

EXTENDED DISTRIBUTION OF *CASSIPOUREA CEYLANICA*, AN INLAND RHIZOPHORACEAE

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Abstract: *Cassipourea ceylanica* (Gardn.) Alston, an inland Rhizophoraceae member, hitherto known only from Southernmost parts of Western Ghats and Sri Lanka is being reported here from Northern Western Ghats, Goa. It is of considerable phytogeographic interest as it shows disjunct distribution.

INTRODUCTION

During our floristic survey in the Western Ghat regions of Goa State, we collected a Rhizophoraceae member which on critical examination has been identified as *Cassipourea ceylanica* (Gardn.) Alston, hitherto known only from Sri Lanka and Southern parts of Western Ghats (Kanniyakumari and Thirunelveli Districts of Tamil Nadu). Identification has been confirmed by comparing the specimen with authentic specimens present at MH. As it forms an important phytogeographical finding with disjunct distribution the species is reported here with description and illustrations.

Cassipourea ceylanica (Gardn.) Alston in Kew Bull. 1925: 251. 1925; Macnae & Fosberg in Dassanayake & Fosberg, Rev. Handb. Fl. Ceylon 2: 498. 1981; Srinivasan in Nair & Henry, Fl. Tamil Nadu 1: 147. 1983. *Anstrutheria ceylanica* Gard. in Calcutta J. Nat. Hist. 6: 345, t. 4. 1846. *Weihea zeylanica* (Gard.) Baill. in Adansonia 3: 38. 1862; Bedd. Fl. Sylv. t. 194. 1872; Henslow in Hook. f., Fl. Brit. India 2: 441. 1878; Gamble, Fl. Pres. Madras 1: 326. 1957 (repr. ed.).

A sparingly branched tree, up to 9 m tall; bole straight, up to 25 cm in diameter, bark grayish black. Terminal branches crooked, nodes swollen. Leaves simple, opposite, stipulate, petiolate; stipules interpetiolar, ovate-lanceolate, up to 4 x 2 mm, caducous, hairy outside, ciliate along margins; petiole up to 7 mm long, grooved; lamina variable,

elliptic to obovate, up to 12 x 6 cm, acute to obtuse at base, entire along margins, obtusely acuminate at apex, glabrous, nerves in 4-6 pairs. Flowers solitary, axillary or at old defoliated nodes, pedicellate, c. 7 mm across; pedicel slightly compressed, c. 2 mm long; bracteoles 2, thick, hemispherical, enclosing the flower in bud condition, ciliate along the margins, one of the bracteole hirsute along the dorsal line. Sepals 5, rarely 4, oblong-lanceolate, c. 5 x 2.5 mm, persistent, incurved after shedding petals and stamens, densely silky outside, sparsely hairy inside, acute at apex, thick, with dense silky hair inside near apex. Petals 5, rarely 4, alternating with sepals, obovate to oblanceolate, lacinate, c. 5 x 3.5 mm, white, caducous. Stamens numerous, filaments c. 2 mm long; anthers oblong, c. 1.5 x 0.5 mm. Ovary superior, appearing semi inferior, silky hairy near the junction of style, trilocular; ovules pendulous, 2 per locule; style thick, c. 3 mm long, slightly twisted; stigma trilobed (Fig. 1).

Specimens examined: Goa, Netravali, Taday, near Mainacho water falls, 15°04'08" N and 74°15'22.9" E, 9.5.2006, 250 m above MSL, Ashish Prabhugaonkar & M.K. Janarthanam 511 (Goa University Herbarium).

Tamil Nadu, Kanniyakumari dt., Kannupulicadu, Panagudi, 375 m, 5.2.1972, B. D. Sharma 39959 (MH); Thirunelveli dt., Mundanthurai, 18.6.1901, C. A. Barber 3230 (Acc. No. 19868) (MH), 17.9.1915, s.l. 12200 (Acc. No. 19870), Manimuthar dam, 18.10.1957, 300 m, K. M. Sebastine 4535 (MH), Inchikuzhi, 5.7.1964, 750 m, A. N. Henry & M. Chandrabose 19275 (MH).

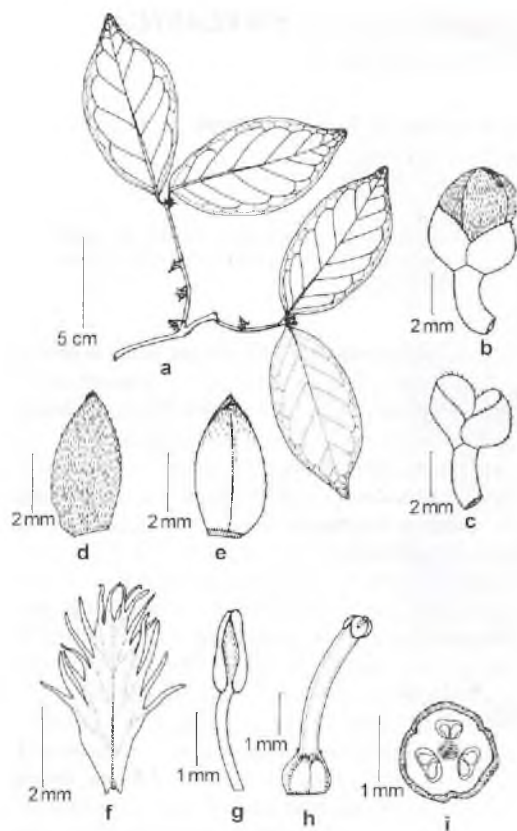


Fig. 1: *Cassipourea ceylanica* (Gardn.) Alston – a. flowering twig, b. flower bud, c. calyx lobes, d. sepal (dorsal view), e. sepal (ventral view), f. petal, g. stamen, h. pistil, i. T. S. of ovary.

Note: A population of about twelve individuals of this species has been observed at 250 m altitude along a steep slope leading to the water falls. The vegetation is deciduous and some prominent associated plants are *Maytemus senegalensis* (Lam.) Excell., *Tricalysia sphaerocarpa* (Dalz.) Gamble, *Lannea coromandelica* (Houtt.) Merr., and *Ixora brachiata* Roxb. ex DC. *Cassipourea ceylanica* is also reported from Chilika Lake Islands of Orissa (Pattnaik, 2003) which we could not refer for this work being unpublished thesis and refer to *C. ceylanica* as an apparent endemic species, a

mangrove associate and rare, vulnerable or threatened plant. However, we could not get any published source for confirmation.

The plants from Goa show considerable variations as compared to the specimens from Southern Western Ghats and Sri Lanka deposited at MH. The plants from Goa show crooked terminal branches with swollen nodes, flowers on defoliated nodes, comparatively larger leaves, thick and stiff bracteoles and sepals thickened at apex. However, these variations do not warrant any separate taxonomic status as they are not significant. Macnae and Fosberg (1981) described that the plants are much branched shrubs, whereas we observed trees that are with straight unbranched boles. They also recorded considerable variation in leaf shape and texture.

The genus *Cassipourea* Aublet. consists of about 40 species (excluding *Dactylopetalum* Benth.) distributed in Tropical America, Tropical Africa, South Africa, Madagascar and Sri Lanka (Mabberley, 2005) out of which only one species is present in Sri Lanka and India. The species has not been recorded in between in its Southern most distribution (Kanniyakumari and Thirunelveli Districts of Tamil Nadu) and Northern most distribution in Goa along the Western Ghats. It may be possible to locate the species in less explored steep areas at lower altitudes of Western Ghats.

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