

JOURNAL of the ADELAIDE BOTANIC GARDENS

AN OPEN ACCESS JOURNAL FOR AUSTRALIAN SYSTEMATIC BOTANY

flora.sa.gov.au/jabg

Published by the

STATE HERBARIUM OF SOUTH AUSTRALIA

on behalf of the

BOARD OF THE BOTANIC GARDENS AND STATE HERBARIUM

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Botanic Gardens and
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Calycopeplus (Euphorbiaceae) not in South Australia

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Abstract

Calycopeplus ephedroides is removed from the South Australian census of plants after being recorded as occurring there by H.K. Airy Shaw in a 1980 publication on Australian Euphorbiaceae.

Calycopeplus ephedroides Planchon was first listed for South Australia, with *C. helmsii* F.Muell. & Tate as a synonym, when Airy Shaw (1980) indicated that the species occurred in Western Australia, South Australia and, questionably, the Northern Territory.

Since there was no material in the South Australian herbarium, W.R. Barker contacted Airy Shaw (in litt., 17 December 1982) to establish the basis of the South Australian record. He was informed by Airy Shaw (in litt., January 1983) that the record was based on a specimen held by the herbarium of the Royal Botanic Gardens, Kew, from the:

... vicinity of Lake Eyre. Coll. Mr Andrews. Comm. R. Schomburgk. Nov. 1875. No. 229.

and furthermore that:

This forms the sole basis of my attribution of *C. ephedroides* to S. Australia, but I have not studied the genus in detail. I believe the identification is correct.

Accordingly, Barker included *C. ephedroides* in the two subsequent South Australian censuses (Barker in Jessop 1983, 1984).

Weber (1986) included the species in the 4th edition of the *Flora of South Australia* as a synonym of the prior-named *C. paucifolius* (Klotzsch.)Baillon, stating that: "The existence of this species in S. Aust. is very doubtful".

C. paucifolius has continued to be questionably listed for the Lake Eyre region in South Australian censuses (Barker 1989, 1993, State Herbarium of South Australia 2001) until this time.

Forster (1995) stated that there were no records for South Australia and the species should be deleted for the state, but he had clearly not investigated the Andrews collection in Kew.

The Kew specimen

The process of compiling the most recent edition of the South Australian vascular plant census, published in

2005 (Barker et al. 2005), led the first author to contact the second, fortuitously spending time at Kew, to request him to investigate the specimen.

The specimen (Fig. 1) has a printed label with the text:

Vicinity of Lake Eyre, SOUTH AUSTRALIA. Coll. Mr Andrews. Com. R. Schomburgk. Nov. 1875'.

to which has been added, in an unknown hand:

Euphorbia (*Calycopeplus*) sp. cf. *Euph. arborea* (Ephedra, Muell).

There is a separate paper tag glued to the sheet with the number 229. Again, the hand is unknown but there are similar number tags with other collections sent by Schomburgk from Adelaide so they are possibly numbers added to a set before despatch rather than collectors' numbers. There is nothing in the old 'Plant Lists' of collections submitted to Kew corresponding with Schomburgk's donation. There also appears to be nothing in the Schomburgk holdings of the State Herbarium of South Australia (AD) corresponding with this specimen, although these holdings have yet to be fully investigated.

The collector was probably Frederick William Andrews (1824?–1884), a collector and naturalist on the 1874 Lewis Expedition around Macumba River, Lake Eyre and Goyder Lagoon. He was employed by the South Australian Museum and is better known as a bird collector, but it is documented that he collected plants on occasion (Kraehenbuehl 1986). This is not certain however since there are two other collectors with surname Andrews who may have collected in South Australia in that period: J.H. Andrews who collected in 1883 and C. Andrews with date of collecting unknown.

Specimens examined

SOUTH AUSTRALIA. *C. Andrews 121*, s.dat. Lake Eyre. AD 99208028 (*Cyperus gracilis* R.Br.); *J.H. Andrews 1180*, 1883. Eyre Peninsula. AD 97737110 (J.G.O. Tepper Herbarium: *Waitzia acuminata* Steetz); *Mr Andrews 229*, s.dat. Vicinity

