A New Species of Casearia (Salicaceae) from Southeastern Brazil

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ABSTRACT. Casearia espiritosantensis R. Marquete & Mansano, a new species of Salicaceae from Espírito Santo, Brazil, is described and illustrated here. This species is similar to the widespread C. decandra Jacq. in having fasciculate inflorescences, lanceolate or elliptic-lanceolate leaves, and 10 stamens. The new species differs by being a shrub and having smaller stipules, anthers with apical glands, hirsute ovaries, and clavate stigmas. Other diagnostic aspects of C. espiritosantensis are the sparsely serrate leaf margins and the stipules with glands at the base of the adaxial surface.

Resumo. Casearia espiritosantensis R. Marquete & Mansano, uma espécie nova de Salicaceae do Espírito Santo, Brasil, é descrita e ilustrada no presente trabalho. Esta espécie é semelhante a C. decandra Jacq., uma espécie amplamente distribuída, pela inflorescência fasciculada, folhas lanceoladas ou elíptico-lanceoladas e 10 estames. Difere pelo hábito arbustivo, pelas estípulas menores, pelas anteras com glândulas apicais, pelo ovário hirsuto e estigma clavado. Outros caracteres diagnósticos desta nova espécie são: margem das folhas esparsamente serreadas e estípulas com glândulas na base da face adaxial.

Key words: Atlantic rainforest, Brazil, Casearia, Espírito Santo, Flacourtiaceae, Salicaceae.

Casearia Jacq. (Salicaceae, formerly Flacourtiaceae) is a pantropical genus distributed in Africa and Central and South America with ca. 180 species. It occurs in varied habitats, including the Atlantic rainforest, savanna, and seasonal semideciduous forest, and is most diverse in Central and South America where 75 species have been found (Sleumer, 1980; Castillo-Campos & Abreo, 2003). According to Sleumer (1980) in his treatment for the Flora Neotropica, 45 species occur in Brazil. In his treatment, Sleumer (1980) described 15 new species

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from Brazil and made some synonymizations; he based his classification of species on the work of Eichler (1871). Since then, increased field activity in Brazil has revealed new taxa that need to be described. The new species described here can be recognized in particular by its sparsely serrate leaf margins and the stipules with glands evident at the base of the adaxial surface.

Casearia espiritosantensis R. Marquete & Mansano, sp. nov. TYPE: Brazil. Espírito Santo: Santa Teresa, Reserva Biol. Augusto Ruschi, estrada principal, próximo a sede, 2 Sep. 2003 (fl.), *J. Rossini*, *E. Bausen & W. Pizziolo* 527 (holotype, RB; isotype, MBML). Figure 1.

Species qua inflorescentiis fasciculatis, foliis lanceolatis vel elliptico-lanceolatis, sepalis quinque et staminibus decem ad *Caseariam decandram* Jacq. proxime accedit, sed ab ea habitu fruticoso, stipulis minoribus, antheris ad apicem glandulosis et stigmatibus clavatis differt.

Shrub, ca. 3 m tall; trunk with bark smooth, grayish brown; branches tomentose, basally glabrescent and apically densely tomentose, brown. Stipules 2.5–3 imesca. 0.25 mm, subulate, persistent, with claviform glands on the adaxial surface; leaves alternate, simple, with the petiole 2-3 m, terete, hirsute, slender; blades $3-5.2 \times 1.6-2.2$ cm, chartaceous, lanceolate or elliptic-lanceolate, abaxial surface sparsely villose, with the nerves villose, adaxial surface sparsely villose only on the primary vein, apex long-acuminate to acuminate, base acute, margin sparsely serrate, marginal teeth ca. 0.4 mm, more frequent in the upper half of the leaf blade, pellucid punctations minute and lateral veins in 4 ascending pairs, the other veins forming a dense reticulation, prominent on the abaxial surface. Inflorescences in fascicles, each fasciculate unit 4(to 9)-flowered; bracts ca. 1 mm, at the pedicel base, coriaceous,

