

TAXONOMIC NOTES ON NEW VARIETIES
OF SPECIES OF *CLITORIA*
(LEGUMINOSAE - PHASEOLEAE - CLITORIINAE)

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ABSTRACT

New varieties of 10 species of *Clitoria* (Leguminosae - Phaseoleae - Clitoriinae) are described with commentary. Characteristics of segregation from other varieties within the species are presented. Newly described varieties include: *C. arborea* var. *pseudoamazonica* (Western Brazil), *C. petiolata* var. *angustissima* (Brazil: Paraná), *C. guianensis* var. *macrocleistogama* (Brazil: Minas Gerais), *C. leptostachya* var. *fruticosa* (Brazil: Pará), *C. mariana* var. *pubescentia* (United States: Florida), *C. polystachya* var. *congesta* (México: México), *C. polystachya* var. *pringlei* (México: Morelos), and *C. pozuzoensis* var. *schunkei* (Perú: Loreto). New combinations include: *C. falcata* var. *aurantiaca* (Southern Brazil), *C. falcata* var. *latifolia* (Brazil: Pará), *C. heterophylla* var. *pedunculata* (Madagascar, Mauritius), *C. guianensis* var. *chapadensis* (Brazil: Mato Grosso), and *C. stipularis* var. *latifolia* (Brazil: Ceará, Maranhão).

RESUMEN

Se describen variedades nuevas de diez especies de *Clitoria* (Leguminosae - Phaseoleae - Clitoriinae). Se presentan las características de segregación de otras variedades dentro de las especies. Estas variedades nuevamente descritas incluyen las siguientes: *C. arborea* var. *pseudoamazonica* (Brasil oeste), *C. petiolata* var. *angustissima* (Brasil: Paraná), *C. guianensis* var. *macrocleistogama* (Brasil: Minas Gerais), *C. leptostachya* var. *fruticosa* (Brasil: Pará), *C. mariana* var. *pubescentia* (Estados Unidos: Florida), *C. polystachya* var. *congesta* (México: México), *C. polystachya* var. *pringlei* (México: Morelos), and *C. pozuzoensis* var. *schunkei* (Perú: Loreto). Se incluyen las siguientes combinaciones nuevas: *C. falcata* var. *aurantiaca* (Brasil del sur), *C. falcata* var. *latifolia* (Brasil: Pará), *C. heterophylla* var. *pedunculata* (Madagascar, Mauritius), *C. guianensis* var. *chapadensis* (Brasil: Mato Grosso), y *C. stipularis* var. *latifolia* (Brasil: Ceará, Maranhão).

INTRODUCTION

Clitoria (Leguminosae, Phaseoleae, Clitoriinae) comprises 60 species within the pantropical-subtropical belt. Several species are divisible into populations that are sufficiently distinct, and have been recognized at the level of *varietas*. All types cited have been examined, unless noted. The objective of this paper is to validate these names.

TAXONOMY

1. *Clitoria arborea* Hoffm. ex Benth. var. ***pseudoamazonica*** Fantz, var. nov.

Varietas nova *pseudoamazonica* distinguibili a *Clitoria arborea* var. *arborea* foliolis acuminatis, infra pubescentibus, calyce glabrato et vexillo subglabrato, et inflorescentia elongato.

Leaflets ovate-elliptic, acuminate with acumen 7–15 mm long, conspicuously pilose on nerves below. Inflorescence 10–30 cm long, primary branches 8–15 mm long that bear the pedicels. Calyx glabrate, appressed trichomes concentrated on ventral margin. Vexillum subglabrate with few appressed hairs along nerves and concentrated near the folded margin. Western Brazil.

TYPE: BRAZIL. AMAZONAS: Mun. São Paulo de Olivencia near Palamares, Basin Rio Solimões, 11 Sep-26 Oct 1936, *Krukoff* 8208 (HOLOTYPE: US 2169816; ISOTYPES: A, F 927714, G 295 & 296, MICH, MO 1175978 & 1250450, S, U 38199A).

PARATYPES: BRAZIL. ACRE: near mouth Rio Macauhan, Basin Rio Purus, 27 Aug 1933, *Krukoff* 5719 (A, BM-2 sheets, F, G-2 sheets, LA, M, MICH, MO, NY-2 sheets, PR-2 sheets, S, U, UC).

