

NOTES FROM THE  
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ABSTRACT. The species described by Léveillé which belong to the families *Leguminosae*, *Rosaceae*, *Saxifragaceae* s.l., *Crassulaceae*, *Hamamelidaceae* and *Haloragaceae* are evaluated. Other species described in, but not belonging to, these families are also included. Five new combinations are made: *Flemingia cavaleriei* (Lévl.) Lauener; *Indigofera oenotheroides* (Lévl.) Lauener; *Rubus parvifolius* L. var. *taquetii* (Lévl.) Lauener & Ferguson; *Rubus sachalinensis* Lévl. var. *concolor* (Kom.) Lauener & Ferguson and var. *diamantinus* (Lévl.) Lauener & Ferguson.

INTRODUCTION

This paper, which follows the same format as those previously published and listed below\*, covers, among others, the major families *Leguminosae* and *Rosaceae*. The large genus *Rubus* was written up in collaboration with D. K. Ferguson of the Department of Botany in the University of Antwerp.

LEGUMINOSAE

407. ?*Acacia delavayi* Franch.; Rehder in Journ. Arn. Arb. 13: 321 (1932).  
*A. cavaleriei* Lévl., Fl. Kouy-Tchéou 224 (1914) nom. nud.

408. *Albizia kalkora* (Roxb.) Prain; Rehder in Journ. Arn. Arb. 13: 321 (1932).  
*A. esquirolii* Lévl., Fl. Kouy-Tchéou 224 (1914).

409. *Apios bodinieri* Lévl., Fl. Kouy-Tchéou 225 (1914).  
CHINA. Kweichow, Mei tong chan, fl. beau rose, *E. Bodinier* 499 (holo. E).

The handwriting on the collector's label appears to me to be that of Esquirol.

\* Part I, *Notes R.B.G. Edinb.* 23: 573-596 (1961); II, 24: 73-78 (1962); III, 26: 333-346 (1966); IV, 27: 1-10 (1966); V, 27: 265-292 (1967).

**410. *Apios fortunei*** Maxim. in Bull. Acad. Sci. St. Pétersb. 18: 396 (1873); Hand.-Mazz., Symb. Sin. 7: 579 (1933).

*A. cavaleriei* Lévl., Fl. Kouy-Tchéou 225 (1914).

CHINA. Kweichow, Tsin-gai, bois, 15 vii 1903, *Cavalerie* 1152 (holo. *A. cavaleriei*, E).

**411. *Arachis hypogaea*** L., Sp. Pl. 741 (1753); F. J. Herm. in U.S. Dept. Agric. Monogr. no. 19: 13 (1954).

*Lathyrus esquirolii* Lévl., China Revue Annuelle 4 (1916).

CHINA. Kweichow, environs de Hin-y-fou, bord des ruisseaux, des rizières, 20 iv 1897, *Bodinier* 1580 (holo. *A. hamulosus*, E).

**412. *Astragalus bhotanensis*** Baker in Hook. f., Fl. Brit. Ind. 2: 127 (1876); Pet.-Stib. in Acta Hort. Gotoburg. 12: 65 (1938).

*A. hamulosus* Lévl., Fl. Kouy-Tchéou 226 (1914).

CHINA. Kweichow, environs de Hin-y-fou, bord des ruisseaux, des rizières, 20 iv 1897, *Bodinier* 1580 (holo. *A. hamulosus*, E).

**413. *Astragalus graveolens*** [Buch.-Ham. ex] Benth. in Royle, Ill. Bot. Him. 199 (1835); Bunge in Mém. Acad. Imp. Sci. St. Pétersb. ser. 7, 15 (1): 31 (1869); Hand.-Mazz., Symb. Sin. 7: 557 (1933); Pet.-Stib. in Acta Hort. Gotoburg. 12: 51 (1938); Ali in Biologia (Lahore) 7: 36 (1961).

*A. bodinieri* Lévl. in Bull. Acad. Géog. Bot. 25: 49 (1915) & Cat. Pl. Yunnan, 151 (1916).

CHINA. Yunnan, rives des torrents à mi-mont de Kiao Kia, 500 m, plante vivace, fl. blanches, vi 1912, *E. E. Maire* s.n. (holo. *A. bodinieri*, E).

**414. *Bauhinia aurea*** Lévl. in Bull. Soc. Bot. Fr. 54: 368 (1907) & Fl. Kouy-Tchéou 226 (1914) p.p.; Rehder in Journ. Arn. Arb. 13: 322 (1932); Chen in Lingn. Sci. Journ. 18: 482 (1939).

The specimen collected by Séguin and cited by Lévillé in his *Flore du Kouy-Tchéou* does not appear to belong to *B. aurea*.

**415. *Bauhinia faberi*** Oliv. in Hook., Ic. Pl. t. 1790 (1888); Chen in Lingn. Sci. Journ. 18: 486 (1939); Fang in Ic. Pl. Omeiens. 2: pl. 200 (1946).

*B. densiflora* Franch., Pl. Delav. 191 (1890); Gagnep. in Not. Syst. (Paris) 2: 282 (1912); Lévl., Fl. Kouy-Tchéou 227 (1914); Rehder in Journ. Arn. Arb. 13: 321 (1932).

*B. cavaleriei* Lévl. in Fedde, Rep. Sp. Nov. 11: 31 (1912).

*B. altefissa* Lévl., Fl. Kouy-Tchéou 226 (1914) p.p. quoad *Esquirol* 3056, & Cat. Pl. Yunnan, 152 (1916).

**416. *Bauhinia touranensis*** Gagnep. in Not. Syst. (Paris) 2: 181 (May 1912), 282 (Jan. 1913); Lévl., Fl. Kouy-Tchéou 227 (1914); Rehder in Journ. Arn. Arb. 13: 321 (1932); Chen in Lingn. Sci. Journ. 18: 475 (1939).

*B. rocheri* Lévl. in Fedde, Rep. Sp. Nov. 11: 31 (July 1912).

417. *Bauhinia yunnanensis* Franch.; Rehder in Journ. Arn. Arb. 13: 322 (1932); Chen in Lingn. Sci. Journ. 18: 268 (1939); Fang in Ic. Pl. Omeiens. 2: pl. 199 (1946).

*B. altefissa* Lévl., Fl. Kouy-Tchéou 226 (1914) p.p. quoad *Cavalerie* 3908, & Cat. Pl. Yunnan, 152 (1916).

418. *Campylotropis bodinieri* Schindl. in Fedde, Rep. Sp. Nov. 11: 339 (1912).

*Lespedeza bodinieri* (Schindl.) Lévl., Fl. Kouy-Tchéou 236 (1914) p.p. & Cat. Pl. Yunnan 158 (1916) pro syn. sub *L. macrocarpa*.

CHINA. Kweichow, environs de Tsin-gay, à Se-tse-chan, belles fleurs roses, 24 x 1898, 14 xi 1899, *Bodinier* 2488 (typus *C. bodinieri*, E); environs de Kouy-yang, bois de la pagode de Lan-yo-chan, belles fleurs roses, petit arbuste, 15 vi 1899, *Bodinier* 2488 bis, (E); Tsin-gai, 5 viii 1903, *Cavalerie* 1242 (E); Tsin-gai, bois, 15 viii 1903, *Cavalerie* 1154 (E).

Schindler's determination is not on the sheet of *Bodinier* 2488 at Edinburgh, so it is probably not the holotype.

Léveillé listed *Esquirol* 1070, 3193 and *Cavalerie* 2624 under *L. bodinieri* but these all belong to *Campylotropis esquirolii* Schindl., of which the first and third specimens are syntypes.

See under *Lespedeza capitata* Michx. (no. 455) for other species of *Campylotropis* transferred by Léveillé to *Lespedeza*.

419. *Campylotropis polyantha* (Franch.) Schindl.; Rehder in Journ. Arn. Arb. 13: 329 (1932) excl. syn. *Lespedeza "dichromocalyx"* Lévl. Rehder, l.c. 18: 276 (1937).

*Lespedeza eriocarpa* DC. var. *polyantha* Franch., Pl. Delavay. 168 (1899). *L. blinii* Lévl. in Bull. Acad. Géog. Bot. 25: 48 (1915) & Cat. Pl. Yunnan 157 (1916).

420. *Campylotropis polyantha* (Franch.) Schindl. var. *leiocarpa* (Pamp.) Pet.-Stib. in Acta Hort. Gotoburg. 13: 437 (1940).

*Lespedeza eriocarpa* DC. var. *chinensis* Pamp. subvar. *polyantha* (Franch.) Pamp. f. *leiocarpa* Pamp. in Nuov. Giorn. Bot. Ital. n.s. 17: 22 (1910). *L. dichromoxylon* Lévl., Fl. Kouy-Tchéou 236 (1914) & Cat. Pl. Yunnan 157 (1916); Rehder in Journ. Arn. Arb. (sphalm. *L. dichromocalyx*) 13: 329 (1932) & 18: 276 (1937).

421. *Campylotropis velutina* (Dunn) Schindl.; Rehder in Journ. Arn. Arb. 13: 329 (1932).

*Lespedeza velutina* Dunn in Hook., Icon. pl. 27: t. 2700 (1901). *Millettia cavaleriei* Lévl., Fl. Kouy-Tchéou 238 (1914).

422. *Caragana franchetiana* Kom.; Rehder in Journ. Arn. Arb. 13: 326 (1932).

*C. komarovi* Lévl. in Bull. Acad. Géog. Bot. 25: 49 (1915) & Cat. Pl. Yunnan, 153 (1916).

**423. *Crotalaria bialata*** Schrank, Pl. Rar. Hort. Monac. 1: t. 13 (1817); Ohashi in Hara, Fl. E. Himal. 146 (1966).

*C. alata* [Buch.-Ham. ex] D. Don, Prodr. Fl. Nep. 241 (1825); De Munk in Reinwardtia 6: 200 (1962).

*C. alata* Lévl., Fl. Kouy-Tchéou 229 (1914)—non D. Don.

CHINA. Kweichow, Chang Long, xii 1904, *Esquirol* 339 (holo. *C. alata* Lévl., E).

