

NEW SPECIES OF *CEPHAELIS* AND *GONZALAGUNIA*
FROM ECUADOR
(RUBIACEAE)

John D. Dwyer*

Two species of the Rubiaceae, *Cephaelis gentryi* Dwyer and *Gonzalagunia dodsonii* Dwyer, are described from the Province of Los Ríos in Ecuador.

Cephaelis gentryi Dwyer, sp. nov.

(Plate 16:A).

Arbores ad 8 m altae, ramulis subquadrangularibus, nodis saepe tumidis. Folia oblongo-rotunda, 18-28 cm longa, 12-19 cm lata, apice rotundata, venis lateralibus ca. 16 lato-arcuatis, chartacea, glabra; petiolis rigidis, 4-5.5 cm longis; stipulis persistentibus connatis vagina brevi, ad 5 mm longa, parte utraque vaginae bicornuata cornu utroque ad 1.7 cm longo, coriaceo. Inflorescentiae paniculatae terminales, ad 14 cm longae, pedunculo ad 7 cm longo, ramis paucis brevibus caespitibus 3 paucifloris ovato-rotundis, 0.6-1 cm latis, terminatis. Flores sessiles lobis calycis 5 rotundis; corolla malvina in medio lutea tubo conspicue carnosae glabra praeter intus prope stamina; stamina 5 subsessilia infra faucem affixa; stylo gracili, ca. 14 mm longa, stigmatibus brevibus 2; ovario 2-loculoso.

Trees 5-8 m tall, the branchlets when dry somewhat 4-angled, smooth, glabrous, the pith moderately abundant, the nodes well-spaced, conspicuous, often swollen. Leaves oblong-rotund, 18-28 cm long, 12-19 cm wide, rounded at the apex, acuminate, the acumen to 1 cm long, obtuse at the base, occasionally rounded or widely cuneate, slightly inequilateral, the costa prominulous on both sides, the lateral veins ca. 16, widely arcuate, the submarginal vein often inconspicuous, chartaceous, slightly discolorous when dry, glabrous; petioles rigid, often twisted, usually angular-ascending, 4-5.5 cm long, to 2.2 mm wide, glabrous; stipules persistent, connate, the sheath short, to 5 mm long, to 11 mm wide, coriaceous, glabrous, with each part of the sheath two-horned, each horn narrowly oblong, to 1.7 cm long, erect, coriaceous, glabrous, minutely ciliolate on the margin. Inflorescences paniculate, terminal, to 14 cm long, to 6 cm wide, black when dry, the peduncle erect, rigid, to 7 cm long, to 0.25 cm wide, smooth, glabrous, the lowermost branches 3, rigidly ascending, verticillately disposed, to 2 cm long, to 0.2 cm wide, minutely puberulent, the uppermost branches few, crowded, rigidly ascending, with each branch with 3 few-flowered, ovate-rotund heads, 0.6-1 cm wide, the bracts few, the outermost large, oblong, to 1.2 cm long, glabrous, carnosae, usually at maturity divided into 2-3 oblong lobes; bracteoles sub-rotund, concave, not lobed, to 0.7 cm long, wider than long. Flowers (here in bud) sessile, the hypanthium very short, the calycine cup scarcely measureable, the lobes 5, oblong-rotund, to 2 mm long, rounded at the apex, glabrous except minutely ciliolate on the margin; corolla light-purple, yellow or white in the center, the tube short, carnosae, glabrous outside, white-villose within at point of stamen attachment, the lobes 5, valvate, very carnosae, glabrous, oblong, ca. 10 mm long; stamens 5, the anthers subsessile, narrowly oblong, ca. 4 mm long, obtuse, attached below the faux; style slender, ca. 14 mm long, the stigmas 2, erect, thumb-shaped, to 1.2 mm long, acute; ovary 2-celled, the ovules attached basally. Fruits not seen.

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TYPE: *ECUADOR*: LOS RÍOS: Río Palenque Science Center, km 56, *Dodson 5169* (HOLOTYPE: MO; ISOTYPES: US, RPSC, SEL).

