Sansevieria Online
Online Journal
ISSN 2197-7895
Article 1
Vol. 12 (2)
30. July 2024

The taxonomic synonyms of *Sansevieria pearsonii*, their questionable legitimacy and the correction of infraspecific names in *Dracaena*

PETER A. MANSFELD
Grotenbleken 9, D- 22391 Hamburg, Germany – post@petermansfeld.de

Abstract

For years, *Sansevieria deserti* and *S. rhodesiana* have been placed as taxonomic synonyms to *S. pearsonii*. Doubts about this were ignored and remained largely unheeded. Gradual differences clearly indicate that these are three separate species whose habitats are widely separated from each other. With the correction, the infraspecific names in *Dracaena* are also corrected.

Introduction

The terms “taxonomic” or “heterotypic synonym” apply when different type specimens exist of a plant. This is different from the terms “nomenclatural” or “homotypic synonym” which apply when there is one type specimen only.

While Brown (1911) assumes that there are two other different species apart from *Sansevieria pearsonii* which he described and which he shows as *S. deserti* and *S. rhodesiana* in his monograph written four years later, (Brown 1915), Obermeyer (1992) for the first time adds *S. deserti* as synonym to *S. pearsonii*. Van Jaarsveld (1994) follows him with the additional information that the plants were two forms. One form with speckled leaves which often forms epigealm stolons and the second form with green, more robust leaves and subterranean rhizomes. (Jaarsveld 1994, 2002) In contrast to him Mbugua (1995) considers *Sansevieria deserti* to be a species of its own while he connects *S. rhodesiana* and *S. varians* (a species originating in South Africa) as taxonomic synonyms with *S. pearsonii*. Much later Jankalski believes that Mbugua “*...might have used the name wrongly...*” and connects *S. deserti* from Botswana and *S. rhodesiana* from Zimbabwe with *S. pearsonii* from South Angola. (Jankalski 2006) La Croix (2010), Mansfeld (2013, 2022) and Webb & Newton (2022) seem to accept without an attempt at verification the then reigning opinion that the three species all were one and the same species - i.e. *S. pearsonii* while *S. deserti* and *S. rhodesiana* were to be considered as heterotypic synonyms.

Chahinian who mentions in connection with the identification of *Sansevieria deserti* that all three plants were very similar and that the problem was aggravated by the considerable variation of the species and often wrongly used names in cultivation does admit, however, that they might all be one and the same species. (Chahinian 1995) He was at the locations and could still remember the detailed differences between the three species very well. Yet, he does not mention again his short mo-

 © 2024 Sansevieria Online, Vol.12 (2) A1 – *Licensed under Creative Commons Attribution-N.C. 4.0 International*

ments of doubt from 1995 and assumes in the end that they are three totally different plants. In this regard he even describes very clearly the differences between them. (Chahinian 2005) Unfortunately this justified view is not generally accepted, yet.

Fig. 1–4 – *Sansevieria* (*Dracaena) rhodesiana*
Harva Dam (-17.98627° S, 31.10402° E) near the Manyame River south of Harare near Chitungwiza.
(Photos: Manfred J. Spindler)

Regions and methods

The investigations were based on long-term observations in particular in the plants' habitats, especially in Zimbabwe (Aireys Pass, Great Dyke near Mtorashanga and at the Harava Dam at the

Manyame River south of Harare near Chitungwiza), in northern South Africa, in Botswana and on clearly identified material in cultivation. In particular the plants collected by Richards (Appendix 1) were compared with the first descriptions (table 1).