**424. *Crotalaria capitata*** [Benth. ex] Baker in Hook. f., Fl. Brit. Ind. 2: 74 (1876).

*C. mairei* Lévl. in Bull. Acad. Géog. Bot. 25: 49 (1915) & Cat. Pl. Yunnan 153 (1916); Rehder in Journ. Arn. Arb. 18: 206 (1937).

CHINA. Yunnan: pâtures des mont. à Lan-ngi-tsin, 3100 m, plante vivace, couchée, fl. bleu de Prusse, viii 1913, *E. E. Maire* s.n.; coteaux arides, calcaires à Ta-kiao (rare), 2550 m, plante vivace, feuil. grises endessus, blanche veloutées endessous, fl. bleues papilionacées, viii 1913, *E. E. Maire* s.n.; pâtures des collines à Tche-hai, 2950 m, légumineuse vivace, naine, en touffes rampantes, fl. violet sombre, vii 1913, *E. E. Maire* s.n. (syntype *C. mairei*, E).

*Crotalaria duboisii* Lévl. (1916) non Wilczek (1953) = *Polygala arillata* Buch.-Ham. (Polygalaceae)

**425. *Crotalaria ferruginea*** [Grah. ex] Benth. in Hook., Lond. Journ. Bot. 2: 476 (1843); Baker in Hook. f., Fl. Brit. Ind. 2: 68 (1876); Pet.-Stib. in Acta Hort. Gotoburg. 13: 413 (1940); Chuang in Taiwan 9: 77 (1963).

*C. bodinieri* Lévl., Fl. Kouy-Tchéou 229 (1914).

CHINA. Kweichow, environs de Kouy-yang, cimetière des Chritiens, dans les herbes, fleurs jaunes, 21 vii 1899, *Bodinier* 2660 (holo. *C. bodinieri*, E).

**426. *Crotalaria tetragona*** Andr., Bot. Repos. 10: t. 593 (1810); Roxb., Fl. Ind. ed. 2, 3: 263 (1832); Pet.-Stib. in Acta Hort. Gotoburg. 13: 415 (1940).

*C. esquirolii* Lévl., Fl. Kouy-Tchéou 229 (1914).

CHINA. Kweichow: Kiao-fan, fleur jaune, xii 1904, *Esquirol* 260; Tchia-hiang-tin, fleur jaune, haute 16 décim., circonference au tronc, 13 décim., 22 xii 1904, *Esquirol* 340; sine loc., *Esquirol* 820 (syntype *C. esquirolii*, E).

**427. *Dalbergia cavaleriei*** Lévl., Fl. Kouy-Tchéou 230 (1914); Rehder in Journ. Arn. Arb. 13: 330 (1932) & 18: 208 (1937); Hand.-Mazz., Symb. Sin. 7: 574 (1933).

Rehder cites only one of the two syntypes, *Cavalerie* 3918; the other syntype is *Cavalerie* 2054.

**428. *Dalbergia esquirolii*** Lévl., Fl. Kouy-Tchéou 230 (1914); Rehder in Journ. Arn. Arb. 13: 329 (1932).

429. *Derris tonkinensis* Gagnep. var. *esquirolii* Lévl., Fl. Kouy-Tchéou 231 (1914).

CHINA. Kweichow: Ouang-mou, arbrisseau, fleur rose, vi 1904, *Esquirol* 116; arbrisseau, fleur blanche lavée de rose, *Esquirol* 903; Lo-Hou, buisson derrière le fort, 800 m, 5 vi 1912, *Esquirol* 3615 (syntype E).

One of the type specimens of *D. tonkinensis*, *Cavalerie* 2632, is not in Léveillé's herbarium and there is no other material available at Edinburgh for comparison with Léveillé's variety, which is based on a shorter fruit, 4 cm long instead of 8–11 cm.

430. *Derris* sp.; Lévl., Fl. Kouy-Tchéou 231 (1914); Rehder in Journ. Arn. Arb. 13: 330 (1932).

*Indigofera thirionni* Lévl. in Fedde, Rep. Sp. Nov. 12: 190 (1913).

As Rehder mentions (l.c.), the specimen of *I. thirionni* "is too meagre for exact determination".

In "A Review of the Chinese Species of *Derris*", Foon-Chew How (*Acta Phytotax. Sin.* 3: 209–232, 1954) lists three species of *Derris* found in Kweichow. Léveillé's species may belong to one of these, *Derris fordii* Oliv., although the calyx and flower buds of *I. thirionni* are much hairier.

431. *Desmodium concinnum* DC.; Rehder in Journ. Arn. Arb. 13: 328 (1932).  
*D. barbigerum* Lévl., Cat. Pl. Yunnan 153 (1916).

432. *Desmodium esquirolii* Lévl., Fl. Kouy-Tchéou 232 (1914) & Cat. Pl. Yunnan 154 (1916); Rehder in Journ. Arn. Arb. 18: 207 (1937); Pet.-Stib. in Acta Hort. Gotoburg. 13: 430 (1940); Merrill in Sunyatsenia 3: 252 (1937).

*D. cinerascens* Franch., Pl. Delavay. 174 (1890); Rehder in Journ. Arn. Arb. 13: 327 (1932)—non A. Gray (1853).

*D. franchetii* Rehder in Journ. Arn. Arb. 3: 41 (1922).

CHINA. Kweichow, sine loc., *Esquirol* s.n. (typus—n.v.); sine loc., *Cavalerie* 3998 (E).

Rehder cited *Cavalerie* 3274 as the holotype of *D. esquirolii* but this was obviously an error as he also cites it, correctly, as the type of *D. cavaleriei* Lévl. *Cavalerie* 3998 is not cited by Léveillé but the label bears the name *D. esquirolii* in his handwriting and this specimen appears to match material of "*D. cinerascens* Fr."

The type of *D. esquirolii* is not in the Léveillé herbarium at Edinburgh and so it cannot be ascertained that it is the same as *D. cinerascens* Franch. On the assumption that it is, however, *D. esquirolii* is the name which must be used.

433. *Desmodium gangeticum* (L.) DC.; Rehder in Journ. Arn. Arb. 13: 328 (1932).

*Hedysarum gangeticum* L., Sp. Pl. 746 (1753).

*Desmodium cavaleriei* Lévl., Fl. Kouy-Tchéou 232 (1914).

434. *Desmodium griffithianum* Benth.; Rehder in Journ. Arn. Arb. 13: 327 (1932).

*D. oxalidifolium* Lévl., Fl. Kouy-Tchéou 233 (1914) p.p. quoad Bodinier 1731.

435. *Desmodium gyroides* (Roxb. ex Link) DC.; Rehder in Journ. Arn. Arb. 13: 327 (1932).

*Hedysarum gyroides* [Roxb. ex] Link, Enum. alt. 2: 247 (1822).

*Desmodium oxalidifolium* Lévl., Fl. Kouy-Tchéou 233 (1914) p.p. quoad Esquirol 2205.

436. *Desmodium podocarpum* DC. in Ann. Sc. Nat. ser. 1, 4: 102 (1825); Isely in Brittonia 7: 208 (1950).

*D. bodinieri* Lévl., Fl. Kouy-Tchéou 232 (1914); Rehder in Journ. Arn. Arb. 13: 326 (1932) pro syn. sub *D. racemosum* (Thunb.) DC.

Rehder equated *D. bodinieri* with *D. racemosum*, which is a synonym of *D. oxyphyllum* DC. *D. podocarpum* and *D. oxyphyllum* are closely related but can be separated on leaf shape and hairiness, and I consider Lévillé's species to be the same as *D. podocarpum*. Isely saw a photograph of *D. bodinieri* and also considered it as probably conspecific with *D. podocarpum*.

In a paper on "Desmodium in Malaysia", M. S. Knaap-van-Meeuwen (*Reinwardtia* 6: 257, 1962) reduced *D. podocarpum* to *D. racemosum* but Isely, who had seen photographs of the type specimens of *D. podocarpum*, *D. oxyphyllum* and *D. racemosum*, kept *D. podocarpum* and *D. oxyphyllum* separate. Japanese authors also regard these two latter species as distinct.

437. *Dumasia villosa* DC.; Rehder in Journ. Arn. Arb. 13: 330 (1932); Hand.-Mazz., Symb. Sin. 7: 578 (1933); Rehder in Journ. Arn. Arb. 18: 208, 276 (1937).

*Apios martini* Lévl., Fl. Kouy-Tchéou 225 (1914).

*Erythrina mairei* Lévl. in Bull. Acad. Géog. Bot. 25: 50 (1915) & Cat. Pl. Yunnan 155 (1916).

CHINA. Kweichow, environs de Gan-pin, commun dans les haies, fleur. jaunes, devenant noires à la maturité, 22 ix 1897, 29 viii 1897, *Martin & Bodinier* 1825 (holo. *Apios martini*, E). Yunnan, sous bois de Pan-long-se, 2500 m, plante grimpante, vivace, fl. jaune d'or ix, 1912, *E. E. Maire*, s.n. (holo. *Erythrina mairei*, E).

438. *Dunbaria pulchra* Benth.; Lévl., Cat. Pl. Yunnan 154 (1916) & China Revue Annuelle 21 (1916); Rehder in Journ. Arn. Arb. 13: 332 (1932).

*Pueraria seguini* Lévl. in Bull. Soc. Bot. Fr. 55: 426 (1908) & Fl. Kouy-Tchéou 241 (1914).

439. *Flemingia cavaleriei* (Lévl.) Lauener, comb. nov.

*Geissaspis cavaleriei* Lévl. in Fedde, Rep. Sp. Nov. 12: 533 (1913) & Fl. Kouy-Tchéou 233 (1914).

CHINA. Kweichow, route Pien-yang—Lo-fou, xi 1905, *Cavalerie* 2579, 2629 (syntype *G. cavaleriei*, E).

*Flemingia cavaleriei* falls within Sect. *Ostryodium* Desv. which is characterised by its simple leaves and large folded bracts. From the other five species in the section, *F. cavaleriei* may be easily distinguished by the shape of the leaves or the hairiness of the bracts. It appears to be most closely related to *F. fluminalis* which has narrow cuneate leaves whilst those of *F. cavaleriei* are broader and rounded at the base. In addition, the bracts of *F. cavaleriei* are more copiously hairy than those of *F. fluminalis*.

