

# NEW OR RARE *HEDYOTIS* LINN. (RUBIACEAE) FROM SOUTH INDIA

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## ABSTRACT

Three taxa of *Hedyotis* Linn. (Rubiaceae), viz., *H. gamblei* Henry & Subr. sp. nov., *H. eualata* var. *agastyamalayana* Henry & Subr. var. nov. and *H. barberi* (Gamble) Henry & Subr. comb. nov., collected from Agastyamalai Hills and surrounding regions in Tirunelveli District, Tamil Nadu, South India, are described in this paper.

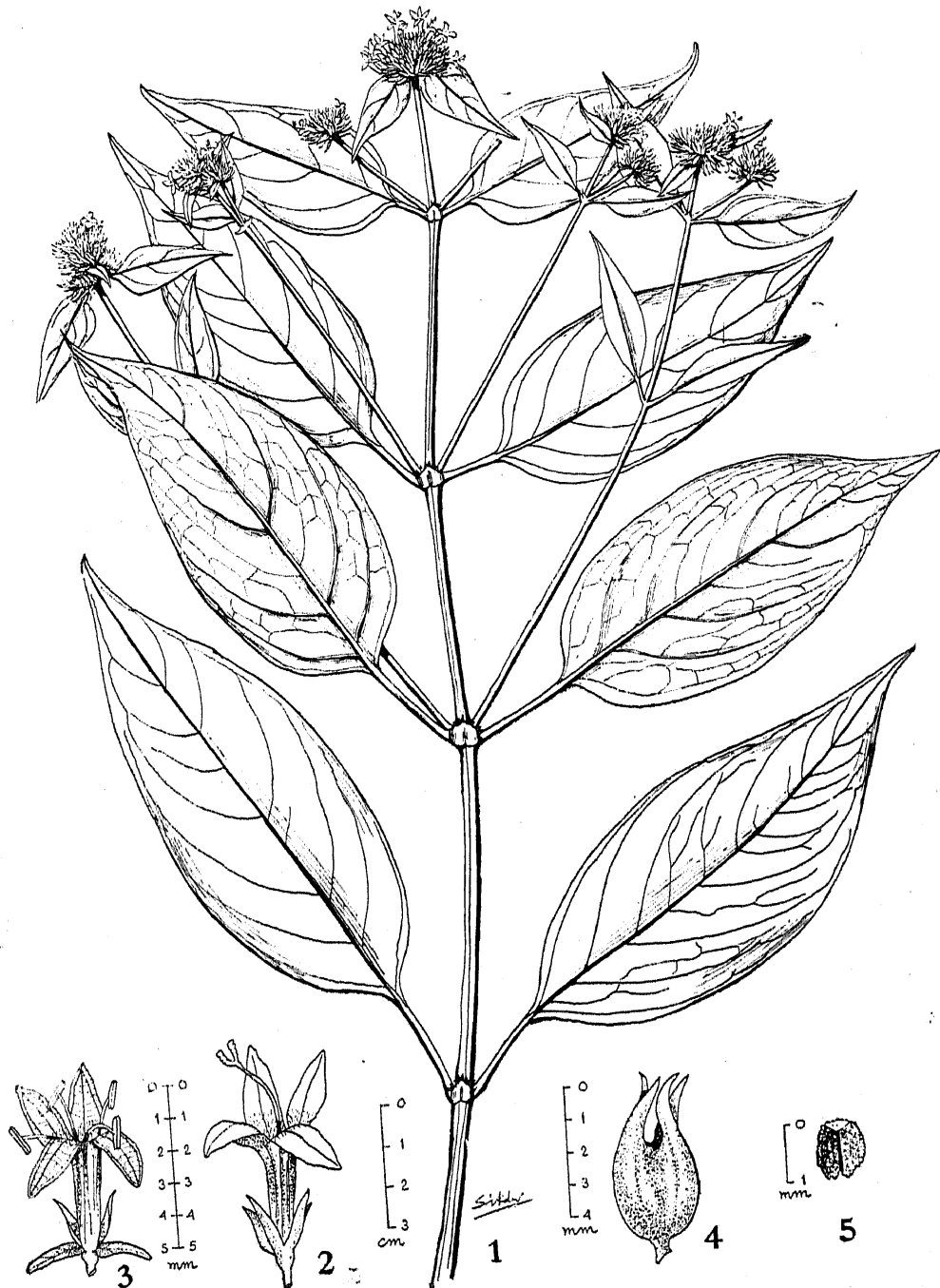
DURING systematic studies on the flora of Agastyamalai Hills and surrounding regions in Tirunelveli District, Tamil Nadu, South India, several taxa of *Hedyotis* Linn. (Rubiaceae) were collected. The new and rare ones are described with illustrations.

