

A NEW GENUS OF ACANTHACEAE FROM KERALA STATE, SOUTH INDIA

Kanjarum Ramamurthy Gen. nov. belongs to the tribe Strobilanthinae of Acanthaceae and is allied to the genus *Carvia* Brem. in having large bracts and in the absence of bracteoles but differs from it in the following characters: (1) the short shoot by which the inflorescence is produced is of greater length (2) flattened spikes have lateral bracts folded and apparently sterile (3) bracts have greater number of lateral nerves and the palmately spreading nerves are absent from its base (4) calyx lobes are narrower and (5) corolla lobes are smaller and white. It also resembles *Nilgirianthus* Brem. in having included stamens and the filaments of the outer ones being hirtellous.

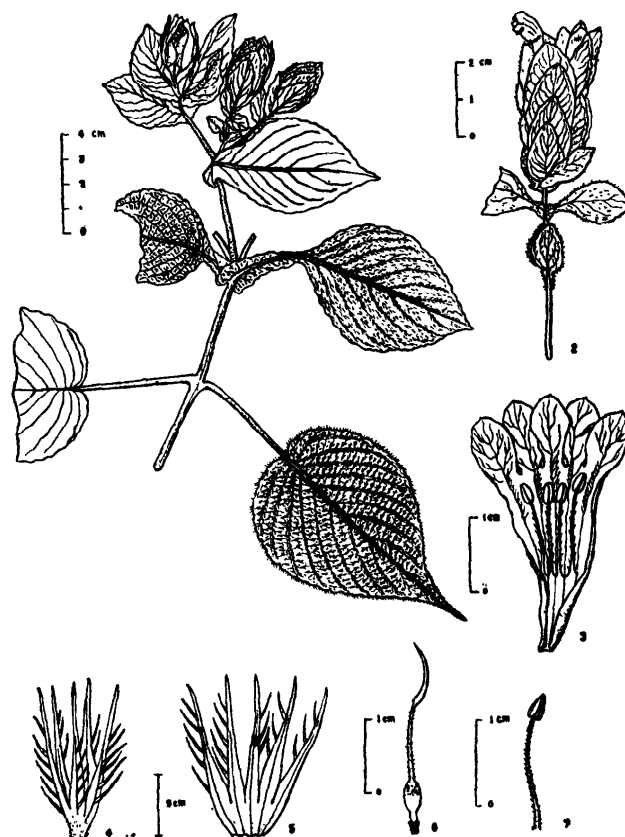
Shrubs with many opposite ascending branches; leaves opposite, broadly ovate, petiolate; leaves of flowering shoots pandurate; petiole winged. *Inflorescences* at the end of short shoot arising from the axils of ordinary leaves and provided with strongly reduced leaves; flattened spikes with, folded, lateral apparently sterile bracts; bracteoles absent. *Calyx* 5-partite and lobes are narrower. *Corolla* curved with upper part ventricose and lower cylindric. *Stamens* 4. Disk small. *Ovary* glabrous, 4-celled.

The following is the type species.

Kanjarum palghatense Ramamurthy sp. nov.

Shrubs with many opposite ascending branches, ± 2 m high; stem erect, subtetragonal, nearly glabrous; young shoots puberulous. *Leaves* simple, opposite; lamina $\pm 15 \times 11$ cm, broadly ovate, cuspidate, margins crenate, base auriculate, pilose on both sides, main nerves upto 10 pairs with reticulate venation; petiole ± 7 cm long, hairy; *leaves of flowering shoots* pandurate, cuspidate, margins crenate, base auriculate, pilose on both sides, petiole winged. *Inflorescences* at the end of short shoots arising from the axils of ordinary leaves and provided with strongly reduced leaves, pedunculate spikes ± 5 cm long, the lateral bracts are folded in the flattened spikes and apparently sterile; bracts reaching 2×3 mm, ovate orbicular, glabrous without, puberulous within, membranous with reticulate venation; bracteoles absent. *Calyx* ± 15 mm long, 5-partite, segments linear lanceolate, equal, acute, glabrous except for white hairs from middle portion. *Corolla* ± 2 cm long, white, notched, the upper part ventricose, the lower cylindric, glabrous without, white hairs near the mouth within, upper

lip with 3 lobes and lower lip with 2 lobes, rounded or ovate. *Stamens* 4, didynamous, filaments hirtellous, monadelphous, the bases combined in a



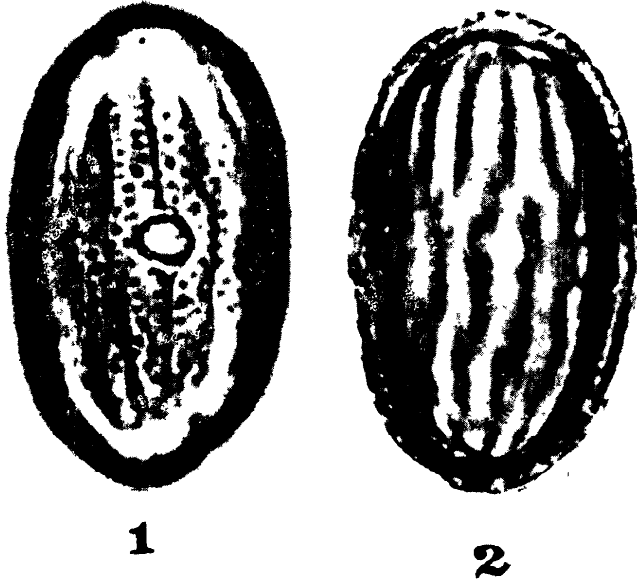
Kanjarum palghatense Ramamurthy

Figs. 1-7: 1. Portion of a branch. 2. Inflorescence. 3. Corolla split open showing stamens. 4. Calyx. 5. Calyx split open. 6. Pistil. 7. Stamen.

