



Typification of the Linnaean names *Oxalis flava* and *O. versicolor* (Oxalidaceae)

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The typification of the Linnaean names *Oxalis flava* and *O. versicolor* (Oxalidaceae) are discussed. The illustrations provided by Burman in *Rariorum Africanarum Plantarum* are designated as the lectotypes of these names. Furthermore, an epitype for the name *O. versicolor* is also designated in order to avoid any ambiguity in the interpretation of the lectotype.

Keywords: epitype, Linnaeus, nomenclature, typification

Introduction

The genus *Oxalis* Linnaeus (1753: 433) (Oxalidaceae R.Br.) is a very complex group of vascular plants and is found principally in South America and South Africa (Macbride 1949, Eiten 1963, Denton 1973, Lourteig 1975, 1979, 1980, 1988, 1994, 1995, 2000, Dreyer & Makgakga 2003, Oberlander *et al.* 2004, 2009, 2011, Nesom 2009, López *et al.* 2013). The genus comprises approximately 500 species distributed in two centres of species richness: South America (c. 250 species) (Lourteig 1994, 2000) and southern Africa (c. 210 species) (Salter 1944, Oliver 1993, Williamson 1999, Dreyer & Makgakga 2003), with the former being the putative place of origin for the genus (Oberlander *et al.* 2011).

South America hosts the largest diversity in terms of *Oxalis* growth forms, including shrubs, herbs, annuals, vines and geophytes. Southern African members, in contrast, are all bulbous perennials with above-ground plant parts borne on seasonal rhizomes emergent during the rainy season (Roets *et al.* 2013). The greatest diversity of southern African taxa is confined to Western and Northern Cape in South Africa, corresponding closely to the Greater Cape Floristic Region (GCFR) sensu Born *et al.* (2007). Increased collecting effort and the use of molecular identification tools has led to the discovery and description of new South African *Oxalis* species at an increasing rate over the past few decades (Oliver 1993, Williamson 1999, Manning & Goldblatt 2008, Dreyer *et al.* 2009, 2013, 2014, Oberlander *et al.* 2009, Roets *et al.* 2013, Suda *et al.* 2013). On the other hand, several species, e.g. *O. acetosella* Linnaeus (1753: 433), *O. corniculata* Linnaeus (1753: 435), *O. pes-caprae* Linnaeus (1753: 434), and *O. purpurea* Linnaeus (1753: 433), and a few endemic species grow in Europe, Asia, and Oceania (Knuth 1930, Lourteig 1994, Castro *et al.* 2007, Anilkumar & Udayan 2013).

The most comprehensive taxonomic treatment of the genus *Oxalis* was written by Lourteig (2000). He considered the genus divided into four subgenera, based mainly on characters of the leaf: *Oxalis*, *Monoxalis* Small (1903: 665) Lourteig (1980: 452), *Trifidus* Lourteig (1995: 389), and *Thamnoxys* Endlicher (1840: 1172) Reiche (1894: 275) emend. Lourteig (1994: 1).

Oxalis flava and *O. versicolor* are two of the sixteen species of *Oxalis* described by Linnaeus (1753, 1762, 1771), and both species are found in South Africa. *Oxalis flava* is a geophyte with a fibrous bulb, mostly semi-succulent; number of leaflets ranging from 1–10; petiole round, sometimes winged; leaflet margins smooth to undulate; flowers large, funnel-shaped with broad tube, petals white, light pink or yellow. This species is distributed in South Africa, Northern and Western Cape Provinces. Taxonomically Jacquin (1794) described three putatively related species of *O. flava*: *O. flabellifolia* Jacquin (1794: 94), *O. lupinifolia* Jacquin (1794: 92) and *O. pectinata* Jacquin (1794: 95), principally because the author didn't recognize *O. flava* as a distinct species. However, Salter (1944) regarded these three species as synonyms of *O. flava*, and recognized eight morphologically distinct forms based mainly on petiole, leaflet and sepal characters.

Oxalis versicolor is a bulbous plant approximately 8 cm tall, forming a clump of light green leaves composed of three narrow leaflets, leaflets linear-cuneate, channelled above, emarginate; lamina of leaflets sessile; petioles 2–5 cm long, glabrous or pilose; flowers solitary, funnel-shaped, petals white with the underside of the petals edged in red.

The Linnaean names *Oxalis flava* and *O. versicolor* have apparently not yet been typified (Jarvis 2007: 716–717). The purpose of this paper is to contribute to the stability of the nomenclature by lectotypification of these names. The designation of the corresponding types is based on the consultation of Linnaeus's original material and the literature cited in the respective protologues.