



## *Commiphora namibensis* (Burseraceae), a new species from Angola

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### Abstract

*Commiphora namibensis* Swanepoel, described here as a new species, is known only from the Kaokoveld Centre of Endemism, southwestern Angola. It appears to be closely related to *C. virgata* Engl. Diagnostic morphological characters of *C. namibensis* include the mostly spinescent lateral branches and branchlets, trifoliolate leaves, rarely with a few simple ones also present, the leaflets which are shiny adaxially and a laterally slightly compressed putamen with a yellow pseudo-aril. Illustrations of the plant and a distribution map are provided. Mainly confined to near the coast, the new species is widespread but uncommon between Namibe and Santa Maria.

### Introduction

At present about 222 described species of *Commiphora* Jacquin (1797: 66) are accepted worldwide (The Plant List 2013), of which 12 occur in Angola. Five of these species are endemic to the Kaokoveld Centre of Endemism, a biogeographical region with many restricted-range plants and animals in southwestern Angola and adjacent northwestern Namibia (Mendes 1964, 1967, Van Wyk & Smith 2001, Curtis & Mannheimer 2005, Figueiredo & Smith 2008). The Kaokoveld Centre is the principle focal point of endemism and diversity for *Commiphora* in southern Africa (Van Wyk & Smith 2001) and new members of the genus continue to be discovered in this biologically diverse but botanically poorly explored region.

In this contribution, a new species of *Commiphora* from the Kaokoveld Centre is described. During a botanical expedition to southwestern Angola in April 2010, the author encountered an unfamiliar *Commiphora* with bark peeling horizontally in strips and glabrous, trifoliolate leaves. It resembles *C. virgata* Engler (1894: 139) but with branches and branchlets mostly spinescent and with slightly discoloured, adaxially shiny leaves. The plants were sterile at the time. During a subsequent visit in December 2010, flowers and fruit were collected and these confirmed that this is an undescribed species. Plants were found in several localities on the coastal plain between Namibe and Santa Maria. Live material of the new species was studied in the field, and morphological characters in the following description are based on mature leaves, fresh flowering material and ripe fruit. Diagnostic features for *C. virgata* were determined through examination of live plants in southwestern Angola and in Namibia. Additional information for *C. virgata* was sourced from the literature (Van der Walt 1986, Steyn 2003).

### Taxonomic treatment

*Commiphora namibensis* Swanepoel *sp. nov.* (Figs.1 & 2)

Differs from *C. virgata* Engler in branches and branchlets mostly spinescent; leaves trifoliolate, rarely with few simple ones also present, leaflets shiny adaxially, slightly discoloured, obovate, obcordate, subrhombic, suborbicular or broadly elliptic; disc grooved in male flowers; putamen laterally slightly compressed; pseudo-aril yellow.

**Type:**—ANGOLA. Namibe Province: 13 km west of Caraculo along main road to Namibe, 1512BA, 526 m, 14 April 2010, *Swanepoel* 329 (holotype PRU!; isotype LUBA!).

Differences in the fruit of the two species include the laterally slightly compressed putamen with a yellow pseudo-aril in *C. namibensis* and the white to reddish pseudo-aril with the putamen not compressed in *C. virgata*.

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## References

- Curtis, B.A. & Mannheimer, C.A. (2005) *Tree atlas of Namibia*. National Botanical Research Institute, Windhoek, 674 pp.
- Engler, A. (1894) *Plantae Gurichianae*. Ein Beitrag zur Kenntnis der Flora von Deutschsüdwestafrika. *Botanische Jahrbücher für Systematik, Pflanzengeschichte und Pflanzengeographie* 19: 128–152.
- Figueiredo, E. & Smith, G.F. (2008) Plants of Angola/Plantas de Angola. *Strelitzia* 22: 1–279.
- Jacquin, N.J. (1797) *Plantarum Rariorum Horti Caesarei Schoenbrunnensis*, vol. 2. C.F. Wappler, Vienna, pp. 1–68, pl. 130–250. <http://dx.doi.org/10.5962/bhl.title.332>
- Mendes, E.J. (1964) Additiones ed adnotationes florum angolensi – VIII. *Boletim da Sociedade Broteriana* 2(28): 137, 138.
- Mendes, E.J. (1967) Additiones ed adnotationes florum angolensi – X. *Boletim da Sociedade Broteriana* 2(41): 155–164.
- Seely, M. (2004) *The Namib: Natural History of an Ancient Desert*. Desert Research Foundation of Namibia, Windhoek, 110 pp.
- Steyn, M. (2003) *A field guide, southern Africa Commiphora / 'n Veldgids, Suider-Afrika Commiphora*. Published by the author, Polokwane, 92 pp.
- The Plant List (2013) Version 1.1. Published on the Internet; <http://www.theplantlist.org/> (accessed 19 August 2014).
- Van der Walt, J.J.A. (1986) Burseraceae. *Flora of southern Africa* 18(3): 5–34.
- Van Wyk, A.E. & Smith, G.F. (2001) *Regions of floristic endemism in southern Africa: a review with emphasis on succulents*. Umdaus Press, Hatfield, Pretoria, 199 pp.