These specimens have been identified by botanists frequently as *Clitoria amazonum* Mart. ex Benth. Closer examination indicates that these specimens are distinguished easily from *C. amazonum* by (1) the smaller flowers, bracteoles, calyx, gynoecium and androecium, (2) a different pubescence on the leaves, calyx and vexillum, and (3) the larger stipules, stipels and inflorescence. Other botanists have reached the same conclusion, as evidenced by their annotations, but disagree upon the placement of this taxon. Specimens commonly have been assigned to *Clitoria arborescens* R. Br., *Clitoria glaberrima* Pittier, *Clitoria javitensis* (Kunth) Benth. or *Clitoria racemosa* Benth. [= *Clitoria fairchildiana* R.A. Howard], but rarely to *C. arborea*. Occasionally, an annotation note has raised the question of a new species. These specimens agree with *C. arborea* in (1) habit, (2) inflorescence type, (3) flowers and its associated floral parts, and (4) legumes. There are too many characteristics in agreement with *C. arborea* to warrant its separation from this species.

Variety *arborea* is distinguished from var. *pseudoamazonica* by the obtuse to abruptly short-acuminate leaflets (acumen 0.3–5 mm long) that are glabrate below, short inflorescences (2–7 cm long), calyces with appressed trichomes over its surface and a vexillum with moderately dense, appressed trichomes abaxially.

2. *Clitoria epetiolata* var. *angustissima* Fantz, var. nov. [*Clitoria guyanensis* (Aubl.) Benth. f. *angustissima* Hoehne, nom. in sched.]

Varietas nova *angustissima* distinguibili a *Clitoria epetiolata* var. *epetiolata* Burkart foliolis angustati.

Leaflets 3–5 mm wide, lower surface bearing a few, scattered, appressed trichomes ca 0.5 mm long. Flowers 5.5–6.5 cm long. Calyx tube 16–19 mm long, 6–9 mm wide at the throat, lobes 7–9 mm long. Bracteoles 5–7 mm long. Cerrado and campos, Paraná, Brazil.

TYPE: BRAZIL. PARANÁ: Jaguariahyva [= Jaguariaiva], 5 Nov 1928, *Hoehne* 23404 (HOLOTYPE: GH).

Hoehne was the first to recognized this taxon as distinct, named it *angustissima*, and assigned it as a form of *C. guyanensis* [= *C. guianensis*] in

annotations of herbarium specimens. Currently, no record has been found of the publication of this name. I used Hoehne's name, changed the status to the rank of variety, and assigned it to *C. epetiolata*. Hoehne was unaware of *C. epetiolata* as Burkart (1949) did not circumscribed this closely related species until twenty years later.

This variety is represented poorly in herbarium collections, but is distinguished quickly by the narrower leaflets. Variety *epetiolata* (Paraguay and Corrientes, Argentina) has leaflets commonly 6–12(17) mm wide and bracteoles 7–12 mm long, with other characters similar to var. *angustissima*. Variety *latiuscula* Burk. (Paraguay and Paraná, Brazil) has leaflets 15–30 mm wide, sericeous below with trichomes ca 1 mm long, flowers 6–8.5 cm long with calyx tube (17)22–25 mm long, 13–15 mm wide at throat, lobes 11–13 mm long, and bracteoles 9–11 mm long.

3. *Clitoria falcata* Lam.

This species is characterized as an herbaceous vine with white flowers (pale to deep yellowish in dried state) on elongate axillary peduncles from filiform, voluble, densely rufo-pilose stems. The petioles, rachis, and calyx surface commonly are rufo-pilose with leaves densely sericeous (thinning with age) beneath. Legumes are costate to ecostate. Table 1 contrasts the four varieties.

Variety *falcata* has medium-sized flowers (3.5–5.5 cm) with larger leaflets 3–5.5 cm wide. The calyx tube is 10–16 mm long, moderately to densely pilose with lobes ovate-lanceolate, 2.5–4 mm wide. Bracteoles are ovate-lanceolate, acute, broadly cuneate below, 7–11 mm long, 3–4 mm wide. Legumes commonly are costate with a prominently raised medial costa extending nearly the entire length of the valve, infrequently ecostate or weakly costate with a slightly elevated costa extending a 1/4–3/4 the length of the valve in f. *heteromorpha* (Griseb.) Fantz. This variety is widespread in the neotropics, from southern Mexico to Peru, east to Paraguay and southern Brazil, and introduced infrequently into Africa and recently documented (Huang et al. 1990) from Taiwan.

