

NEW SOUTH AMERICAN SPECIES OF PIPERACEAE

BY

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Piper ripagaudens Yuncker n. sp. (Figure 1)

Frutex (?); internodiis superis gracilibus glabrescentibus; foliis lanceolatis vel lanceolato-ovatis, apice acute acuminatis, basi aequilateraliter rotundatis, acutis obtusisve, supra glabris, subtus ad venas dissite hirsutis, a medio infero pinnatim venosis, costa venularum conjunctis, in sicco tenuibus; petiolo ad laminam vaginato-alato, dissite hirsuto; pedunculo gracili, dissite hirsuto; drupa rotundata glabra, stylo brevi crasso coronato; stigmatibus sat brevibus recurvis.

Shrub (?); upper internodes 4-6 cm. long, slender, glabrous or transiently very sparsely pubescent; leaves lanceolate or lance-ovate, commonly somewhat falcate, 3-5.5 cm. wide x 7-10 cm. long or somewhat smaller, apex sharp acuminate, base essentially equilateral, rounded, obtuse or acutish, glabrous above, the nerves beneath loosely hirsute, thinly ciliate, pinnately nerved with two or three pairs of nerves arising from the lowermost 15 mm. and an additional pair from near the middle, submarginally loop-connected and cross-connected with the midrib upward, drying thin, translucent; petioles from 5 mm. long on upper leaves to 2 cm. long on larger lower leaves, vaginate-winged to the blade, thinly hirsute; spikes 2 mm. thick x 10-15 mm. long; peduncle slender, 10-12 mm. long, thinly hirsute; bracts triangular-subpeltate, ventral margin fringed; fruit rounded, glabrous; stigmas rather short, recurved, on a short, stout style.

BRAZIL: AMAZONAS: on beach, near Serra Tukano, above Travão, Rio Uaupes, between Ipanoré and confluence with Rio Negro, Nov. 7, 1947, *Richard Evans Schultes & João Murça Pires 9008* (TYPE, in USNH as sheet no. 1996690).

This species in some respects resembles *P. Camiloi* of Colombia but differs in the more equilateral leaf bases, type of nerving, character of indumentum, lack of black dots, longer, vaginate petiole, etc.



Figure 1. *Piper ripagaudens* Yuncker n. sp.



Figure 2. *Piper Barkleyi* Yuncker n. sp.

Piper Barkleyi Yuncker n. sp. (Figure 2)

Suffrutex; internodiis floriferis gracilibus retrorsum pubescentibus glanduloso-punctatis; foliis elliptico-subovatis, apice acuminatis, basi rotundatis ad petiolum abrupte acutis, supra glabris, subtus hirtulis (ad venas quam maxime), a lamina media pinnatim venosis, venis utrinque ca. 4, intermediis aliquot acutis, conferte glanduloso-punctatis, in sicco tenuibus; petiolo ad medium vaginato-alato, retrorsum hirtulo; spicis mucronatis; pedunculo retrorsum hirtulo; bracteis triangulari-subpeltatis, fimbriatis; drupa ovoideo-subtrigona, stylo breviter crasso, pilose coronato; stigmatibus parvis rotundatis.

Suffrutescent; flowering internodes slender, retrorsely pubescent, glandular-dotted; leaves elliptic-subovate, apex acuminate, base essentially equilateral, rounded but abruptly acute at the petiole, 5-6 cm. wide x 9-11 cm. long, glabrous above, staring hirtellous beneath, the nerves densely so, pinnately nerved from below the middle, the nerves about 4 on each side, with shorter intermediates and anastomosing nervules, strongly glandular-dotted, drying thin but firm, translucent; petiole 2-3 cm. long, grooved above, vaginate to near the middle, retrorsely hirtellous; spikes 3 mm. thick x 2-3 cm. long, mucronate; peduncle 2-3 cm. long, retrorsely hirtellous; bracts triangular-subpeltate, fringed; fruit ovoid-subtrigonal, tapering to a short, thick, pilose, style-like apex; stigmas short, rounded.

COLOMBIA: ANTIOQUIA: in dense moist forest near Villa Arteaga, alt. 100 m., April 19, 1948, *Francisco Sierra Soto and Fred A. Barkley 18C629* (TYPE, in USNH as sheet no. 1954945).

This species bears some resemblance to *P. cararensis* but differs because of its substylose fruits and much longer peduncles.

Piper Araquei Yuncker n. sp. (Figure 3)

Arbor parva; internodiis floriferis sat crassis elongatisque, conferte hispidis, indumento heteromorpha, pilis usque ad 3 mm. vel ultra longis; foliis lanceolato-ovatis, bene rugosis, apice sensim acute acuminatis, basi profunde cordatis, sinu subclauso, supra ad venas hirsutis, subtus sat dissite hirsutis (ad venas quam maxime), a tertio supero deorsum pinnatim venosis, venis utrinque ca. 7, trabeculis sat prominentibus sub margine laminae laqueatis; petiolo crasso, ad laminam vaginato-alato; bracteis brunneo-hirsutis, triangulari-subpeltatis, pedicello sulcato; drupa oblonga e latere sat compressa glabra, apice truncato; stigmatibus sessilibus.

Small tree, up to 3 m. or more tall; flowering internodes rather long and stoutish, densely hispid, the hairs up to 3 mm. or more long and coarse, with an understory of short hispidulous hairs; leaves lance-ovate, 18 cm. wide x 40-45 cm. long, strongly rugose, apex gra-

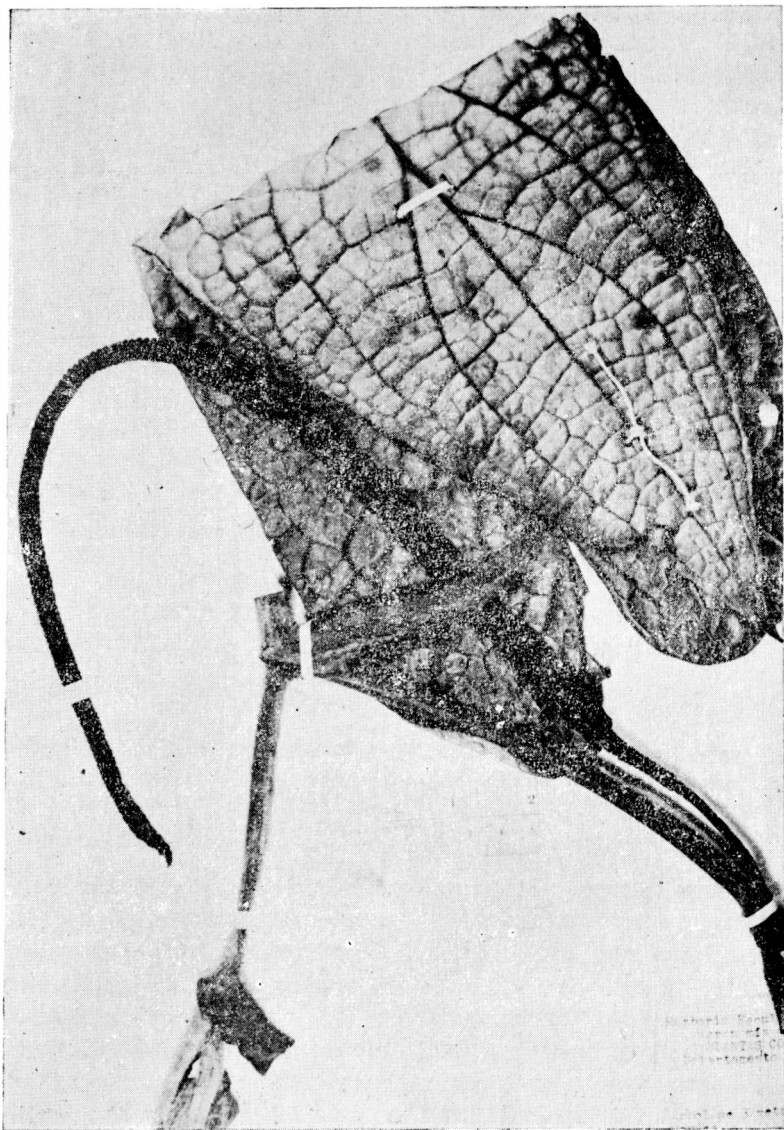


Figure 3. *Piper Araquei* Yuncker n .sp.

