

YUTAJEA, ANOTHER NEW GENUS OF RUBIACEAE FROM THE GUAYANA HIGHLAND

Of the genera of Rubiaceae endemic to the region of the Guayana Highland, none had previously been described from the Serranía de Yutaje in the Territorio Federal Amazonas of Venezuela. A recent expedition to this region collected material of a rubiaceous tree, here described as a new genus. It is fitting to name the genus for Yutaje, a sandstone mountainous area where numerous endemic species are already known.

Yutajea Steyermark, gen. nov. TYPE: *Y. liesneri* Steyermark. Tribe Isertieae.

Arbor. Stipulae interpetiolares persistentes late lanceolatae acutae. Inflorescentia thyrsiformi-paniculata seriebus verticillatis dispositis, axibus in dichasia desinentibus. Calyx truncatus tandem in lobes 3–4 irregulariter rumpens. Corolla late cylindrica vel subinfundibuliformis rosea, lobis 6 in aestivatione imbricatis paullo inaequalibus, tubo intus dense pubescenti, orificio barbato. Stamina 6 prope basim tubi corollae affixae. Antherae sub-basifixae transverse rugulosae inclusae. Ovarium 6-loculare, ovulis numerosis.

Yutajea liesneri Steyermark, sp. nov. TYPE: Venezuela. Territorio Federal Amazonas: Depto. Atures, 5–8 km NW of Yutaje settlement, along stream flowing south from east side of unnamed peak, 3 km west of Río Coro Coro, west of Serranía de Yutaje, 05°40'N, 66°9'W, 700–1,000 m, 10 Mar. 1987, Ronald Liesner & Bruce Holst 21826 (holotype, MO; isotype, VEN).

Arbor 6-metralis, ramulis superioribus adpresso-pubescentibus; stipulis late lanceolatis acutis 8 mm longis 4 mm latis; foliis oblanceolatis vel lanceolato-ellipticis apice acuminatis basi acutis 13.5–20 cm longis 5.5–8.5 cm latis; inflorescentia thyrsiformi-paniculata late ovoidea multiflora pedunculato, axibus principalibus 12–16 modice vel dense hirtellis in verticillos 3–5 ordinatos atque in dichasia composita desinentibus; calyce hypanthioque 4–6 mm longo subadpresso-pubescenti; calyce ante anthesin truncato vel paullo undulato sub anthesi in lobos 3–4 irregulariter rumpenti, lobis suborbicularibus vel suborbiculari-ovatis apice rotundatis, marginibus minute ciliolatis; corolla rosea late cylindrica vel subinfundibuliformi 8–9 mm longa 4–7 mm lata, tubo extus glabro intus praeter partem basilem 1.5 mm glabrum adpresso-pubescenti atque prope orificium barbato pilis longioribus instructo; lobis 6 paullo inaequalibus suborbiculari-ovatis vel obovato-oblongis apice obtusis vel rotundatis ubique glabris marginibus minute papillatis; staminibus 6, antheris linearibus.

Tree 6 m tall, the twigs appressed-pubescent distally. Stipules broadly lanceolate, acute, 8 mm long, 4 mm wide, strigose. Leaves oblanceolate to lance-elliptic, acuminate at apex, acute at base, 13.5–20 cm long, 5.5–8.5 cm wide, the upper surface glabrous, the lower surface pilosulous on midrib and lateral nerves, sparsely pubescent on some tertiary veins, glabrous on surface between the tertiary veins; lateral nerves 12–17 each side, anastomosing near margin, elevated below; midrib sulcate above and elevated below; tertiary veinlets inconspicuous above, finely reticulate and impressed below. Inflorescence thyrsiform-paniculate, broadly ovoid, 35–50-flowered, 6–11 cm long excluding the peduncle, 4.5–7 cm wide, the main axes 12–16 in 3–5 verticils ending in often compound dichasia, moderately to densely hirtellous; lowest axes 12–25 mm long, the others 7–15 mm long. Bracts subtending axes ovate, acute, 2.5–4 mm long, 1.5 mm wide, minutely hirtellous. Peduncle terminal, 8–12 cm long, 2.5–3 mm diam., moderately pubescent. Calyx and hypanthium 4–6 mm long, subappressed-pubescent; hypanthium obconic, 3–5 × 3–5 mm. Calyx truncate or slightly undulate before anthesis, splitting irregularly during anthesis into 3–4 thickened, suborbicular or suborbicular-ovate lobes, these rounded at apex, 3–3.5 mm long, 4–8 mm wide, minutely ciliolate at the margins. Corolla pink or roseate, fleshy-thickened, broadly cylindric or subinfundibuliform, 8–9 mm long, 4–7 mm wide, the tube 5 mm long, 4–7 mm wide, glabrous without, within densely appressed-pubescent except for the glabrous basal 1.5 mm, and with longer barbate pubescence at the orifice; lobes 6, slightly unequal, suborbicular-ovate or obovate-oblong, obtuse or rounded at apex, 4–5 mm long, 2.5–3 mm wide, glabrous both sides, the margins minutely papillate. Stamens 6; anthers linear, 3.5–5 mm long, 0.8–1.5 mm wide, the thecae transversely rugulose, terminating in an oblong, rounded connective 0.5–1 mm long, 0.5 mm wide; filaments ligulate-linear, thickened, 1.5 mm long, 0.7 mm wide, inserted 1.5–2.5 mm above the base of the corolla tube, broader than the base of the thecae. Style 4–6 mm long, papillate-verrucose; stigmas 4–6, ligulate, 0.5 mm long. Disk annular, the margin undulate, 1 mm long, 4 mm diam. Ovary 6-celled, ovules ca. 8 in each cell.