*Flemingia* Roxb. ex Aiton, nom. cons. prop. in *Taxon* 19: 294-297 (1970).

**440. *Flemingia semialata*** [Roxb. ex] Aiton, Hort. Kew. ed. 2, 4: 349 (1812); Roxb., Fl. Corom. 3: 46, t. 249 (1815); D. Don, Prodr. Fl. Nep. 242 (1825). *Crotalaria cavaleriei* Lévl., Fl. Kouy-Tchéou 229 (1914); Pet.-Stib. in Acta Hort. Gotoburg. 13: 449 (1940) pro syn. sub *Flemingia prostrata* Roxb.

*Moghania semialata* (Roxb.) Mukerjee in Bull. Bot. Soc. Beng. 6: 16 (1952).

CHINA. Kweichow, Rte. Pien-yang à Lo-fou, commune, *Cavalerie* 2622; Lo-fou, *Cavalerie* 3342 (syntype *C. cavaleriei*, E).

**441. *Glycine soja*** Sieb. & Zucc.; Rehder in Journ. Arn. Arb. 18: 208 (1937). *G. ussuriensis* Regel & Maack in Mém. Acad. Imp. Sci. St. Pétersb. ser. 7, 4, 4: 50 (1861); F. J. Herm. in Tech. Bull. U.S. Dept. Agric. no. 1268: 37 (1962).

*Rhynchosia argyi* Lévl. in Mem. Real Acad. Cienc. Art. Barcelona, ser 3, 12: 555 (1916).

CHINA. Kiangsu: sine loc., *d'Argy* 40; Chang Hay (Shanghai), route de Zi-ka-wei, dans les haies, ix 1891, *Bodinier* s.n. (syntype *R. argyi*, E).

Rehder cited the *d'Argy* numbers as 200 and 201 but these were taken from numbered tickets inserted in the loose folders by a previous investigator and are not *d'Argy* numbers. There are two *d'Argy* sheets, one without a number but probably a duplicate of *d'Argy* 40.

*Gueldenstaedtia australis* ? Lévl., Cat. Pl. Yunnan, 155 (1916) *nom. nud.*

No specimens were cited and it is not clear what Léveillé intended.

**442. *Gueldenstaedtia verna*** (Georgi) A. Boriss. in Spisok Rast. Herb. Fl. URSS 12: 122 (1953); Ali in Candollea 18: 144 (1962).

*Astragalus vernus* Georgi, Bemerk. Reise Russisch. Reich. 1: 226 (1775). *Gueldenstaedtia multiflora* Bge. var. *longiscapa* Franch., Pl. David. 1: 92 (1884).

*Gueldenstaedtia delavayi* Franch. in Bull. Soc. Bot. Fr. 32: 5 (1885); Hand.-Mazz., Symb. Sin. 7: 553 (1933).

*Astragalus cavaleriei* Lévl. in Bull. Acad. Géog. Bot. 25: 50 (1915) & Cat. Pl. Yunnan 152 (1916).

*Gueldenstaedtia longiscapa* (Franch.) Lévl., Cat. Pl. Yunnan, 155 (1916).

CHINA. Yunnan, tertres, plaine de La-kou, 2400 m, vivace, rampante, feuilles velues, blanches endessous, fl. violettes, iii 1912, *E. E. Maire* s.n. (holo. *A. cavaleriei*, E).

443. *Gueldenstaedtia yunnanensis* Franch., Pl. Delavay. 164, pl. 40 (1890); Lév., Cat. Pl. Yunnan 155 (1916); Ali in Candollea 18: 154 (1962).

*Astragalus esquirolii* Lév. in Bull. Acad. Géog. Bot. 25: 49 (1915) & Cat. Pl. Yunnan 152 (1916).

CHINA. Yunnan, vallée de Lou-pou, 3000 m, pisacée vivace, rampante, fl. rouges, ix 1912, E. E. Maire s.n. (holo. *A. esquirolii*, E).

*Astragalus cavaleriei* Lév. (see no. 442) and *Astragalus esquirolii* Lév. were not cited in synonymy by Ali in his revision of the genus *Gueldenstaedtia*. However, it is obvious that he saw and identified the holotypes in Edinburgh.

444. *Hedysarum sikkimense* [Benth. ex] Baker in Hook. f., Fl. Brit. Ind. 2: 145 (1876); Hand.-Mazz., Symb. Sin. 7: 565 (1933).

*Astragalus mairei* Lév. in Bull. Acad. Géog. Bot. 25: 49 (1915) & Cat. Pl. Yunnan 152 (1916).

CHINA. Yunnan, sommet du Io-chan, sous bois, legumineuse vivace, naine, couchée, fl. violettes, viii 1912, E. E. Maire s.n. (holo. *A. mairei*, E).

445. *Indigofera atropurpurea* [Buch.-Ham. ex] D. Don, Prodr. Fl. Nep. 244 (Feb. 1825); DC., Prodr. 2: 225 (Nov. 1825); Roxb., Fl. Ind. ed. 2, 3: 381 (1832); Craib in Notes R.B.G. Edinb. 7: 71, 76 (1913); Lév., Fl. Kouy-Tchéou 234 (1914); Rehder in Journ. Arn. Arb. 13: 325 (1932).

*I. cavaleriei* Lév. in Fedde, Rep. Sp. Nov. 12: 190 (1913).

446. *Indigofera esquirolii* Lév. in Fedde, Rep. Sp. Nov. 12: 190 (1913) & Fl. Kouy-Tchéou 234 (1914); Rehder in Journ. Arn. Arb. 13: 324 (1932) & 18: 207 (1937); Hand.-Mazz., Symb. Sin. 7: 547 (1933).

447. *Indigofera oenotheroides* (Lév.) Lauener, comb. nov. descr. ampl. Fig. 1.

*Corchorus onotheroides* Lév. in Fedde, Rep. Sp. Nov. 10: 437 (1912) & Fl. Kouy-Tchéou 418 (1915).

*Radix* tuberosa. *Caulis* rectus, e basi ramosus pilis medifixis adpressis albis densius tectus. *Folia* simplicia lanceolato-oblongata, basi cuneata, apice mucronata, utrinque pilis albis adpressis instructa, ad 4.5 cm longa, 1 cm lata, breviter petiolata; petioli 2 mm longi; stipulae subulatae, 2 mm longae. *Racemi* axillares ad 1.5 cm longi, pedunculo communi ad 5 mm longo. *Calyx* 2-3 mm longus; lobi tubum aequantes. *Vexillum* apicem versus acutum, 3-4 mm longum, 2-2.2 mm latum; alae 4 mm longae, 2 mm latae; carina ad marginem ciliata, aliter glabra, c. 2.5 mm longa, 1 mm lata. *Legumen* lineare tomentosum, c. 1 cm longum.

CHINA. Kweichow: plaine de Lo-fou (steppes), 600 m, ix 1910, *Esquirol* 2210 (holo. E); *Esquirol* 3660 (E); fleur jaune, vi 1904, *Esquirol* 96 (E).

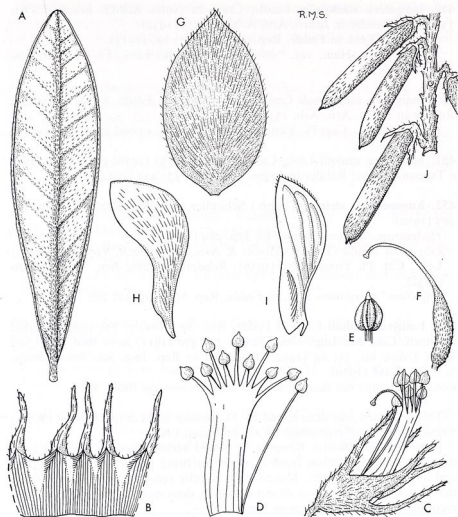


FIG. 1. *Indigofera oenotheroides* (Lévl.) Lauener: A, leaf undersurface x 2; B, calyx dissected x 16; C, calyx surrounding androecium and gynoecium (petals fallen) x 16; D, androecium opened out x 16; E, anther x 30; F, gynoecium x 16; G, H, I, standard, wing and keel from an unopened flower x 16; J, fruit x 4.

Of all the Chinese *Indigofera*, *I. linifolia* seems to be the only other species with simple leaves. The two species are immediately distinguished by the smaller leaves and globose pods of *I. linifolia*. None of the Indian simple-leaved species resembles *I. oenotheroides* and I have been unable to find an allied species.

**448. *Indigofera reticulata* Franch.;** Craib in Notes R.B.G. Edinb. 8: 70, 76 (1913); Rehder in Journ. Arn. Arb. 13: 325 (1932).

*I. craibiana* Lévl., Cat. Pl. Yunnan 155 (1916).

**449. *Indigofera stachyodes*** Lindl.; Craib in Notes R.B.G. Edinb. 8: 64, 73 (1913); Rehder in Journ. Arn. Arb. 13: 323 (1932).

*I. bodinieri* Lévl. in Fedde, Rep. Sp. Nov. 12: 190 (1913).

*I. dosua* Buch.-Ham. var. "*stachyoides*" (Lindl.) Lévl., Fl. Kouy-Tchéou 234 (1914).

**450. *Indigofera szechuensis*** Craib in Notes R.B.G. Edinb. 8: 62, 76 (1913); Rehder in Journ. Arn. Arb. 13: 325 (1932).

*I. vaniotii* Lévl., Cat. Pl. Yunnan 157 (1916) p.p. quoad spec. e Lou-pou.

**451. *Indigofera vaniotii*** Lévl., Cat. Pl. Yunnan 157 (1916) p.p. quoad spec. e Tsouan-tien-po; Rehder in Journ. Arn. Arb. 13: 324 (1932).

**452. *Kummerowia striata*** (Thunb.) Schindler in Fedde, Rep. Sp. Nov. 10: 403 (1912).

*Hedysarum striatum* Thunb., Fl. Jap. 289 (1784).

*Lespedeza striata* (Thunb.) Hook. & Arn., Bot. Beech. Voy. 262 (1838); Lévl., Cat. Pl. Yunnan 159 (1916); Rehder in Journ. Arn. Arb. 13: 329 (1932).