ADDITIONAL MATERIAL EXAMINED: *ECUADOR*: LOS RÍOS: at the same locality *Dodson & Gentry 6556* (MO,RPSC,SEL); *Dodson 6632* (MO, SEL); *ESMERALDAS*: Parroqui de Concepción; Playa Rica, alt. 105 m, *Mexia 8478* (MO).

Cephaelis gentryi is known only from Ecuador. It is distinguished by its large oblong-rotund leaves and connate stipules, each part of the sheath with 2 elongate, horn-like lobes. The flowers of the type collection are described as having a corolla "light-purple with a yellow center", an unusual coloration for *Cephaelis*. The other collection cited above is described as having "white flowers". The two collections, however, are excellent matches.

Cephaelis gentryi is closely related to *C. pebasensis* Standley, the type of which is *L. Williams 1786* (HOLOTYPE: F) from Pebas on the Amazon River, Dept. Loreto, Peru. It differs, however, in having leaves which are abruptly narrow at the base as well as being briefly decurrent, in having very narrow bracteoles, flowers very numerous in the heads, and calycine teeth linear. Dr. Alwyn Gentry, for whom the new species is named, notes that the type bears a resemblance to *C. schunkeana* Standley from Amazonian Peru, whose leaves are markedly pubescent. The common name listed on *Mexia 8478* is "Mandinga".

***Gonzalagunia dodsonii* Dwyer, sp. nov.**

(Plate 16:B).

Arbores parvae. Folia ovato-oblonga ad vix rotundo-oblonga, 8.5-17 cm longa, 3.6-7 cm lata, venis lateralibus 8-11; petiolis ad 1.5 cm longis; stipulis persistentibus, triangularibus, 2-5 mm longis. Inflorescentiae 11-33 cm longae, cymulis plerumque 3-5-floris; bracteis ad 3 mm longis. Flores pedicellis ad 4 mm longis; calyce lobis 4 triangularibus, 0.7-1.2 mm longis; corolla tubo ad 12 mm longo, lobis 4, ca. 4 mm longis; antheris 1.8-3 mm longis; ovario 4-loculari.

Trees small, 1-10 m tall, the branchlets slender, somewhat angular, puberulent, the nodes well-spaced. Leaves ovate-oblong, 8.5-17 cm long, 3.6-7 cm wide, deltoid toward the apex, acuminate, the acumen to 1 cm long (or longer?) cuneate at the base, equilateral, the costa prominulous above and below, slender, the lateral veins 8-11, arcuate, slender, scarcely prominulous, uniting to form an undulate submarginal vein, the smaller veins pinnatifid, thin-chartaceous, concolorous, glabrescent above except often on the costa and vein lightly pubescent, the hairs white appressed or various, glabrous beneath or with hairs on the costa and veins; petioles slender, to 1.5 cm long, ca. 1.5 mm wide, angular-ascending; stipules persistent, triangular, 2-5 mm long, ca. 2.5 mm wide at the base, attenuate and acute, black when dry, puberulent outside. Inflorescences pendent, spiciform, longer or shorter than the uppermost leaves, 11-33 cm long, at anthesis to 3.5 cm wide, the cymules many, often 3-5-flowered, well-spaced; bracts subulate, ca. 3 mm long, puberulent, often deciduous. Flowers with the pedicels to 4 mm long, puberulent, the calycine cup ca. 1.5 mm long, puberulent, the lobes 4, triangular, 0.7-1.2 mm long; corolla white, the tube slender, to 12 mm long, to 1.5 mm wide, puberulent or appressed-villose outside, within densely villose at the faux, the lobes 4, ovate-oblong, ca. 4 mm long, to 2.5 mm wide, villose near the base within; stamens 4, the anthers narrowly oblong, 1.8-3 mm

long, obtuse, the filaments slender, ca. 2.5 mm long, attached at the faux; style slender, 9-11 mm long, the stigmas 2, linear, ca. 1 mm long; ovary 4-celled. Fruits not seen.

