

A NEW SPECIES OF ARGYREIA FROM SOUTH INDIA

N. P. BALAKRISHNAN,

Botanist, Central National Herbarium, Sibpur

ABSTRACT

A new species of *Argyreia* by name *Argyreia arakuensis* Bal., collected from Araku Valley, Visakhapatnam District, Andhra Pradesh, has been described with illustrations.

Argyreia arakuensis Bal., spec. nov. Affinis *Argyreiae sericeae* Dalz., a qua tamen differt eo quod species haec nova maior et robustior sit, densius adpresse pilosa, eiusque folia sint longe adpresse pilosa supra, dense velutino-tomentosa subtus, haud eminenter nitentia; pedunculi vero petiolis breviores; bractee exteriores foliaceae quidem pinnate reticulatae, ad apicem acutae, adpresse pilosae, non vero foliaceae sint lineari-oblongae; sepala longe hispida, longiora.

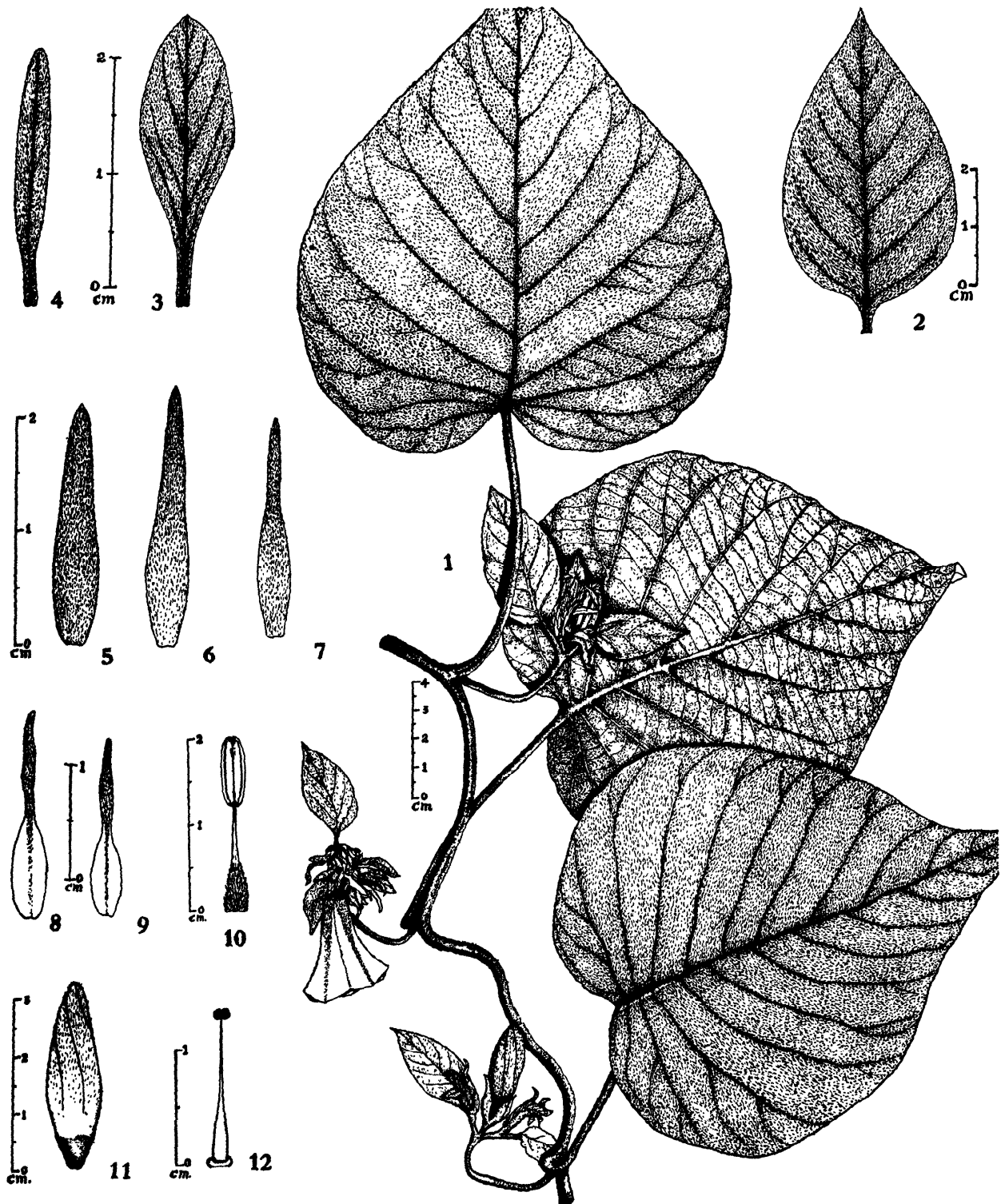
Caulis volubilis, teres, solidus, usque ad 6 m. longus, dense adpresse tomentosus, pallide fulvus et lanatus, ut et petioli atque inflorescentia. *Folia* ampla, ex ovatis orbiculata, 6-20 × 5-17 cm., rarissime ad basin rotundata, acuta vel breviter cuspidata ad apicem, mucronulataque, sparse adpresse hispida in pagina superiore, in inferiore vero intense alba, nervis medio et 5-13 lateralibus eminentibus subtus, ultimis nervorum ramulis plurimis, subparallelis, petiolis lamina brevioribus, 1-8 cm. longis, dense lanato-tomentosis. *Flores* cymosi subcapitati; pedunculi breviores petiolis ad 6 cm. longi tomentosi vel lanati. *Pediculi* 3-7 mm. longi. *Bractee* eminentes, persistentes; exteriores quidem ampliores, foliaceae, ovato-ellipticae, acutae, breviter petiolatae, 1.5-2.5 × 0.5-2.0 cm. (minores quidem et angustiores in cymis ad caulis apicem), pinnate nervosae, dense fulvo-tomentosae, adpresse hispidae supra; interiores vero angustiores, lineari-oblongae vel spathulatae, obtusae vel late acutae ad apicem, angustatae ad basin, 1-2 cm. longae, 2-4 mm. latae, unico nervo principe ornatae, lateralibus nervis haud distinctis, indumento ut in bracteis exterioribus. *Sepala* subinaequalia, hispide pubescentia extrinsecus in partibus expositis, glabra intus et in partibus opertis; bina sepala exteriora lineari-oblonga, spathulata, acuta, ± 1.75 cm. longa; interiora vero terna lineari-oblonga, angustata ad apicem, acuminata, ± 1.5 cm. longa. *Corolla* infundibuliformis, ± 4.5 cm. longa, pallide vel alte roseo-purpurea, altius purpurea ad os; limbus tenuiter lobatus, brevi tempore reflexus, zona media petalorum atque parte superiore tubi hispidulis. *Stamina* inclusa; filamenta ad basin pilosa. *Ovarium* glabrum, 4-loculare; stylus inclusus. *Fructus* ignotus. (Fig. 1-12).

