

CALYDOREA MINIMA (IRIDACEAE, TIGRIDIEAE) A NEW SPECIES FROM SOUTH AMERICA

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Summary: *Calydorea minima* (Iridaceae, Tigridieae) is described from stony grasslands of northern, Argentina and Paraguay. The new species resembles *Calydorea azurea*, but it can be easily distinguished by its smaller habit (10-15 cm vs. 25-35 cm), its smaller flowers with acute tepals (1.5-2.2 cm diameter vs. 4.4-5.3 cm diameter), and by its linear extremely narrow leaves (0.5-0.7 mm vs 3 a 6 mm wide). A key, to identify the species of the genus from Argentina, Paraguay and Uruguay is provided

Key words: Iridaceae, Tigridieae, *Calydorea*, South America.

Resumen: *Calydorea minima* (Iridaceae, Tigridieae) una nueva especie de Sud America. Se describe *Calydorea minima* (Iridaceae: Tigridieae) proveniente de afloramientos de roca del norte de, Argentina y Paraguay. Esta nueva especie se asemeja a *Calydorea azurea*, pero puede distinguirse fácilmente por su menor tamaño (10-15 cm vs. 25-35 cm), sus flores más pequeñas (1.5-2.2 cm vs. 4.4-5.3 cm de diámetro), con tépalos agudos y sus hojas lineares muy angostas (0.5-0.7 mm vs 3 a 6 mm de ancho). Se incluye una clave para identificar las especies del género que habitan Argentina, Paraguay y Uruguay.

Palabras clave: Iridaceae, Tigridieae, *Calydorea*, Sud America.

INTRODUCTION

Calydorea Herbert is a genus of Iridaceae, tribe Tigridieae, centered in temperate South America. It is defined by the subequal tepals spreading from the base, free stamens, short, slender style branches with simple, obtuse to emarginate apices. The genus was expanded by Goldblatt & Henrich (1991) to include *Salpingostylis* Small, *Cardiostigma* Baker, *Itysa* Ravenna, and *Catila* Ravenna, thus extending the range of the genus to northern South America, Mexico, and southern North America (Florida). *Tamia* Ravenna has been also merged in *Calydorea* (Di Tullio *et al.*, in press), which now includes 25 species, 7 of which were reported in Argentina, Paraguay and Uruguay.

During a trip to the north of Corrientes, in spring of 2002, we found populations of a very tiny species of *Calydorea*. Bulbs collected in the field, were

cultivated in the J. O. Hall Garden facilities (Facultad de Agronomía, Universidad de Buenos Aires, 34°35' S, 58° 30' W) and for the last 4 years observations on growth and phenology, were carried out. During spring of 2006 we collected and made vouchers of this plant in the same place. Furthermore in a visit to CTES herbarium we found a voucher of this species from Paraguay. Detailed observations of the habit, size and flowers led us to treat this as a new species, allied to *C. azurea* Klatt, a species restricted to grasslands in Entre Ríos and south of Corrientes provinces in Argentina.

Calydorea minima Roitman & A. Castillo, sp. nov (Fig. 1 A-C).

Ab *Calydorea azurea*, herbae 10-15 cm alta, foliis angustissimis, floribus parvioribus, tepaliis angustioribus recedit.

Type: ARGENTINA, Corrientes. *Dpto.*: Santo Tomé. Cercanías de Garruchos, 10-X-2006, G Roitman s.n. (BAA25701). Paraguay, *Dpto.*: Caaguazú, Coronel Oviedo. Ruta 2. Km 140. Krapovickas y C. L. Cristobal 13429 (CTES).

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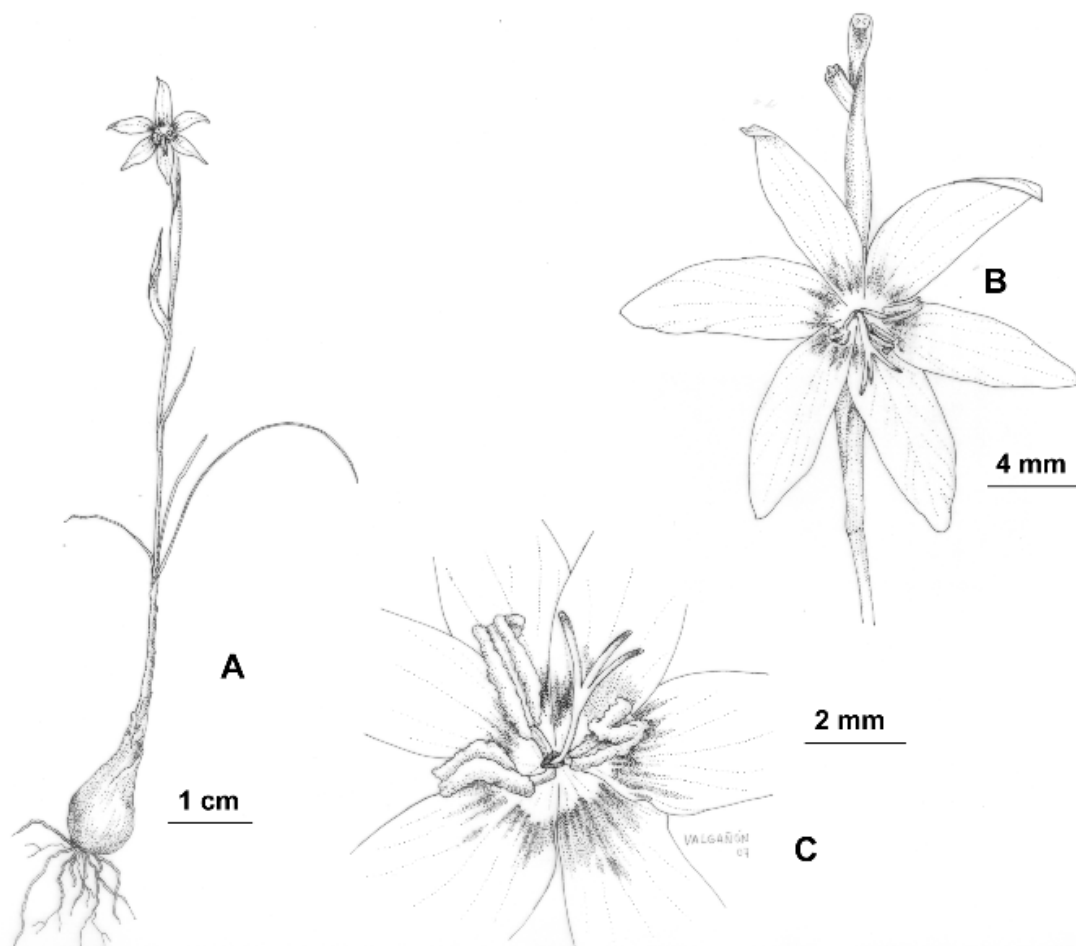