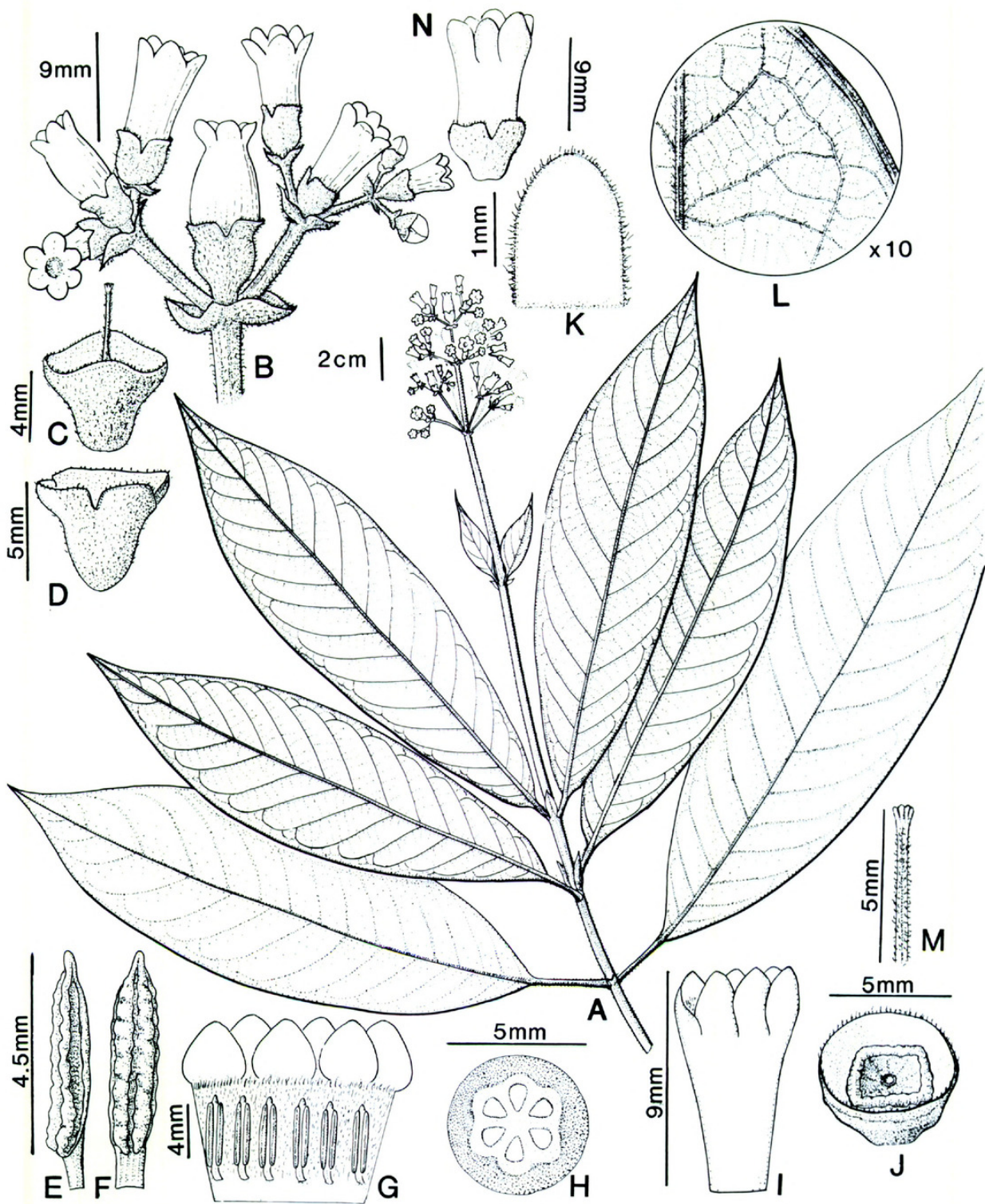


FIGURE 1. *Yutajea liesneri*.—A. Habit.—B. Portion of inflorescence.—C. Calyx and hypanthium before anthesis.—D. Calyx and hypanthium during anthesis.—E. Stamen (lateral view).—F. Stamen (ventral view).—G. Corolla, interior view.—H. Transverse section through ovary, semidiagrammatic.—I. Corolla, subinfundibuliform type.—J. Disk, from above, in depression at base of calyx tube.—K. Floral bract, exterior view.—L. Detail of lower leaf surface.—M. Style and stigmas.—N. Flower with broadly cylindrical corolla type with slightly unequal lobes.

Yutajea is a member of the tribe Isertiaeae as circumscribed by Kirkbride (1979) and may be placed next to its closest related genus, *Isertia*. From *Isertia* it differs especially in having the

stamens inserted near the base of the corolla tube and in having sub-basifixed anthers. The slightly unequal corolla lobes and the uniformly pubescent interior of the corolla tube are additional



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