### *Hedyotis gamblei* Henry & Subr. sp. nov.

Frutex gracilis, 1.5–2.5 m. altus; ramuli 4-angulares, canaliculati, glabri. Folia ad 13.5 × 5.8 cm., ovato-lanceata, oblongo-lanceata vel elliptico-lanceata, tenuis, in sicco viridis, glabra, integra, ad apicem acuminata, obtusa vel angusta ad basim; petioli ad 2.8 cm. longi, glabri; stipulae ovato-triangulares, ad margines laciniatae, viscidiae. Flores in capitato-cymas, terminales vel axillares dispositi. Calycis tubo non producto; lobi 4, oblongo-lanceati, persistentes. Corolla alba, infundibuliformis, ad faucem dense pilosa; lobi 4, 2–2.5 × 1 mm., ovato-oblongi, acuti vel subacuti, recurvi. Stamina 4, ad corollae tubum inserta, inclusa vel exserta. Ovarium 2-loculare, ovulis numerosis, placenta basalia; stylus filiformis; stigmatibus 2, linearibus. Capsula 3–3.5 mm. diametro, subglobosa, crustacea, glabra, calyce persistente coronata; semina c. 1 mm. longa, angularis, testa aliquantum scrobiculata.

Typus lectus a Henry ad locum Manjanamparai, Singampatti R.F. dist. Tirunelveli in provincia Tamil Nadu die 30–5–1963 et positus in CAL subnumero *Henry* 16368A. Isotypi *Henry* 16368B–F positi in MH.

Slender shrubs, 1.5–2.5 m. tall; branches 4-angled, grooved, glabrous. Leaves up to 13.5 × 5.8 cm., ovate-lanceate, oblong-lanceate or elliptic-lanceate, thin, greenish when dry, glabrous, entire, acuminate at apex, obtuse or narrowed at base; petioles up to 2.8 cm. long, glabrous; stipules triangular-



FIGS. 1-5: *Hedyotis gamblei* Henry & Subr. sp. nov. Fig. 1. Flowering branch. Figs. 2 and 3. Flowers. Fig. 4. Fruit. Fig. 5. Seed.

ovate, margins laciniate, viscid. Flowers heterostylous, in axillary and terminal, bracteate, capitate cymes. Calyx-limb not produced; lobes 4, oblong-lanceate, longer than calyx-tube, persistent. Corolla white, funnel-shaped, throat densely hairy; tube 3–4 mm. long, minutely hairy; lobes 4, each 2–2.5 × 1 mm., ovate-oblong, acute or subacute, recurved. Stamens 4, inserted on corolla-tube, included or exerted. Ovary 2-celled; ovules many, on placentas arising from base of septum; style filiform; stigmas 2, linear. Capsules 3–3.5 mm. across, subglobose, crustaceous, glabrous, crowned with calyx-teeth; seeds about 1 mm. long, angled, testa somewhat pitted (Figs. 1–5).

Among Indian species of *Hedyotis*, *H. gamblei* comes closer to *H. pruinosa* Wt. & Arn., but differs by its capitate inflorescence and glabrous capsule.

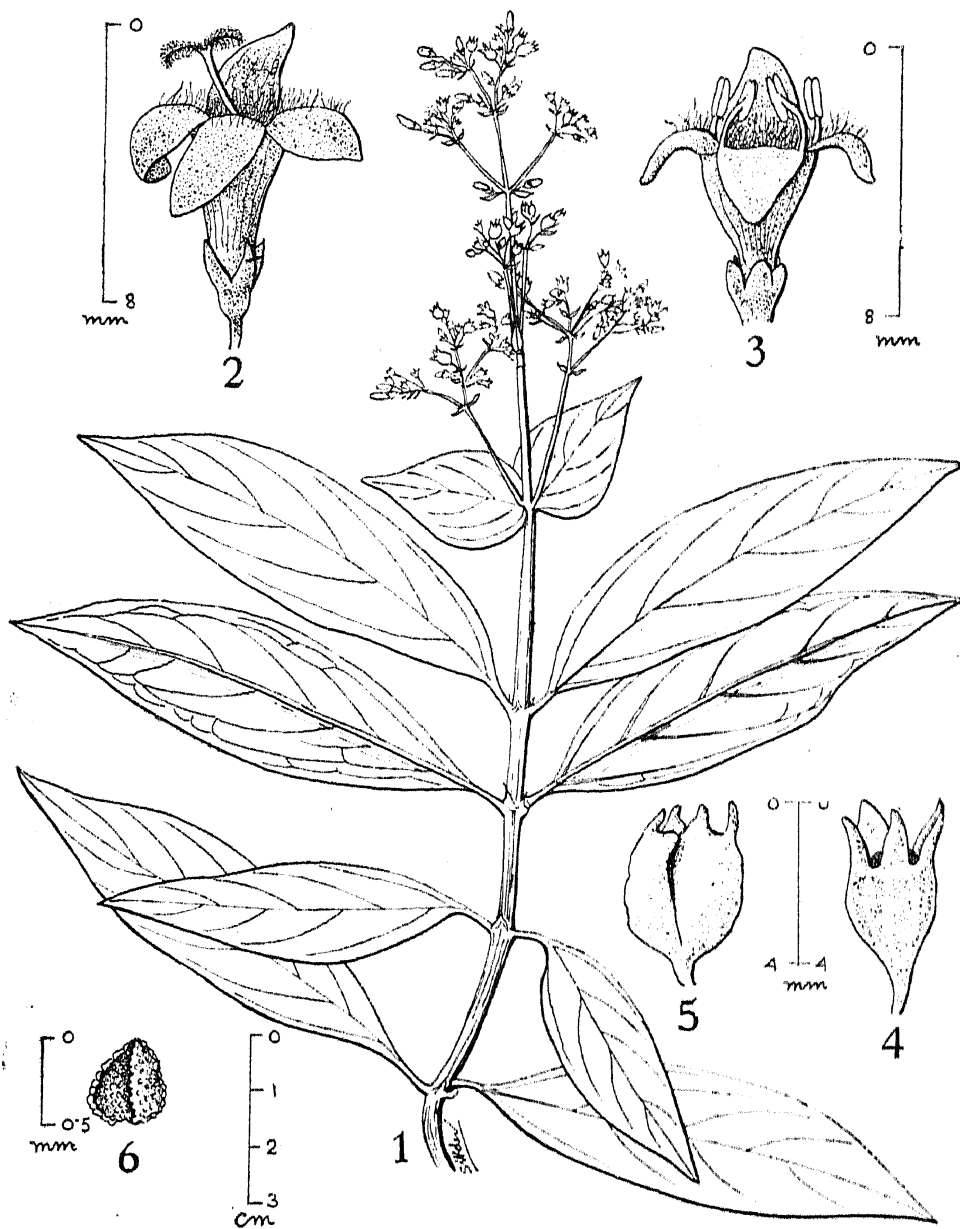
*Hedyotis eualata* (Gamble) Henry & Subr. comb. nov. *Oldenlandia eualata* Gamble in *Kew Bull.* 1919, 404, 1919. *Hedyotis eualata* Bedd. ex. Gamble in *Kew Bull.* 1919, 405, 1919, pro syn.

