



***Rudgea agresteophila* and *R. hileiabaiana* (Palicoureeae, Rubiaceae): two new species from eastern Bahia, Brazil**

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Abstract

This work is part of a larger ongoing study of taxonomy and systematics of *Rudgea* (Rubiaceae), with the recognition of two new Brazilian species, *R. agresteophila* and *R. hileiabaiana*, described and illustrated here. The new species occur in the eastern Bahia State, Brazil, which is a place of high diversity for *Rudgea*. *Rudgea agresteophila* is morphologically distinct within the genus, by the combination of thickly coriaceous leaves, flowers with long calyx-tube and fruits crowned by a persistent calyx up to 6 mm long; and is known only from the type locality, in the municipality of Jequié. *Rudgea hileiabaiana* is distinguished by its coriaceous leaves, up to 30 cm long and round to cordate base, broadly infundibular corolla and unexpanded calyx; and it is restricted to southern Bahia. Detailed data on distribution and habitat, phenology and conservation status of both species are presented.

Key words: Atlantic Forest, Neotropical Flora, Northeastern Brazil, Rubioideae

Rudgea Salisbury (1807: 327) includes at least 120 Neotropical species, distributed from Mexico to Argentina, and has two main centers of diversity, one in northwestern South America (Peru, Colombia and Ecuador) and the other in the Atlantic Forest of eastern Brazil (Zappi 2003, 2006). The species are found in wet forests from sea level to montane forests (to 3.500 m), rarely in seasonal vegetation. The genus is characterized by its woody habit, from subshrubs to medium size trees to 25 m tall; opposite, petiolate or sessile leaves, often with domatia at secondary veins axils; persistent to deciduous, interpetiolar to sheathing (fused around the stem) stipules entire to fimbriate, often with glandular appendages or projections; terminal, cymose to thyriform inflorescences; bisexual, usually distylous flowers; tubular to campanulate calyx, truncate or lobed, lobes 4–6; broadly funnellform to narrowly tubular corolla, white to pale yellow, with 4–6(–8) lobes, frequently dorsally corniculate, valvate in bud; 4–6 stamens attached to the lower, middle or upper part of the corolla tube, with dorsifixed anthers; 2-locular ovary; ovules solitary and basal in each locule; spongy to fleshy, drupaceous fruits, with pericarp pale green, white, yellow, orange, red, brown or black, with 2 pyrenes, these plano-convex, 1-seeded, usually with 2 marginal and 1–3 abaxial preformed germination slits; seeds abaxially (i.e., dorsally) smooth to costate, adaxially furrowed (Zappi 2003, 2006, Zappi & Steyermark 2004).

Brazil is the country with greatest *Rudgea* diversity, with about 66 species (Bruniera & Zappi 2014), and preparation of a Brazilian synopsis is underway (Bruniera *et al.* in prep); however, there are several new taxa awaiting description. The highly diverse forests of eastern Bahia (Thomas *et al.* 1998; Amorim *et al.* 2008, 2009) are extremely rich in rubiaceaceous species, and two new species are described from there.

Material and methods

Herbarium material of mature individuals was used for the descriptions and analyzed under a dissecting scope, with flowers and fruits rehydrated before being measured and drawn. The terminology adopted for the morphological descriptions follows Radford *et al.* (1974), Robbrecht (1988) and Zappi (2003, 2006).

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