Variety *glabrescens* (Verdc.) Fantz is distinguished easily by the glabrescent appearance of the stem, petiole and calyx, lower leaf surface, and only ecostate fruits. Other characters agree with var. *falcata*. This variety is found in West Africa with limited collections cited by Fantz (1990) from Guadeloupe and Martinique (introductions?). Two new varieties are added as follows:

- 3a. *Clitoria falcata* var. *aurantiaca* (Benth.) Fantz, comb. nov.** *Clitoria glycinoides* DC. var. *aurantiaca* Benth., Mart. Fl. Bras. 15(1):119. 1862. TYPE: BRAZIL. Rio Grande: fl. orange flushed red, Fox 325 (HOLOTYPE: K-hb. Hooker; photo of K: S).
Clitoria glycinoides DC. var. *megapotamica* Malme, Ark. Bot. 23a(13):32. 1931. TYPE: BRAZIL. RIO GRANDE DO SUL: Cruz Alto, 16 Jan 1902, Malme II:1102 (LECTOTYPE: S,

mounted on two sheets). SYNTYPES: BRAZIL. MINAS GERAIS: Caldas, 18 Jan 1860, *Regnell III:437* (S-2 sh.); 18xx, *Regnell III:437* (S); 26 Dec 1862, *Regnell III:437* (S). *Neurocarpum rufescens* Benth., Ann. Wiener Mus. Naturgesch. 2:116. 1837; *Clitoria rufescens* (Benth.) Benth., J. Proc. Linn. Soc. Bot. 2:39. 1858. TYPE: BRAZIL. MINAS GERAIS: in campis editis ad Tejuco et Villa do Principe, *Martius s.n.* (HOLOTYPE: M 12446).

Vine, stem with upper portion conspicuously pubescent, trichomes dense, erect, rufous. Leaves conspicuously pubescent below, leaflets oblong, 3–5.5 cm wide. Flowers (5.5) 6–7.5 cm long, vexillum white becoming dark yellowish-orange in the dried state. Calyx tube 16–20 mm long, laxly pilose with trichomes primarily along ventral and dorsal surfaces; lobes oblong, abruptly acuminate, broad, 4–7 mm wide. Bracteoles oblong, obtuse, widening above the middle, 7–11 mm long, 3–4 mm wide. Legume costate. Southern Brazil.

Bentham (1862) published his varietal name with a question mark and a short diagnosis that included the orangish flowers with broad calyx lobes, two of the diagnostic characteristics. Bentham cited the Fox collection in Hooker's herbarium, but neglected to cite the collection number. Only one specimen was cited with a location of deposit, thus there is no doubt that *Fox 325* is the holotype. Malme (1931) did not designate a type, but cited two collections (syntypes) without locality of deposit. Syntype *Malme II:1102* was selected as the lectotype because Malme cited it immediately following the diagnosis, and preceding a more detailed description. Syntype *Regnell III:437* was cited after a note that interpreted Bentham's name as published with an incomplete description.

Clitoria rufescens is rarely mentioned in the literature. Rizzini (1963) cited it as a Brazilian species, but did not examine any specimens of it. The type agrees with *Fox 325* and the circumscription of this variety.

3b. *Clitoria falcata* var. *latifolia* (Rizzini) Fantz, stat. et comb. nov. *Clitoria rubiginosa* Juss. ex Pers. f. *latifolia* Rizzini, Arch. Jard. Bot. Rio de Janeiro 17:180. 1963. TYPE: BRAZIL. PARÁ: Mayan Tapajós, Cachoeira do Mangabal, 8 Feb 1917, *Ducke 16739* (HOLOTYPE: RB 11861, mounted on two sheets; ISOTYPES: BM! MG 17171, non vidi).

Vine, stem with upper portion conspicuously pubescent, trichomes dense, erect, rufous. Leaves conspicuously pubescent on lower surface, leaflets elliptic-oblong to oval, 5–8 cm wide. Flowers 3.5–4 cm long, white, drying pale yellow. Calyx tube 12–15 mm long, pilose; lobes ovate-lanceolate, acuminate, 2–4 mm wide. Bracteoles oblong-lanceolate, abruptly acuminate, 10–15 mm long, 4–6 mm wide. Brazil: Pará.

