



A NEW VARIETY OF *SALACIA* (CELASTRACEAE) FROM THE WESTERN GHATS OF KERALA, SOUTH INDIA

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ABSTRACT: *Salacia oblonga* Wall. ex Wight & Arn. var. *kakkayamana* P.S. Udayan, A.V. Raghu, V. a new variety of *Salacia* L. from Kakkayam, Kozhikkode district in Kerala, India is described and illustrated. The new variety resembles *Salacia oblonga* Wall. ex Wight & Arn. by its slender branchlets, shape of flowers; but differs from it being slender in habit, smaller leaves, purplish-black long petiole, smaller pale yellow flowers with suppressed mouth, 3 ovoid seeds with globose yellowish-orange smaller fruit.

Key words: *Salacia*, Western Ghats, Kerala

INTRODUCTION

The genus *Salacia* L. comprises about 200 species, mainly distributed in tropical regions of the Northern Hemisphere [2]. The genus was formerly placed under the family Hippocrateaceae, and currently considered as belonging to the major family Celastraceae as the members of Hippocrateaceae is now found to be nested within the present Celastraceae [1]. Among the 200 species of genus *Salacia* L., 21 species occur in India, of which 8 species have their distribution in the state of Kerala [3,4,5,6,7,8] and recently two more species are described from the Western Ghats of Kerala (Udayan *et al.*, 2012 & 2013). During the course of floristic exploration along the Western Ghats of Kerala in South India, the authors have collected an interesting variety of *S. oblonga* Wall. ex Wight & Arn. On closer examination it turned out to be an undescribed taxa which is described here as a new variety.

Salacia oblonga Wall. ex Wight & Arn. var. *kakkayamana* P.S. Udayan & A.V. Raghu *sp. nov.* (Fig. 1 & 2)

Type: India. Kerala: Kozhikkode District, Malabar Wildlife Sanctuary, Kakkayam, 11° 33' N 75° 55' E ± 750 m elev., 12.03.2012, P.S. Udayan, A.V. Raghu & E.M. Muraleedaran, KFRI 27802 (Fl): (Holotype: CAL; Isotypes: MH, CALI, SKC, KFRI).

P.S. Udayan, A.V. Raghu & S. Noorunnisa Begum, 27.05.2011, 110820 FRLH (Fr):

Climbing shrubs; terminal branchlets slender, glabrous, lenticellate. Leaves elliptic-oblong to oblanceolate, 3-8 × 1.5-2 cm, apex acuminate, base obtuse, minutely serrate, subcoriaceous, glabrous; petiole 2 cm long, brownish-black. Flowers greenish-yellow, 3-5 in short, usually up to 2 mm long, axillary cymes, peduncles sometimes sessile. Calyx to 5 mm long, lobed nearly to base; lobes orbicular, glabrous. Corolla oblong, 1 mm long, rounded at apex; lobes 5, fleshy. Stamens 3; filaments short, with dilated base inserted along the margins of the disc; anther cells longitudinally dehiscent. Ovary partly sunk in the disc, conical, tapering to a short style, trilobular with single ovule in each locule. Fruit globose, 2.5 cm across, yellowish-orange when ripe. Seeds 3, globose, small, 1 cm across, immersed in pulp.

Diagnosis

This new variety is closely similar to *S. oblonga* Wall. ex Wight & Arn. in having slender branchlets, narrow and greenish urceolate yellow flowers. But differs from it by being comparatively slender climber, smaller elliptic-lanceolate leaves with brownish-black long petiole, 3-5 small axillary pale yellowish flowers, smaller sepals, petals and yellowish-orange fruit which is globose and 3 seeded. A more detailed morphological comparison of the two varieties is provided in Table 1.

Phenology:—Flowering starts from January and peak flowering is in the month of March. Fruit is matured during the months of May–July.

Table 1. Diagnostic morphological characters of two varieties of *S. oblonga* Wall. ex Wight & Arn.

Characters	var. <i>kakkayamana</i>	var. <i>oblonga</i>
Habit	Slender climber	Woody climber
Inflorescence	3-5, small urceolate flowers in axillary cymes	3, large urceolate flowers in axillary cymes
Flowers	Pale yellow, small, suppressed mouth	Bright yellow, larger, broad mouth
Stamens	Filaments slender, short, to 1 mm long	Filaments stout, to 3 mm long
Calyx	Pubescent, 5 mm long, blackish-green	Pubescent, to 3 mm long, greenish
Petals	Oblong, 1.5 mm long, Narrowly obovate, pale yellow	Broadly obovate, 3-5 mm long, dark yellow
Fruit	3-seeded, globose, smooth	5-8 seeded, rugose