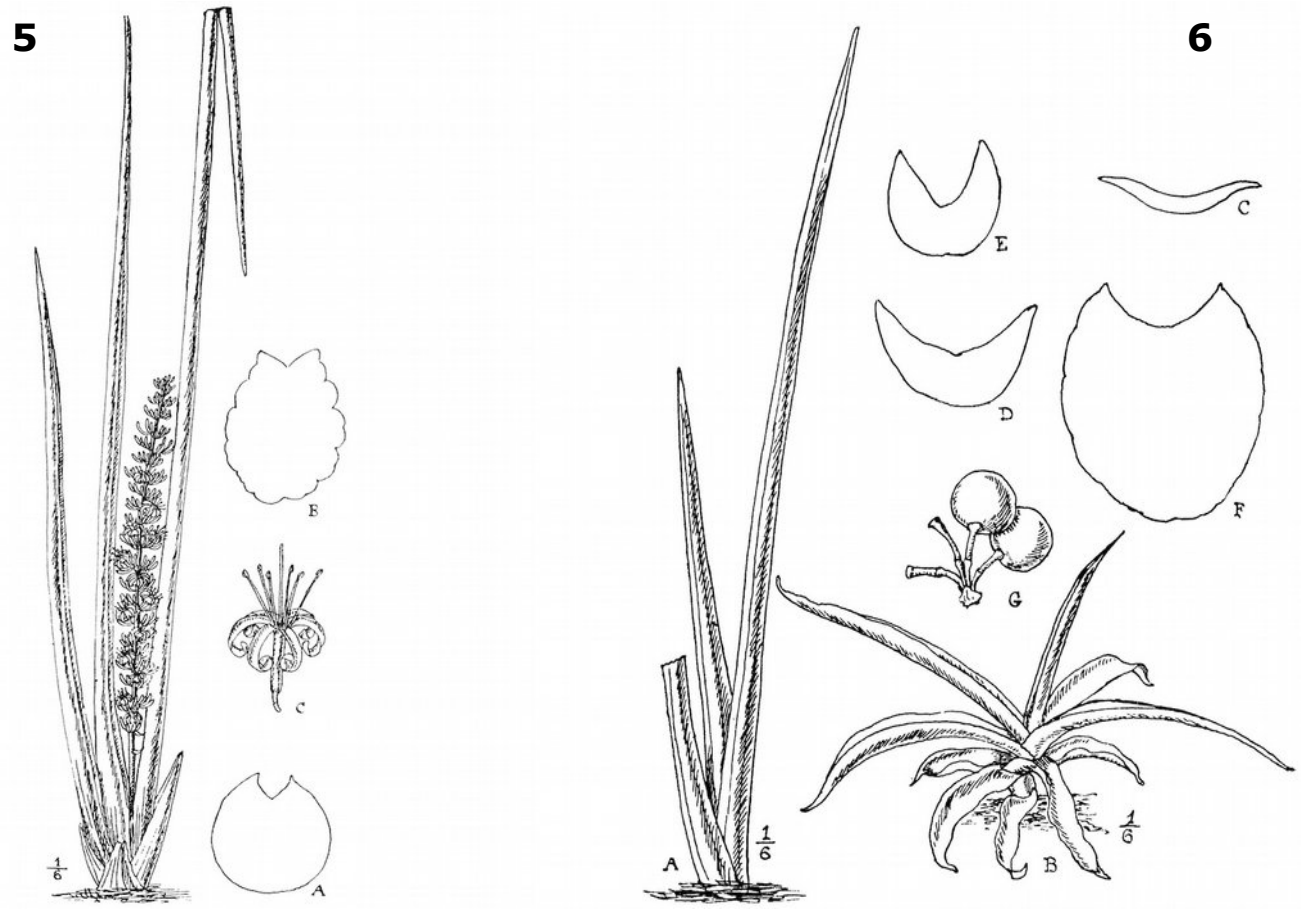

Fig. 5 – *Sansevieria* (*Dracaena*) *rhodesiana* (source: Brown 1915)
Fig 6 – *Sansevieria* (*Dracaena*) *pearsonii* (source: Brown 1915)

Results

Sansevieria deserti from the desert regions in Botswana has a glabrous leaf surface just like *S. pearsonii* from Angola. However, juvenile plants of both species show obvious differences. While *Sansevieria pearsonii* initially grows planifolius suberect and forms the cylindrical leaf shape only later in the adult stage, *S. deserti* has from the very beginning compact, cylindrical, erect leaves with the characteristic pink tinge at the base.

However, all of the studied plants from the Zimbabwe locations, including those mentioned by La Croix (2010) and those mentioned here, had only specimens with distichous, straight or nearly straight and strictly upright leaves. We must assume that in Zimbabwe only *Sansevieria rhodesiana* with distichous leaves occurs and that this is therefore to be taken for an endemic species.

 © 2024 Sansevieria Online, Vol.12 (2) A1 – *Licensed under Creative Commons Attribution-N.C. 4.0 International*

As Brown noted: "*The leaves of Sansevieria rhodesiana do not taper nearly so rapidly as those of S. pearsonii, are parallel, and not diverging, more compressed, especially at the much less acute point, and the dark green lines are continuous (not interrupted) and more evident than in S. pearsonii.*" (Brown 1915)

Fig. 7–8 – *Sansevieria* (*Dracaena*) *deserti* - Cultivated plant originating from Botswana. In Dave Richards' garden. Also mistakenly known as R 799. (Photos: Manfred J. Spindler)

Fig. 9–10 – *Sansevieria* (*Dracaena*) *pearsonii* – Cultivated plant originating from South Africa. (Photos: Stefano Micarelli)

The only exception is the finding south of Mutare at the road to Chipinge from 1982 (R 799) with the handwritten geodata given by Richards (19° 40’ S, 32° 40’ E) which turned out to be *Sansevieria deserti*. Unfortunately the information could not be confirmed by later visits. We therefore assume that this information was based on a mistake by Richards.