*Hedyotis eualata* var. *agastyamalayana* Henry & Subr. var. nov.

A typo differt stipulis integeris eglandulosisque, capsula majore.

Typus *Henry* 19166 A et isotypi *Henry* 19166 B-F lecti ad collibus Agastyamalai dist. Tirunelveli in provincia Tamil Nadu, die 30–6–1964; typus positus in CAL, isotypi in MH. Paratypi *Henry* 16303A-F lecti eodem in loco die 26–5–1963, positi in MH.

Woody herbs or undershrubs; stems subtetragonous, minutely puberulous or nearly glabrous, erect or spreading and rooting at lower nodes. Leaves up to 17.5 × 5.6 cm., oblong-lanceate (floral leaves ovate or ovate-lanceate), thin, glabrous, acuminate at apex, narrowed or tapering at base; petioles up to 1 cm. long, glabrous; stipules triangular or triangular-ovate, fleshy, entire, eglandular. Flowers heterostylous, in cymes forming terminal, bracteolate, glabrous panicles. Calyx-lobes 4, ovate to ovate-lanceate, acute or subacute, glabrous, persistent. Corolla pinkish-white or pale yellow, funnel-shaped, throat densely hairy; tube 3–4 mm. long; lobes 4, each about 3 × 1.5 mm., ovate or ovate-oblong, obtuse, recurved. Stamens 4, inserted on corolla-tube, included or exerted. Ovary 2-celled; ovules many, on placentas arising from base of septum; style filiform; stigmas 2, linear, hairy. Capsules about 3 mm. across, subglobose, crustaceous, glabrous, crowned with calyx-teeth; seeds minute, somewhat angular, testa reticulate (Figs. 1–6).



FIGS. 1-6: *Hedyotis eualata* var. *agastyamalayana* Henry & Subr. var. nov. Fig. 1. Flowering branch. Figs. 2 and 3. Flowers. Figs. 4 and 5. Fruits. Fig. 6. Seed.

This new variety is characterized by the entire, fleshy, eglandular stipules, and larger capsules.

*Hedyotis barberi* (Gamble) Henry & Subr. comb. nov. *Oldenlandia barberi* Gamble in *Kew Bull.* 1920, 68, 1920 and *Fl. Pres. Madras* 600, 1921.

Erect shrubs, 1.5-2 m. tall; branches woody, ringed, curved upwards. Leaves up to 2.5 × 1.3 cm., sessile, crowded towards the apices of branches,

ovate, very coriaceous, glabrous, obtuse at apex, obtuse and tapering at base, margins thickened, recurved; stipules orbicular, glandular along margins, white and scarious when old. Flowers pale white, tinged violet, in 3-flowered sessile cymes in the axils of upper leaves.

This species is known only from its type locality; the type was collected by C. A. Barber (2926), from Agastyamalai Hills on 22-5-1901. We have succeeded in locating the plant after a lapse of over six decades (Henry, 19191, MH). The woody, ringed branches with the small leathery leaves closely packed at their top and the prominent white stipules are very characteristic.

#### ACKNOWLEDGEMENTS

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