dually sharp-acuminate, base deeply cordate, the lobes subequal or one lobe much larger, sinus nearly closed, 7 cm. deep, pale and hirsute above, at least along the nerves, darker and loosely hirsute beneath, the nerves more densely so with an hirtellous understory, pinnately nerved below the upper third, the nerves about 7 on each side, with strongly raised anastomosing and cross-connecting nervules, submarginally loop-connected, obscurely glandular-dotted beneath, not ciliate, drying coriaceous, opaque, narrowly revolute; petiole 8 cm. long, stout, rather densely mixed hirtellous-hirsute, vaginate-winged to the blade; spikes green when growing, 8 mm. thick x 40-50 cm. long; peduncle 4-6 cm. long, rather thinly hirtellous-hirsute; bracts triangular-subpeltate with grooved pedicel, nearly completely brown-hairy; fruit oblong, laterally somewhat flattened, glabrous, apex truncate; stigmas rounded, sessile.

COLOMBIA: ANTIOQUIA: in moist forest in Fuentes Termales de Santo Domingo, alt. 1200 m., May 7, 1949, *Rosa Scolnik, Jorge Araque Molina & Fred A. Barkley 19A7500* (TYPE, in USNH as sheet no. 1954947).

The heteromorphic pubescence, leaf size and shape, and long spikes distinguish this species.

***Piper longimucronatum* Yuncker n. sp. (Figure 4)**

Frutex glaber, vel innovationibus minute puberulentibus; internodiis superis in sicco minute striatis granulosis, glanduloso-punctatisque; foliis late ellipticis, apice acuminatis, basi abrupte ad petiolum acutis, supra glabris (?), subtus ad venas granulosis obscure minute puberulentis conferte glanduloso-punctatis, a medio infero pinnatim venosis, venis utrinque 6-7; petiolo ad laminam vaginato-alato; spicis mucronatis, mucrone 5 mm. vel ultra longo; bracteis rotundato-triangularibus subpeltatis, fimbriatis; drupa e latere compressa; stigmatibus recurvis, sessilibus.

Shrub, glabrous or very young growth minutely and evanescently puberulent; upper internodes 4-8 cm. or more long, finely striate-ridged when dry, granular and glandular-dotted; leaves broadly elliptic, 11-12 cm. wide x 23 cm. long, apex acuminate, base abruptly acute at the petiole, glabrous above (?), nerves beneath granular or very obscurely minutely puberulent, densely glandular-dotted, pinnately nerved from the lower half, the nerves 6-7 on each side, with rather regularly spaced cross-connecting-anastomosing nervules, drying papery and bronzy, translucent; petiole about 2 cm. long, vaginate-winged to the blade, the wing apparently persistent, veiny, puberulent, ciliolate; spikes 2 mm. thick x 9-10 cm. long, mucronate, the mucro 5 mm. or more long; peduncle 1-1.5 cm. long; bracts

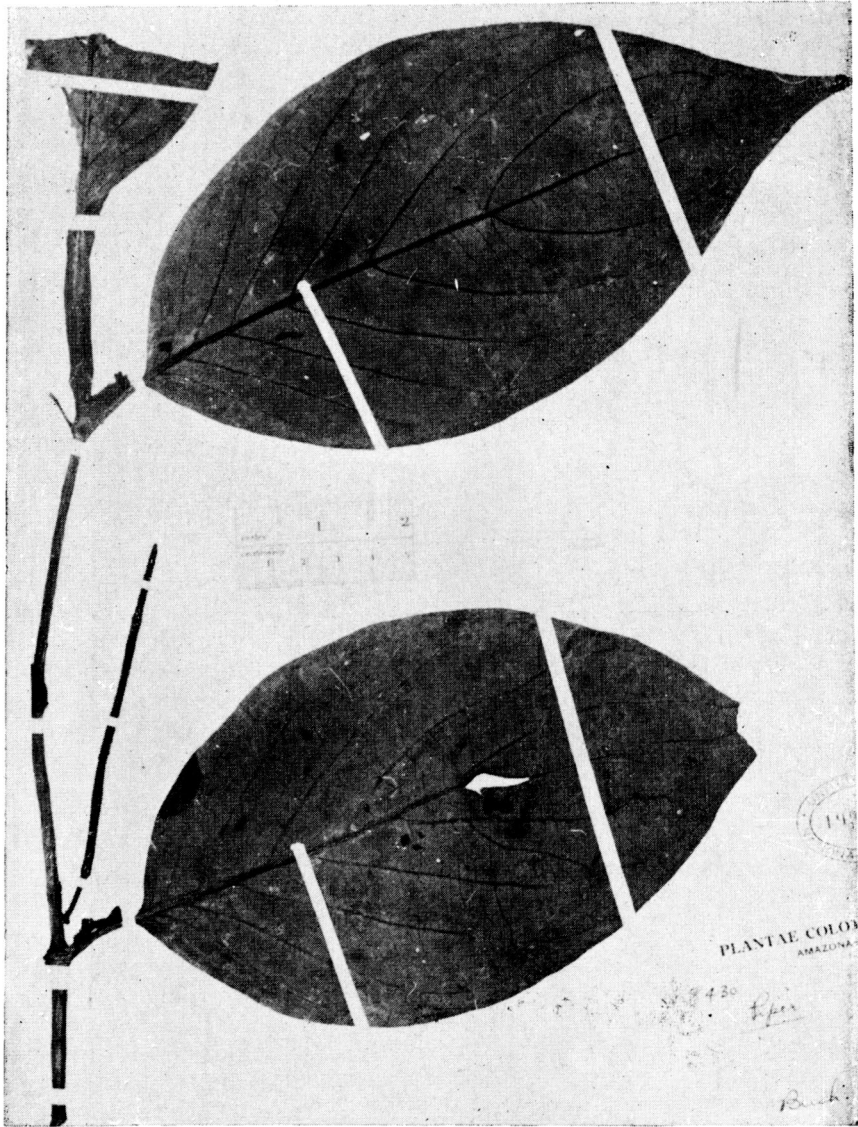


Figure 4. *Piper longimucronatum* Yuncker n. sp.