*Trifolium? polygonum* Lévl. in Fedde, Rep. Sp. Nov. 12: 282 (1913).

**453. *Lathyrus vaniotii*** Lévl. in Fedde, Rep. Sp. Nov. 7: 230 (1909); Nakai in Journ. Coll. Sci. Imp. Univ. Tokyo 31: 470 (1911) & in Bull. Nat. Sci. Mus. Tokyo no. 31: 64 (1952); Kitagawa in Rep. Inst. Sci. Res. Manch. 3, App. 1: 288 (1939).

KOREA. In monte des diamants, 23 vi 1906, *Faurie* 398 (holo. E).

This specimen was determined by M. Bassler as "*Lathyrus emodi* (Wall.) Fritsch?", i.e. *Lathyrus emodi* (Wall. ex Fritsch) Ali.

Regarding *L. vaniotii*, however, it would seem better to retain it as a distinct species. It differs from *L. emodi* in being glabrous in all its parts and in the simple stipules. Moreover, it is quite remote geographically from the distributional range of *L. emodi* which does not appear to have been recorded from China, Korea or Japan.

**454. *Lens culinaris*** Medicus, Vorles. Churpf. Phys.-Oken Ges. 2: 361 (1787); Hand.-Mazz., Symb. Sin. 7: 577 (1933).

*Vicia pisicarpa* Lévl., Cat. Pl. Yunnan 162 (1916).

CHINA. Yunnan: vallée de Chang-pa-tse, 2300 m, pisacée annuelle, cultivée, fl. blanches, 2300 m, *E. E. Maire* s.n.; plaine de Mo-tsou, 800 m, *E. E. Maire* s.n. (syntype *V. pisicarpa*, E).

**455. *Lespedeza capitata*** Michx., Fl. Bor.-Amer. 2: 71 (1803); Lévl., China Revue Annuelle, 30 (1916); Clewell in Rhodora 68: 370 (1966).

*L. velutina* Bricknell in Torreyia 1: 102 (Sept. 1901)—non Dunn (Feb. 1901).

*L. schindleri* Lévl., Cat. Pl. Yunnan 159 (1916)—in nota.

In his *Catalogue des Plantes du Yunnan*, Lévillé indicated that *L. schindleri* was a *nomen novum* for *L. velutina* Bricknell and later, in the *China Revue Annuelle*, he corrected them both to *L. capitata*.

Léveillé also transferred species of *Campylotropis* described by Schindler to *Lespedeza* as follows: *L. alata* (Schindler) Lévl.; *L. argentea* (Schindler) Lévl.; *L. fulva* (Schindler) Lévl.; *L. grandifolia* (Schindler) Lévl.; *L. harmsii* (Schindler) Lévl.; *L. neglecta* (Schindler) Lévl.

**456. *Lespedeza daurica*** (Laxm.) Schindler; Nakai, *Lespedeza* of Japan and Korea, 87 (1927); Rehder in Journ. Arn. Arb. 13: 328 (1932); Nakai in Bull. Nat. Sci. Mus. Tokyo no. 31: 64 (1952).

*Trifolium dauricum* Laxm. in Nov. Comm. Acad. Petrop. 15: 560, t. 30, fig. 5 (1771).

*Lespedeza fauriei* Lévl. in Fedde, Rep. Sp. Nov. 7: 230 (1909); Nakai in Journ. Coll. Sci. Imp. Univ. Tokyo 31: 467 (1911).

**457. *Lespedeza fasciculiflora*** Franch.; Rehder in Journ. Arn. Arb. 18: 207 (1937); Hand.-Mazz., Symb. Sin. 7: 572 (1933).

*L. floribunda* Bge. var. *fasciculiflora* (Franch.) Schindler in Fedde, Rep. Sp. Nov. 23: 354 (1927).

*L. monnayeri* Lévl., Cat. Pl. Yunnan 158 (1916); Rehder in Journ. Arn. Arb. 13: 328 (1932).

**458. *Lespedeza forrestii*** Schindler in Fedde, Rep. Sp. Nov. 10: 406 (1912) & in Notes R.B.G. Edinb. 8: 12, pl. 8 (1913); Rehder in Journ. Arn. Arb. 13: 328 (1932).

*L. pampaninii* Lévl. in Bull. Acad. Géog. Bot. 25: 48 (1915) & Cat. Pl. Yunnan 158 (1916).

Rehder's citation of *L. pampaninii* as being in *Fl. Kouy-Tchéou* 158 (1916) was obviously a clerical error for the *Cat. Pl. Yunnan*. He also gave *Notes R.B.G. Edinb.* as the place of publication of *L. forrestii* whereas it was first described in *Fedde's Repertorium* a year earlier.

**459. *Lespedeza juncea*** Pers., Syn. Pl. 2: 318 (1807).

var. *juncea*

*L. juncea* Pers. var. *personii* Lévl. in Bull. Acad. Géog. Bot. 27: 79 (1917).

Léveillé listed the above variety in his *Catalogue Des Plantes de Pekin et du Tché-Li*, adding in brackets "*juncea* Pers."

**460. *Maackia fauriei*** (Lévl.) Takeda; Rehder in Journ. Arn. Arb. 13: 323 (1932); Nakai in Bull. Nat. Sci. Mus. Tokyo no. 31: 65 (1952).

*Cladrastis fauriei* Lévl. in Fedde, Rep. Sp. Nov. 7: 230 (1909); Nakai in Journ. Coll. Sci. Imp. Univ. Tokyo 31: 471 (1911).

**461. *Millettia dielsiana*** Harms; Rehder in Journ. Arn. Arb. 13: 326 (1932).

*M. blinii* Lévl., Fl. Kouy-Tchéou 238 (1914).

*M. bodinieri* Lévl., op. cit. 238 (1914).

*M. fragrantissima* Lévl., op. cit. 239 (1914).

*M. dunniana* Lévl., Cat. Pl. Yunnan 159 (1916).

462. *Millettia gentiliana* Lévl., Fl. Kouy-Tchéou 239 (1914); Rehder in Journ. Arn. Arb. 13: 326 (1932).
463. *Mucuna birdwoodiana* Tutcher; Rehder in Journ. Arn. Arb. 18: 208 (1937); Pet.-Stib. in Acta Hort. Gotoburg. 13: 447 (1940).  
*M. bodinieri* Lévl. in Bull. Soc. Bot. Fr. 55: 408 (1908) & Fl. Kouy-Tchéou 240 (1914); Rehder in Journ. Arn. Arb. 13: 330 (1932).
464. *Mucuna cochinchinensis* (Lour.) A. Chev.; Rehder in Journ. Arn. Arb. 13: 331 (1932); Merrill in Trans. Amer. Phil. Soc. n.s. 24, 2: 208 (1935); How in Acta Phytotax. Sin. 3: 77 (1954).  
*Marcanthus cochinchinensis* Lour., Fl. Cochinch. 461 (1790).  
*Mucuna martinii* Lévl. & Van. in Bull. Soc. Bot. Fr. 55: 409 (1908) & Fl. Kouy-Tchéou 240 (1914).
465. *Mucuna esquirolii* Lévl. in Fedde, Rep. Sp. Nov. 7: 231 (1909) & Fl. Kouy-Tchéou 240 (1914); Rehder in Journ. Arn. Arb. 13: 331 (1932).
466. *Mucuna sempervirens* Hemsl.; Rehder in Journ. Arn. Arb. 13: 331 (1932).  
*M. mairei* Lévl. in Fedde, Rep. Sp. Nov. 13: 337 (1914) & Cat. Pl. Yunnan 160 (1916).
467. *Mucuna terrens* Lévl. in Fedde, Rep. Sp. Nov. 13: 264 (5 May 1914); Rehder in Journ. Arn. Arb. 13: 330 (1932).  
*M. corvina* Gagnep. in Not. Syst. (Paris) 3: 28 (25 May 1914); Lévl., Fl. Kouy-Tchéou 240 (1914).
468. *Nogra grahamii* (Wall. ex Benth.) Merrill in Trans. Amer. Phil. Soc. n.s. 24 (2): 201 (1935).  
*Glycine grahami* [Wall. ex] Benth. in Miq., Pl. Jungh. 233 (1852).  
*Grona grahami* (Wall. ex Benth.) Baker in Hook. f., Fl. Brit. Ind. 2: 191 (1876); Gagnep. in Lecomte, Fl. Gen. Indo-Chine 2: 406, fig. 39, viii-xiii (1916).  
*Uria esquirolii* Lévl. in Fedde, Rep. Sp. Nov. 12: 191 (1913).  
*Apios esquirolii* (Lévl.) Lévl., Fl. Kouy-Tchéou 225 (1914).
- CHINA. Kweichow, Lo-iang (Tché-pia), bleue, viii 1909, *Esquirol* 2544 (holo. *Uria esquirolii*, E); route de Ly-long, 25 viii 1912, *Esquirol* 3720 (E).
469. *Phaseolus radiatus* L., Sp. Pl. 725 (1753); Hara in Journ. Jap. Bot. 30: 140 (1955).  
*Pueraria chaneti* Lévl. in Bull. Acad. Géog. Bot. 17: no. 210-211, pl. iii (1907).
- CHINA. Hopei (Pé-Tche-Ly), Tchao-tchao, terrains en fiche, 12 viii 1905, *Chanet* 91 (holo. *Pueraria chaneti*, E).
- Piptanthus esquirolii* Lévl. Mss = *Polygala arillata* Buch.—Ham. (Polygalaceae).

**470. *Pterolobium punctatum*** Hemsl.; Rehder in Journ. Arn. Arb. 13: 322 (1932).

*Prosopis esquirolii* Lévl., Fl. Kouy-Tchéou 242 (1914).

**471. *Pueraria lobata*** (Willd.) Ohwi in Bull. Nat. Sci. Mus. Tokyo no. 18: 16 (1947); Verdcourt in Taxon 17: 170 (1968).

*Dolichos hirsutus* Thunb. in Trans. Linn. Soc. 2: 339 (1794).

*Dolichos lobatus* Willd., Spec. Pl. 3 (2): 1047 (1802).