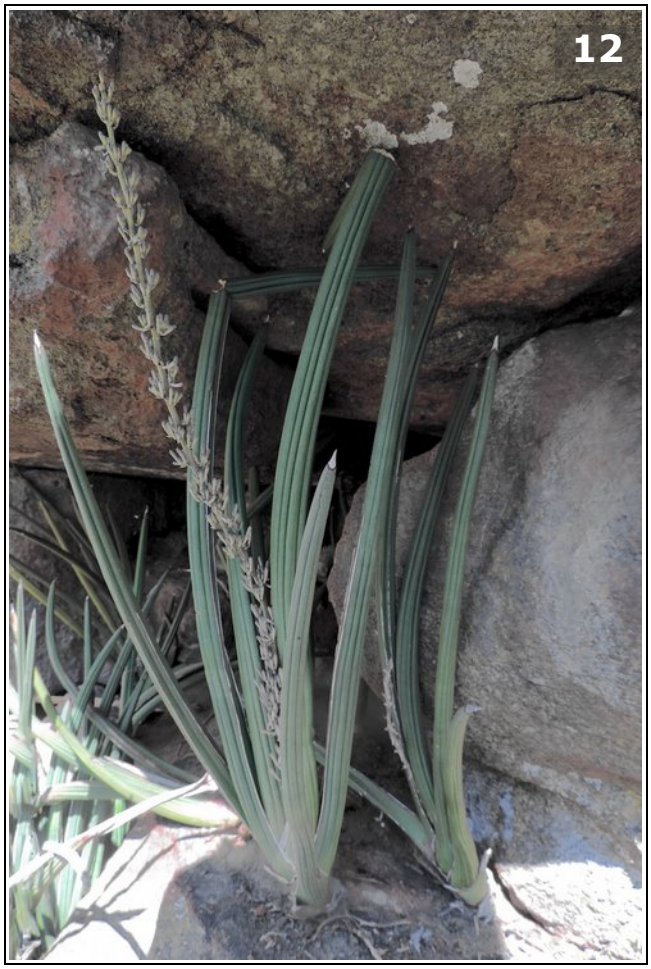

Fig. 11–13

Sansevieria (*Dracaena) rhodesiana* at Ayres Pass
(Photos: Manfred J. Spindler)

Fig. 14

Sansevieria (*Dracaena) rhodesiana* from Great Dyke
(Photo: Manfred J. Spindler)

Fig. 15

LEFT: *Sansevieria* (*Dracaena) rhodesiana* from Great Dyke.

RIGHT: *Sansevieria* (*Dracaena*) *deserti* from Botswana.
(Photo: Manfred J. Spindler)

Discussions

Comparisons between the cylindrical species while the plants were in different stages of their growth often led to mistakes and wrong interpretations before. One of the best known examples for this is *Sansevieria pearsonii* discovered by Hugo Baum as early as 1899 in southern Angola which he first thought to be *S. cylindrica*. (Baum 1903) More than ten years later the species discovered by Baum during his expedition was finally described validly as *S. pearsonii*.

Table 1 - Comparison of species

	S. pearsonii	***S. deserti***	***S. rhodesiana***
Leaf position	rosette	distichous, erect	distichous, erect
Leaves	3–6	7–8	3–4 (5)
Leaf length	70–90 cm	75–105 cm	90–170 cm
Leaf thickness	34–38 mm	30–50 mm	28–30 mm

	S. pearsonii	***S. deserti***	***S. rhodesiana***
Leaf apex	8–25 mm	13 mm	6–13 mm
Leaf color	slightly bluish-green to light green	dark olive green	medium green
Leaf surface	smooth	smooth	rough
Inflorescence	30–55 cm	60 cm	50 cm
Flowers per cluster	9–12	4–6	8–9
Perianth tube	12–25 mm	7–8 mm	8–13 mm
Lobes	6–10 mm	13 mm	16–20 mm

Conclusions

The assumption held to date that *Sansevieria deserti* and *S. rhodesiana* were taxonomic synonyms of *S. pearsonii* can no longer be maintained. As shown above, all three species are not only totally different in their appearance but they come from locations separated by large distances and with very different climatic conditions. Exceptions are all due to dispersal by humans.

Dracaena pearsonii (N.E.Br.) Byng & Christenh. was published in 2018 (Byng & Christenhusz 2018). In addition to the homotypic synonym *Sansevieria pearsonii*, the two heterotypic synonyms *S. deserti* and *S. rhodesiana* were assigned.

This is where the formal correction of the infraspecific names to *Dracaena* takes place.

Dracaena deserti (N.E.Br.) P.A.Mansf. **comb. nov.**
≡ *Sansevieria deserti* N.E.Br. - Bull. Misc. Inform. Kew 1915: 208 (1915).