Holotypus, Balakrishnan 540A, lectus in valle Araku dicto in Visakhapatnam, in regione Andhrice, in India ad altit. ca. 800 m. die 14 septembris anni 1961, positus in Herbario Nationali ad Sibpur prope Calcuttam;

isotypi, Balakrishnan 540 B-F, lecti eodem die ac loco, positi sunt in eodem herbario. Paratypi, Balakrishnan 10751 A-F, lecti eodem in loco die 23 augusti anni 1960, positi sunt in Herbario Regionis Australis, Bot. Surv. Ind., ad Coimbatore.

Stem twinning, terete, solid, up to 8 m. long, densely appressed-tomentose to pale fulvous woolly as are the petioles and inflorescences. Leaves large, ovate to orbicular, 6-20 × 5-17 cm., base very rarely rounded, apex acute or shortly broad-cuspidate, mucronulate, upper surface sparsely appressed-hispid, lower surface densely white, greyish or fulvous woolly-tomentose, midrib and the 5-13 nerves prominent beneath, minor nerves many, subparallel; petioles shorter than the blade, 1-8 cm. long, densely woolly-tomentose. Flowers in subcapitate cymes; peduncle shorter than the petiole, up to 6 cm. long, tomentose or woolly. Pedicels 3-7 mm. long. Bracts prominent, persistent; outer bracts large, foliaceous, ovate-elliptic, acute, shortly petiolate, 1.5-2.5 × 0.5-2.0 cm. (smaller and narrower in cymes towards the apex of the stem), pinnately veined, densely fulvous tomentose beneath, appressed-hispid above, inner bracts narrower, linear-oblong or spathulate, obtuse or broadly acute at apex, narrowed at base, 1-2 cm. long, 2-4 mm. wide, with a single main nerve, lateral nerves not prominent, indumentum as on outer bracts. Sepals slightly unequal, hispid-pubescent outside on exposed regions, glabrous inside and covered regions; the two outer sepals linear-oblong, spathulate, acute, ± 1.75 cm. long; the three inner sepals linear-oblong, narrowed to the apex, acuminate, ± 1.5 cm. long. Corolla funnel-shaped, ± 4.5 cm. long, pale to dark pinkish purple, darker at the throat, limb shallowly lobed, soon reflexed, mid-petaline bands and upper portion of tube hispidulous. Stamens and style included. Filaments pilose at base. Ovary glabrous, 4-celled. Fruit not seen.

The type was collected from Araku Valley, Visakhapatnam Dt. in Andhra Pradesh at an altit. of about 800 m. on 14 Sept., 1961 by Balakrishnan 540 A-F; the Holotype (Balakrishnan 540 A) has been deposited in the Central National Herbarium, Sibpur; Isotypes (Balakrishnan 540 B-F) preserved in the same herbarium. The paratypes (Balakrishnan 10751 A-F), collected from the same locality on 23 August, 1960, are deposited in the Southern Circle Herbarium of Botanical Survey of India, Coimbatore.



Argyreia arakuensis Bal.

Fig. 1. portion of plant (from Holotype); Fig. 2. outermost foliaceous bract; Figs 3-4. inner bracts; Figs. 5-7. outer sepals; Figs. 8-9. inner sepals; Fig. 10. stamen; Fig. 11. flower-bud with sepals removed; Fig. 12. gynoecium with disc, style and stigma.

This species differs from the closely related species as follows:

Leaves ovate, deeply cordate at base, as broad as long.

Peduncle longer than the petiole, outer bracts foliaceous, palmately 3-5 nerved, leaves sparsely hairy above, silky-shining beneath

A. sericea

Peduncle shorter than the petiole, outer bracts, when foliaceous, always pinnately reticulate, leaves densely appressed hairy above, not shining beneath

A. arakuensis

Leaves elliptic-oblong, rounded at base, twice as long as broad

A. choisyana

ACKNOWLEDGEMENTS

I wish to express my thanks to the Director, Royal Botanic Gardens, Kew, for his kind help in connection with the comparison of the specimen in Kew Herbarium. I am greatly indebted to Rev. Fr. H. Santapau for kindly translating the diagnosis into Latin. My thanks are also due to Dr. K. Subramanyam and Dr. S. K. Mukerjee for all the help and encouragement during the course of the study.