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180 Novon

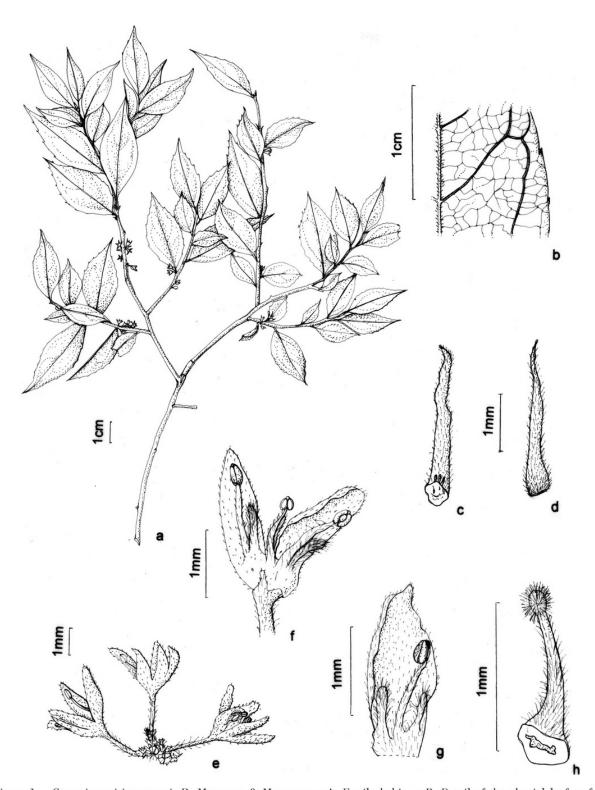


Figure 1. Casearia espiritosantensis R. Marquete & Mansano. —A. Fertile habit. —B. Detail of the abaxial leaf surface showing the margin. —C, D. Stipules, showing adaxial and abaxial surfaces, respectively. —E. Inflorescence. —F. Partial flower showing the gland at the apex of the anthers. —G. Disk lobes connate at the base of the sepals and alternate with the stamen. —H. Pubescent gynoecium and stigma with hirsute trichomes. Drawn from the holotype, Rossini et al. 527 (RB).

ovate to cucullate; pedicels ca. 3 mm, terete, basally articulate, white, hirsute. Floral buds oblong-lanceolate, sparsely tomentose; flowers bisexual; sepals 5, ca. 3.5×1.2 mm, fused basally, ovate, greenish white, tomentose, white externally, glabrescent at the base and tomentose internally; stamens 10, filaments

yellow, 1(-1.5) mm, sparsely pilose, free, anthers yellow, oblong, with a minute gland at the apex, glabrous; disk lobes yellow, ca. 1 mm, oblong, connate at the base of the sepals and alternate with filaments, pilose; ovary yellow, ovate to lanceolate-ovate, with trichomes sparse, hirsute, white, the style slender,

morphologically similar species, C. decandra Jacq.

Table 1. Distinguishing characters between Casearia espiritosantensis R. Marquete & Mansano and its most

	C. espiritosantensis	C. decandra
Habit	shrub, ca. 3 m high	tree, 8–18 m high
Stipules	$2.5-3 \times \text{ca. } 0.25 \text{ mm}, \text{ glands at the base}$ of the adaxial surface	ca. 7×0.5 mm, glands at the margins
Petiole	hirsute	puberulent
Leaf blade	$3-5.2 \times 1.6-2.2 \text{ cm}$	$5-7(-9) \times 2-4.1 \text{ cm}$
Leaf shape	lanceolate or elliptic-lanceolate	lanceolate to oblong-lanceolate
Leaf abaxial surface	sparsely villose	rarely pubescent to glabrescent on the veins
Leaf base	acute	cuneate to slightly asymmetrical
Leaf margin	sparsely serrate	serrate to crenate
Pedicel	hirsute	tomentose
Flower buds	oblong-lanceolate	obovate-oblong to oblong-ovate
Sepals	ovate	oblong-lanceolate
Stamen filaments	sparsely pilose at the base	tomentose at the base
Anthers	oblong, minute gland at apex	globose, without gland at apex
Disk lobes	oblong	oblong-clavate
Ovary	ovate to lanceolate-ovate, sparsely hirsute	ovate to oblong-ovate, villose
Stigmas	clavate	capitate

entire, glabrous, the stigma white, clavate, entire, hirsute.

Distribution and habitat. Casearia espiritosantensis occurs in the Atlantic rainforest in Brazil, at altitudes from 600 to 700 m.

IUCN Red List category. Although the new species was found in a protected area, it should be considered Critically Endangered (CR) according to IUCN Red List criteria (2001) because of its narrow geographical distribution and the small number of herbarium specimens that have been located.

Etymology. The specific epithet espiritosantensis refers to the state of Espírito Santo, Brazil, where the species is endemic.

Relationships. Casearia espiritosantensis is similar to C. decandra Jacq. by its fasciculate inflorescences, leaf shape, and number of sepals. It differs from C. decandra by being a shrub (vs. tree) and having smaller stipules that have glands at the anther apex (lacking in C. decandra), a hirsute ovary (vs. villose in C. decandra), and clavate stigmas (vs. capitate in C. decandra). Further morphological comparison of these two species can be found in Table 1. The new species is endemic to the state of Espírito Santo, Brazil, while C. decandra has a wide distribution in the Neotropics.

In Brazil, *C. decandra* occurs from north to south in different habitats (Marquete, 2001).

Paratype. BRAZIL. **Espírito Santo**: Castelo, Parque Estadual do Forno Grande, L. Kollman & R. L. Kollman 8937 (MBML, RB).

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