Nomenclatural note
Chlorophytum boomense (Agavaceae), a local endemic from southern Namibia, is found to be morphologically indistinguishable from C. namaquense, which ranges from southern Namibia to central Namakaland, and is consequently synonymised in that species.

Keywords: Greater Cape Floristic Region; Namaqualand; Namibia; Taxonomy

Introduction

Chlorophytum Ker Gawl. (Agavaceae) (sensu APGII 2003; Manning & Goldblatt 2012) includes 150–200 species of rhizomatous perennials distributed widely through the Old World tropics and subtropics, with its centre of diversity in Africa (Conran 1998; Manning 2017). The genus is well represented in southern Africa, with 40 species currently recorded from the subcontinent, twelve of which are endemic to the winter-rainfall parts of the Greater Cape Floristic Region (Manning & Goldblatt 2012; Snijman 2013; Kativu & Bjorå 2016; Manning 2017).

The southern African species were last revised some years ago by Obermeyer (1962) [see Archer and Kativu (2001) for nomenclatural corrections], but the Namibian species were more recently treated by Kativu et al. (2012). Since these publications, two additional species have been described from South Africa (Van Jaarsveld 2014; Manning 2017) and another from southern Namibia (Kativu & Bjorå 2016). The latter, C. boomense Kativu, was described from a single population from Ai-Ais Hotsprings Game Park just east of Rosh Pinah in southern Namibia. We are unable to distinguish it from C. namaquense Schltr. ex Poelln. from the Northern Cape, South Africa and southern Namibia, and formally synonymise it here.
in southern Namibia. It was recognised as new through comparison with other species recorded from central and southern Africa, and was diagnosed against the tropical African *Chlorophytum subpetiolatum* (Baker) Kativu on the basis of their similar roots, tapering to the tips, but is otherwise morphologically different from that taxon, and the two are evidently only distantly related (Kativu & Bjorå 2016). *Chlorophytum boomense* is otherwise unremarkable among the southern African members of the genus with pedicels articulated at or below the middle in having glabrous, subdistichous, linear to narrowly lanceolate leaves 8–12 mm wide, and a simple, racemose inflorescence of moderately large flowers with sparsely papillate filaments.

*Chlorophytum namaquense*, which was described from plants from Springbok in northern Namakuland, was considered for a long time to be a relatively rare endemic from the immediate area (Obermeyer 1962) but is now recognised to occur more widely, ranging from Rosh Pinah in southern Namibia through the Richtersveld to far as Soebatsfontein in central Namaqualand, South Africa (Snijman 2013). It is diagnosed by its slender roots, elongated rosette of glabrous, lanceolate leaves to 25 mm wide with unthickened, sparsely setulose margins, and ± simple raceme of moderately large flowers with scabrid filaments, and pedicels articulated near the middle (Obermeyer 1962). Although the roots were described as slender, Obermeyer (1962) suggested that they were probably soft and spongy when young, and this is borne out in more recent collections, which have slender, tapering roots indistinguishable from *C. boomense*. The similarity between these two species, as well the occurrence of *C. namaquense* in Namibia, was overlooked by Kativu and Bjorå (2016).

A summary of taxonomically useful features in the two species (Table 1) fails to reveal any significant differences between them and we accordingly reduce *C. boomense* to synonymy.

### Table 1. Summary of taxonomically useful characters in *C. boomense* (from Kativu & Bjorå 2016) and *C. namaquense* (from Obermeyer 1962) plus additional specimens cited

|          | Roots | Rhizome | Leaves | Inflorescence | Pedicels | Tepals | Filaments |
|----------|-------|---------|--------|---------------|----------|--------|-----------|
| *C. boomense* | Swollen at base, without tubers | Short, with fibrous leaf bases | Subdistichous, linear to lanceolate, 8–12 mm wide, glabrous | Simple | Articulated below middle, ± 9 mm long in fruit | 10 mm long | Sparsely papillate |
| *C. namaquense* | Slender, without tubers | Short, with fibrous leaf bases | Subdistichous (in an elongated rosette), linear to lanceolate, 8–25 mm wide, glabrous | Simple or with 1 or 2 ascending branches | Articulated at or shortly below middle, 10 mm long in fruit | 10–12 mm long | Scabrid |

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*Chlorophytum namaquense* Schltr. ex Poelln. in Berichte der Deutschen Botanischen Gesellschaft 61: 207 (1943). Type: South Africa, Northern Cape, Springbok (1917): Namaqualand, Vogelklip, (–DB), Oct 1897, Schlechter 11295 (B†, holo.; PRE, iso.).

