

Zeitschrift: Bulletin de la Société botanique de Genève
Herausgeber: Société botanique de Genève
Band: 25 (1932-1933)

Artikel: Sertum Monninarum
Autor: Chodat, R.
DOI: <https://doi.org/10.5169/seals-1099519>

Nutzungsbedingungen

Die ETH-Bibliothek ist die Anbieterin der digitalisierten Zeitschriften auf E-Periodica. Sie besitzt keine Urheberrechte an den Zeitschriften und ist nicht verantwortlich für deren Inhalte. Die Rechte liegen in der Regel bei den Herausgebern beziehungsweise den externen Rechteinhabern. Das Veröffentlichen von Bildern in Print- und Online-Publikationen sowie auf Social Media-Kanälen oder Webseiten ist nur mit vorheriger Genehmigung der Rechteinhaber erlaubt. [Mehr erfahren](#)

Conditions d'utilisation

L'ETH Library est le fournisseur des revues numérisées. Elle ne détient aucun droit d'auteur sur les revues et n'est pas responsable de leur contenu. En règle générale, les droits sont détenus par les éditeurs ou les détenteurs de droits externes. La reproduction d'images dans des publications imprimées ou en ligne ainsi que sur des canaux de médias sociaux ou des sites web n'est autorisée qu'avec l'accord préalable des détenteurs des droits. [En savoir plus](#)

Terms of use

The ETH Library is the provider of the digitised journals. It does not own any copyrights to the journals and is not responsible for their content. The rights usually lie with the publishers or the external rights holders. Publishing images in print and online publications, as well as on social media channels or websites, is only permitted with the prior consent of the rights holders. [Find out more](#)

Download PDF: 18.04.2026

ETH-Bibliothek Zürich, E-Periodica, <https://www.e-periodica.ch>

Sertum Monninarum

AUCTORE

R. CHODAT ¹

A. Pterocarpa

Monnina filifolia Chod. nov. spec.

Radix perpendicularis ad 3 mm. crassa, plus minus tortuosa haud corticata. Caules basi simplices, a medio corymbose ramosi, ramis elongatis, 30-50 cm. longis; folia linearia 40-70 mm. longa, 2 - 4 mm. lata, herbacea, plus minus numerosa, glabra, breviter petiolata, saepe in axilla fasciculum foliorum angustiorum ferentia; racemi tenues ad 30 cm. longi, herbacei, elongati, apice tenuiter bracteis lineari-filiformibus longiuscule comosi; pedicelli ad 1 mm. longi, demum cernui, glabri, tenues; flores 2,3 - 3 mm. longi; sepala parva lanceolato-acuminata, tenuiter ciliata. Diam. racemi ad 4 mm. latus; alae obovatae, basi acutae parum involutae, glabrae, nervo medio stricto apicem versus pauciramoso, nervi laterales stricti etiam pauciramosi, venulis mox vel parum anastomosantibus; carina glabra triloba, lobo medio acutiusculo; petala superiora distincte apice flabellate-dilatata; androecei vagina, medio apice triangularis et pilis paucis ornata; stamina in duos fasciculos disposita, filamentis usque ad antheras per tres coalitis; antherae inde in summo fasciculorum subsessiles; membrana intermedia triangularis pilosula; ovarium oblongum stylo leviter curvato, leviter bi-auriculato; stigma latiusculum superius dentiforme alio pendente apice bituberculato; samarae late lanceolatae, apice basique emarginatae,

¹ Mes remerciements vont aux Directeurs et Conservateurs des Herbiers du *Field Museum*, ainsi qu'à ceux du *New-York Botanical Garden*.
R. C.

ala membranacea angusta, nec latiuscula rugosa, granulato-villosula 5/3 mm.

Plants of Peru, Coll. WEBERBAUER n. 6454.

M. filifolia Chod. habitu admodum similis *M. gramineae* Chod. sed hic stipulae spiniformes desunt et antherae per 3 in apice androecei bifidi sessiles dum sunt in *M. graminea* Chod. filamentis plus minus partim liberis vel varia longitudine liberis vel etiam per duo ad apicem connatis sunt.

Monnina Macbridei Chod. nov. spec.

Radix annua, tenuis, perpendicularis, vix ramosa; caulis simplex vel e basi ramosus; folia lanceolato-lineararia 25 - 35 mm. longa, 1,5 - 3 mm. lata, basin versus attenuata vel superiora lineararia; racemi elongati laxiflori, maturitate samariferi 5 cm. longi demum tenues; fructiferi, parte florifera 3 - 5 cm. longa; flores erecti; pedicelli brevissimi 0,4 - 0,5 mm. longi; flores 3 mm. longi; sepala lanceolato-acutiuscula subdentata; alae unguiculatae, spathulatae, nervis haud anastomosantibus, nervo medio ad apicem 3 - 4 plo ramoso, laterilibus ramusculis extrinsecus erecte ramosis, ramulis simplicibus; carina acutior, petalis quam ea longioribus anguste spathulatis vel anguste flabellato-spathulatis; vagina androecei subdiadelpha, sinu angusto divisa glabra; antherae per 4, in apice vittae subsessiles vel quam filamentorum parte libera longiores glabrae; ovarium ellipticum glabrum, stylus ovario longior erectus apice stigma unum dentiforme ferens, alterum anatiforme apice sub tuberculato-papillosum leviter arcuatum, alio duplo longius; samarae ad 4 mm. longae 3,5 mm. latae parum inaequilaterales, foveolatae, ala radiante nervosa, leviter emarginatae, basi similiterque emarginatae glabrae.

Habitus Polygalae speciei.

Nomen in honorem cl. J. MACBRIDE, collectorem insignem.

Plants of Peru, F. PENNELL (1925) Collect. M. Field Mus., Gray Herbar. N.Y. Bot. Gard. and Philad. Acad. Sc. n. 13167 — Dept. of Arequipa Tingo, sandy rocky open slopes alt. 2100-2300. Alae violaceae (more Hortensiae) apex carinae lutea, PENNELL leg. n. 13110.

Monnina polygonoides Chod. nov. spec.

Radix annua pauciramosa ; caulis a basi ramosus, ramis corymbosis brevibus vel conspicue elongatis, tenuissime puberulis ; folia herbacea lanceolata vel elliptica, breviter petiolata 25/17 20/7 30/10 mm. saepe utrinque acuta ; racemi juniores conici bracteis vix comosi ; pedicelli brevissimi ; sepala oblonga vel lanceolata, nervis paucis, ciliata ; flores ad 4 mm. ; alae spathulatae, obovatae, basi attenuatae, nervo medio superne cum lateralibus anastomosante, exterioribus mediocriter anastomosantibus ; carina triloba, lobo mediano acutiusculo ; petala limbo oblongo, apice flabellate spathulata ; androecei pars media filamentorum parte libera quam antherae triplo longiore interdum duo filamenta usque ad antheras connata vel omnia 8 soluta, glabra ; ovarium ovatum dense pilosum ; stylus leviter adscendens suberectiusculum stigma dentiforme acutum aliud pendens, breviter cylindricum apice tuberculatum ; racemi floriferi apice breviter comosi, deinde floribus dissitis fructibus junioribus ovato-acutis pilosis, basi retuso-obtusis, apice acutis pubescentibus, exalatis, intermedium constans inter drupam et samaram. Dimensio et facies plantae variabilis, a basi ramosa, vel basi denudata, filamentorum staminum parte libera prorata longa, ovario hirsuto, stigmatate pendente conspicuo et habitu herbaceo, stipulis nullis, peculiaris.

Hab. Peruviam, Ambo ; steep stony hillside, petals pale lilac, galea greenish yellow throughout. leg. J. F. MACBRIDE n. 3181, aprili (1923) ; Huarica, leg. J. F. MACBRIDE, n. 3116.

Monnina amarella Chod. nov. spec.