*Pachyrrhizus thunbergianus* Sieb. & Zucc. in Abhand. Akad. Münch. 4 (3): 237 (1846).

*Pueraria thunbergiana* (Sieb. & Zucc.) Benth. in Journ. Linn. Soc. (Bot.) 9: 122 (1865); Rehder in Journ. Arn. Arb. 13: 331 (1932) & 18: 208, 276 (1937); Li, Woody Fl. Taiwan 359 (1963).

*Pueraria hirsuta* (Thunb.) Matsum. in Bot. Mag. Tokyo 16: 91 (1902)—non Kurz (1873); C. K. Schneid., Handb. Laubholz. 2: 114 (1907)—non Kurz (1873).

*Pueraria bodinieri* Lévl. & Van. in Bull. Soc. Bot. Fr. 55: 425 (1908) & Fl. Kouy-Tchéou 241 (1914).

*Pueraria koten* Lévl. in Bull. Soc. Bot. Fr. 55: 426 (1908) & in Mem. Real Acad. Cienc. Art. Barcelona ser. 3, 12: 555 (1916).

*Pueraria argyi* Lévl. & Van. in Bull. Soc. Bot. Fr. 55: 426 (1908); Lévl. in Mem. Real Acad. Cienc. Art. Barcelona ser. 3, 12: 555 (1916).

*Pueraria caerulea* Lévl. & Van. in Bull. Soc. Bot. Fr. 55: 427 (1908).

*Shuteria cavaleriei* Lévl., Cat. Pl. Yunnan 161 (1916) *nom. nud.*

No specimens are cited.

**472. *Smithia blanda*** Wall. in Wight & Arn., Prodr. 221 (1834); Hand.-Mazz., Symb. Sin. 7: 568 (1933).

*S. yunnanensis* Franch., Pl. Delavay. 170 (1890); Lévl., Cat. Pl. Yunnan 161 (1916).

*S. bodinieri* Lévl., Fl. Kouy-Tchéou 242 (1914).

CHINA. Kweichow: environs de Gan-pin, dans la mont., haies, champs, fleurs jaunes, foncé, 3 ix 1897, *Martin & Bodinier* 1821; route Pin-fa à Tin-fan, près du chemin près ruis., pas trouvée ailleurs, 5 x 1904, *Cavalerie* 1883 (syntype *S. bodinieri*, E).

**473. *Smithia ciliata*** Royle, Ill. Bot. Him., 201, t. 35, f. 2 (1835); Hand.-Mazz., Symb. Sin. 7: 568 (1933).

*S. cavaleriei* Lévl., Fl. Kouy-Tchéou 242 (1914).

CHINA. Kweichow, Tou-chan, x 1899, *Cavalerie* s.n. (holo. *S. cavaleriei*, E).

**474. *Sophora praseri*** Prain subsp. *mairei* (Pamp.) Yakovl. in Trudy Leningr. Khim.-farm. Inst. 21: 48 (1967).

*S. mairei* Pamp. in Nuov. Giorn. Bot. Ital., n.s., 17: 31 (1910) non Lévl. (1915).

*Millettia esquirolii* Lévl., Fl. Kouy-Tchéou 239 (1914); Rehder in Journ. Arn. Arb. 18: 207 (1937) pro syn. sub *Sophora* sp.

Professor Yakovlev has told me (personal communication) that although *M. esquirolii* is a synonym of *S. praseri* subsp. *mairei* in his review, he now considers it to be a peculiar variety as it differs from the type in the more densely pubescent and darker brown leaflets and petioles.

**475. *Sophora velutina* Lindl., Bot. Reg. t. 1185 (1828).**

subsp. *velutina* forma *velutina*; Yakovl. in Trudy Leningr. Khim.-farm. Inst. 21: 50 (1967).

*Indigofera mairei* Lévl. in Fedde, Rep. Sp. Nov. 12: 190 (1913) & Cat. Pl. Yunnan 161 (1916) pro syn. sub *Sophora glauca* DC.

CHINA. Yunnan: coteaux calcaires arides derrière La-Kou, 2450 m, legumineuse vivace en touffes dressées, tiges et feuilles velues, blanches endessous, fl. violettes, iii 1911, *E. E. Maire* s.n.; plaine de Kiao-Kia, 400 m, legumineuse vivace en touffes dressées, fleurs violettes, vii 1911, *E. E. Maire* s.n. (syntype *I. mairei*, E).

*S. glauca* Lesch. ex DC. is a synonym of *S. velutina* sens. lat.

**476. *Sophora velutina* Lindl. subsp. *cavaleriei* (Lévl.) Yakovl. in Trudy Leningr. Khim.-farm. Inst. 21: 50 (1967).**

*S. cavaleriei* Lévl., Fl. Kouy-Tchéou 242 (1914); Rehder in Journ. Arn. Arb. 13: 323 (1932) pro syn. sub *S. glauca* DC. var. *albescens* Rehder. *S. velutina* Lindl. var. *cavaleriei* (Lévl.) Brummitt & Gillett in Kirkia, 5: 261 (1966).

**477. *Styphnolobium japonicum* (L.) Schott in Wien. Zeitschr. 3: 844 (1830); Yakovl. in Trudy Leningr. Khim.-farm. Inst. 21: 44 (1967).**

*Sophora japonica* L., Mant. 1: 68 (1767); Lévl., Fl. Kouy-Tchéou 243 (1914) & Cat. Pl. Yunnan 161 (1916); Rehder in Journ. Arn. Arb. 13: 322 (1932).

*Ormosia esquirolii* Lévl., Fl. Kouy-Tchéou 240 (1914).

*Sophora mairei* Lévl. in Bull. Acad. Géog. Bot. 25: 48 (1915) non Pamp. (1910) & Cat. Pl. Yunnan 161 (1916).

**478. *Tephrosia purpurea* (L.) Pers., Syn. 2: 329 (1807); Ali in Biologia (Lahore) 10: 28 (1964).**

*Cracca purpurea* L., Sp. Pl. 752 (1753).

*Galega purpurea* (L.) L., Syst. Nat. ed. 10, 2: 1172 (1759).

*Glycyrrhiza mairei* Lévl., Cat. Pl. Yunnan 155 (1916).

CHINA. Yunnan, haut plateau de Ié-ma-tchouan, legumineuse vivace en touffes dressées, haut 2 m, fl. violettes, 3200 m, viii 1912, *E. E. Maire* s.n. (holo. *Glycyrrhiza mairei*, E).

**479. *Vicia amurensis* Oett. in Acta Hort. Bot. Univ. Jurjev. 6: 143, t. 2 (1906); Nakai in Journ. Jap. Bot. 18: 289 (1942); Ohwi, Fl. Jap. 687 (1953) & Fl. Jap. (Engl. ed.) 565 (1965).**

*V. vanioti* Lévl. in Fedde, Rep. Sp. Nov. 7: 230 (1909); Nakai in Journ. Coll. Sci. Imp. Univ. Tokyo 31: 469 (1911).

KOREA. Quelapaert, in petrosis littoris, x 1906, *Faurie* 385 (holo. *V. vanioti*, E).

480. *Vicia hirsuta* (L.) S. F. Gray in Nat. Arr. Brit. Pl. 2: 614 (1821); Nakai in Bot. Mag. Tokyo 48: 773 (1934) & in Bull. Nat. Sci. Mus. Tokyo no. 31: 66 (1952); Ohwi, Fl. Jap. 686 (1953).

*Ervum hirsutum* L., Sp. Pl. 738 (1753).

*Vicia taquetii* Lévl. in Fedde, Rep. Sp. Nov. 11: 31 (1912).

*V. coreana* Lévl. in Bull. Acad. Géog. Bot. 25: 50 (1915).

KOREA. Quelpaert: In agris Hongno, iv 1909, *Taquet* 2777, 2778; in littore, 8 iv 1908, *Taquet* 4621; in agris Hongno, iv 1908, *Taquet* 4622; in agris Hongno, 12 iv 1911, *Taquet* 4829 (syntype *V. taquetii*, E); in agris Hongno, vi 1909, *Taquet* 2776, 2780 (syntype *V. coreana*, E).

481. *Vicia hirticalycina* Nakai in Bot. Mag. Tokyo 28: 329 (1914) & in Bull. Nat. Sci. Mus. Tokyo no. 31: 66 (1952).

*Lathyrus fauriei* Lévl. in Fedde, Rep. Sp. Nov. 7: 230 (1909)—non *Vicia fauriei* Franch. (1886); Nakai in Journ. Coll. Sci. Imp. Univ. Tokyo 31: 470 (1911).

KOREA: in sylvis Pomasa, 21 v 1906, *Faurie* 397; in herbis montium Fusan, 18 v 1906, *Faurie* 454 (syntype *L. fauriei* Lévl., E).

482. *Vicia mairei* Lévl. in Bull. Acad. Géog. Bot. 25: 50 (1915) & Cat. Pl. Yunnan 162 (1916); Hand.-Mazz., Symb. Sin. 7: 576 (1933); Pet.-Stib. in Acta Hort. Gotoburg. 13: 440 (1940).

CHINA. Yunnan, Kiao-me-ti, vallées, haies, 3000 m, legumineuse vivace, grimpants, fl. bleues en grappes, *E. E. Maire* s.n. (holo. E).

483. *Vicia unijuga* A. Braun in Ind. Sem. Hort. Berol. 12 (1853); Nakai in Bot. Mag. Tokyo, 37: 15 (1923).

var. *unijuga*

*V. unijuga* A. Braun var. *ciliata* Lévl. in Fedde, Rep. Sp. Nov. 11: 548 (1913).

*V. unijuga* A. Braun var. *integristipula* Lévl. in Fedde, Rep. Sp. Nov. 11: 548 (1913).

*V. unijuga* A. Braun var. *ouensanensis* Lévl. in Fedde, Rep. Sp. Nov. 11: 548 (1913).

CHINA. Hopei (Tché-Ly), Pe Hoa Chan, sur le sommet de la montagne aux Cent Fleurs, vi 1888, *Bodinier* s.n. (holo. var. *ciliata*, E).