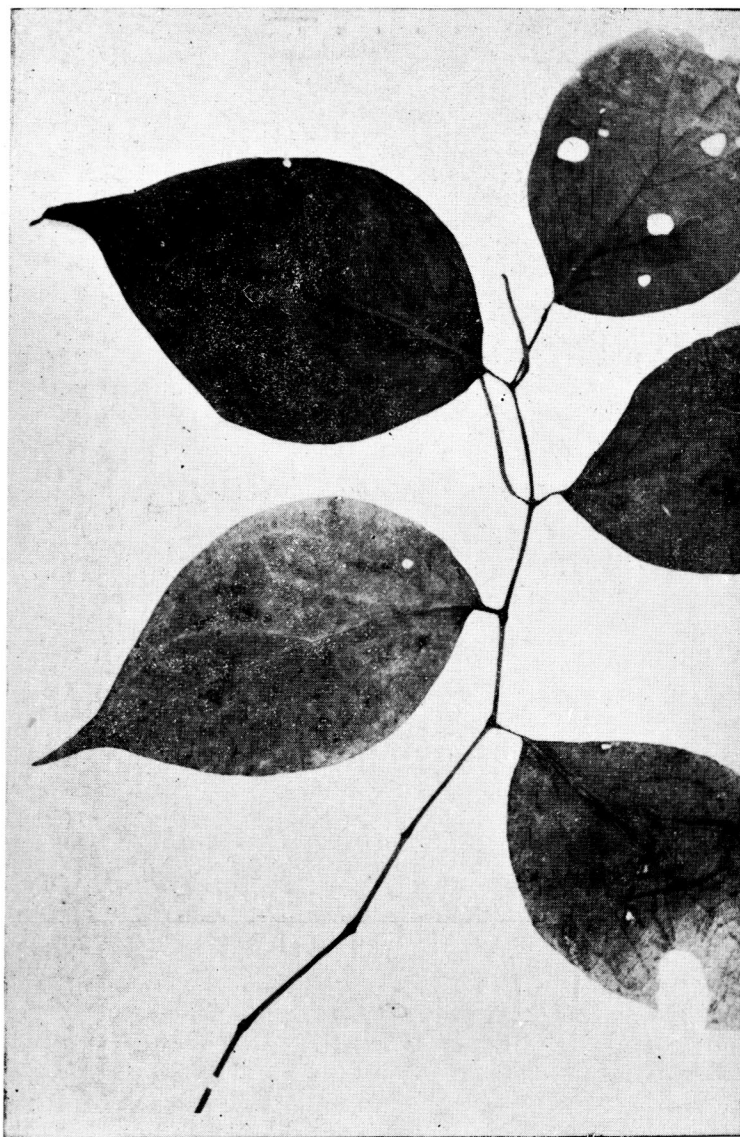


Figure 5. *Piper virgatum* Yuncker n. sp.

rounded-triangular-subpeltate, fringed; rachis pubescent (?); fruit laterally compressed, glabrous; stigmas curved, sessile.

COLOMBIA: AMAZONAS: Loretoyacu River, alt. about 100 m., Oct. 1946, *Richard Evans Schultes & George A. Black 8430* (TYPE, in USNH as sheet no. 1996431).

The large, 6-7 nerved, glabrous leaves, with prominently winged petioles, and slender, mucronate spikes are distinctive characters of this species.

***Piper virgatum* Yuncker n. sp. (Figure 5)**

Frutex glaber, innovationibus perramosis, ramulis pergracilibus, nodosis; foliis sat late subrhombico-ellipticis, apice acute acuminatis, basi oblique acutis latere altero 2-3 mm. brevior, a medio infero pinatim venosis, venis utrinque 4-5; petiolo ad medium vaginato; spicis adhuc immaturis; bracteis triangulari-subpeltatis.

Shrub, 1 m. tall, glabrous; young growth much branched; twigs very slender, nodose; flowering internodes mostly 2-4 cm. long; leaves rather broadly subrhombic-elliptic, 6.5-8.5 cm. wide x 12-16 cm. long, apex sharply acuminate, obscurely mucronate, base obliquely acute, one side 2-3 mm. shorter, pinnately nerved from the lower half, the nerves 4-5 on each side, with slender cross-connecting-anastomosing nervules, drying thin and papery, translucent; petiole 5-8 plus 2-3 mm. long, vaginate to the middle; spikes as yet immature, cream-colored when growing, 1 mm. thick x 3.5 cm. long; peduncle scarcely 5 mm. long; bracts triangular-subpeltate, marginally fringed; ovary or fruit not developed.

COLOMBIA: SANTANDER: dense forested area 15 km. east of Pto. Berrío, alt. 250 m., May 13, 1949, *Rosa Scolnik, Jorge Araque Molina & Fred A. Barkley 19S011; 19S019* (TYPE, in USNH as sheet no. 1985190).

The subrhombic-elliptical glabrous leaves, slender twigs, and small (?) spikes characterize this species.

***Piper scobinifolium* Yuncker n. sp. (Figure 6)**

Frutex; internodiis floriferis gracilibus, dissite scabridis, a modice ad sat conferte hirsutis, pilis 1-2 mm. longis; foliis ovatis vel lanceolato-ovatis, rugosis, apice attenuatis acute acuminatis, basi rotundato-cbtusis vel inaequilateris latere altero 2-3 mm. brevior, a medio infero pinatim venosis, utrinque 5-6 trabeis prominentibus, supra hispidis bene scabridis, subtus sat dissite longo-hirsutis; petiolo hirsuto ad basim vaginato; pedunculo dissite hirsuto; bracteis triangulari-subpeltatis, sat parvis, fimbriatis; drupa e latere compressa truncata glabra; stigmatibus sessilibus.

Shrub, 1 m. tall; flowering internodes slender, moderately to rather densely hirsute, the hairs 1-2 mm. long, coarse, some-

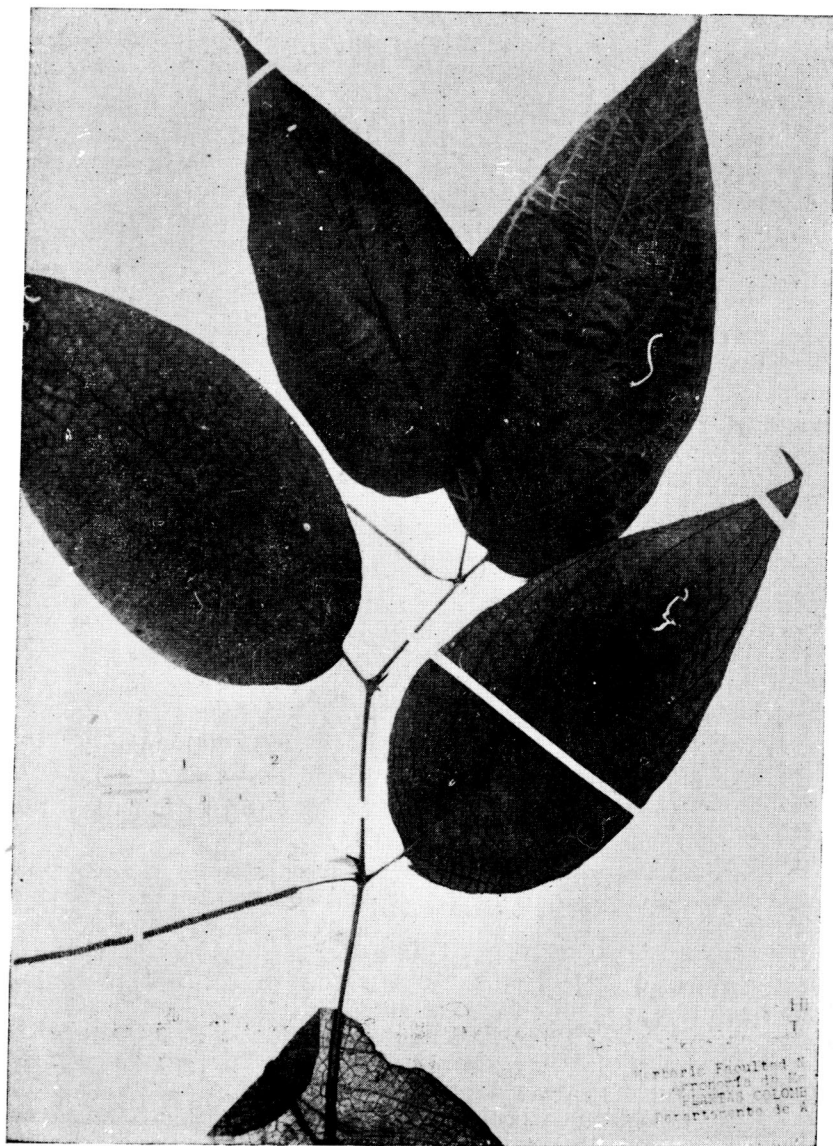


Figure 6. *Piper scobiniifolium* Yuncker n. sp.