*Chlorophytum boomense* Kativu in Kativu and Bjorå in Plant Ecology and Evolution 149: 342 (2016), syn. nov. Type: Namibia, Chamaites (2717): Ai-Ais Hotspings Game Park, Orange River Mountain (Boom River), (–CC), 12 Sep 2012, Nanyeni 380 (WIND, holo.—image!: SRGH, WIND, iso.).

Additional representative specimens examined

Namibia. 2717 (Chamaites): Rosh Pinah, hills E of Danimub Reserve, (–CC), 4 Sept 2000, Bruyns 8871 (NBG).

South Africa. NORTHERN CAPE. 2816 (Oranjemund): Richtersveld National Park, (–BB), 7 Nov 1995, C & F Williamson 5841 (NBG). 2817 (Vioolsdrift): Kliphooget, (–CD), 11 Sept 1929, Herre STE11482 (NBG); Koeefontein, (–CD), 15 Aug 1979, Van Berkel 108 (NBG). 2917 (Springbok): Kourkammaberg, (–CD), 25 Aug 1999, Desmet 266 (NBG); Spektakel, (–DA), 9 Sept 1950, Barker 6729 (NBG); 3.5 km E of Nababeep and 1.5 km N of Divide Copper Mine, (–DB), 18 Aug 1987, Hilton-Taylor 2104 (NBG); 10 mi [16 km] N of Komaggas, (–DC), 4 Sept 1951, Compton 22799 (NBG); Misklip [Mesklip], (–DD), 28 Aug 1935, Compton 5869 (NBG); 25 Aug 1941, Barker 1883 (NBG). 3017 (Hondeklipbaai): Boskloof, Kookfontein farm, 10 km NE of Soebatsfontein, (–BA), 2 Sept 1986, Hilton-Taylor 1346 (NBG).
References

Angiosperm Phylogeny Group II, 2003, ‘An update of the Angiosperm Phylogeny Group classification for the orders and families of flowering plants APGII’, Botanical Journal of the Linnean Society 141: 399–436, https://doi.org/10.1046/j.1095-8339.2003.00158.x.

Archer, C. & Kativu, S., 2001, ‘The correct name in Chlorophytum (Anthericaceae) for Anthericum longistylum’, Bothalia 31: 40–41, http://dx.doi.org/10.4102/abc.v31i1.501.

Conran, J.G., 1998, ‘Anthericaceae’, In K. Kubitzki (ed), The Families and Genera of Vascular Plants III. Flowering Plants, Monocotyledons, Liliaceae (except Orchidaceae): 114–121, Springer, Berlin, Heidelberg.

Kativu, S., Bjorå, C.S., Kwembenya, E.G., Klaassen, E.S. & Nordal, I., 2012, ‘Anthericaceae’, Flora of Namibia. Occasional Contributions 4. National Botanical Research Institute, Windhoek.

Kativu, S. & Bjorå, C.S., 2016, ‘A new species of Chlorophytum (Asparagaceae) from the succulent Karoo biome, Namibia – with an updated key for Chlorophytum of Namibia’, Plant Ecology and Evolution 149: 339–346, http://dx.doi.org/10.5091/plecevo.2016.

Manning, J.C., 2017, ‘Chlorophytum asperum (Agavaceae), a new species from Northern Cape, South Africa’, South African Journal of Botany 111: 316–318, http://dx.doi.org/10.1016/j.sajb.2017.04.002.

Manning, J.C. & Goldblatt, P., 2012, Plants of the Greater Cape Floristic Region 1: The Core Cape Flora, Strelitzia 29. South African National Biodiversity Institute, Pretoria.

Obermeyer, A.A., 1962, ‘A revision of the South African species of Anthericum, Chlorophytum and Trachyandra’, Bothalia 7: 669–778, https://doi.org/10.4102/abc.v7i4.1679.

Poellnitz, K. Von, 1943, ‘Neue afrikanische Planten’, Berichte der Deutschen Botanischen Gesellschaft 61: 204–209.

Snijman, D., 2013, Plants of the Greater Cape Floristic Region 2: The Extra Cape Flora, Strelitzia 30. South African National Biodiversity Institute, Pretoria.

Thiers, B., 2016, Index Herbariorum: A Global Directory of Public Herbaria and Associated Staff. New York Botanical Garden’s Virtual Herbarium, http://sweetgum.nybg.org/science/ih.

Van Jaarsveld, E., 2014, ‘Chlorophytum cremnophilum (Anthericaceae), a new caulescent succulent cliff-hanger from the Eastern Cape (RSA)’, Bradleya 32: 19–24.