KOREA. Quelpaert: in sepibus Hallaisan, viii 1909, *Taquet* 2786; secus torrentes Yetchou, 15 vii 1910, *Taquet* 4202 (syntype var. *integristipula*, E); in dumosis montium Ouen-san, vii 1906, *Faurie* 391; in sepibus Hallaisan, 23 ix 1908, *Taquet* 701 (syntype var. *ouensanensis*, E).

484. *Vicia unijuga* A. Braun var. *unijuga* f. *minor* Nakai in Bot. Mag. Tokyo 37: 16 (1923).

*V. unijuga* var. *kaussanensis* Lévl. in Fedde, Rep. Sp. Nov. 11: 548 (1913).

KOREA. Quelpaert, in petrosis montium Kaussan, 25 x 1908, *Taquet* 706 (holo. var. *kaussanensis*, E).

I am grateful to Dr. Masami Mizushima of the Makino herbarium, Tokyo, for identifying var. *kaussanensis* with f. *minor*. He pointed out that the plants on which these taxa were based were subjected to heavy grazing and thus may not merit taxonomic rank.

## ROSACEAE

485. *Amelanchier asiatica* (Sieb. & Zucc.) Endl. ex Walp.; Nakai in Bot. Mag. Tokyo 30: 17 (1916); Rehder in Journ. Arn. Arb. 13: 308 (1932); Nakai in Bull. Nat. Sci. Mus. Tokyo no. 31: 61 (1952).

*Aronia asiatica* Sieb. & Zucc., Fl. Jap. 1: 87, t. 42 (1839).

*Pirus taqueti* Lévl. in Fedde, Rep. Sp. Nov. 7: 199 (1909); Nakai in Journ. Coll. Sci. Imp. Univ. Tokyo 31: 474 (1911); Card. in Bull. Mus. d'Hist. Nat. Paris 24: 68 (1918).

*Pirus vanioti* Lévl. in Fedde, Rep. Sp. Nov. 7: 200 (1909); Nakai in Journ. Coll. Sci. Imp. Univ. Tokyo 31: 474 (1911).

486. *Aruncus dioicus* (Walt.) Fern. var. *aethusifolius* (Lévl.) Hara in Journ. Jap. Bot. 30: 69 (1955).

*Astilbe thunbergii* Miq. var. *aethusifolius* Lévl. in Fedde, Rep. Sp. Nov. 8: 283 (1910); Nakai in Journ. Coll. Sci. Imp. Univ. Tokyo 31: 484 (1911).

*Aruncus aethusifolius* (Lévl.) Nakai in Bot. Mag. Tokyo 26: 325 (1912) & Bull. Nat. Sci. Mus. Tokyo, no. 31: 56 (1952).

KOREA. Quelpaert in petrosis secus torrentes, x 1907, *Taquet* 148 (lecto. E).

Léveillé also cited *Faurie* 368 and *Taquet* 797 as syntypes but although Nakai cited other collections under *Aruncus aethusifolius*, of Léveillé's three syntypes he only cited *Taquet* 148 as lectotype.

*Taquet* 148 and *Faurie* 368 are in fruit whilst *Taquet* 797 is in flower.

*Cotoneaster coreanus* Lévl. = *Symplocos paniculata* (Thunb.) Miq. (Styracaceae).

487. *Cotoneaster franchetii* Boiss.; Rehder in Journ. Arn. Arb. 13: 302 (1932).

*C. mairei* Lévl. in Bull. Acad. Géog. Bot. 25: 45 (1915) & Cat. Pl. Yunnan 229 (1917).

*C. mairei* Lévl. var. *albiflora* Lévl. in Bull. Acad. Géog. Bot. 25: 45 (1915).

488. *Cotoneaster glaucophylla* Franch.; Rehder in Journ. Arn. Arb. 13: 302 (1932).

*Photinia rosifoliolata* Lévl. in Bull. Acad. Géog. Bot. 24: 142 (1914) & Fl. Kouy-Tchéou 349 (1915).

489. *Cotoneaster horizontalis* Decne.; Rehder in Journ. Arn. Arb. 13: 302 (1932).

*Diospyros chaffanjoni* Lévl. in Fedde, Rep. Sp. Nov. 12: 101 (1913) & Fl. Kouy-Tchéou 145 (1914).

*Crataegus academiae* (Blin ex Lévl.) Lévl. = *Xylosma racemosum* (Sieb. & Zucc.) Miq. (Bixaceae)

*Crataegus biloba* Lévl. = *Symplocos paniculata* (Thunb.) Miq. f. *biloba* (Lévl.) Rehder (Styracaceae)

490. *Crataegus cuneata* Sieb. & Zucc.; Rehder in Journ. Arn. Arb. 13: 303 (1932).

*C. argyi* Lévl. & Van. in Bull. Soc. Bot. Fr. 55: 57 (1908); Lévl. in Mem. Real Acad. Ci. Art. Barcelona ser. 3, 12: 559 (1916).

*C. stephanostyla* Lévl. & Van. in Bull. Soc. Bot. Fr. 55: 57 (1908); Lévl. in Mem. Real Acad. Ci. Art. Barcelona ser. 3, 12: 559 (1916).

*C. chantcha* Lévl. in Fedde, Rep. Sp. Nov. 10: 377 (1912) & Fl. Kouy-Tchéou 346 (1915).

*Crataegus lyi* Lévl. nomen = *Symplocos paniculata* (Thunb.) Miq. (Styracaceae)

491. *Crataegus pinnatifida* Bunge; Rehder in Journ. Arn. Arb. 13: 303 (1932); Kitagawa in Rep. Inst. Sci. Res. Manch. 3, App. 1: 259 (1939).

*C. coreanus* Lévl. in Fedde, Rep. Sp. Nov. 7: 197 (1909); Nakai in Journ. Coll. Sci. Imp. Univ. Tokyo 31: 474 (1911).

*Crataegus pomasae* Lévl. = *Deutzia glabrata* Kom. (Saxifragaceae)

492. *Crataegus scabrifolia* (Franch.) Rehder; Rehder in Journ. Arn. Arb. 13: 302 (1932).

*C. bodinieri* Lévl. in Bull. Soc. Bot. Fr. 55: 57 (1908).

493. *Docynia delavayi* (Franch.) Schneid.; Rehder in Journ. Arn. Arb. 13: 309 (1932); Vidal in Adansonia n.s. 6: 570 (1966).

*Cotoneaster bodinieri* Lévl. in Bull. Acad. Géog. Bot. 25: 44 (1915) & Cat. Pl. Yunnan 229 (1917).

494. *Docynia indica* (Wall.) Decne. in Nouv. Arch. Mus. Paris 10: 131, pl. 14 (1874); Vidal in Adansonia n.s. 6: 569 (1966) & in Fl. Cambodge, Laos & Vietnam no. 6: 104 (1968).

*Pyrus indica* Wall., Pl. As. rar. 2: 56, t. 173 (1831).

*Pyrus (Cydonia) rufifolia* Lévl. in Bull. Acad. Géog. Bot. 25: 46 (1915).

*Docynia rufifolia* (Lévl.) Rehder in Journ. Arn. Arb. 13: 310 (1932); Hand.-Mazz., Symb. Sin. 7: 462 (1933).

495. *Eriobotrya cavaleriei* (Lévl.) Rehder in Journ. Arn. Arb. 13: 307 (1932) & 17: 334 (1936); Hand.-Mazz., Symb. Sin. 7: 477 (1933); Vidal in Adansonia n.s. 5: 560 (1965) & in Fl. Cambodge, Laos & Vietnam no. 6: 72 (1968).

*Hiptage cavaleriei* Lévl. in Fedde, Rep. Sp. Nov. 10: 372 (1912) & Fl. Kouy-Tchéou 271 (1915).

496. *Eriobotrya seguinii* (Lévl.) Card. ex Guillaum.; Rehder in Journ. Arn. Arb. 13: 308 (1932); Vidal in Adansonia n.s. 5: 574 (1965) & in Fl. Cambodge, Laos & Vietnam no. 6: 34 (1968) in nota.

*Symplocos seguini* Lévl. in Fedde, Rep. Sp. Nov. 10: 431 (1912).

*Eriobotrya pseudoraphiolepis* Card. in Not. Syst. (Paris) 3: 371 (1918).

Vidal (1968) observed that *Eriobotrya seguinii* and *Sorbus ligustrifolia* (Chev.) J. E. Vidal greatly resemble each other but the absence of fruit in Lévillé's type specimen prevents a decisive comparison.

**497. *Fragaria nilgerrensis*** Schlechtend. ex Gay var. ***mairei*** (Lévl.) Hand.-Mazz., Symb. Sin. 7: 507 (1933) & in Acta Hort. Gotoburg. 13: 333 (1939). *F. mairei* Lévl. in Fedde, Rep. Sp. Nov. 11: 300 (1912) & Cat. Pl. Yunnan 230 (1917).

CHINA. Yunnan, cà et là à Tong-tchouan, 2500 m, collines et tertres, fragaria vivace, fl. et fruits blancs, parfumés, iv 1911, *E. E. Maire* s.n. (holo. *F. mairei*, E).

Cardot (*Bull. Mus. d'Hist. Nat. Paris* 22: 397, 1916, & *Not. Syst. (Paris)* 3: 228, 1916) placed *F. mairei* in *F. nilgerrensis*, and Dr. G. Staudt of the Max Planck Institute determined *F. mairei* as *F. nilgerrensis*.

**498. *Geum aleppicum*** Jacq. var. ***bipinnatum*** (Batal.) Hand.-Mazz., Symb. Sin. 7: 523 (1933).

*G. strictum* Ait. var. *bipinnata* Batal. in Acta Hort. Petrop. 13: 93 (1893); Bolle in Fedde, Rep. Beih. 72: 57 (1933).

*G. ranunculoides* Lévl. in Bull. Acad. Géog. Bot. 25: 46 (1915) non. Ser. 1825.

*G. potaninii* Juz. in Fl. URSS 10: 255 (1941); Gajewski in Monogr. Bot. 4: 64 (1957).

CHINA. Yunnan, Tong-tchouan, 2500 m, pâtures des collines, agrimonium annuel, fl. jaunes, vi 1912, *E. E. Maire* s.n. (holo. *G. ranunculoides*, E).