TYPE: *ECUADOR*: LOS RÍOS: cloud forest on western slope, area of virgin forest, km 12 road from Patricia Pilar to 24 de Mayo, Montañas de Ila, alt. 450 m, *Dodson & Gentry 6597* (HOLOTYPE: MO; ISOTYPES: RPSC, SEL).

ADDITIONAL MATERIAL EXAMINED: *ECUADOR*: LOS RÍOS: Río Palenque Science Center, km 45 Road Quevedo-Sto. Domingo, alt. 150-220 m, *Dodson & Gentry 6452* (MO, QCA, RPSC, SEL); same area, *Dodson 6625* (MO, QCA, SEL) and *Dodson 6643* (MO, QCA, SEL); Bosque do Oro near Hacienda Las Balsas, Montalvo, alt. 300-400 m, *Jativa & Epling 633* (MO).

Gonzalagunia dodsonii is distinguished by its very elongate corolla tube and its very well-spaced cymules. The leaves seem to attain to a much greater width than those of other species of *Gonzalagunia* in South America.

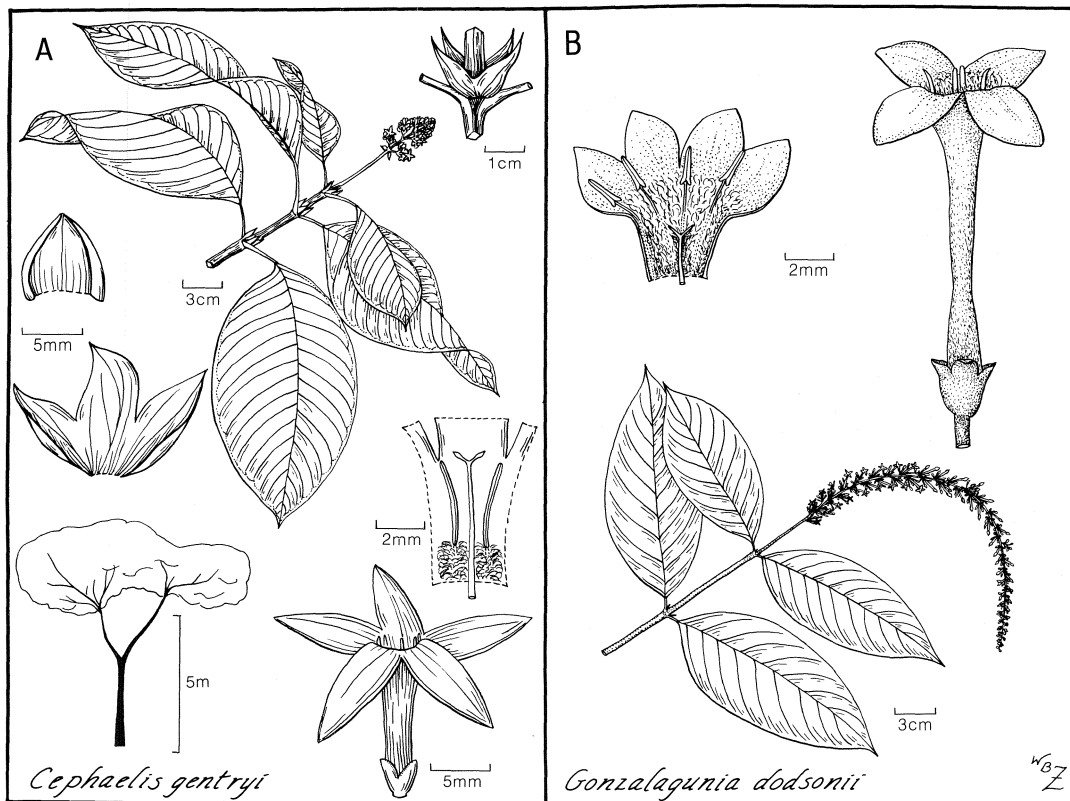


Plate 16