Annua ; radix tenuis perpendicularis simplex vel pauciramosa ; caulis e basi ramosus ad 11 cm. altus, ex axilla foliorum, etiam basilarium, ramos ascendentes, breves, simul cum ex apicalibus, edens, habitu *Polygalam amarellam*, vel *Polygalam amaram* memorans, inde nomen ; folia herbacea vel crassiuscula, linearia, obtusa, apice saepe emarginata glaberrima, basin versus attenuata inde ut petiolata, 10 - 20 mm. longa, 3 - 5 mm. lata ; racemi in caulis basi foliosi et breves,

10 - 15 mm. lg. plerumque subtaxiflori, abbreviati, juniores 10 - 15 mm. longi, interdum supraaxillares saepe pauciflori, 5 - 20 mm. longi; superiores terminales simul floriferi et fructiferi, bracteis minimis, rhachis caulisque minutissimi; racemi saepe magis condensati foliisque suffulti, floribus fructibus condensatis; pedicelli brevissimi; sepala parva glabra, lanceolata, acutissima, parce et vix dentata, nervo unico vittata; alae obovatae, margine reflexae, basi unguiculatae, nervo medio apicem versus paucifido vel a parte media ramoso, externis nervillis extrinsecus ramulosis, nervillis haud anastomosantibus; carina triloba cucullatooblonga, saepe acute et conspicue triloba; petala superiora limbo elongato versus apicem leviter arcuato-dilatata; androecei vagina apice medio triangulariter prolongata et hic parce pilifera; androeceum in duas vittas solutum utrinque 2 vel 3 antheras ferentes; vittae pars libera quam antherae duplo longiores lamellam mediam triangularem piliferam longitudine superantes; ovarium glabrum oblongum; stylus supra basin arcuatus, conspicue bi-auriculatus; stigma inferius dentiforme, aliud tuberculatum, sessile; samara $4/3$ mm. ovato-inaequilateralis apice leviter angustequae emarginata venosa, saepe margine, basique, violaceo-tincta, densissime sed tenuiter puberula.

U.S.A. Herb. Plt. of Peru, near Cuzco 3000-3500 m. leg. L. HERRERA (1925). — Crescit simul cum *Alchemilla pinnata*, leg. HERRERA, prope Cuzco, colinas del Saxaihuaman, ad 3600 m., martio ann. 1929. ID. collect. n. 2393, ibidem ad 3600 m. — HERRERA, Cuzco, n. 681, n. 2388.

Plants of Peru coll. under the auspices of the Field Mus., N.Y. Bot. Gard. Phil. Acad. Sc., leg. F. W. PENNELL, 25 April (1925) n. 13629, Dept. of Cuzco, apud San Sebastian.

Monnina Weberbaueri Chod.

Peruvia leg. MACBRIDE et FEATHERSTONE, Matucana, n. 88, steep rocky western slope about 8000 feet; iidem n. 1168 Yanahuanca about 10.000 feet, shrubby southern slope, red purple flowered; iidem coll. n. 1168; iidem coll. n. 1548,

Mito leg. MACBRIDE et FEATHERSTONE, here in cornfield but the common blue annual of other places, here purple red ; iidem coll. n. 311, Maturana ; common here at various altitud. Fruit form varies. —

WEBERBAUER n. 2301, ex Exped. M. Field Exped ejusd. coll. n. 7451, rainy grass formation, mostly annuals, alt. 2000-2100 m. ; Lima, coll. F. M. G. H. etc. n. 14343 open rocky slopes alt. 2700-2900 m. leg. PENNELL n. 14372 - n. 14436.

Costal Flora of S. Peru, leg. J. M. JOHNSTON, n. 3551.

WEBERBAUER, coll. Capt. M. F. fund, Mt. Estuquina N. W. of Moquegna, n. 7451 - ejusd. collect. n. 88 - leg. MACBRIDE et FEATHERSTONE n. 311 at various altitude, idem n. 1548.

Monnina Chanduyensis Chod.

Peruvia, Dept. Lima, along Rio Chillon, near Viscas, leg. PENNELL n. 14467, open rocky slopes, alt. 1800-2000 m.

Posterior petals amparo purple changing to spectrum violet, keel « anilin » yellow.

Monnina pterocarpa Ruiz et Pavon.

Peruvia, Chosica, Exp. Cpt. M. Field fund, leg. MACBRIDE, mart. (1923) alt. 3000 feet, dry rock gulch about 3 feet slender, woody below, fl. red purple. n. 2874. Stipulae cylindricae apice glanduliferae corneae ad 2 mm. — leg. PENNELL in Dept. Lima, Quive, n. 14298.

id. coll. Dept. Piura, Paita, n. 14812 (breviter stipulata). — leg. MACBRIDE et FEATHERSTONE, Peruvia, Chosica about 3000 feet, april (1922) n. 494.

Monnina pterocarpa var. **exauriculata** Chod. nov. variet.

A typo recedit, stipulis magis abbreviatis subsessilibus punctiformibus, stylo arcuato, medio intus haud biauriculato.

Hab. Peruviam n. 7757 coll. WEBERBAUER Pl. S. Americ. Exp. M., Field fund, mart (1927) alt. 100 m., shrub 1, 1/2 m. carina dark rose, crest purple ; rainy green formation, Caucas, Prov. Tumbes, Dept. Tumbes — Costal flora of Northern

Peru, Dept. Piura, coll. IWAN JOHNSTON, Talara, oct. (1925) n. 3512 (specimen robustior) basi caule sublignoso ad 3 mm. crasso. — OSCAR HAUGHT, in Parinas Valley, found throughout this district, especially along water courses. F. 91. slightly shrubby 1 m. or less high. (forma robustior)

Section B. Hebeandra

Monnina subspeciosa Chod. nov. spec.

Arbor, ramulis striatis et breviter sparse hirsutis. Folia elliptica, oblonga, conspicue petiolata, petiolo 10 - 15 mm. longo, 2 - 2,5 mm. crasso, sparse et breviter hirsuto; limbus basi subacutus, apice breviter acutus, sed haud basi rotundatus nec subcordatus subcoriaceus, supra glabrescens vel glaber, 120/50, 125/55, 90/40 mm.; paniculae 16-17 cm. amplae ramosissimae, ramis tenuibus hirsutulis; racemi partiales, bracteis haud amplis sed citius caducis; pedicelli 0,5 mm.; flores laxè dispositae; sepala superiora lanceolata elliptica breviter ciliata, *per* $1/3$ connata; alae obovatae apice rotundatae basi margine ciliolatae, nervis paucis, mediano apice saepe anastomosante et vix ramoso, laterales extrinsecus ramosi et simpliciter arcuate plus minus ramusculis anastomosantibus; petala superiora quam carina plus quam $1/3$ breviora, intus hirsuta; androecei margo superior vaginae longius pilosa, antheris distincte pedicellatis haud in vagina subsessilibus. Ovarium glabrum, stylus curvatus et stigmata typi.

Drupae anguste ovato-oblongae acutae ad 6 mm. / 1,7 mm. crassae angulosae, glabrae, vix nervosae.

Hab. in Columbia, in silvis Cordillerae occidentalis, Dept. El valle, La Cumbre.

FRANCIS W. PENNELL, ELLSWORTH P. KILLIP coll. maj. 21-25, 1922 (N.Y. Bot. Gard., Gray Herbar. etc. auspiciis) n. 5888. In Hb. N.Y.

Habitu memorans *M. speciosam* Tr. et Planch. sed ramis haud glabris, foliis basi haud rotundatis vel cordatis, panicula magis divisa et apice haud bracteis amplis flores suffultantibus, antheris haud subsessilibus, floribus minoribus.

Monnina Killipii Chod. nov. spec.