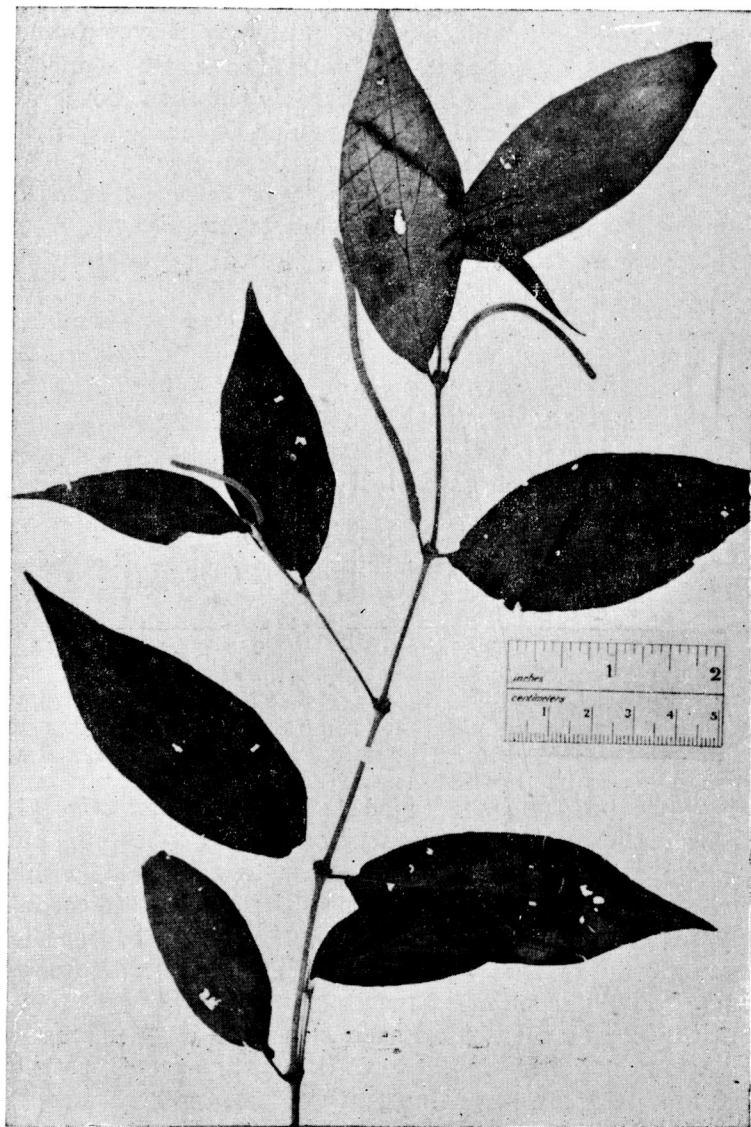


Figure 7. *Piper pseudoarmatum* Yuncker n. sp.

what scabrid; leaves ovate or lance-ovate, rugose, apex attenuately sharp-acuminate, base rounded, obtuse, subequal or one side 2-3 mm. shorter, 6-8 cm. wide x 15-18 cm. long, pinnately nerved from the lower half, the nerves 5-6 one each side, with raised cross-connecting-anastomosing nervules, hispid and very harshly scabrous above, rather loosely staring long-hirsute and pale glandular-dotted beneath, coarsely ciliate, drying brownish, firm, semi-translucent; petiole 1-1.5 cm. long, hirsute, vaginate at the base; spikes 2 mm. thick x 8.5 cm. long; peduncle 1.5 cm. long, loosely hirsute; bracts comparatively small, triangular-subpeltate, fringed with stiff hairs; drupe laterally compressed, truncate, glabrous; stigmas sessile.

COLOMBIA: ANTIOQUIA: in moist forest below the summit of Santa Elena, road betweed Medellin and Rionegro, alt. 2500 m., April 2, 1949 *Rosa Scolnik, José Efrain Ospino Carvajal & Fred A. Barkley 19An364* (TYPE, in USNH as sheet no .1954946).

The coarsely hirsute stems and leaves, and coarsely scabrid ovate leaves distinguish this species.

Piper pseudoarmatum Yuncker n. sp. (Figure 7)

Frutex; internodiis superis gracilibus, retrorsum hispidis, glanduloso-punctatis; foliis lanceolato-ellipticis, apice acute acuminatis, basi inaequilateris, latere altero acuto obtusove 2 mm. brevior, latere longiore cordulato, supra hispido-scabridis, subtus subhispidis (ad venas quam maxime), a medio infero pinnatim venosis, venis utrinque ca. 5, trabeculis gracilioribus, in sicco tenuibus; petiolo hispido, ad basim vaginato; pedunculo hispido; bracteis triangulari-subpeltatis, margine sat breviter-ciliolatis; drupa oblonga, e latere compressa, apice puberulento; stigmatibus brevibus, sessilibus.

Shrub, 3-4 m. tall; upper internodes slender, 4-5 cm. long, retrorsely hispid, glandular dotted; leaves lance-elliptic, 3-3.5 cm. wide x 7-10 cm. long, apex sharp-acuminate, base inequilateral, with one side 2 mm. shorter and acutish or obtuse, the longer side cordulate, hispid and scabrid above, subhispid beneath, the nerves densely so, the hairs upwardly curved, the margin ciliolate, green above, paler and strongly glandular dotted beneath, pinnately nerved from the lower half, the nerves about 5 on each side, with slender cross-connecting-anastomosing nervules, drying thin, translucent; petiole up to 5 plus 2 mm. long, hispid, vaginate at the base; spikes 2 mm. thick x 7 cm. long; peduncle scarcely 1 cm. long, hispid; bracts rounded triangular-subpeltate, marginally rather short-fringed; fruit oblong, laterally flattened, apex puberulent; stigmas short, sessile.