Dracaena rhodesiana (N.E.Br.) P.A.Mansf. **comb. nov.**
≡ *Sansevieria rhodesiana* N.E.Br. - Bull. Misc. Inform. Kew 1915: 212 (1915).

Appendix 1 - Richard's collections containing information about *Sansevieria pearsonii*

R 65 = ex Dyke, Ravine at Dyke, Southern end
R 844 = Tschipise T-Junction
R 915 = south of Nyanyadzi, 41 km south of Wengezi Junctio
R 1116 = 9 km peg Kadoma-Golden Valley
R 1303 = 171 km peg Harare to Mazaringo
R 1561 = near Hwange
R 1973 = Mazoe River, riverine for ± 400 m

 © 2024 Sansevieria Online, Vol.12 (2) A1 – *Licensed under Creative Commons Attribution-N.C. 4.0 International*

R 2268 = The Dyke, Aireys Pass
R 2278 = along river bank at Umvumvumvu Bridge
R 2465 = North of Tshipisi
R 2477 = 88.5 km Harare to Kadoma
R 2621 = Towke/Mukorsi Junction

Acknowledgements

This article was inspired by Manfred J. Spindler from Harare in Zimbabwe who visited the mentioned locations often on many journeys with Dave Richards († 2012) and many other members of the Aloe, Cactus and Succulent Society of Zimbabwe (ACSSZ). I send him my heartfelt thanks for this and for providing photos from some of the expeditions. I thank Stefano Micarelli for proving photographs. Dr. Heinz-Günter Budweg I thank for his expert advice and for the expert translation into English I thank Regina Baumert.

References

BAUM, H. (1903): *Die Kunene-Sambesi Expedition*. Hrsg. Warburg, Otto, Kolonial-Wirtschaftliches-Komitee, Berlin.

BROWN, N. E. (1911): *1209 Sansevieria pearsonii N.E.Br.*. In: Bulletin of Miscellaneous Information. p. 97.

BROWN, N. E. (1915): *Sansevieria A monograph of all known species*. In: Bulletin of Miscellaneous Information. No. 5, p. 185–261.

BYNG, W.J. & CHRISTENHUSZ, M.J.M. (2018): Asparagaceae. In: M.J.M. Christenhusz, M.F. Fay & J.W. Byng (Eds.), GLOVAP, Nomenclature Part 1, Vol. 4: 64-67. Plant Gateway, Bradford.

CHAHINIAN, B. J. (1995): *Zimbabwe for Sansevieria*. In: The Sansevieria Journal, Vol. 5, p. 18–24.

CHAHINIAN, B. J. (2005): *The splendid Sansevieria - an account of the species*. Published by the author, Buenos Aires.

JAARSVELD, E. VAN (1994): *The Sansevieria species of South Africa and Namibia*. In: Aloe 31,(1): 11-15.

JAARSVELD, E. VAN (2002): *Sansevieria Species of South Africa and Namibia, Part. 2.* In: Sansevieria, No. 3, p. 8–13.

JAARSVELD, E. VAN (2010): *Hunting Sansevieria in southern Angola*. In: Sansevieria 23, p. 3–12.

JANKALSKI, ST. (2006): *Brown´s Sansevieria monograph - an update*. In: Sansevieria, Heft 15, Sp 21–29.

LA CROIX, I. (2010): *Dracaenaceae*, In: Timberlake, J. (ed.) Flora Zambesiaca 13 (2), Kew Publishing, London.

MBUGUA, P. K. (1995): *Systematic studies of the genus Sansevieria Petagna*. University of Reading. For the Degree of Doctor of Philosophy, School of plant sciences Department of Botany.

MANSFELD, P. A. (2013): *Die Gattung Sansevieria – Alle Arten und ihre Pflege*. 1. Auflage, Norderstedt/Hamburg.

MANSFELD, P. A. (2022): *Trendpflanze Sansevieria – (m)eine Auswahl*. Hrsg. Deutsche Kakteen-Gesellschaft (DKG), Adelsdorf.

MANSFELD, P. A. & SPINDLER, M. J. (2022): *Simbabwe im südlichen Afrika und einige Sansevierien*. In: Sansevieria Online, vol. 10(2): 42–49.

OBERMEYER, A. A. (1992): *Sansevieria*. In O.A. Leistner (ed.), Flora of Southern Africa 5(3): 5-9.

WEBB, R. H., & NEWTON, L. E. (2022): *The genus Sansevieria, a pictorial guide*. Arid Lands Publishing, Tucson, Arizona.

WILKINS-ELLERT, M. (2022): *Einige Beobachtungen an Sansevierien in Simbabwe*. In: Sansevieria Online, vol. 10(2): 50–59.