Frutex ramis ad 1,5 m. elongatis (ex coll.) ad 3 - 4 mm. crassis; rami lignosi cylindrici, tenuiter striati, hirsuti in ramis ultimis hirsutuli, sat foliosi; folia lanceolata, basi et apice acuta plus minus acuminata, limbo 70/30 mm. 90/40 mm. 40/20 mm., petiolo supra basin plus minus articulato et ibidem circumscripto, pilis brevibus dense vel laxe hirsuto, limbus basi acutus acuminatus et breviter apiculatus; pagina superior sparse et adpresse setosa, nervo medio pennate ramoso, nervis lateralibus vix conspicuis, erecto-patulis; pagina inferior pallidior, aequae simpliciter pennate nervosa, calvescens; textura folii sat herbacea nec coriacea sed plus minus tenuis; ex axilla foliorum nascuntur gemmae foliosae vel non evolutae; inflorescentia (quae adest) paniculata parva, 9 - 10 cm. longa, ramis griseis breviter hirsutis, 1,5 - 2 mm. crassis, gemmis florigeris, subsessilibus haud dense congestis, bracteis lanceolatis oblongis hirsutis cito deciduis, florem juvenilem haud superantibus, pedicellis ultra 2 mm. longis breviter hirsutulis; flores 4,5 - 5 mm. longi et lati, juniores globosi; sepala latiuscula ovato-lanceolata subacuta, margine dense ciliata, duo superiora ad 1/3 connata, nervo simplici; alae ellipticae, subexunguiculatae, dorso parce hirsutulae, apice rotundatae margine inferiore ciliolatae, nervo medio versus apicem pauciramoso, ramusculo simplici vel aliis bifidis simpliciterque; carina triloba.

Androecei vagina parte superiore pilosa; antherae quam filamentorum pars libera triplo vel quadruplo breviores; filamenta quad partem liberam parce pilosa, vel etiam pars basilaris antherarum; ovarium glabrum, ovato-ellipticum; stylus brevis erectus, deinde curvatus et subhorizontalis apice retuso et stigmatate inferiore papilloso.

Hab. Peruviam, Dept. Iunin Carpapata supra Huacapis-

tana alt. 2700-3200 m. ad marginem sylvarum. coll. E. P. KILLIP et A. C. SMITH, Junio (1909) Expl. of Peru Smithson. Institut. n. 24421.

Nomen dicavi in honorem cl. E. P. KILLIP collectorem.

Drupae juniores secus lineam superiorem vix hirsutulæ, inde forsan ovarium uno latere parce pilosum (sed in analysi haud vidi).

Monnina crotalarioides D. C.

Peruvia, leg. F. W. PENNELL (1925) n. 14376, coll. F. Mus. N.Y. Bot. Garden. etc. — leg. id. et A. C. SMITH n. 21621, shrub 4 - 6 feet, petals deep purple.

Dept. Lima, Rio Blanco, alt. 3000-3500 m. open hillside. — WEBERBAUER. A. (1912) Prov. Hancabamba, Dept. Piura, above Pallamba, n. 6055 alt. 3000 m. — leg. MACBRIDE et FEATHERSTONE, Matucama, n. 95 — WEBERBAUER n. 5488, Prov. Huamanga, Dept. Ayacucho. Reg. col del Saxachuan, 3500-3600 m., leg. HERRERA — leg. KILLIP et A. C. SMITH, n. 21609 — Prov. Hanta, Dept. Ayacucho, leg. WEBERBAUER — Dept. Cuzco, Vilcanota, below Vilcanota below Caicai, open rocky slopes, PENNELL n. 14188. Id. KILLIP. A. C. SMITH, april. n. 21569 — MACBRIDE et FEATHERSTONE, Mito, n. 1514. a common shrub to 4 feet high, branched only above, flowers deep blue, lips yellow, odourless.

MACBRIDE et FEATHERSTONE, M. Field. fund exped. n. 664, shrub to 4 feet, branches few, stems long virgate, Rio Blanco-Dept. Cuzco, San Sebastian, coll. M. F. Mus. Gray Herb. etc. n. 13617 etc. etc. — Lima Dept. along Rio Chillon, above Obrajillo n. 14376, leg. PENNELL F., Mus. etc. — PENNELL, Dept. Cuzco n. 14188. — Cuzco, HERRERA leg. n. 2378.

Monnina stipulata Chod. var. **tenuibracteata** Chod. nov. var.

Rami glabri ad 6 mm. crassi, florentes apice hirti vel sparse hirti, interdum glabrescentes substriati vel subangulosi ; folia in pulvino curvato insidentia e quo oritur, e basi, stipulae cylindricae, retrorsum spectantes, apice glanduliformes, ad

5 mm. longae, graciles; inflorescentia paniculata, basi foliosa haud ampla, ramis gracilibus hirtis vel hirsutis; bracteae lineari-acutae; glabrescentes vel hirtellae, in rachi hirsuta; folia 90/55, 75/45 mm.; petiolo ad 0,5 cm. glabrescente vel laxe hirsuto; limbus supra subtusque glaber sat coriaceus, subdiscolor; reticulus nervorum supra magis conspicuus quam subtus, hic nervo medio sat exsculpto, nervis secundariis pennatis, inconspicuis, rete evanescente; racemi paniculae apice tenues, bracteati, hic alabastrum parva, bracteis linearibus breviora; pedicelli 1 - 1,5 mm. longi glabrescentes; flores 4 mm. longi; sepalum superius dorso glabrum, margine ciliatum ovali-acutum, trinervium, duo altera per dimidium connata, triangularia breviter ciliata; alae ellipticae dorso glabrae, nervo medio apice, bi- vel trifido, ceterum simplici, lateralibus nervillis erectis, extus bi- vel trifidis parum anastomosantibus; antherae quam pars libera filamentorum breviores; vagina androecei pars media parce pilosa; ovarium ellipticum basi apiceque subretusum, glabrum; stylus curvatus crassiusculus, stigmata ut in pluribus. Drupae nondum maturae, lanceolatae.

Hab. Peruviam, leg. PENNELL maj. (1925) n. 14122 et 14022, Dept. Cuzco Pillhuata, cerro de Cusilluyoc. coll. Field Mus. N.-Y. Bot. Gard., Phil. Acad. Sc. id. n. 14122. — Rocky cliff, in forest, alt. 2300-2400 m. Shrub, keel yellow, petals dark soft blue violet.

A *M. stipulata* Chod. differt bracteis tenuibus haud ovatis et hirsutis, foliorum crassitie.

Monnina acutifolia Chod. nov. spec.

Herba, basi lignescens et subsimplex (ex coll.) dein plus minus corymbosa ramosa, ramis strictis denudatis, versus partem superiorem foliosis, foliis hic sat condensatis lanceolatis basi et apice acutis, distincte apiculatis, maximis ad 30 mm. longis, 9 mm. latis, ceteris paulo minoribus, limbo 28 7,5, 30/10, 24/8 mm. vel angustiore, ut caules ultimi griseo hirtis vel pubescentibus supra setis parvis hirtulis, subtus vix discoloribus et aequae hirtulis, petiolo conspicue hirtulo, in lim-

bum sensim dilatato, 2 -3 mm. longo; racemus (unus qui adest) terminalis basi nudus, pedunculo tenui haud incrassato, hirsutulo; pars florifera ad 6 cm. longa; bractee demum deciduae in racemo juvenili prominentes filiformes et alabastra conspicue superantes duplo triplove basin versus vix dilatatae, dein anguste lineares subfiliformes, adscendentes; sepala dorso margineque ciliata demum colorata 1 - 1,25 longa; alae ellipticae basi breviter unguiculatae, nervo medio apice cum lateralibus uno vel duobus nervillis anastomosante, lateralibus extrinsecus repetite ramosis vel ramulis bifidis, nervatura inde pluriangulosa. Carina triloba, androecei pars superior pilosa antheris quam pars libera brevioribus, filamentis antherisque glabris; pars superior petalorum oblonga, retusa; ovarium ellipticum glaberrimum; styli pars inferior breviter erecta, dein stylus horizontalis et incrassatus, apice incrassata, lobo inferiore breviter pendente; fructus ignotus.

Species ex affinitate *M. crotalarioidis* D. C. a qua et varietatibus differt, habitu, foliorum forma, racemo elongato gracili; bracteis filiformibus alabastra multo superantibus, aliisque.