sheath more or less adherent near the middle of the corolla; anthers oblong, muticous, 2-celled. *Disk* small. *Ovary* glabrous, 2-celled; 2 ovules in each cell, style linear, hairy; stigma linear.

Pollen: Pollen grains 3-colporate, prolate size av. $70 \times 46 \mu$; range $60-73.8 \times 37.5-47.5 \mu$. Ambitus triangular (Equatorial contour of mesocolpia convex). Colpi size av. $58.3 \times 9.3 \mu$; range $55.0-65.0 \times 8.0-10.0 \mu$ with tapering ends; their margins uneven; membrane densely granular. Ora lalongate av. $7.0 \times 9.0 \mu$; range $6.10 \times 8-10.5 \mu$. Each mesocolpium provided with 5, narrow, colpoid streaks. Exine thickness $4.5-6.0 \mu$. Sexine about 3μ thick, collumellate reticulate. Reticulum homo-brochate. Muri more or less straight, simplibaculate. Lumina smooth, irregular.

Nexine, as it seems consists of a homogeneous layer, inner surface slightly uneven.



Pollen grain (Photomicrograph $\times 1000$) of *Kanjarum palghatense* Ramamurthy

1. Equatorial view, showing aperture & ornamentation.
2. Equatorial view, apical section.

The holotype of this species *Sebastine* 22312 A and the isotypes *Sebastine* B-F were collected on 27-10-1964 in Kanjarumpuzha Submergible Area, Palghat District, Kerala State. The holotype and the isotype *Sebastine* 22312 B have been deposited in the Central National Herbarium, Calcutta (CAL); the isotypes *Sebastine* 22312 C-F have been deposited in the Regional Herbarium, Botanical Survey of India, Coimbatore (MH).

Kanjarum Ramamurthy gen. nov. pertinet ad tribum Strobilanthinearum familiæ Acanthacearum; affine generi; differt tamen (1) inflorescentiae brachyblasto longiore (2) spicis complanatis bracteis lateralibus plicatis apparenterque sterilibus (3) nervis lateralibus bractearum plurioribus basalibus antem palnatis carantibus (4) calycis lobis angustioribus (5) lobis corollæ albis et minoribus, accedit etiam ad *Nilgirianthum* Brem. staminibus inclusis, filamentis exterioribus hirtellis.

Frutices multis oppositis adscendentibus ramis. *Folia* opposita, late ovata, petiolata; folia surculorum florescentium panduriformia, petiolis alatis. *Inflorescentiæ* ad apices brachyblastorum in axillis foliorum normalium orientium habentesque folia valde reducta; spicae complanatae bracteis lateralibus plicatis et apparenter sterilibus, bracteolis absentibus. Calyx 5-partitus, lobis angustioribus. Corol-

la curvata, supra ventricosa, infra cylindrica. *Stamina* 4. *Discus* parvus. *Ovarium* glabrum, 4-cellulare. Species typica ut infra.

***Kanjarum palghatense* Ramamurthy sp. nov.**

Frutices pluribus adscendentibus oppositis ramis, ± 2 m alti, caulibus erectis, subtetragonis, fere glabris, surculis puberulis. *Folia* simplicia, opposita, late ovata, cuspidata, crenata basi auriculata, uterque pilosa, venatione reticulata, nervis praecipuis binatis usque ad 10, laminis $\pm 15 \times 11$ cm, petiolis pilosis ± 7 cm longis; folia surculorum florescentium panduriformia, cuspidata, crenata, basi auriculata, uterque pilosa, petiolis alatis. *Inflorescentiæ* ad apices brachyblastorum orientium in axillis foliorum normalium et habentes folia maxime reducta; spicae pedunculatae ± 5 cm longae, complanatae, bracteis lateralibus plicatis apparenterque sterilibus; bractea usque ad 2×3 mm, ovato-orbiculares, extus glabrae, intus puberulae, membranaceae, venatione reticulata; bracteoli absentes. *Calyces* ± 15 mm longi, 5-partiti, segmentis lineari-lanceolatis, aequalibus, acutis, glabris, exceptis in medio pilis albis. *Corollae* ± 2 cm longae, albae, incisae, supra, ventricosae, infra cylindricae, extus glabrae, intus ad ora pilis albis, labio superiore 3-lobato, inferiore 2-lobato, rotundato vel ovato. *Stamina* 4, didynama, filamentis hirtellis, monadelphis, ad basim vaginam plusminusve ad medium corollae adherentem efformantibus; antherae oblongae, muticae, bicellulares. *Discus* parvus. *Ovarium* glabrum, 2-cellulare; ovula in quoque loculo duo, stylus linearis, pilosus; stigmatibus linearis.