Fig. 1. *Calydorea minima* Roitman et A. Castillo. **A.** Plant; **B.** Flower front view; **C.** Detail of the free stamens and the style. From the holotype, Roitman, s.n. (BAA 25701).

Herb, 10-15 cm high. Bulb subglobose, 8-12 mm wide, covered by dark-brown, membranous coats, prolonged upwards into a neck. Leaves 1-2, 6-8 cm long, 0.5-0.8 mm wide plicate, linear, green at anthesis, erect, 6-8 cm long, 0.5-0.8 mm wide. Inflorescence a 1-2-flowered rhpidium; spathes green, the outer 2-2.5 cm long, the inner 1-1.8 cm long. Flower 1.5-2.2 cm diameter, lilac with violet dots and a yellow stripe at the base, radially symmetrical, 1.5-2.2 cm diameter. Outer tepals 0.7-1.1 x 0.3-0.5 cm, oblanceolate, with acute apex, 0.7-1.1 x 0.3-0.5 cm; inner tepals 0.6-1.0 x 0.3-0.6 cm, elliptic, with acute apex, 0.6-1.0 x 0.3-0.6 cm. Filaments 1-1.5 mm long free, yellow 1-1.5 mm long; anthers 2.5-3 mm long linear, curved at dehiscence, 2.5-3 mm long. Pollen yellow. Ovary 3-4 x 1-2.5 mm. Style 2 mm long, yellow 2 mm long, with truncated branches, 2.5-3.2 mm long. Capsule 0.7-1

cm x 0.4-0.6 mm globose 0.7-1 cm x 0.4-0.6 mm, seeds angled, 1 mm long light brown, 1 mm long.

This new species resembles *Calydorea azurea*

which has flowers of the same color, but it can be easily distinguished from *C. azurea* by its smaller habit (10-15 cm vs. 25-35 cm), its linear, extremely narrow leaves (0.5-0.7 mm vs 3 a 6 mm wide), its smaller flowers (1.5-2.2 cm diameter vs. 4.4-5.3 cm diameter), and by its acute apex of the tepals (vs. rounded apex tepals).

Distribution and Ecology. It is found near Garruchos (Argentina, Corrientes), in stony grasslands, growing with *Cypella hauthalii* (Kuntze) R.C.Foster subsp. *opalina* Ravenna and *Cypella laeta* Ravenna, and in the South of Paraguay.

Etymology: It is the smallest species in the genus.

Key to the species of Calydorea from Argentina, Paraguay and Uruguay

- A. Equal or subequal tepals, plane without undulate margins. Style branches not bifurcated.
B. Flowers white. Style branches linear, subulate. *C. alba* Roitman & A. Castillo
B'. Flowers pale lilac. Style branches truncated.
C. Inner spathe 3 or 4 times longer than the outer spathe. *C. approximata* R.C. Foster
C'. Inner spathe 1 to 2 times longer than the outer spathe.
D. Style arms connate, with a stigma shortly trifid. *C. nuda* (Herb.) Baker
D'. Style arms divided in three, each one with a truncated stigma.
E. Plants 25-35 cm high. Flowers 4.4 to 5.3 cm diameter.
Tepals with apex rounded. *C. azurea* Klatt
E'. Plants 10-15 cm high. Flowers 1.5-2.2 cm diameter.
Tepals with apex acute. *C. minima* Roitman & A. Castillo
A' Unequal tepals, the inner ones geniculate or with undulate margins. Style branches bifurcated.
F. Anthers applied to the style arms. Stigma shortly emarginated. *C. amabilis* (Rav.) Goldblatt & Henrich
F'. Anthers free from the style arms. Stigma bifid.
G. Flowers pale lilac, with purple dots in the base of the tepals. Inner tepals unguiculate. Stamen filaments 3-4 mm long. *C. pallens* Griseb.
G'. Flowers violet-blue, with purple stripes in the base of the tepals. Inner tepals undulate. Stamen filaments 1-2 mm long. *C. undulata* Rav.

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