Commiphora benguelensis (Burseraceae), a new species from Angola

W. SWANEPOEL*

* H.G.W.J. Schweickerdt Herbarium, Department of Plant Science, University of Pretoria, Pretoria, 0002 South Africa. Postal address: P.O. Box 21168, Windhoek, Namibia. E-mail: wessel@kaokosafari.com

Abstract

Commiphora benguelensis 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. africana. Diagnostic morphological characters of C. benguelensis include the white, glutinous exudate, smooth bark and hairy, trifoliolate leaves. 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 twelve described species of Commiphora Jacquin (1797: 66) are known from 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 principal focal point of diversity and endemism 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 smooth, non-peeling bark and hairy, trifoliolate leaves, resembling C. africana (Richard 1831: 150) Engler (1883: 14) but with white, glutinous exudate (resin) and branches without spines. The plants were sterile at the time. During a subsequent visit in December 2010, flowers and fruit were collected. 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. africana were determined through examination of plants in the field in southwestern Angola and in Namibia. Additional information for C. africana was sourced from the literature (Van der Walt 1986; Van der Walt & Van der Schijff 1973; Steyn 2003; Swanepoel 2008).

Taxonomic treatment

Commiphora benguelensis Swanepoel, sp. nov. (Fig. 1)

Differs from C. africana in being dioecious or monoecious (vs. dioecious); spineless (vs. spinescent); exudate glutinous, white (vs. not glutinous, clear); leaves trifoliolate, usually with few simple ones also present (vs. invariably trifoliolate), leaflets pilose adaxially, tomentose abaxially (vs. pilose to tomentose (in southern Africa), similar on both sides); flowers sessile (vs. pedicellate); disc not grooved on inside, lobes bifid (vs. disc grooved on inside, lobes simple); fruit with exocarp pilose (vs. glabrous); pseudo-aril yellow, with two short lobes and two long commissural arms (vs. red with 4 arms of variable size and form, or pseudo-aril almost completely covers the putamen).

Type:—ANGOLA. Namibe Province: 22 km SSE of Chapeu Armado in maritime hills, 1412CB, 438 m, 16 April 2010, Swanepoel 324 (holotype PRU; isotype LUBA!).

Accepted by Zhi-Qiang Zhang: 26 May 2015; published: 23 Jun. 2015
Licensed under a Creative Commons Attribution License http://creativecommons.org/licenses/by/3.0