Rizzini's form is recognized as a variety distinguished easily by the broader leaflets and longer bracteoles. Rizzini's taxon *Clitoria rubiginosa* Juss. ex Pers. f. *longifolia* Rizz. (Arq. Jard. Bot. Rio de Janeiro 17:180. 1963) is part of the natural variation of the species, and is regarded as a synonym of var. *falcata*.

TABLE 1. A comparison of the varieties of *Clitoria falcata* Lam.

CHARACTER	<i>falcata</i>	<i>glabrescens</i>	<i>aurantiaca</i>	<i>latifolia</i>
STEM				
Pubescence	Rufo-pilose	Glabrate	Rufo-pilose	Rufo-pilose
LEAFLETS				
Larger-width	3–5.5 cm	3–5.5 cm	3–5.5 cm	5–8 cm
Pubescence below	Sericeous	Glabrate	Sericeous	Sericeous
FLOWERS				
Size	3.5–5.5 cm	3.5–5.5 cm	6–7.5 cm	3.5–5.5 cm
Color dried	Pale to deep yellow	Pale to deep yellow	Dark yellowish-orange to orange	Pale to deep yellow
CALYX				
Tube length	10–16 mm	10–16 mm	16–20 mm	12–15 mm
Lobe width	2.5–4 mm	2.5–4 mm	4–7 mm	2.5–4 mm
Pubescence	Pilose	Glabrate	Lax Pilose	Pilose
BRACTEOLES				
Shape	Ovate-lanceolate	Lanceolate to ovate-lanceolate	Oblong	Ovate-lanceolate
Length	7–11 mm	7–11 mm	7–11 mm	10–15 mm
Width	3–4 mm	3–4 mm	3–4 mm	4–6 mm
LEGUMES				
Costate	Costate or ecostate	Ecostate	Costate	Costate

4. *Clitoria guianensis* (Aubl.) Benth.

This species is characterized as a subshrub with subsessile, 3-foliolate leaves with narrow elongated leaflets, axillary peduncles bearing a pair of large (5.5–7.5 cm) blue to lavender flowers, and costate legumes. Cleistogamy with reduced, apetalous flowers is common. Members are found from southern Mexico to Brazil, and western Cuba (Pinar del Río, Isla de Pinos) in savannas, rocky cerrado, pine or pine-oak forests usually in dry sandy soil. Although well documented in collections, specimens with fruits borne from chasmogamous flowers are rare (2%, 8 of 347 collections), a pattern not observed in other species of *Clitoria* with cleistogamy. Two new varieties are noted below:

4a. *Clitoria guianensis* var. *chapadensis* (Malme) Fantz, stat. nov. *Clitoria chapadensis* Malme, Ark. Bot. 23:82. 1931; *Clitoria guyanensis* (Aubl.) Benth. f. *chapadensis* (Malme) Rizzini, Arch. Jard. Bot. Rio de Janeiro 17:184. 1963. TYPE: BRAZIL. MATO GROSSO: Santa Anna de Chapada, 5 Aug 1902, *Malme II:2067b* (LECTOTYPE: S; ISOLECTOTYPES: S, 24 Jul 1902, *Malme 2067*; 2 Aug 1902, *Malme 2067a*; 10 Aug 1902, *Malme 2067d*; 26 Sep 1902, *Malme 2067e*).

Leaves 3-foliolate, occasionally 1-foliolate; leaflets shorter and broader (L/W ratio is 2–2.5:1), oblong-elliptic to oblong-obovate, 5.5–9 cm long, (2) 2.5–4 cm wide. Petioles 3–6 mm long; rachis 2–5 mm long; stipules 7–12 mm long, 4–5 mm wide. Calyx tube of cleistogamous flowers 5–8

mm long. Legumes costate; stipes 9–14 mm long. Brazil (Mato Grosso: Chapada dos Guimarães).

Malme (1931) cited the type as *Malme 2067a-e*. This group of specimens represents a series of plants collected from one generalized locality over a period of time. Thus, they are treated as syntypes. *Malme 2067*, *2067a*, and *2067e* represent immature plants with small leaves and early flowering stages. *Malme 2067c* includes one plant with cleistogamous flowers and fruits. *Malme 2067d* has more material, but lacks 1-foliolate leaves. *Malme 2067b* has the best material, represented well in flowering, with both 1- and 3-foliolate leaves; thus it is selected as the lectotype.