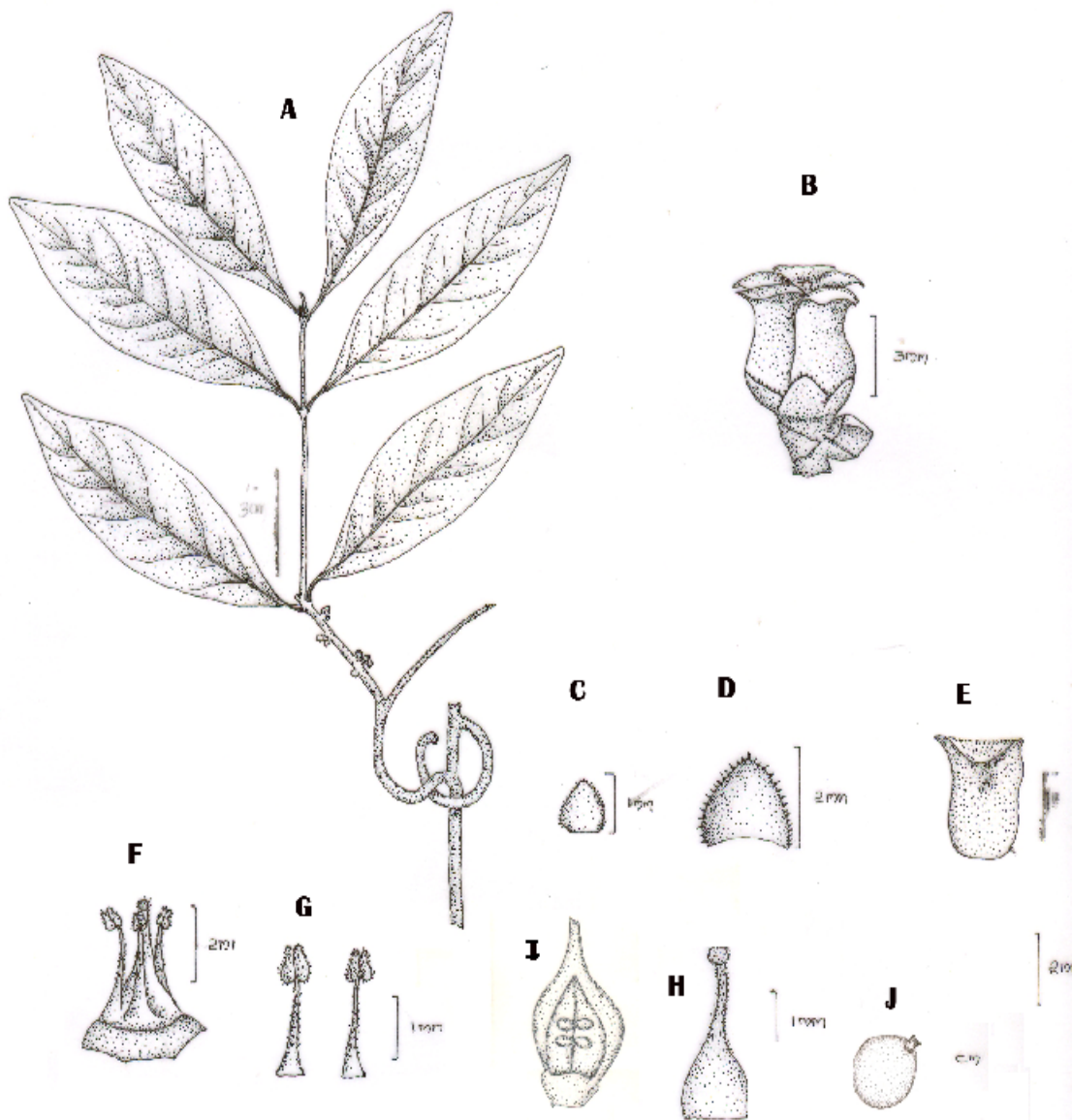


Fig. 1. – *Salacia oblonga* Wall. ex Wight & Arn. var. *kakkayamana* P.S. Udayan & A.V. Raghu var. nov. A. Twigs with flowers and buds; B. Single flower ; C. & D Sepal ; E Petal ; F. Flowers with petals removed; G. Stamens; H. Pistil; I. L.S. of Ovary J. Fruit.

Distribution & Ecology: — *Salacia oblonga* Wall. ex Wight & Arn. var. *kakkayamana* is endemic to Kerala and is known only from the type locality in the evergreen forests of Kakkayam along the foothills of the Western Ghats of Kerala. This species is found at an elevation of about 750 m in moist shady locations along with *Aristolochia tagala* Cham. (Aristolochiaceae); *Embelia ribes* Burm.f. (Myrsinaceae); *Garcinia gummi-gutta* (L.) Roxb. (Clusiaceae); *Ligustrum robustum* subsp. *walkeri* (Decne.) P.S.Green (Oleaceae); *Melicope lunu-ankenda* (Gaertn.) T.G. Hartley (Rutaceae); *Neuropeltis malabarica* Ooststr. (Convolvulaceae); *Olea dioica* Roxb. (Oleaceae); *Poeciloneuron indicum* Bedd. (Clusiaceae) etc.

Conservation significance - In the absence of any other known collections of this species, it is assumed that the species has a highly restricted geographical distribution and is potentially susceptible to related extinction propensities. A detailed assessment of its distribution, population status, phenology and reproductive biology is necessary for understanding factors of rarity and vulnerability relevant in formulating species specific conservation strategy.

Etymology: The varietal name '*kakkayamana*' is derived from type locality Kakkayam of Malabar Wildlife Sanctuary, one of the floristically rich protected areas along the Western Ghats of Kozhikkode district, Kerala state, southern India.

Additional specimens examined: Paratype: India. Kerala: Kozhikkode Dist., Kakkayam, 11° 33' N 75 ° 55' E ± 780 m elev., 27th May 2011, P.S. Udayan, S. Noorunisa Begum & A.J. Robi 110820 (Fr), (FRLH, SKC); ibid 20th March 2013, P.S. Udayan, A.V. Raghu & E.M. Muraleedharan 03348 (Fr), (KFRI, SKC).

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