



Three new species of *Cypella* (Iridaceae) from South America, and taxonomic delimitation of *C. suffusa* Ravenna

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Abstract

Three new species of *Cypella* are described and illustrated for the complex of grasslands ecosystems of Rio de La Plata: *C. aurinegra*, *C. guttata* and *C. ravenniana*. The former is endemic to the region of the Taquari river, southern Cerro Largo Department, Uruguay, and is closely related to *Cypella fucata* and *C. luteogibbosa*, but can be distinguished from these species by its yellow flowers stained with dark-purple, narrower outer tepals, smaller inner tepals, shorter adaxial crests of style branches, slender filaments, and seeds with smooth testa. *Cypella guttata* occurs in Artigas and Rivera Departments, northern Uruguay, and in Santana do Livramento Municipality, southwestern Rio Grande do Sul State, Brazil. This species resembles *C. herbertii* and *C. lapidosa*, and can be distinguished by its flowers with central depression showing red spots, filaments narrower and tape-shaped, style branches with shorter adaxial crests, and small transverse stigmatic surface of the abaxial crest. The range of geographic distribution of *C. ravenniana* includes southern Misiones, and northeast Corrientes Provinces, Argentina, and west and northwest Rio Grande do Sul State, Brazil. This species can be recognized by its one-flowered spathes, borne on short peduncles. *Cypella ravenniana* was firstly misidentified as *C. suffusa*; however, having as base the type and topotypical collections of the latter species, *C. suffusa* is recognized by its two-flowered spathes borne on long peduncles, and perigone golden-yellow with deep central concavity. Data about phenology, geographic distribution, conservation and dichotomous keys to segregate these three new species from its related species are supplied.

Key words: bulbous geophyte, grasslands, Iridoideae, taxonomy, Tigridieae

Introduction

Cypella Herbert (1826: t. 2637) is a genus of the tribe Tigridieae with about 25 species native to south-central South America, which encompasses small or medium-sized plants with 1–2 flowered spathes, often yellow or orange flowers with broadly clawed tepals (Ravenna 2005, Ravenna 2009). A dense area of glandular trichomes is located in a central depression of the inner tepals, and the style is slender below, with branches well developed, compressed, usually divided above into prominent acute crests and with a transverse stigmatic surface on the abaxial surface at the base of the crests (Ravenna 2003, Goldblatt & Manning 2008, Deble *et al.* 2012c).

The generic delimitation of *Cypella* is still controversial: Goldblatt & Manning (2008) and Roitman *et al.* (2008) gave a broad definition to the genus, including *Phalocallis* Herbert (1839: t. 3710), *Kelissa* Ravenna (1981c: 106), and *Onira* Ravenna (1983: 204). Chauveau *et al.* (2012) evidenced this widely circumscribed *Cypella* as polyphyletic, and recognized *Phalocallis* as an independent lineage. In the World Checklist of Iridaceae (WCI) the wider concept was followed by Barker (2015), but *Hesperoxiphion* Baker (1877: 127), *Larentia* Klatt (1882: 362), and *Phalocallis* were recognized as valid genera. Following the generic delimitation of WCI, the genus *Cypella* is almost totally