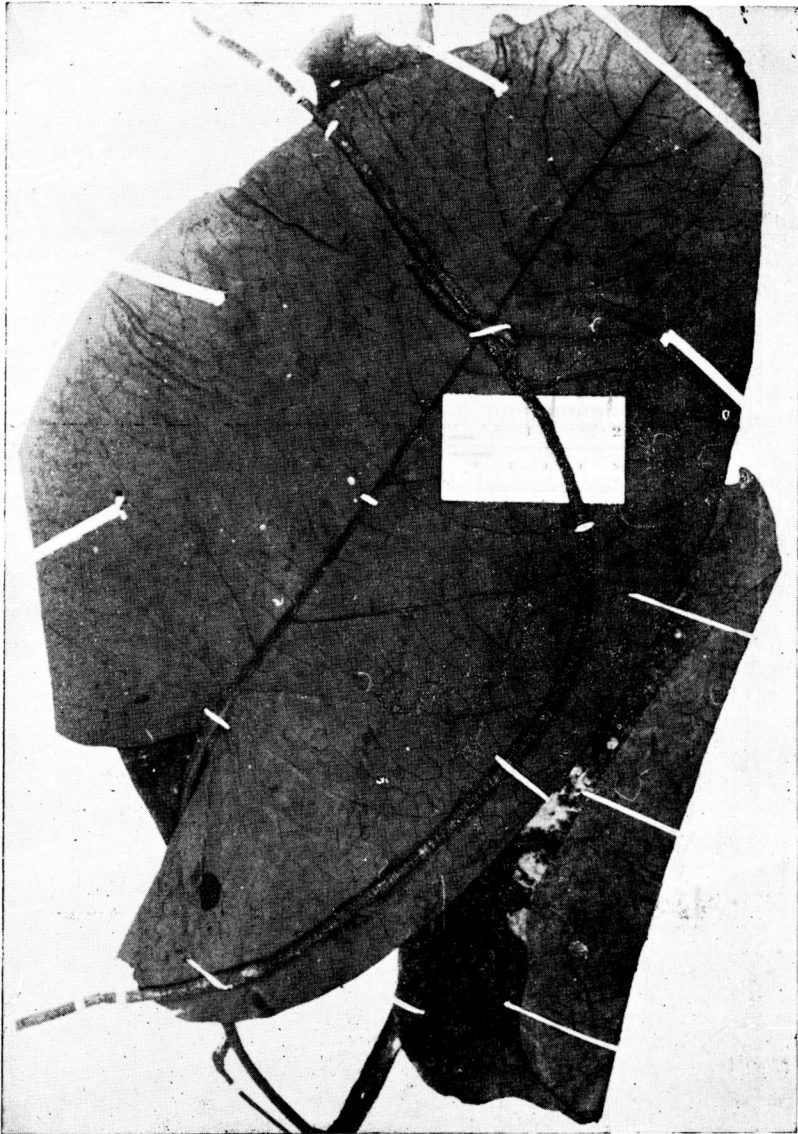


Figure 8. *Piper criniovarium* Yuncker n. sp.

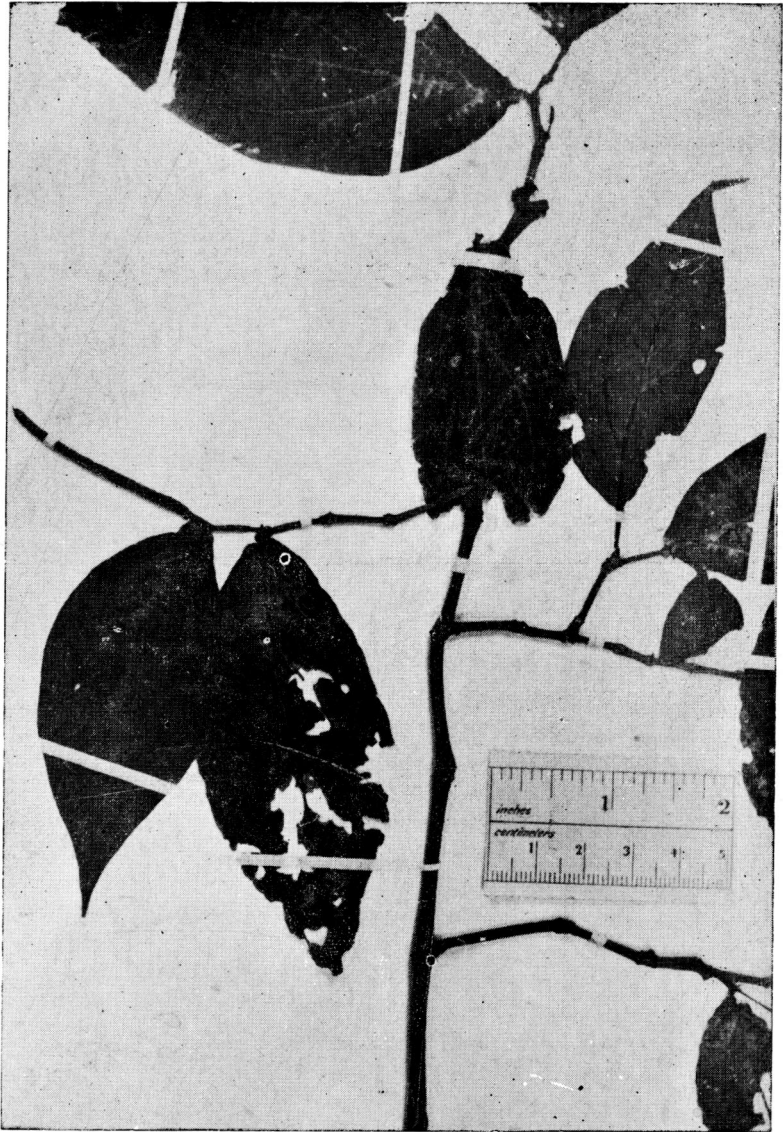


Figure 9. *Piper echinvarium* Yuncker n. sp.

PERU: Cuzco: Prov. Quispicanchi, Quincemil, alt. 800 m., margin of woods, June 1949, *F. Marin 1530* (TYPE, in USNH as sheet no. 1995229).

This species resembles *P. armatum* but differs in its fewer nerves with scarcely appressed pubescence, leaves strongly glandular dotted, type of pubescence, etc.

Piper criniövarium Yuncker n. sp. (Figure 8)

Frutex; internodiis superis brunneo-villosis; foliis elliptico-subovatis, apice acutis (?), basi inaequilateraliter profunde cordatis, lobo longiore petiolo ca. aequilongo, sinu acuto subobliquo, supra ad venas plus minusve villosis, subtus ad venas crispe villosis, ubique pinnatim venosis, venis utrinque 10 vel ultra, intermediis aliquot auctis, sub margine laqueatis; petiolo brunneo-villoso, ad laminam vaginato-alato; petiolo dissite villoso; bracteis triangulari-subpeltatis vel subcupuliformibus, conferte brunneo-fimbriatis; ovario subglobose, conferte brunneo-hirsuto; stigmatibus sessilibus recurvis.

Shrub; upper internodes brown-villous; leaves elliptic-subovate, 19 cm. wide x 28 cm. long (petiole to apex), apex acute (?), base deeply unequally cordately lobed, the longer lobe about equaling the petiole, sinus acute, slightly oblique, the nerves somewhat villous above, the midrib beneath and adjacent parts of lateral veins crisp-villous, pinnately nerved throughout, the nerves 10 or more on each side with numerous intermediates and cross-connecting-anastomosing nervules, submarginally loop-connected, drying rather firm, opaque; petiole 8-9 cm. long, brown-villous, vaginate-winged to the blade; spikes 4 mm. thick x 45 cm. or more long; peduncle 1 mm. thick x 4 cm. long, thinly villous; bracts triangular-subpeltate or somewhat cupulate, strongly brown-fringed; ovary subglobose, densely brown-hairy; stigmas curved, sessile; fruit not matured.

PERU: MADRE DE DIOS: region of Iberia-Iñapari, June 1945, *Richard Evans Schultes 6473* (TYPE, in USNH as sheet no. 1952867).

The large pinnately nerved leaves, long, comparatively slender spikes, and especially the densely hairy ovaries are distinctive characters of this species. The spike on the type collection has a short lateral branch above the middle. Branched spikes in *Piper* are extremely unusual. If this condition is common or even occasional for this species it would be an excellent diagnostic character.