Variety *guianensis* can be distinguished by the linear to lanceolate leaflets (7–20 cm long, 1–2.5 cm wide, with L/W ratio 3–6:1), smaller stipules (5–9 mm long, 2–4 mm wide), and elongate leaf axes (petiole 3–10 mm long; rachis 2–10 mm long).

4b. *Clitoria guianensis* var. *macrocleistogama* Fantz, var. nov.

Varietas nova *macrocleistogama* a distinguibili *Clitoria guianensis* var. *guianensis* petiolo et rhachidi et stipite elongato et floribus cleistogamis cum macrocalycibus.

Leaves 3-foliolate; leaflets linear to lanceolate, 7–16 cm long, 1–1.8 cm wide, with L/W ratio 3–8:1. Petioles 10–20 mm long; rachis 8–18 mm long; stipules 5–8 mm long, 2–3 mm wide. Calyx tube of cleistogamous flowers 9–12 mm long. Legumes weakly costate, the medial vein extending nearly the entire length of the valve; stipes 14–20 mm long. Brazil: Minas Gerais.

TYPE: BRAZIL. MINAS GERAIS: Serra da Caracol prope prodium Brata in campo alto audo preta, 20 Dec 1875, *Mosen 4082* (HOLOTYPE: S, mounted on two sheets).

Variety *guianensis* is distinguished by the smaller calyces of cleistogamous flowers (4–8 mm long), shorter leaf axes, and shorter fruit stipes (6–14 mm long).

5. *Clitoria heterophylla* var. *pedunculata* (Bojer ex Benth.) Fantz, stat. et comb. nov. *Clitoria pedunculata* Bojer ex Benth., Ann. Wiener Mus. Naturgesch. 2:114. 1837 (non Micheli 1875); *Ternatea pedunculata* (Bojer ex Benth.) Kuntze, Revis. Gen. Pl. 1:210. 1891. TYPE: MADAGASCAR: inter frutices ad margines fluviorum, Mar 1830, *Bojer v.77* (LECTOTYPE: W).

Vine. Leaflets (3)5–9, 3–8 mm wide, upper surface micro-uncinate with scattered, short (0.2–0.5 mm) subappressed, macrotrichomes. Peduncle elongate, arcuate, (15) 25–70 mm long; pedicel commonly solitary, borne laterally from peduncle apex, occasionally paired. Legume 3.5–6 cm long, pubescence erect to subappressed. Madagascar, with one collection from Mauritius.

Bentham (1837) did not cite any collection with the original publication of Bojer's species; thus no holotype. However, a later publication pro-

vided clues as to a probable type. Bentham (1858) cited one collection for the species as "*Bojer* (herbaria Musaei Vindobensis)." Descriptions published by Bentham consistently noted 3-foliolate leaves, an uncommon leaflet number in the species (typically 5-11-foliolate). Only *Bojer v.77* (W) has some 3-foliolate leaves and bears the identification "*Clitoria pedunculata mihi*" (handwriting unknown; Bojer or Bentham?). *Bojer v.77* (W) was a specimen utilized by Bentham in describing the plant, thus selected as the lectotype.

Variety *heterophylla* (common in Mauritius, infrequent in Madagascar) is distinguished easily by narrower leaflets (1-4 mm wide) glabrate above, shorter peduncles (3-10 mm long) with pedicels solitary, borne medially from the peduncle apex, and shorter legumes (2-3.7 cm long).

6. *Clitoria leptostachya* var. *fruticosa* Fantz, var. nov.

Varietas nova *fruticosa* distinguibili a *Clitoria leptostachya* var. *leptostachya* fruticosa cum apice interdum scandens, bracteola longis, et legumine angustato.

Shrub with apices occasionally climbing. Leaflets with midrib raised on upper surface. Bracteoles lanceolate, 3-4 mm long. Flowers rose to lilac. Legume 12-16 mm wide. Brazil (Amazonas, Pará).

TYPE: BRAZIL. PARÁ: prope medium fl. Tapejóz [Rio Tapajós], loco Quataguara, 15 Aug 1923, *Ducke* 17244 (HOLOTYPE: S; ISOTYPES: G-hb. Barbey-Boissier (209 & 210), RB 17244 (two sheets), U 63828, US 1442540).

