrata for the typical variety. Tölken (1967) regarded the absence of reddish colouring in the var. *lignosum* as the distinguishing feature. However, we have found that the woodiness of the main stem is a good feature.

All the southern African Salicornieae are discussed further by O'Callaghan (1992).

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