Piper echinovarium Yuncker n. sp. (Fig. 9)

Frutex 1 m. altus nodosus ramulosus, internodiis glabrescentibus; foliis subrhombico-elliptico-lanceolatis, apice acute acuminatis, basi auriculatis lobis pro ratione parvis, supra glabris, subtus ad venas

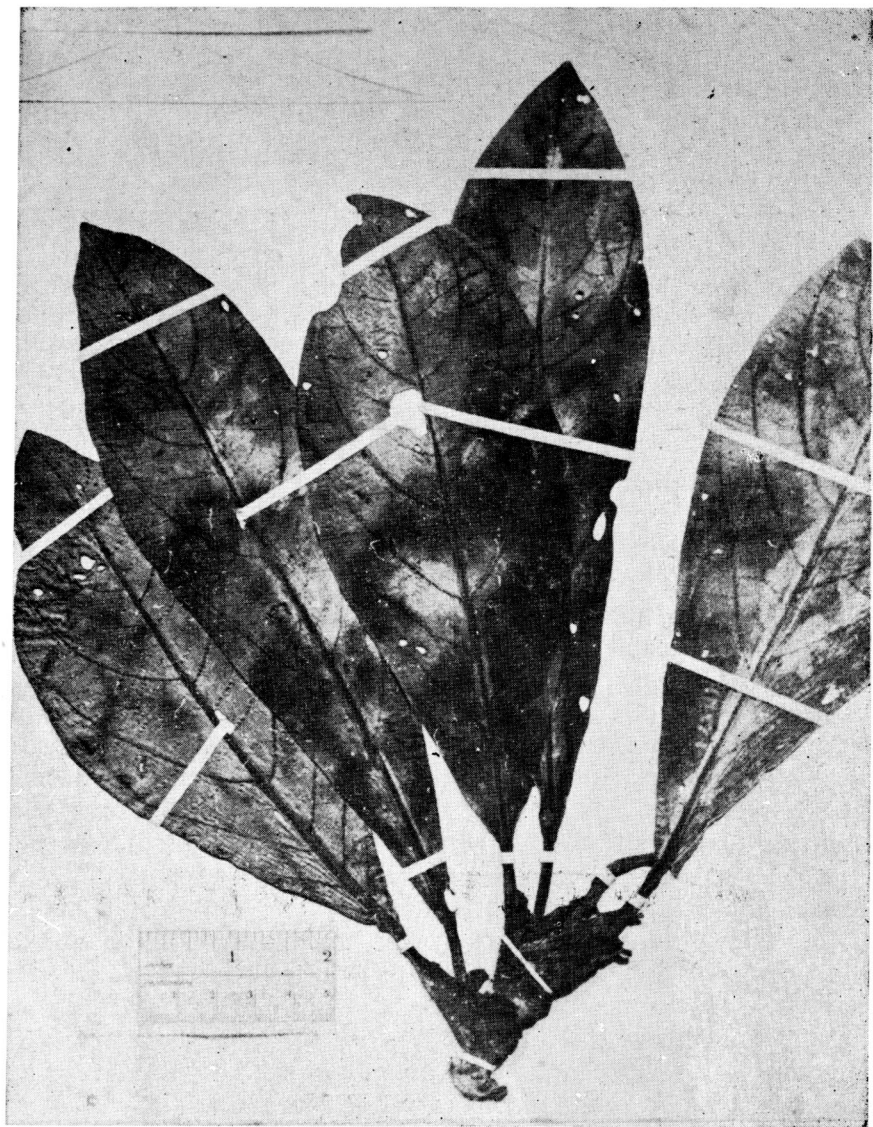


Figure 10. *Trianaeopiper Haughtii* Yuncker, n. sp.



Figure 11. *Peperomia persuculenta* Yuncker, n. sp.

dissite crispe pubescentibus, a tertio infero pinnatim venosis, venis utrinque ca. 3; petiolo brevi, ad laminam vaginato; spicis breviter apiculatis; bracteis triangulari-subpeltatis margine aristatis; drupa angulata apice truncato-subdepressa hispida.

A shrub, 1 m. tall; stem nodose, upper internodes about 1 cm. long, lengthening downward, somewhat twiggy-branched, glabrous except very young growth may be sparsely pubescent; leaves sub-rhombic-elliptic-lanceolate, 3-4.5 cm. wide x 8-9 cm. long, apex sharp-acuminate, base narrowly auriculate, the lobes small, the larger usually covering the petiole, glabrous above, the nerves beneath sparsely crisp-pubescent, "bullate", pinnately nerved from the lower one-third, the nerves about 3 on each side, with slender cross-connecting-anastomosing nervules, drying thin, translucent; petiole 2-4 mm. long, puberulent glabrescent, vaginate to near the blade; spikes 2 mm. thick x 3-5 cm. long, short-apiculate; peduncle about 5 mm. long, glabrescent; bracts triangular-subpeltate, bristly-fringed; drupe angular, apex truncate-subdepressed, bristly-puberulent, stigmas small, sessile.

COLOMBIA: META: Sierra de la Macarena, Central Mountains, north ridge, in dense forest, alt. 1300 m., Dec. 21, 1949, *W. R. Philipson & J. M. Idrobo 1855* (TYPE, in USNH as sheet no. 2026200).

The rather twiggy growth, short internodes, auriculate leaf base, and bristly fruit characterize this species. In some respects it resembles *P. cornifolium* but differs from that species in a number of characters, especially the type of nervation. The collectors report the leaves as bullate but this character is not obvious in the dried condition.

***Piper taboganum* C. DC. var. *rugosum* Yuncker n. var.**

Foliis rugosis in sicco firmis.

Leaves becoming rather strongly rugose and drying firm.

VENEZUELA: ZULIA: Perijá, alt. 1175 m., Dec. 29, 1949, *Bro. Ginés 1392* (USNH); Dec. 21, 1950, *Bro. Ginés 1842* (USNH); Dec. 24, 1950, *Bro. Ginés 1948* (TYPE, in USNH as sheet no. 2025820); Jan. 1, 1951, *Bro. Ginés 2044* (USNH); 2122 (USNH).

The specimens cited above were all collected in the same general region. In leaf shape, character of pubescence, spikes, etc. they appear to be essentially the same as typical *P. taboganum*. The leaves, however, become quickly rather strongly rugose. The leaves when dry also are firmer and slightly more scabrous than in the species.