Variety *leptostachya* (Guyana) is distinguished as a liana bearing pinkish-white to mauve-white flowers with a smaller bracteole (2 mm long), broader fruits (15-20 mm wide), and leaflets with the midrib weakly raised on the upper surface.

7. *Clitoria mariana* var. *pubescentia* Fantz, var. nov. BASIONYM: *Clitoria mariana* var. *mariana* f. *pubescentia* Fantz, nom. in sched.

Varietas nova *pubescentia* distinguibili a *Clitoria mariana* var. *mariana* foliolis infra piloso-sericeis et in Florida meridionalis endemica.

Leaflets moderately to densely pilose-sericeous below, the trichomes conspicuous, suberect to erect, thinning with age, but not widely scattered nor confined to veins; upper surface bearing inconspicuous micro-uncinate trichomes (vidi 20-30x) beneath conspicuous whitish macrotrichomes (0.3-1 mm long), trichomes falcate to subappressed, deciduous with age; stipules 2-3 mm wide at the base. Inflorescence short, stout, 1-4 cm long, 1-2-flowered. Calyx pubescence of micro-uncinate trichomes with moderate to scattered, subappressed to slightly spreading, 0.3-1 mm long macrotrichomes that are deciduous with age. Legume stipes from chasmogamous flowers 12-17 mm long. Endemic to central and southern Florida.

TYPE: UNITED STATES. FLORIDA [LAKE COUNTY]: near edge of Lake at Leesburg, 7 Jun 1967, *Baltzell* 120 (HOLOTYPE: FLAS 99034).

Specimens of this variety had been annotated as a form of var. *mariana* because the distinction was based upon one character, an increase in pubescence. Populations from the coastal plains of other states (North Carolina to Texas) maintain their sparse degree of pubescence, similar to upland to mountainous members. When representatives of both varieties were grown together in the greenhouse, they retained their characteristic pubescence. Other botanists have encouraged me to treat this taxon as a variety because of its geographical isolation and the constancy in characters when transplanted.

Members of var. *mariana* are rarely found south (Alachua, Lake, Marion Counties) of an imaginary line across north-central Florida (Cedar Key to Ponte Verda Beach), but maintain their glabrate characteristic. Variety *mariana* is distinguished by its leaves being glabrate below, the trichomes subappressed and scattered when young, and confined to major veins in the mature state. The upper leaf surface lacks macrotrichomes. The macrotrichomes on the calyx are sparse to lacking. Florida populations are found in the panhandle and counties north of the line noted. Variety *orientalis* Fantz is endemic to Southeast Asia (Fantz and Predeep 1992), and distinguished by elongate, more lax inflorescences (5–15 cm) with 2–6 flowers, shorter stipes (5–9 mm long), and broader stipules (3–5 mm wide at base).

8. *Clitoria polystachya* Benth.

This species is characterized as a shrub with axillary, multiflowered, paniculate inflorescences bearing small (2.5–3 cm long) white flowers or ecostate, strigose fruits that are weakly depressed between the seeds. Members range from southern Mexico to western Panama. Two new varieties are noted below:

8a. *Clitoria polystachya* var. *congesta* Fantz, var. nov.

Varietas nova *congesta* distinguibili a *Clitoria polystachya* var. *polystachya* inflorescentia cum floribus congestis.

Leaflet base rotund to subcordate. Stipules 6–12 mm long. Inflorescence contracted, 1–3 cm long; peduncle 1–2 cm long; flowers congested near the peduncle apex, pedicels appearing to be nearly fasciculate. Calyx tube 7–9 mm long, lobes 2–3 mm long. Bracteoles 6–9 mm long. Endemic to District Temascaltepec, state of México, México.

TYPE: MÉXICO. MÉXICO: Dist. Temascaltepec, Rincón, 1960 m, 21 Aug 1933, *Hinton* 4447 (HOLOTYPE: NY; ISOTYPE: GH).

PARATYPES: MÉXICO. MÉXICO: Dist. Temascaltepec, San Lucas, 24 Oct 1935, *Hinton* 8597 (F 1497429, G-excluding vine around specimen, MO 1800932, NY, S, US 1979941, W 13453).