Gajewski, in his "Cytogenetic Study of the Genus *Geum*" discusses *G. aleppicum* (*op. cit.* 60-65) and refers to its North American and Far Eastern variations, but considers that the species requires "special genetic and taxonomic investigation". Although he questions the value of the various infra-specific taxa of *G. aleppicum* he does not formally reduce var. *bipinnatum* (*G. potaninii*) to synonymy. Therefore, I prefer at the moment to retain varietal rank and maintain the association with *G. aleppicum*.

Specimens in the Edinburgh herbarium have been named *G. aleppicum* var. *bipinnatum* (Batal.) Bolle, but in his paper on *Geum* and allied genera, Bolle discussed *G. strictum* var. *bipinnata* Batal. under *G. aleppicum* but did not, in fact, make any formal transfer.

*G. ranunculoides* Ser. is a synonym of *G. aleppicum* s. str.

**499. *Geum fauriei*** Lévl. in Fedde, Rep. Sp. Nov. 8: 281 (1910); Miyabe & Miyake, Fl. Saghal. 131 (1915); Card. in Bull. Mus. d'Hist. Nat. Paris 22: 396 (1916) & in Not. Syst. (Paris) 3: 225 (1916); Bolle in Fedde, Rep. Beih. 72: 64 (1933); Juz. in Fl. URSS 10: 256 (1941); Gajewski in Monogr. Bot. 4: 60, f. 23 (1957).

*G. sachalinense* Lévl. in Fedde, Rep. Sp. Nov. 8: 281 (1910).

*G. japonicum* Thunb. var. *sachalinensis* Koidz. in Bot. Mag. Tokyo 29: 157 (1915).

*G. japonicum* Thunb. var. *fauriei* (Lévl.) Kudo in Rep. Veg. N. Saghal. 165 (1924).

*G. sachalinense* (Koidz.) Makino in Journ. Jap. Bot. 3: 28 (1926)—non Lévl.

*G. aleppicum* Jacq. var. *sachalinense* (Koidz.) Ohwi in Fl. Jap. 636 (1953) & Bull. Nat. Sci. Mus. Tokyo no. 33: 75 (1953).

*G. macrophyllum* Willd. var. *sachalinense* (Koidz.) Hara in Journ. Fac. Sci. Univ. Tokyo (Bot.) 6: 69 (1952) & Ohwi, Fl. Jap. (Engl. ed.) 530 (1965).

SACHALIN: in silvis Kimonai, 20 ix 1908, *Faurie* 586 (holo. *G. fauriei*, E); in herbis Vladimirof, vi 1908, *Faurie* 583 (holo. *G. sachalinense* Lévl., E).

**500. *Malus sieboldii*** (Regel) Rehder; Rehder in Journ. Arn. Arb. 13: 308 (1932); Yu & Yen in Acta Phytotax. Sin. 5: 109, pl. 12 (1956).

*Pyrus sieboldii* Regel in Ind. Sem. Hort. Petrop. 51 (1858); Card. in Bull. Mus. d'Hist. Nat. Paris 24: 69 (1918).

*Crataegus cavaleriei* Lévl. & Van. in Bull. Soc. Bot. Fr. 55: 58 (1908) & Fl. Kouy-Tchéou 346 (1915) excl. *Cavalerie* 1303 quoad = *Photinia parvifolia*.

*Pirus subcrataegifolia* Lévl. in Fedde, Rep. Sp. Nov. 7: 199 (1909); Nakai in Journ. Coll. Sci. Imp. Univ. Tokyo 31: 474 (1911).

*Photinia rubro-lutea* Lévl. in Fedde, Rep. Sp. Nov. 9: 460 (1911) & Fl. Kouy-Tchéou 349 (1915).

*Crataegus taquetii* Lévl. in Fedde, Rep. Sp. Nov. 10: 377 (1912).

*Pirus esquirolii* Lévl. in Fedde, Rep. Sp. Nov. 12: 189 (1913) & Fl. Kouy-Tchéou 350 (1915).

*Malus toringo* Sieb., Cat. Rais. 1: 4 (1856) nomen; De Vries in Tuinbouwfl. Nederl. 3: 368, t. 17 (1856), sine descr. p.p. quoad ram. fruct.; Nakai, Fl. Sylv. Kor. 6: 35, t. 10 (1916), in Bot. Mag. Tokyo 30: 31 (1916) & in Bull. Nat. Sci. Mus. Tokyo no. 31: 61 (1952).

*Mespilus esquirolii* Lévl. = *Actinidia eriantha* Benth. (Theaceae)

**501. *Neillia sinensis*** Oliv. var. *caudata* Rehder in Sarg., Pl. Wils. 1: 436 (1913).

*N. glandulocalyx* Lévl., Fl. Kouy-Tchéou 348 (1915); Rehder in Journ. Arn. Arb. 17: 334 (1936) pro syn. sub *N. sinensis*.

*N. sinensis* Oliv. forma *glanduligera* Hemsl. ex Rehder in Journ. Arn. Arb. 13: 299 (1932).

**502. *Photinia amphidoxa*** (Schneid.) Rehder & Wils.; Rehder in Journ. Arn. Arb. 13: 306 (1932).

*Stranvaesia amphidoxa* Schneid. in Bull. Herb. Boiss. ser. 2, 6: 319 (1906).

*Pirus feddei* Lévl. in Fedde, Rep. Sp. Nov. 12: 189 (1913) & Fl. Kouy-Tchéou 350 (1915).

**503. *Photinia beauverdiana*** Schneid.; Card. in Bull. Mus. d'Hist. Nat. Paris 26: 570 (1920); Rehder in Journ. Arn. Arb. 13: 305 (1932); Yu & Kuan in Acta Phytotax. Sin. 8: 226 (1963); Vidal in Fl. Cambodge, Laos & Vietnam no. 6: 42 (1968).

*P. cavaleriei* Lévl. in Fedde, Rep. Sp. Nov. 4: 334 (1907) & Fl. Kouy-Tchéou 50 (1915)—non 1912.

- 504. *Photinia blinii* (Lévl.) Rehder** in Journ. Arn. Arb. 17: 335 (1936); Yu & Kuan in Acta Phytotax. Sin. 8: 226 (1963).

*Cotoneaster blinii* Lévl., Cat. Pl. Yunnan 229 (1917); Rehder in Journ. Arn. Arb. 13: 302 (1932) in nota.

- 505. *Photinia bodinieri* Lévl.** in Fedde, Rep. Sp. Nov. 4: 334 (1907); Card. in Bull. Mus. d'Hist. Nat. Paris 25: 402 (1919); Rehder in Journ. Arn. Arb. 13: 307 (1932); Yu & Kuan in Acta Phytotax. Sin. 8: 225 (1963).

*Hiptage esquirolii* Lévl. in Fedde, Rep. Sp. Nov. 10: 372 (1912) & Fl. Kouy-Tchéou 271 (1915).

*Photinia serrulata* auct. non Lindl.: Lévl., Fl. Kouy-Tchéou 349 (1915) quoad synonym. et specim. cit.

- 506. *Photinia crassifolia* Lévl.**, Fl. Kouy-Tchéou 348, 349 (1915) in clavi; Card. in Bull. Mus. d'Hist. Nat. Paris 25: 398 (1919); Rehder in Journ. Arn. Arb. 13: 306 (1932); Hand.-Mazz., Symb. Sin. 7: 478 (1933); Yu & Kuan in Acta Phytotax. Sin. 8: 226 (1963).

*P. cavaleriei* Lévl. in Fedde, Rep. Sp. Nov. 11: 66 (1912)—non 1907.

- 507. *Photinia esquirolii* (Lévl.) Rehder** in Journ. Arn. Arb. 17: 334 (1936).

*Cotoneaster esquirolii* Lévl., Fl. Kouy-Tchéou 345 (1915); Rehder in Journ. Arn. Arb. 13: 302 (1932) in nota.

- 508. *Photinia lasiogyna* (Franch.) Schneid.** in Ill. Handb. Laubholzk. 1: 707 (1906); Vidal in Adansonia n.s. 5: 576 (1965).

*Eriobotrya lasiogyna* Franch., Pl. Delavay. 225 (1890).

*Photinia mairei* Lévl. in Le Monde des Pl. ser. 2, 18: 28 (1916) & Cat. Pl. Yunnan 230 (1917); Rehder in Journ. Arn. Arb. 13: 307 (1932).

- 509. *Photinia parvifolia* (Pritz.) Schneid.**; Rehder in Journ. Arn. Arb. 13: 305 (1932).

*Pourthiaea parvifolia* Pritz. in Bot. Jahrb. 29: 389 (1900).

*Viburnum komarovii* Lévl. & Van. in Fedde, Rep. Sp. Nov. 9: 78 (1910); Lévl., Fl. Kouy-Tchéou 66 (1914).

*Crataegus cavaleriei* auct. non Lévl. & Van. (1908): Lévl., Fl. Kouy-Tchéou 346 (1915) quoad *Cavalerie* 1303.

- 510. *Photinia serrulata* Lindl.**; Rehder in Journ. Arn. Arb. 13: 306 (1932); Vidal in Adansonia n.s. 5: 225 (1965).

*Stranvaesia argyi* Lévl. in Mem. Acad. Ci. Art. Barcelona, ser. 3, 12: 560 (1916) nom. nud. pro syn. sub *S. calleryana* Decne.

- 511. *Photinia villosa* (Thunb.) DC.**; Rehder in Journ. Arn. Arb. 13: 305 (1932), excl. syn. *Pirus sinensis* Lindl. var. *maximowicziana* Lévl.

*Crataegus villosa* Thunb., Fl. Jap. 204 (1784).

*Pirus brunnea* Lévl. in Fedde, Rep. Sp. Nov. 10: 377 (1912)—non Lévl. 1916.

*Pirus spectabilis* Ait. var. *albescens* Lévl. in Fedde, Rep. Sp. Nov. 10: 377 (1912).

*Pourthiaea villosa* (Thunb.) Decne. var. *brunnea* (Lévl.) Nakai in Rep. Veget. Isl. Quelpaert 52 (1914), in Bot. Mag. Tokyo 30: 25 (1916) & in Fl. Sylv. Kor. 6: 29, t. 7 (1916).