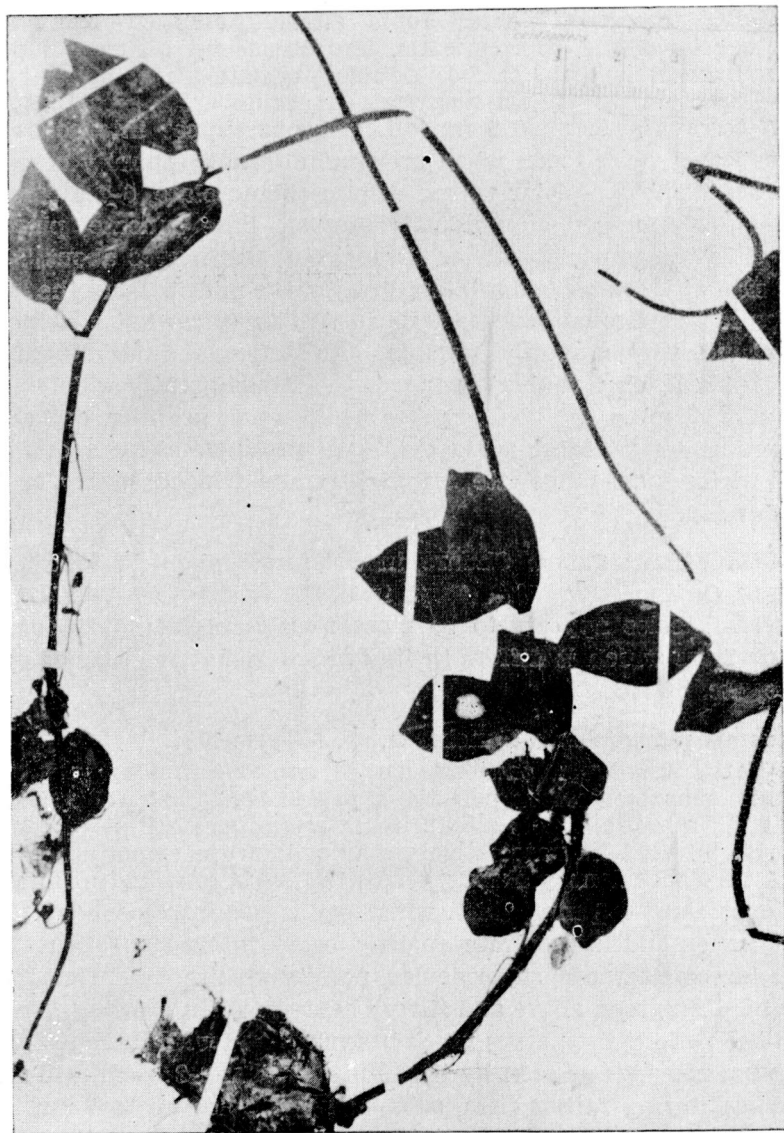


Figure 12. *Peperomia glanduligera* Yuncker n. sp.

Trianaeopiper Haughtii Yuncker n. sp. (Fig. 10)

Herba terrestris glabra; foliis alternis elliptico-oblancoelatis, apice sensim acutis, basi cuneatis, fere ubique vel quartum superum pinnatim venosis costa crassa; petiolo vaginato-alato; spicis axillaribus; bracteis triangulari-subpeltatis margine arcte albo-fimbriatis.

A terrestrial herb, 0.5 m. tall, glabrous; upper internodes very short; leaves dark green when growing, alternate, spirally congested with overlapping petiolar wings, elliptic-oblancoelate, 6-7.5 cm. wide x 19-21 cm. long, apex gradually acutish, base cuneate, pinnately nerved to the upper fourth or throughout, the nerves about 7-8 on each side with some slender intermediates, the midrib stout, the lateral nerves rather strongly curved upward, drying somewhat chartaceous, subopaque, very narrowly revolute, obscurely glandular dotted; petiole 3-4 cm. long, vaginate-winged, the wings greatly widened basally and clasping the stem; spikes white when growing, axillary, as yet young, 4 mm. thick x 2-3 cm. long; peduncle about 1 cm. long; bracts triangular-subpeltate, narrowly white-fringed; ovary or fruit not developed.

COLOMBIA: CAUCA: Chuare, in wet forest, about 70 m. alt., Dec. 23, 1946, *Oscar Haught 5377* (TYPE, in USNH as sheet no. 1903797).

This species appears to be most closely related to *T. confertifolium* from which it differs in its type of venation, lack of pubescence, etc.

Peperomia persuculenta Yuncker n. sp. (Figure 11)

Herba terrestris, carnosa, glabra, stolonifero-adsurgens; foliis alternis, suborbicularibus peltatis, a petioli basi 7-nerviis, venis sursum bene ramosis; spicis adhuc immaturis, oppositifoliis (?); ovario obpyriformi vel turbinato; stigmatibus apicalibus; drupa immatura.

A very succulent, glabrous, terrestrial herb, growing in humid situations; stem 4-5 mm. thick when dry, ascending to about 10 cm. from an extended prostrate rooting base; internodes about 1 cm. long; leaves alternate, suborbicular, peltate within about 1 cm. of the margin, deep green above and silvery beneath when growing, 7-nerved from the petiole, the nerves much branched and with numerous anastomosing nervules as seen by transmitted light, 2-2.5 cm. wide x 2-3 cm. long, drying rather firm, subopaque; petioles up to 7 cm. long; spikes leaf-opposed (?), as yet immature, about 1 mm. thick x 2.5 cm. long; peduncle about 6-7 cm. long; bracts round-peltate; rachis glabrous; ovary obpyriform or turbinate; stigma apical; fruit not developed.

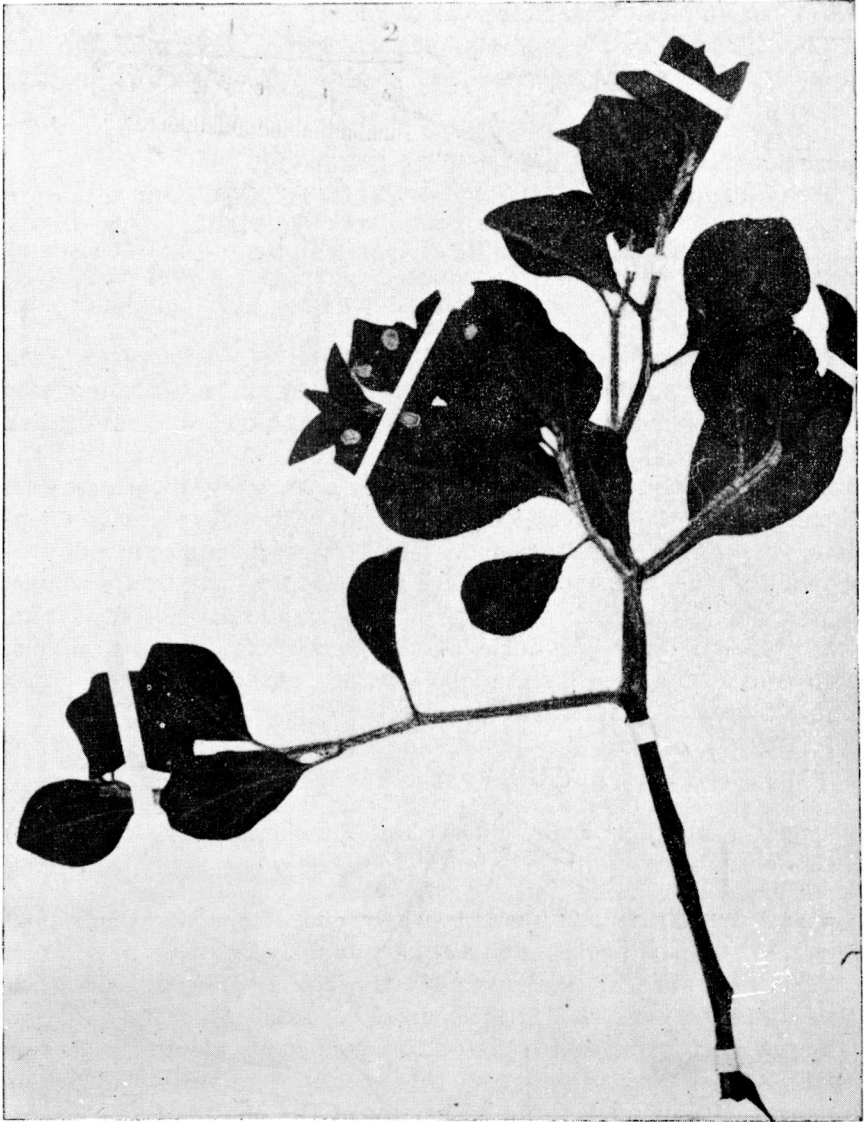


Figure 13. *Peperomia glanduligera* var. *villosissima* Yuncker n. var

ECUADOR: LOJA: Cordillera Oriental, 12 km. east of Loja, alt. about 2400 m., Dec. 27, 1947, *Reinaldo Espinosa & Arsenio Espinosa 2283* (TYPE, in New York Botanical Garden)

The fleshy, glabrous plants, peltate leaves, long petioles and peduncles, and apical stigmas are distinctive characters of this species.