Hab. Peruviam, Dept. Ayacucho, Ciarrapa inter Huanta et Rio Apurimae, alt. 1000 m. (wooded hillside, coll. E. P. KILLIP et A. C. SMITH (1929) n. 22498

Monnina equatoriensis Chod. nov. spec.

Frutex 2 - 3 m. corymbosus ramosus, ramis fistulosis breviter hirsutissimis, ramulis floriferis corymbosis; stipulae desunt; folia petiolo brevi hirsuto, limbo oblongo, subcoriaceo, supra et subtus pilis subadpressis puberulo, 60/16 mm., 43/12 mm., 50/11 mm. obtuso breviter mucronato, nervo medio subtus exsculpto magis pubescente, nervis lateralibus subpatulis vel erectiusculis utrinque cc. 7; inflorescentiae breves 20-40 mm. corymbosae, racemis juvenilibus pyramidalibus, bracteis minimis griseis leviter apice comosis, rhachi tomentoso-hirsutula; sepala inferiora usque ad 1/4 connata, triangularia, longiora quam lata, acuta, dense ciliata, superius paulo

majus triangulare; alae obovato-orbiculares nervis paucis pauciramosis liberis; petalorum superiorum pars libera limbi apice retusa subquadrangularis haud orbicularis; androecei margo et apex ciliata; ovarium curvatum uno latere pilis erectis ciliatum; stylus subhorizontalis.

SODIRO leg. in silva subandina vulg. Tungusahua, n. 91 b.

Monnina Vitis Idaea, Chod. nov. spec.

Frutex 30 cm. altus, ramis profunde striatis, foliorum decurrentibus et cicatricibus basi eorum prominentibus asperis, ramulis in apice corymbosis, foliis in imis ramulis condensatis; folia 20/5, 15/7 mm. obovata, vel elliptica, basi in petiolum brevem vix 1 mm. longum attenuata vel cuneata, limbo margine angustissime crassiuscula, puberula vel calvescentia, laevissime revoluta, nervillis lateralibus plus minus inconspicue reticulata; rachis crassiuscula, denticulata, foliis circumdata brevis, 5 - 10 mm. longa ad. 1 mm. crassa, sublignescens; drupae lanceolato-ellipticae grosse rugosae glabrae 1/4 mm., nervosae.

Peruvia, pl. of S. Americ. coll. A. WEBERBAUER, n. 6129, flowers dark blue. Cordillera east of Hancabamba, Prov. Dept. Piura.

Flores non adsunt. Forsan affinis *Monninae crassifoliae*.

Monnina laurifolia Chod. nov. spec.

Arbor parva, trunco ad 15 cm. crasso, ad 1,5-2 m. alta, corona ad 1 m. dilatata, rami tenuiter suberosi foliis dilapsis cicatricibus regulariter asperi; in cicatricibus insident amenta breviter nigricantia; rami, qui adsunt, 1 cm. crassi, ramusculi corymbosi basi foliorum cicatricibus truncatis illisque breviter decurrentibus, asperi; folia sat condensata, breviter petiolata articulata; limbus lanceolatus acutus, basi angustatus, limbus plus minus revolutus, dessicatione ut contortus, glaberimus 45/14, 50/12, 40/14 mm., supra subtusque brevissime setosus, nervo medio subtus exsculpto, nervis secundariis inconspicuis; rami ultimi nigricantes, corymbosi; racemi conici vel conico-oblongi, acuti, haud comosi, 25 - 30 mm.

longi et 9 mm. lati (max. diam.) vel latiores, rhachi crassiuscula hirtula, demum nigricante; flores ad 5 mm., pedicellis 0,5 - 0,8 mm. longis; sepala posteriora ad medium connata ut pedicelli hispidula vel demum glabrescentia, ciliata, aliud triangulare ciliatum; carina galeata subacuta; alae ellipticae, basi ciliatae, nervo medio apice bis vel repetite bifido, lateralibus utrinque 2 - 3 ramosis, nervillis strictis vel unus vel alter plus minus sed sparse anastomosans; petalorum superiorum limbus vix flabellariter expansus; ovarium glaberrimum vel vix pilosum i. e. pauci cili in apice; stylus breviter curvatus; drupa ellipsoideo-acuta, foveolata, glabra $\frac{3}{4}$ mm.

Plants of South Amer. Exped. M. Field Mus., collect. MACBRIDE and FEATHERSTONE, n. 1855. Sunny canyon, 6 miles south of Mito about 10000 feet. Petal keel blue with greenish top.

Monnina densecomata Chod. nov. spec.

Frutex, ramis crassis ad 4 mm., diam. lignosis, junioribus dense aureo-hirsutis, adultioribus griseo-hirsutis indumento e pilis crassis tortuosis, lineis prominentibus, pilis densis obtectis; folia $50/30$, $55/34$, mm. limbo elliptico, crassiusculo apice basi que obtuso, hirsutulo, supra plus minus calvescente, petiolo 5 - 7 mm. longo crassiusculo; stipulae cylindrico-conicae ad 3 mm. longae, basi hirsutae, dein corneae et dilatatae; inflorescentia paniculata, ramis prorata brevibus, 20-35 mm. longis, apice dense comosis bracteis navicularibus, carinatis, apiculatis, griseo-tomentoso-hirsutis; apex racemorum singularium 6 - 7 mm. diam.; flores ad 4 - 5 mm., pedicello dense hirsuto, 1 mm. longo, sepala late lanceolata corolla $\frac{1}{3}$ breviora, dorso margineque hirsuta; alae suborbiculares, margine basi ciliatae, nervis paucis, medio apicem versus erecte ramoso, aliis apice vel vix ramosis, uno nervillo interdum anastomosante; carina dorso basi ciliata; petalorum superiorum limbus spathulatus; antherae filamentis liberis aequilongae; ovarium ovoideum subretusum glabrum; stylus breviter erectus, dein patens; stigmata crassiuscula; fructus maturus deest.

Coll. Field. Mus., Gray Herb. N.Y. bot. Garden et Phil. Acad. Sc. — leg. F. PENNELL (1925) n. 13821. Dept. of Cuzco, Peru, Paso de las tres cruces, Cerro de Cusilluyoc.

Posterior petal blue, keel yellow.

Monnina Huacachiana Chod. nov. spec.

Liana, ramis robustis haud sulcatis, sublaevibus ad 7 mm. crassis, ramis ultimis parce hirtulis; ramusculis hirsutulis usque ad paniculam mediocrem foliatis; folia 60/20, 57/18, 70/18, 70/22, 55/20, mm. membranaceo-chartacea, lanceolata, sensim acuta et apiculata, supra in nervo medio hirsutula, ceterum glabrescentia, rugulosa, basi in petiolum attenuata, petiolo ad 7 mm. longo, parce hirsuto; panícula thyrsoidea ramis fragilibus tenuibus, pilis mollibus longiuscule hirsutis; pedicelli tenues, cernui vel patentes pubescentes; sepala basi hirtula vel pubescentia, triangulari-acuta vel acuminata, nervis tribus simplicibus, duo ultra medium connata, acuta; alae orbiculares dorso glabrae nervis parce ramosis nervo medio subsimplici vel ad apicem bifido, lateralibus extrinsecus ramulis strictis haud vel rarius anastomosantibus; flores 4 - 4,5 vel evoluti 5,25 - 4,5 mm.; petalorum superiorum limbus spathulatus haud conspicue exsertus; androecei pars media vaginae apicalis haud longe pilosa; antherae quam filamentorum pars libera breviores haud apiculatae, interdum exteriores binae per $\frac{2}{3}$ filamentorum connatae, i. e. stamina 8 vel 7 varie modo connatae; ovarium glabrum, stylo a basi curvato stylo quam ovarium longiore; stigmata normalia; drupae 6 - 7 mm. longae 4 mm. latae grosse rugosae vel foveolatae.

Peru, Plt. of S. Amer. coll. M. Field Mus., coll. F. MACBRIDE Maj. — June, about 6500 feet., Huacachi, Estacion near Muna, n. 4124. — Liana in thicket., Huacachi, MACBRIDE n. 3885. about 6500 feet., flower blue with greenish-yellow beak.

