



Chlorophytum boomense (Agavaceae) is a synonym of *C. namaquense* from southern Namibia and the Northern Cape, South Africa

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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 Namaqualand, 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.

Materials and Methods

All relevant material was examined in BOL, NBG, PRE and SAM (abbreviations following Thiers (2016)), the herbaria containing significant holdings of southern African flora. Author names are abbreviated according to the International Plant Names Index (<https://www.ipni.org>).

Taxonomy

Chlorophytum boomense is known from a single population along the Boom River near its confluence with the Orange River ± 30 km east of Rosh Pinah

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
<i>C. boomense</i>	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
<i>C. namaquense</i>	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

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 *C. 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 Namaqualand, was considered for a long time to be a relatively rare endemic from the immediate area (Obermeyer 1962) but is now known to occur more widely, ranging from Rosh Pinah in southern Namibia through the Richtersveld as 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.

Nomenclature

***Chlorophytum namaquense* Schltr. ex Poelln.** in *Be-richte der Deutschen Botanischen Gesellschaft* 61: 207 (1943). Type: South Africa, Northern Cape, Springbok (2917): 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, Chamaïtes (2717): Ai-Ais Hotsprings 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 (Chamaïtes):** 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, *G & F Williamson 5841* (NBG). **2817 (Violsdrift):** Kliphoogete, (–CD), 11 Sept 1929, *Herre STE11482* (NBG); Kouefontein, (–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).

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