***Peperomia glanduligera* Yuncker n. sp. (Figure 12)**

Herba ubique conferte glanduloso-punctata, stolonifero-adsurgens simplex vel sursum ramosa; internodiis brevibus, dissite crispe villosis, pilis 1 mm. vel ultra longis; foliis alternis elliptico-obovatis, utrinque acutis, utrinque dissite crispe villosis, palmatim 3-5-nervis; spicis solitariis terminalibus; drupa globoso-ovoidea, apice obliquo; stigmata subapicali.

Herb, all parts densely glandular dotted, the dots raised, dark ruby-red to nearly black, ascending from a decumbent, rooting base up to 15 cm. or more tall, simple or branched upward, 3 mm. thick below when dry, internodes 1-3 cm. long, loosely crisp-villous, the hairs up to 1 mm. or more long; leaves alternate, elliptic-obovate, 1-2 cm. wide x 1.5-4 cm. long, acute at both ends, loosely crisp-villous on both sides, ciliate, palmately 3-or obscurely 5-nerved, drying membranous, translucent; petiole about 5 mm. long, thinly villous; spikes solitary, terminal, all parts strongly glandular-dotted, 2 mm. thick x 12 cm. long; peduncle about 1 cm. long, sparsely villous; bracts round-peltate; fruit globose-ovoid, glandular-dotted, apex oblique; stigmata subapical.

PERU: CAJAMARCA: Hualgayoc, Monte Seco, alt. 1800 m., Aug. 1949, *J. Soukup 3855* (TYPE, in USNH as sheet no. 1985273).

***Peperomia glanduligera* var. *villosissima* Yuncker n. var. (Figure 13)**

Caule seorsum conferte villosa; foliis obovatis utrinque modice villosis, basi acutis, apice abrupte subacutis.

Stems densely villous upward; leaves obovate, moderately villous on both sides, base acute, apex abruptly bluntly pointed.

PERU: CAJAMARCA: Hualgayoc, Monte Seco, alt. 1800 m., Aug. 1949, *J. Soukup 3874* (TYPE, in USNH as sheet no. 1985282).

The villous stems and leaves, and conspicuous glandular dots on all parts of the plant distinguish this species. The variety differs in the degree of pubescence and especially in the shape of the leaves.

***Peperomia Philipsonii* Yuncker n. sp. (Fig. 14)**

Herba sat parva, glabra, stolonifera; foliis ovatis ad nodis aggregatis, apice sensim acutis, basi rotundato-cordatis, sinu fere clauso, palmatim 9-nervis costa venisque sursum bene ramosis; spicis

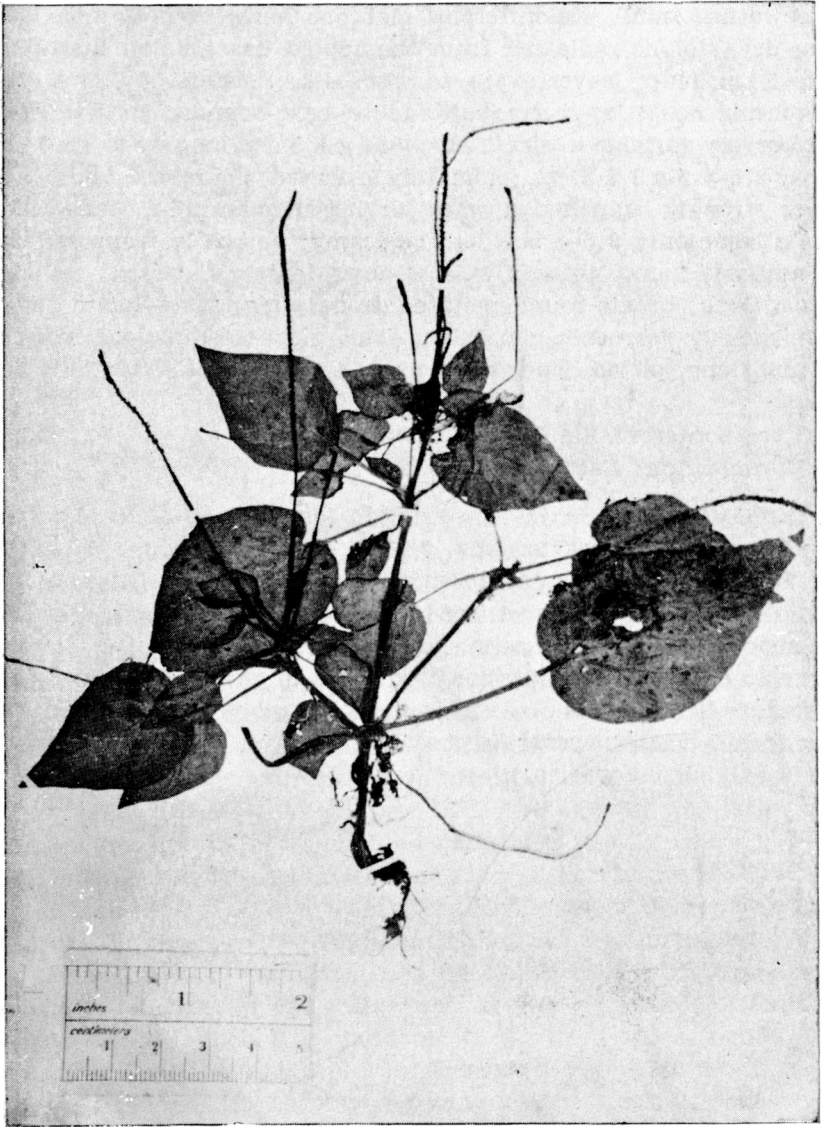


Figure 14. *Peperomia Philipsonii* Yuncker, n. sp.

oppositifoliis (? *axillaribusque*). *dissite florigeris*; ovario valde verrucoso: drupa globoso-ellipsoidea, stigmata pro more apicali.

A rather small, stoloniferous, glabrous herb; stem 2 mm. thick when dry, stolons radiating from the rooted base, stolon internodes up to 5 cm. long; leaves ovate, in whorl-like clusters of 3 or 4 from the rooting nodes, apex gradually acute, base rounded-cordate, sinus narrow, very variable in size, 1 cm. wide x 1.5 cm. long up to 4 x 7 cm., mostly 2.5-3.5 x 3.5-6 cm., palmately 9-nerved, the midrib and lateral nerves strongly branched upward, drying membranous, translucent; petiole commonly 2.5-4 cm. long, clasping; spikes leaf-opposed and (?) axillary, 1 mm. thick x 3-5 cm. long, loosely flowered; peduncle 3-5 cm. long; bracts round-peltate, strongly glandular-dotted; ovary conspicuously verrucose-glandular; fruit globose-ellipsoidal, scarcely 0.5 mm. long, pitted, black with paler apex; stigma essentially terminal.

TYPE LOCALITY: Río Güejar, Meta, Colombia.

DISTRIBUTION: Eastern Colombia.

COLOMBIA: META: in dense humid forest south of El Mico Air-strip (Camp 1), alt. 400 m., Nov. 7, 1949, *W. R. Philipson, J. M. Idrobo & A. Fernández 1370* (TYPE, in British Museum Natural History).

The whorled arrangement of the ovate leaves at the stolon nodes, the comparatively long petioles and peduncles, and the strongly verrucose ovaries are distinctive characters of this species. In certain characters it bears some resemblance to *P. gibba* of Peru. It differs from that species, however, in its whorled leaves and strongly verrucose, non-gibbous ovaries.