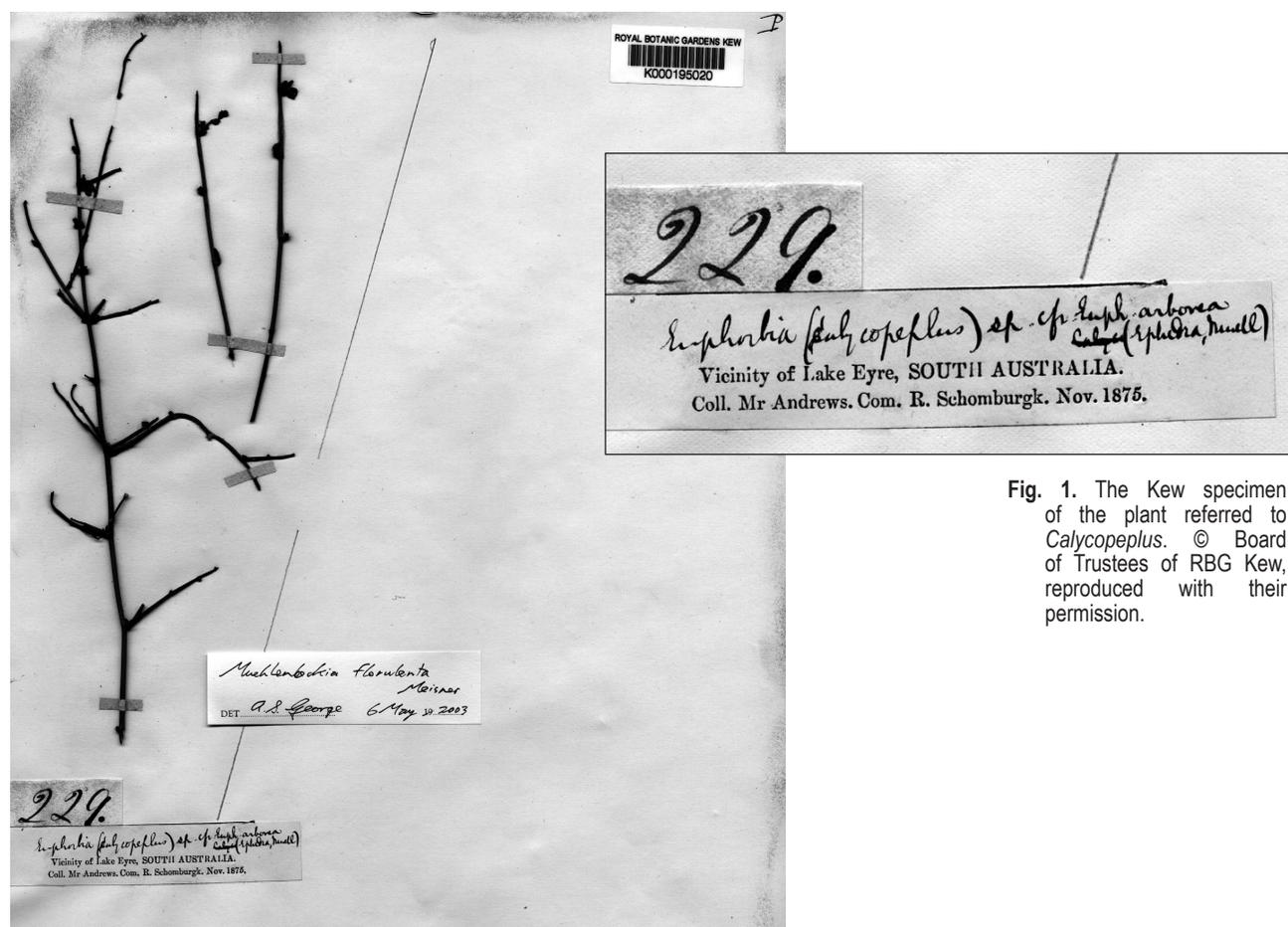


Fig. 1. The Kew specimen of the plant referred to *Calycopeplus*. © Board of Trustees of RBG Kew, reproduced with their permission.

of Lake Eyre. K ("com. R. Schomburgk Nov. 1875": *Muehlenbeckia ?florulenta* Meisner)

Identification of the specimen

Examination of the collection by George showed it to be a male specimen of a leafless *Muehlenbeckia* (Polygonaceae). It is probably the widespread *M. florulenta* Meisn. since one inflorescence is somewhat elongated, matching the description of this species (Chorney 1986), in contrast to the compact form in the related *M. coccoloboides* J.Black, but this determination remains tentative. There seems to be no reliable character for separating male specimens of these two species.

The name *Calycopeplus paucifolius* accordingly has been deleted from the South Australian flora. The species is endemic in Western Australia.

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