Monnina tomentella Chod. nov. spec.

Frutex ramis divaricatis, dense hispide tomentosis deinde

calvatis, ramusculis griseo-tomentosis ; folia petiolata, petiolo 4 - 5 mm. longo ; limbo elliptico-lanceolato, apice basique subacuto, obtusiusculo, 60/35, 55/24 mm. vel minore, supra parce subtomentello, griseo-tomentosus subtus densiuscule et molliter hirtello, nervatura utrinque 4 pennata ; paniculae haud complicatae, rhachi densiuscule hirtello-grisea ; racemi partiales apice longiuscule comosi, bracteis e basi lanceolata filiformibus hirtis, 4 mm. longis, floribus quam iis brevioribus ; pedicelli brevissimi ut axis inflorescentiae hispidi ; flores evoluti ad 4 - 4,5 mm. longi ; sepala exteriora libera, unum naviculare dorso hispidum, acutum, duo altera breviora triangularia longiora quam lata, acuta, longe ciliata, nervis tribus, medius longior, simplicibus ; alae suborbiculares dorso medio latiuscule hispidae et inde, siccae, subgriseae ; nervus medius sub apice ramosus, nervillis (bi- vel trifidis) ; carina triloba lobis acutiusculis, glabra ; petala superiora limbo elongato apicem versus spathulata ; antherae quam filamentorum pars libera breviores ; ovarium ovatum glabrum ; stylus ad $1/3$ curvatus stigma unum dentiforme alio pendente apice subtuberculatum ; drupae lanceolatae, subacutae ad 5 mm. longae.

Hab. Peruviam, Dept. Prov. Huancabamba, Piura, leg. WEBERBAUER n. 6139.

Monnina multicomata Chod. nov. spec.

Frutex insignis, caulibus plus minus hirsutis virgultis, ad 3 - 4 mm. crassis, ramusculis erectis, hirsutis foliolis subherbaceis ; folia lanceolata, basi apiceque acutata, in petiolum sensim attenuata, petiolo basi distincte articulato, anulo corneo exsculpto, glabro circumdato et hic, parte basilaris cauli adnato prolongato ; limbo tenui 100/26, 80/20, 55/13 mm., supra minute breviterque setoso, subtus, praesertim in nervis, hirsutulo, sensim acuto ; rami ultimi florentes, longitrorsum striati, lineis exsculptis, inter lineas hirsuti, supremi subtomentosi hirsutuli ; racemi plus minus pedunculati hirsutuli ad 2 mm. crassi, juveniles foliis circumdati, bracteis elongatis confertis dense longeque comosi, deinde basin versus, floribus minus condensatis sed bractea bracteo-

lisque superati, inde facies racemi valde peculiaris, sepalis similiter lanceolato-acutissimis et ut bracteae bracteolaeque longe dorso margineque ciliato-hirsutae; bracteae 10 - 12,5 mm. longae, anguste (1,8 mm.) lanceolato-lineares acutissimae; bracteolae minores et angustiores; sepala florem superantia, lanceolata, longe ciliata, acutissima 4-5-plo longiores quam latae; alae late ellipticae nervis paucis extrinsecus ramosis vel bifidis subliberis vel liberis, dorso vix pilosae vel glabrescentes, androecei; pars marginalis parce pilosa; ovarium ovatum glaberrimum, stylus basi curvatus, stigmata sat crassa.

Hab. Columbia, Dept. Caldas, Rio San Rafael, below Cerro Tatama, Cordillera occidental, leg. F. W. PENNELL, (1922) n. 10386, coll. ausp. N.Y. Bot. Garden, G. Herb. U.S Nat. Mus. et Academy of Nat. Sc. Philadelphia, Rocky streams, banks in forest, alt. 2500-2800 m. Tall shrub.

Species habitu inflorescentiis insignis cum nulla alia specie, confundenda bracteis longissimis, stramineo-herbaceis, pilosis diu secus racemum persistentibus, sepalisque similibus cognoscenda.

Monnina tenuifolia Chod. nov. spec.

Frutex silvaticus, ramis striatis, subangulosis, lineis proeminentibus anguste decurrentibus, pubescentibus; folia elliptica, obtusa, submarginata vel brevissime mucronata, tenuia, demum chartacea, supra glabrescentia, nervo medio et nervis secundariis pubescentibus rete sub lente conspicuo vel sublaevia, subtus parce puberula, nervo medio distincto, nervis lateralibus utrinque 5 - 7, patulis tenuibus; lamina 75/25, 80/35 mm., petiolus 5 - 7 mm. longus pubescens; stipulae etiam juniores conspicuae, basi conicae, apice cylindraco-corneae glabrae, ad 3 mm. longae; panicula haud ampla, ramis simplicibus vel basilaribus pauciramosis tenuibus pubescentibus; bracteae ovato-acutae, griseo-pubescentes; apex racemorum singularium haud comosus; pedicelli breves 0,5 mm. longi; flores 4-5 mm. longi; sepala ovato-lanceolata, duo inferiora basi connata, dorso puberula; alae dorso

sub apice pubescentes, ceterum glabratae vel basi uno latere ciliatae ; racemi singuli densiflori pyramidales 4-5 mm. diam., bracteis ovato-acutis, ad 2 mm. longis, haud comosi ; rhachi prorata crassa, grisea 0,6 mm. diam. ; sepalum superius ellipticum obtusiusculum margine ciliatum, duo anteriora per $1/4-1/3$ connata, elliptico-obtusa, simpliciter trinervia ; alae ellipticae, nervis parum complicatis ; vix androecei margine pilosa, parte filamentorum libera quam antherae longiori ; ovarium ovatum glabrum, stylus basi curvatus ; stigma unum dentiforme, alio pendente normali.

Hab. Peruviam, Dept. of Cuzco, Pilhuata, Cerro de Cusilyoc, forest, alt. 2200-2400 m.

Coll. Field Mus., Gray Herbar., N.Y. Bot. Gard., Acad. Sc. Philadelph. leg. F. PENNELL, maj. (1925) n. 13977.

Poster. pet. blue, keel yellow (ex coll)

Monnina connectisepala Chod. nov. spec.

Frutex, caulibus cylindricis subtomentosis demum calvescentibus, in parte superiore plus minus sulcatis et pubescentibus vel hirtulis ; folia elliptica vel elliptico-oblonga, leviter acuta, $90/25$, $80/35$, $65/28$, mm., modice coriacea vel subcoriacea, subtus praecipue in nervo medio sat conspicue puberula, ceterum minute rugulosa, nervo medio subtus prominente regulariter pennate ramoso, nervillis subpatentibus tenuibus ; lamina haud nitida vix discolor ; petiolus ad 7 - 8 mm. longus puberulus ; stipulae conico-cylindricae apice corneae, ceterum hirtulae 2 - 3 mm. longae ; paniculae 9 cm. longae et latae, subcorymbosae, ramis sulcatis pubescentibus, repetitive ramosis, stipulae ad ramorum partitionem conspicuae ; bractee in apicibus racemorum ovato-acutae, griseo-pubescentes, pube adpresse densa ; sepala juniora similiter grisea vel calvescentia et margine tantum grisea ; alae dorso medio et apicem versus griseo-pubescentes ; flores subsessiles in racemulos densiusculos conicos dispositi, evoluti ad 5 mm. longi et lati ; sepala colorata ovato-triangularia, superius majus breviter acutum, margine breviter ciliatum, duo inferiora usque fere ad apicem connata, inde ut sepalum duplex

apice leviter emarginatum ; alae breviter unguiculatae ellipticae apice rotundatae ; nervis uno latere anastomosantibus ; carina sat ampla ; antherae ellipsoideae quam pars libera filamentorum longiores vel ea longitudine aequantes ; limbus petalorum superiorum orbiculari-flabellatus ; ovarium glabrum ; stylus breviter erectus dein horizontalis.