Pollen: Grana 3-colporata, prolata, magnitudines media 70×46 ; variationes magnitudinum $60-73.8 \times 35.5-47.5 \mu$. Ambitus triangularis (Mesocolpiorum forma aequatorialis convexa) colpi magnitudines media $58.3 \times 9.3 \mu$; variationes magnitudinum $55.0-65.0 \times 8.0-10 \mu$, apicibus angustatis, marginibus inaequalibus; membrana dense granularis. Ova lalongata, magnitudines media $7.0 \times 9.0 \mu$; variationes magnitudinum $6-10 \times 8-10.5 \mu$. Unumquidque mesocolpium 5 angustis colpoidibus striis praeditum. Exinium $4.5-6.0 \mu$ crass; sexinium vero reticulatum, 3μ crass. Reticulum homobrochatum. Muri $\pm$ recti, simplibaculati. Lumina laevia, irregularia. Nexinium, ut videtur, strato homogeneo, facie interiore paulo rugoso.

Holotypus *Sebastine* 22312 A et isotypi *Sebastine* 22312 B-E lecti die 27 Oct. anni 1964 in parte submergibili Kanjarumpuzha district, Palghatensis in

ditione Keralense. Holotypus et isotypus *Sebastine* 22312 B in herbario Centrali Nationali ad Calcuttam (CAL) et isotypi *Sebastine* 22312 C-F in herbario regionis australis Bot. Surv. India ad Coimbatore (MH) positi sunt.

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NEW RECORDS OF PLANTS FROM SOUTH INDIA—IV*

ROSACEAE

Prunus jenkinsii Hook. f. Fl. Brit. Ind. 2: 317. 1878.

A medium-sized evergreen tree. Leaves glabrous, lanceolate or oblong lanceolate, caudate acuminate, cuneate or acute at base, serrate, serrations glandular tipped; petiole eglandular; stipules linear lanceolate, caducous. Racemes axillary; flowers white. Drupe ca. 2.3 cm long, ovoid, obovoid or subglobose.

This differs from *Prunus persica* Benth. & Hook. f. reported by Gamble in the Flora of Madras Presidency, mainly in having pedicelled flowers.

ANDHRA PRADESH: Visakhapatnam Dt., Limmaguda Hill near Araku village (900 m), 4-1-1970, *Subbarao* 32894 (MH), common.

Distribution: Assam.

COMPOSITAE

Enhydra fluctuans Lour. Fl. Coch. 511. 1790.

Marshy herb, glabrous or pubescent; stems prostrate, elongate, rooting at the nodes. Leaves opposite, sessile, punctate beneath. Heads white, sessile, terminal and axillary, heterogamous; ray florets ♀, fertile; disc florets ♂, fertile or inner ones sterile. Involucral bracts 4, in opposite pairs, foliaceous. Cypsella oblong, enclosed in the rigid pales; pappus 0.

The genus *Enhydra* Lour. is not reported from South India. It is nearer to the genus *Siegesbeckia* Linn. but differentiated as follows:

Outer involucral bracts 4, eglandular; marshy plants	...	<i>Enhydra</i>
Outer involucral bracts 5, glandular, viscid; non-marshy plants	...	<i>Siegesbeckia</i>

ANDHRA PRADESH: Visakhapatnam Dt., Kilagada (825 m), 7-1-1970, *Subbarao* 33308, common.

Distribution: Bihar, Bengal, Assam, Bangladesh, Lower Burma, Sumatra, Malaya and China.

CONVOLVULACEAE

Argyrea roxburghii Choisy, var. *ampla* C. B. Cl. in Hook. f. Fl. Brit. Ind. 4: 185. 1883.

A velvety climber. Leaves broader than long, round, mostly obtuse, cordate, entire, softly velvety on both sides. Flowers in axillary lax subcapitate cymes, sometimes subsolitary, large, purple, funnel shaped; peduncles longer than petioles; one or more of the outer bracts leaf like and petioled. Fruit succulent, orange, depressed-globose.

This is nearer to *Argyrea speciosa* Sweet, reported by Gamble in the Flora of Madras Presidency but can be distinguished as follows:

Leaves glabrous above, silvery tomentose beneath; corolla white woolly externally; none of the bracts foliaceous	...	<i>A. speciosa</i>
Leaves velvety on both sides; corolla sparsely hairy; at least one of the bracts foliaceous and petioled	...	<i>A. roxburghii</i> var. <i>ampla</i>

ANDHRA PRADESH: Visakhapatnam Dt., Cherukonda (1400 m), 29-8-1966, *Subbarao* 28185 (MH), rare.

Distribution: Nepal, Sikkim, Assam and North Bengal.

ARACEAE

Rhaphidophora decursiva (Roxb.) Schott in Bonpland. 5: 45, 1857.

A lofty climber. Leaves many ascending, coria-

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