This variety would be very ornamental if cultivated. It is recognized easily by the globular cluster of congested flowers on contracted inflores-

cences typically shorter than the petiole. The paratype collection has fruits borne from both chasmogamous and cleistogamous flowers. Variety *polystachya* has elongated inflorescences (3–16 cm) with flowers loosely arranged and pedicels paired at the nodes, an elongated calyx tube (8–12 mm) and lobes (3–4 mm), shorter stipules (4–7 mm) and bracteoles (4–6 mm), and leaflets rotund, non subcordate.

8b. *Clitoria polystachya* var. *pringlei* Fantz, var. nov.

Varietas nova *pringlei* distinguibili a *Clitoria polystachya* var. *polystachya* stipulis et bracteolis elongatis.

Leaflet base rotund. Stipules 7–10 mm long. Inflorescence elongate, 3–16 cm long; peduncle 1.5–7 cm long; flowers separated. Calyx tube 8–12 mm long, lobes 3–4 mm long. Bracteoles 6–8 mm long. Endemic to Morelos, México.

TYPE: MÉXICO. MORELOS: Barranca near Cuernavaca, 4 Aug 1896, *Pringle* 7253 (HOLOTYPE: GH; ISOTYPE: MICH).

Variety *polystachya* is distinguished by the smaller stipules (4–7 mm long) and bracteoles (4–6 mm long). Collections of *Clitoria* from the state of Morelos are rare. Variety *polystachya* is well represented in herbaria from southern México, but has not been documented from Morelos.

9. *Clitoria pozuzoensis* Macbride var. *schunkei* Fantz, var. nov.

Varietas nova *schunkei* distinguibili a *Clitoria pozuzoensis* var. *pozuzoensis* fruticosa cum apice scandentis, inflorescentia et pedicello elongato.

Shrub with apices scandent. Inflorescence elongate, 8–19 cm long, weakly flexuous towards apex; pedicels 10–12 mm. Peru (Loreto).

TYPE: PERÚ. LORETO: en bosque bajo, a 1 km abajo de Ipariá al noroeste del Río Ucayali, 250 m, 5 Sep 1968, *Schunke* 2773 (HOLOTYPE: F 1688611; ISOTYPES: G-2 sheets, NY).

This species is poorly represented in herbarium collections. Variety *pozuzoensis* is distinguished as a liana with a short, weakly flexuous inflorescence (1.5–6 cm long), pedicels that are 5–7 mm long, and has a broader distributional range (Perú: Huanuco, Loreto; Ecuador: Manabí, Orientale).

10. *Clitoria stipularis* Benth. var. *latifolia* (Rizzini) Fantz, stat. nov. *Clitoria*

stipularis Benth. f. *latifolia* Rizz., Arch. Jard. Bot. Rio de Janeiro 17:181. 1963.

TYPE: BRAZIL. MARANHÃO: Rio Jurupy [Gurupi], Serra de Pirocana, 25 Apr 1909, *Coll. Ignotus* 10387 (LECTOTYPE: RB 5697; ISOLECTOTYPES: BM, G-hb. Delessert, MG 10387 -non vidi, US 1044109).

Leaflets elliptic, obtuse becoming emarginate, more or less mucronate, 3.5–8 cm long; length/width ratio is 1.2–1.7:1. Stipules broadly ovate, 10–13 mm wide. Petiolules 3–4 mm long. Bracteoles 16–19 mm long. Brazil: Ceará, Maranhão.

Rizzini (1963) described a new form based upon broader obtuse leaflets. He cited one collection consisting of two specimens deposited at different

institutions (MG, RB). These are regarded as syntypes since a holotype was not designated (Fantz 1993). I have not seen the MG collection (MG unable to locate it, possibly distributed to another institution?), thus designated the RB specimen as the lectotype. No collector was listed on the specimens examined (BM, G, RB, US) that were distributed from the Herbario do Museu Paraense Goeldi. It may be a collection of Ducke. Rizzini cited *Ducke 10387* (R 2435-non vidi) under f. *stipularis*, not the new form.

Variety *stipularis* is distinguished by the oblong to oblong-elliptic leaflets, being longer (7–13 cm) and appearing to be narrower (length/width ratio = 2–3:1), longer petiolules (4–8 mm) and bracteoles (17–24 mm), and narrower stipules (7–9 mm wide). This variety is found in Bahia, Brazil with one collection from Amazonas. Leaflets in var. *latifolia* give the false appearance of being broader as widths are similar, but leaflet length is shorter than the typical variety, providing a smaller ratio of length to width.

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