Hab. Peruviam, Dept. Cuzco, Pilhuata, Cerro de Cusiluyoc, leg. F. PENNELL maj. (1925) n. 14095.

Coll. Field Mus. Gray Herb. N.Y. Bot. Gard. etc.

Monnina petiolaris Chod. nov. spec.

Arbor parva, corona densa depressa, rami glabri ultimi profunde sulcati foliosi, dense corymbosi ; folia in ramis oblique in annulo distincto semicirculari insidentia i.e. ut articulata ; petiolus 7 - 10 mm. longus, supra articulationem vel brevior, glaber ; limbus 75/25, 70/24, 70/20 mm. vel apice ramorum minor, dessicatione coeruleo-nigricantia, lanceolata, apice breviter acuta, in petiolum anguste desinentia, utrinque glaberrima, chartacea, sub lente minutissime, brevissime setosa, angustissime marginata et subtiliter subdenticulata, nervo medio subtus sat exsculpto, nervis tenuibus pennatis 6 - 7, subpatentibus, nervillis paucis obviis ; racemi corymbosi foliis 10 - 20 cm. involuti, conici, apice haud conspicue comosi, bracteis triangularibus, rhachi minutissime puberula ; racemi deinde cylindrici apice conici 30 - 50 mm. ; pedicelli 1 mm. longi ; flores ad 4 mm. longi ; drupa pendens 4 - 5 mm. foveolata ellipsoideo-acuta ; sepala superiora ultra dimidium connata obtusiuscula, ciliata, superius ovatum ciliatum pubescens, 1,5 - 2 mm. longum ; alae obtusissimae involutae, basi margine ciliatae, dorso leviter pubescentes, nervis haud vel vix anastomosantibus, nervo medio apice bifido, lateralibus breviter bifidis, aliis 1-2 extrinsecus parce ramosis ; carina prorata acuta ; petalorum limbus aequalis haud flabellate expansus vel vix dilatatus, intus pilosus ; margo vaginae androecei pilosa, parte libera filamentorum antheris longiore ; ovarium postice vix pilosum ceterum glabrum ; stylus curvatus glaber ; stigmata typica.

Hab. Peruviam, Panae, leg. I. F. MACBRIDE, n. 3620, small tree, crown dense flat, flowers dark blue, with greenish yellow beak. Coll. (1923) M. Field Fund.

var. **elliptica** Chod. nov. var.

limbus 60/28, 45/24, 45/23 mm.; petiolus 5 - 6 mm., basi annulo semicirculari articulatus, Hab. Peruviam, Tambo de Vaca, leg. MACBRIDE. Exp. (1923) Cpt. Marshall Field fund n. 4908. Tree 15 feet, slender, with bushy crown, about alt. 13000 feet.

Monnina glaberrima Chod. nov. spec.

Frutex ramis glaberrimis, fistulosis, leviter striatis, ultimis minute adpresse puberulis; folia papyracea vel subchartacea ovato-oblonga, basi conspicue retusa vel subrotundata haud attenuata, superioribus basi subacuta, apiculata vel in acumen prolongata, glaberrima 110/50, 100/45, 80/37, 80/28 mm. vel superiora minora, subdiscoloria; petiolus brevis 3 mm. longus; nervus medius subtus basin versus exsculptus, laterales patentis tenues supra vix conspicui; inflorescentiae paniculatae 12 cm. / 10 cm., ramis glabris 2 - 2,5 mm. crassis, striatis, ramis arcuatis prorata compressis trifurcatis vel pluriramosis; racemi laxiusculi apice bracteis caducis lanceolatis vel linearibus acutis apiculatis 0,3 mm. latis vix ciliatis glabrescentibus; pedicelli adpresse pubescentes; flores ad 4 mm., globosi, sepalum majus acutum ciliatum, duo superiora ad 2/3 connata ciliata; alae elliptico-orbiculares nervis vix vel haud anastomosantibus; androecei margo vix pilosa; ovarium glabrum; stylus curvatus; inflorescentiae rami inferiores oppositi et sat compresses dilatati.

Hab. Columbiam, Dept. El Valle, La Cumbre, Cordillera occidental. Now clearing alt. 1700-2100 m. T. E. HAZEN et ELLSWORTH, P. KILLIPS collect. ausp. N.Y. Bot. Garden., Gray Herb., U.S. Nat. H. Herbarium, n. 11156, and Acad. Sc. Philadelphia, sub nom. *M. solandraefolia*, a qua differt foliorum forma aliisque.

Monnina lingua Chod. nov. spec.

Ad 2 m., caulibus, quibus adsunt, fistulosis dense foliosis ad 15 mm. crassis, foliis decurrentibus grosse sulcato-striatis, subcostatis, breviter sed dense crispulo hirsutulis, minoribus aequè striatis hirsutulis; folia linguiformia 10 - 12 cm. longa crassiuscula sed haud valde coriacea, parce hirsutula vel glabrata, etiam subnitentia, apice obtusa, basin versus sensim attenuata, medio 13 - 20 mm. lata, mucrone apice carentia, in petiolum brevem hirsutulum attenuata, petiolo annulo hirsutulo vel glabrescente circumscripto, omnibus elongato-oblongis, in apice ramorum congestis; nervo medio soli exsculpto, lateralibus vix conspicuis; rhachis inflorescentiae puberula; flores densiuscule racemose spicati; bractae ovato-acutae hirsutulae; pedicelli 1,5 mm. longi, griseo-hirsutuli; sepala extus, imprimis dorso, griseo-hirsuta, ovalia vix acuta vel obtusa; superiora haud connata; flores evoluti ad 5 mm. globosi; alae elliptico-rotundatae, glabrae vel dorso vix piligerae, glabrae margine uno basi ciliatae, nervis paucis apicem versus bifidis interdum uno alterove vix anastomosante; margo vaginae staminalis conspicue hirsuta, limbo petalorum superiorum vix flabellato; ovarium inaequilaterale ventre arcuato dorso rectum; stylus arcuatus stigmatibus parvis.

Ecuador, Prov. Azuay and Canar, between Cuenca et Hingra, alt. 2700-3000 m. leg. A. S. ИТЧНСОК, coll. (1923) — U.S. Dept. Agric. Gray Herb., N.Y. bot Garden. n. 21660.

Habitu similis *M. equatoriensi* Chod. sed folia majora similiter fasciculate congesta, nervo medio subtus exsculpto, mucrone carente, differt praesertim sepalis haud acutis, superioribus haud connatis ovalibus nec triangularibus, ovario glaberrimo, stylo haud distincte curvato sed arcuato.

Monnina Smithii Chod. nov. spec.

Herba 1 - 1,5 m., caulibus ad 5 mm. crassis fistulosis tenuiter et sparse pubescentibus, superne sulcatis; ramis florentibus pubescentibus, foliis subdecurrentibus obscure sulcatis; folia lanceolata, herbacea, basi in petiolum sensim angustata, apice acuminata demum apiculata, sparse pubescentia, sub-

calvata 150/50, 120/35, 130/32 mm., vel superiora minora, nervo medio herbaceo latiusculo, nervis secundariis tenuibus erectis; racemi simplices pedunculati, pedunculo 2 - 6 cm. longo ad 2-3 mm. crasso, parte florente fructiferaque 4 - 7 cm. longa, apice racemi longissime comosi, bracteis lineari-filiformibus, apiculatis 10 - 12 mm. longis, bracteolis, multoties brevioribus pubescentibus; flores 4 - 4,5 mm. longi; sepala libera ovata, plurinervia, nervis plus minus anastomosantibus, breviter ciliata, 4/3 mm., breviter acuta; alae ellipticae nervis parum sed distincte anastomosantibus. Species ob bracteas in apice racemorum comam distinctissimam; pars comosa 2 - 3 cm. longa, *M. longibracteata* memorans sed sepalis superioribus hic haud connatis et sepalis prorata latis, ovatis liberis, margine ciliatis. A *M. comata* Chod. differt alis latioribus glabrescentibus sepalis superioribus liberis amplis haud lanceolatis, stylo haud sparse hirsuto ut in alia specie.

Herba 3 - 5 feet in thicket. Explor. in Columbia, eastern Cordillera, Dept. Santander between Piedecuesta and Las Vegas ad 2000-2500 m. elevation, leg. E. KILLIP, A. C. SMITH, coll. N.Y. Bot. Garden, Gray Herb, etc. n. 15568.

Nomen in honorem cl. A. C. SMITH, collectorem dicatum.

Species nova ob bracteas elongatas, in apice racemorum comam distinctam formantibus peculiaris.

Monninam longibracteata memorans sed sepalis superioribus haud connatis et praecipue sepalis prorata latioribus ovatis liberis margine ciliatis peculiaris. A *M. comata* Chod. alis latioribus glabrescentibus sepalis liberis amplis haud basi connatis, haud lanceolatis, stylo haud sparse hirsuto, aliisque differt.

***Monnina pseudo-polystachya* Chod. nov. spec.**

Liana; ramis divaricatis cylindricis, tomentosis praesertim in ultimis ramis; folia ovalia apice basique acuta, supra breviter tomentosa subtus pallida plus minus tomentosa, tenuiter marginata 60/34, 60/30, 60/32 mm., in ramis florentibus minora, cum gemma axillari crassa tomentosa vel

lanata ; panicula foliosa ampla 20 cm. longa et lata ; inflorescentiae partiales racemosae bracteatae ; bracteae in racemis unioribus cylindricis, conspicue hirsutae alabastra vix aequantes vel superantes ; flores ad 5 mm. ; sepala triangularia, duo superiora per $\frac{1}{3}$ connata, ciliata ut rhachis inflorescentiae hirsuta; alae orbiculares glabrae vel basi medio hirsutulae, nervo medio simplici, lateralibus pauciramosis ramusculis simplicibus vel bifidis haud vel vix anastomosantibus ; antherae filamentorum parte libera triplo vel quadruplo breviores ; limbus petalorum flabellatus basi hirtus ; ovarium dense hirsutum ellipsoideum, stylo brevissime erecto dein horizontali ad marginem interiorem longiuscule ciliato.

Hab. Peruviam. Muna, Trail to Tambo de Vaca ad 8000 feet, fl. deep blue with greenish-yellow beak, liana. n. 4317.

Exped. M. Field Mus. coll. MACBRIDE (1923).

Monnina macrosepala Chod. nov. spec.

Frutex ramis glabris cylindricis vel superne plus minus sulcatis ad 6 mm. crassis, striatis minutissime puberulis glabrescentibus ; folia $90/21$, $95/24$, $84/20$ mm. supra et subtus glaberrima supra papillis vel pilis microscopicis, sub lente puberula, chartacea, subtus pallidiora sed haud nitentia nervo medio subtus leviter exsculpto nervis lateralibus obliquis, rete laxo, versus inflorescentiam minora; petiolus 5-6 mm. longus, ad insertionem dilatatus et ibi cum caule incrassatus subalatus submarginatus ; inflorescentiae terminales et axillares 10-15 cm. longae; racemi proprii elongati, eorum pars terminalis bracteis linearibus filiformibus ad 10 mm. longis vix 0,5 mm. latis glabris alabastra superantibus demum caducis glabris ; flores globosi 4 mm. longi ; sepalum superius concavum quam alae vix brevius, nervis pluribus parallelis, margine breviter ciliatum ; duo superiora per $\frac{3}{4}$ connata oblonga subacuta oblonga, ciliolata ampla ; alae glaberrimae margine haud ciliatae nervo medio apice bifido, lateralibus nervis extrinsecus reticulate ramoso nervosis ; carina glabra breviter acuta, petalorum limbus vix dilatatus ; androecei margo pilosa ; pars libera filamentorum, quam

antherae breviter apiculatae, longior, ciliata ; ovarium elliptico-ovatum, glaberrimum ; drupae quae adsunt haud maturae, pendentes ; rhachis puberula.

Hab. Peruviam Chanchamayo Valley, Dept. Junin, oct. (1924-1927) n. 487 coll. CARLOS SCHUNKE in Field Museum Herb.

Species structura floris, bracteisque affinis *M. Chimborazeanae* Chod. sed hic sepala superiora breviter connata, dum in *M. macrosepala* ampla et alte connata ; in *M. Chimborazoeana* carina acutior et sinu profundiore triloba.

Monnina macrosepala Chod. var. **latifolia** Chod. nov. var.

Folia latiora 95/42, 96/64, 90/38, 115/40, 60/17 mm. ; petiolus, cupulae insidens, 5-6 mm. longus sub lente puberulus, lamina angustissime marginata, sat tenuis discolor supra, sub lente, papillis microscopicis acutis pubescens ; racemi partiales comosi elongati ; pedicelli demum 1,5 mm. longi ut sepala et alae dorso puberuli, bracteis apiculatis in racemo juvenili alabastra superantibus, rhachi puberula ; sepala ut in typo ; petalorum limbus paululum dilatatus ; antherae modice apiculatae, filamentorum parte libera longe pilosa, ovarium glabrum.

Hab. Peruviam, La Merced coll. J. F. MACBRIDE, along sunny stream, flowers dark blue, keel orange.

Exped. Field Museum n. 5410.

Monnina menthoides Chod. nov. spec.

Basi lignosa, ramis furfuraceo-tomentosis, tomento detegibili indumento dense et grosse hirsutis ; inflorescentiae extra-axillares, rhachi basi dense hirsuta, 6-12 cm. longa ; rami ultimi 2,5-3 mm. crassi, dein etiam tenuiores tomentosohirsuti ; folia petiolata, lanceolato-acuta 35/8, 40/9, 30/8 mm. subrepanda vel margine plus minus sinuata, dentibus, haud bene delimitatis ; supra puberula subtus pallidiora et densius pilosa ; limbus breviter mucronatus, sensim acutus ; petiolus 3 mm. hirsutus ; folia juniora ad racemi basin, simul cum

alabastris cano-tomentosa ; racemi terminales vel extra-axillares demum elongati 6-8 cm. longi juniores apice densiflori ; bracteae lineares angustissimae, alabastra superantes pubescentes ; apex racemi comosus ; pedicelli 1 mm. longi pubescens ; flores 5 mm. longi ; sepala lanceolato-triangularia, duo brevissime connata ciliata, nervis parallelis sub-simplicibus quam alae multoties breviora ; alae suborbiculares breviter unguiculatae nervo medio apicem versus ramos ramosos suberectos edente, lateralibus extrinsecus ramosis, ramulis bifidis, basis alarum margine ciliata ; petalorum limbus late linearis apice flabellatus, filamentorum pars libera glabra ; antherae glabrae quam filamenta breviores ; pars media vaginae androecei comosa ; ovarium hirsutum stylo curvato, sensim in stigmata desinente ; samara basi cordata hirsutula, apice breviter emarginata 5/5 mm. nuce facie canescente areolata margine nervosa.

Hab. Peruviam. coll. WEBERBAUER, n. 7786, Exp. M. Field (1929) Marcapata, Prov. Guispichanchi, Dep. Cuzco, febr. (1929).

Monnina pachycoma Chod. nov. spec.

Frutex, ramis diam, 2-3 mm. cicatricibus foliorum dilapsorum plus minus tuberculatis, vel densius tuberculatis, junioribus dense aureo-tomentosis 2-3 mm. crassis, deinde breviter sed densiuscule hirsutis, pilis 1 mm. longis folia in ramis ultimis breviora, lanceolata, basi sensim in petiolum attenuata, supra glabrescentia vel vix hirsutula, subtus, imprimis in nervo medio, hirsuta, et in nervis lateralibus plus minus sed haud dense hirsuta, crassiuscula, pilis sat robustis ; limbus 35/12 mm. 35/10 mm. petiolo adjuncto ; stipulis corneis basi hirsutis et inter indumentum occultis ; racemi terminales vel pauci aggregati, rhachi tomentosa ; bracteae lanceolatae lineares, 3 mm.-4 mm. longae, 0,5 mm. vel latiores, margine dorsoque hirsutae, apice racemi comam pro rata brevem subobtusam densamque formantes ; racemi 3-7 cm. longi (floribus dilapsis adjunctis), 13-16 mm. diam. ; flores brevissime pedicellati, 6 mm. longi ; sepala libera

lanceolata breviter acuta 6 / 2,5 mm. margine subsetosa, nervo simplici vel pauciramoso, carinam subaequantia vel paulo longiora ; alae ellipticae glabrae, nervo medio apice bifido vel pauciramoso, ramusculis liberis ; carina dorso basi pubescens obtusa breviter plicata ; petala quam carina haud longiora, limbo spathulato-lanceolato ; antherae quam filamentorum pars libera breviores haud apiculatae ; pars media apicis vaginae androecei triangularis paucipilosa ; ovarium glabrum acie superiore distincte et apice prominente ; stylus primo leviter curvatus dein horizontalis ; stigmata quam stylus latiora unum dentiforme aliud distincte tuberculatum.

Hab. Peruviam, Dept. Cuzco Paso de Tres Cruces de Cusilluyoc, leg. F. W. PENNELL maj. (1925) n. 13834.

Id. n. 13823. Coll. M. FIELD Mus. N. Y. Bot. Gard. Gray Herbar. et Acad. Sc. Philadelph.

Monnina Trianae Chod. nov. spec.

Caulibus fistulosis breviter sed dense molliter tomentosis ad 5 mm. crassis, in parte superiore sulcatis et similiterque tomentellis ; folia lata, lanceolata basi apiceque acuta, petiolo 0,5-1 cm., tomentello, hirsuto ; limbus sat herbaceus discolor, supra nervis inconspicuis, subtus distincte pennate nervoso, nervo medio, nervillis hirsutulis, supra sparse breviterque setosa, apice breviter apiculata, apiculo 0,3-0,5 mm. longo, 120 / 60, 100 / 46, 60 / 28 mm. vel minora ; inflorescentia repetite corymbose paniculata ramis inflorescentiae breviter hirsutis, racemis 60-70 mm. longis, floribus, subsessilibus apicem versus densius aggregatis dein laxiusculis, bracteis basi cucullatis, amplis apiculatis, basi dorso hirsuto-pubescentibus apicem versus glabrescentibus, flores juveniles amplectantibus ; flores 4-5 mm. ; diam. racemi crassiusculi apicis 5-6 mm. ; bractea ciliata ; sepala libera elliptica, trinervia, obtusiuscula ; ovarium glabrum ; stylus leviter curvatus ; drupae ovatae, grosse reticulatae, basi subcordatae.

Species insignis, racemis juvenilibus ; bracteis amplis ovatis, apiculatis, dorso densiuscule subtomentosis apice rubescentibus,

Monnina fastigiata Triana et Planchon, non Kunth. in qua sunt bracteae angustissimae.

Columbia, Dept. of Caldas, Rio Quindio, above Armenia, moist soil near R. Alt. 1400-1600 m. (N. Y. Bot. Gard. Gray Herb. U. S. Nat. Mus. et Acad. of Sc. Philadelphia. FRANCIS W. PENNELL, E. P. KILLIP, TRACY, E. HAZEN n. 8723.

Monnina longibracteata Chod. var. **Ainensis** Chod. nov. var.

a typo differt ovario conspicue hirto.

Expl. in Peru, E. P. KILLIP et A. C. SMITH n. 23188, Dept. Ayacucho: Aina between Huanta and Rio Apurimac, alt. 750-1000 m. Herb, 1 m. 30 cm. woody below, petals bright blue. Tickets.

Monnina arbuscula Chod. nov. spec.

Frutex 30 cm. altus; trunco lignoso ad 5 mm. crasso, erecto simplici, cicatricibus longitrorsum aspero sat profunde striato, cicatricibus exsculptis, cupuliformibus; rami corymbosi crassi ramosi et asperati ad 8 cm. longi, rami secundarii valde asperati; ramusculi foliosi pubescentes, ad 1,5 mm. crassi corymbosi dense foliosi; folia elliptica $13 \frac{65}{65}$, $14 \frac{7}{7}$ mm. vel minora basi subacuta et in petiolum brevem attenuata, petiolus 1-1,5 mm. pubescens; lamina chartacea, leviter revoluta, glabra, obtusa, glabrescens, vel vix puberula, facies pars foliosa myrtilloides; racemi terminales breves; flores (ex collect.) intense coerulei, in specimine praesente absentes; rachi racemi fructiferae, brevis, asperata, ad 1,5 mm. crassa et 1 cm. longa; drupae elliptico-acutae grosse rugosae, 5-6 mm. longae utrinque acutae.

Species etsi floribus deficientibus, valde peculiaris, forsan *M. Vitis Idaeae* nob. affinis, vel *M. crassifoliae* ob folia pro rate minima et habitu distincta.

Pl. of S. Amer. WEBERBAUER, n. 6129, shrub 30 cm. high. Fl. dark blue. Alt. 3500 m. Cordillera east of Huacabamba, Prov. Huacabamba, Dept. Piura, Peru.

Monnina Huallagensis Chod. nov. spec.

Caules glaberrimi, in parte superiori straminei, demum fistulosi sulcati, racemis, foliis, ramis, decurrentibus angulosis; folia latiuscule inserta, estipulata, petiolo 3-4 mm. glabro tenui, in cupula callosa basilari, demum rugosa ut alulae petioli callosae tenuiter corneae, glaberrimae; limbus 90/20, 85/20, 75/18, 100/24, 80/14 mm., superiores lanceolati breviter mucronati folia, subtenuia, supra substusque glaberrima, longe acuminata, rete haud complicata nervosa, breviter marginata nervo medio magis exsculpto; racemi axillares vel supra-axillares basi callo breviter membranaceo vaginati, demum longissimi, 15-30 cm. longi, rhachi glabra; striata, parte amentacea bracteis filiformibus longe comosa, gemmae, rotundatae dissitae; bractea linearis 9-9,5 mm. longa pellucida, puberula acuminata, gemmas sub flore superans; pedicelli ad 1 mm. longi vel 1,5 mm.; gemmae floriferae 3,5-4 mm.; sepala lanceolata acuta, ad 2 mm. longa, duo superiora ad 2/3 connata oblonga, margine ciliata; inferius oblongum ad 2 mm. longum acutum alis conspicue breviora; alae glabrae, nervo medio ramoso, ramis bifidis vel ramis ramosis, lateralibus ramosis vel plus minus anastomosantibus extus ramosulis; carina extus glabra, lobo medio subacuto, lobis lateralibus apice irregulariter serratis; androecei pars media margine pilosa, filamentis liberis 8 usque ad basin antherarum conspicue pilosis; antherae conspicue mucronatae; ovarium glaberrimum; stylus erectus dein 90° curvatus latiusculus. Drupae non notae.

In Peruvia, coll. WEBERBAUER, loc. Huallaga, 1600 m., n. 6805.

Affinis *M. macrosepala* Chod., differt imprimis sepalis minoribus, rachi glabrescente sed proxima.

Var. pachyphylla nob.

Ramis robustioribus, petiolo robustiore, limbo majore 100-110/35-38 mm., firmiore subtus laxe reticulato, glabro, acutissimo, sepalis apiculatis longius ciliatis, superioribus ad 2/3 connatis, alis multo brevioribus; alae glabrae haud ciliatae,

nervis anastomosantibus, floribus 4 mm. petalorum limbus vix dilatatus ; filamenta antherarum longe pilosa ; antherae parum appendiculatae ; ovarium glaberrimum.

Plants of South America, Exp. Cpt. Marshall Field Fund, MACBRIDE n. 4786. Sunny bushy slope. Slender, few stemmed or branched shrub, 4 feet. Pl. dark blue; the beak yellow tip fruits red., Peruvia, Cueva Grande, estacion near Pozuzo n. 4786.