*Pourthiaea villosa* (Thunb.) Decne. var. *typica* (Schneid.) Nakai in Bot. Mag. Tokyo 30: 24 (1916) & in Fl. Sylv. Kor. 6: 28 (1916).

*Pourthiaea brunnea* (Lévl.) Nakai in Journ. Jap. Bot. 18: 617 (1942) & in Bull. Nat. Sci. Mus. Tokyo no. 31: 62 (1952).

*Pourthiaea laevis* (Thunb.) Koidz. var. *albescens* (Lévl.) Nakai in Bull. Nat. Sci. Mus. Tokyo no. 31: 62 (1952) p.p.

In *Tokyo Botanical Magazine*, Nakai (1916) indicated *Pourthiaea villosa* var. *brunnea* as a comb. nov. but in *Flora Sylvatica Koreana* and *Journal Japanese Botany* (1942) he cited the Report on Quelpaert as the first place of publication.

**512. *Photinia villosa*** (Thunb.) DC. var. *coreana* (Decne.) Rehder in Journ. Arn. Arb. 2: 45 (1920) & 13: 305 (1932).

*Pourthiaea coreana* Decne. in Nouv. Arch. Mus. Paris 10: 148 (1874).

*Pirus mokpoensis* Lévl. in Fedde, Rep. Sp. Nov. 7: 200 (1909).

*Pourthiaea villosa* (Thunb.) Decne. var. *coreana* (Decne.) Nakai in Bot. Mag. Tokyo 30: 25 (1916) & Fl. Sylv. Kor. 6: 29 (1916).

**513. *Photinia villosa*** (Thunb.) DC. f. *maximowicziana* (Lévl.) Rehder in Journ. Arn. Arb. 20: 95 (1939).

*Pirus sinensis* Lindl. var. *maximowicziana* Lévl. in Fedde, Rep. Sp. Nov. 10: 377 (1912).

The name *Pyrus maximowicziana* (Lévl.) Nakai (Fl. Sylv. Kor. 6: 50, t. 20, 1916) although based on Léveillé's variety, describes and figures a different taxon. Nakai's plant requires a new name as the only other synonym is *P. ussuriensis* Nakai (1914)—non *P. ussuriensis* Maxim. (1857). *P. villosa* f. *maximowicziana* is in cultivation and is quite distinct from the typical species.

*Pirus bodinieri* Lévl. = *Decaspermum fruticosum* J. R. & G. Forst. (Myrtaceae)

*Pirus brunnea* Lévl. (1916) nomen—non (1912) = *Lindera glauca* (Sieb. & Zucc.) Bl. (Lauraceae).

**514. *Potentilla ambigua*** Camb. in Jacq., Voy. Bot. 4: 51, pl. 62 (1844); H. R. Fletcher in Notes R.B.G. Edinb. 20: 207 (1950).

*P. dolichopogon* Lévl. in Bull. Acad. Géog. Bot. 25: 44 (1915) & Cat. Pl. Yunnan 232 (1917).

CHINA. Yunnan, rochers du h. plateau Ié-ma-tchouan, 3200 m, sous arbrisseau, fl. jaunes, vii 1912, E. E. Maire s.n. (holo. *P. dolichopogon*, E).

**515. *Potentilla arbuscula*** D. Don, Prodr. Fl. Nep. 256 (1825). var. *arbuscula*. H. R. Fletcher in Notes R.B.G. Edinb. 20: 207 (1950).

*P. lespedeza* Lévl., China Revue Annuelle, 5, 30 & pl. (1916) & in Le Monde des Pl. ser. 2, 18: 54 (1917).

CHINA. Yunnan, pâtures des mont. à Lan-gni-tsin, 3000 m, arbuste buissonnant, haut 1 m, tout velu, feuell. grises endessous, fl. pisacées jaunes, xi 1912, E. E. Maire s.n. (holo. *P. lespedeza*, E).

The *Index Kewensis*, Suppl. 13 (1956-60) gives *Le Monde des Plantes* as the place of description of *P. lespedeza*, but this is a shortened version of the original description which is in *China Revue Annuelle*.

**516. *Potentilla centigrana*** Maxim. in Bull. Acad. Sci. St. Pétersb. 18: 163 (1874); Card. in Bull. Mus. d'Hist. Nat. Paris 22: 405 (1916); Ohwi, Fl. Jap. (Engl. ed.) 525 (1965).

*P. centigrana* Maxim. var. *japonica* Maxim. in Bull. Acad. Sci. St. Pétersb. 18: 164 (1874); Nakai in Journ. Jap. Bot. 18: 288 (1942) & in Bull. Nat. Sci. Mus. Tokyo no. 31: 58 (1952).

*P. centigrana* Maxim. var. *mandshurica* Maxim. in Bull. Acad. Sci. St. Pétersb. 18: 164 (1874); Nakai in Journ. Jap. Bot. 18: 288 (1942) & in Bull. Nat. Sci. Mus. Tokyo no. 31: 58 (1952).

*P. rosulifera* Lévl. in Fedde, Rep. Sp. Nov. 7: 198 (1909); Nakai in Journ. Coll. Sci. Imp. Univ. Tokyo 31: 479 (1911).

*P. longepetiolata* Lévl. in Fedde, Rep. Sp. Nov. 7: 199 (1909); Nakai in Journ. Coll. Sci. Imp. Univ. Tokyo 31: 479 (1911).

KOREA: in humidis Naipiang, vii 1901, *Faurie* 105 (holo. *P. rosulifera*, E); in herbis Syou-Ouen, 31 v 1906, *Faurie* 345 (holo. *P. longepetiolata*, E).

**517. *Potentilla cryptotaeniae*** Maxim. in Bull. Acad. Sci. St. Pétersb. 18: 162 (1874); Nakai in Journ. Jap. Bot. 18: 288 (1942) & in Bull. Nat. Sci. Mus. Tokyo no. 31: 58 (1952).

*P. aegopodiifolia* Lévl. in Fedde, Rep. Sp. Nov. 7: 198 (1909); Nakai in Journ. Coll. Sci. Imp. Univ. Tokyo 31: 479 (1911); Card. in Bull. Mus. d'Hist. Nat. Paris 22: 405 (1916) quoad *Faurie* 103 & *Faurie* 108.

KOREA. In herbis humidis secus aquas Naipiang, vii 1901, *Faurie* 108 (holo. *P. aegopodiifolia*, E).

Cardot also cites *Komarov* 894 under *P. aegopodiifolia* but I have not seen this specimen.

**518. *Potentilla kleiniana*** Wight & Arn., Prodr. Fl. Penins. Or. 300 (1834); Hand.-Mazz., Symb. Sin. 7: 516 (1933).

*P. bodinieri* Lévl. in Bull. Soc. Bot. Fr. 55: 56 (1908).

CHINA. Yunnan, environs de Yunnan-sen, bord des champs, herbages, tiges parfois radicantes, mais non toutes, iii 1897, *Ducloux* s.n. (holo. *P. bodinieri*, E).

**519. *Potentilla siemersiana*** Lehm., Sem. Hort. bot. Hamb. 1820 coll.: 8 (1821); Vidal in Fl. Cambodge, Laos & Vietnam no. 6: 118 (1968).

*P. fulgens* [Wall. ex] Lehm., Rev. Potent. 54 (1856); Hook. f. in Fl. Brit. Ind. 2: 349 (1878); Hand.-Mazz., Symb. Sin. 7: 510 (1933); H. R. Fletcher in Notes R.B.G. Edinb. 20: 210 (1950).

*P. martini* Lévl. in Bull. Soc. Bot. Fr. 55: 57 (1908).

CHINA. Kweichow, environs de Gan-pin, dans les herbes de la mont., à Yu-pan, fleurs jaunes, 29 vii 1898, *Martin & Bodinier* 2500 (holo. *P. martini*, E).

**520. *Potentilla stenophylla*** (Franch.) Diels in Notes R.B.G. Edinb. 5: 271 (1912); Hand.-Mazz., Symb. Sin. 7: 518 (1933); H. R. Fletcher in Notes R.B.G. Edinb. 20: 215 (1950).

*P. peduncularis* Don var. *stenophylla* Franch., Pl. Delavay. 214 (1890).

*P. millefolium* Lévl. in Bull. Acad. Géog. Bot. 24: 281 (1914).

CHINA. Yunnan, sommet du Io-chan, 3400 m, *potentilla* vivace, feuill. velues et blanches endessous, fl. jaunes, vi 1913, *E. E. Maire* s.n. (holo. *P. millefolium*, E).

**521. *Potentilla supina*** L. subsp. *paradoxa* (Nutt. ex Torr. & Gray) Sojak in Folia Geobot. & Phytotax. (Praha) 4: 207 (1969).

*P. paradoxa* [Nutt. ex] Torr. & Gray, Fl. N. Amer. 1: 437 (1840); Nakai in Bull. Nat. Sci. Mus. Tokyo, no. 31: 58 (1952).

*P. supina* L. var. *paradoxa* (Nutt. ex Torr. & Gray) Th. Wolf in Bibl. Bot. 71: 393 (1908).

*P. fauriei* Lévl. in Fedde, Rep. Sp. Nov. 7: 198 (1909); Nakai in Journ. Coll. Sci. Imp. Univ. Tokyo, 31: 479 (1911); Card. in Bull. Mus. d'Hist. Nat. Paris, 22: 404 (1916) pro syn. sub *P. supina* L.; Nakai in Journ. Jap. Bot. 18: 288 (1942) pro syn. sub *P. supina* L.

KOREA. In herbis humidis montis des Diamants, 24 vi 1906, *Faurie* 350 (holo. *P. fauriei*, E).

**522. *Prunus conradinae*** Koehne in Sarg., Pl. Wils. 1: 211 (1912).

*P. glabra* (Pamp.) Koehne var. *occultipes* Koehne in Fedde, Rep. Sp. Nov. 11: 525 (1913).

*P. occultipes* (Koehne) Lévl., Cat. Pl. Yunnan 234 (1917).

CHINA. Yunnan, plaine de Tong-tchouan, 2500 m, *cerasus* cultivé et spontané, grande arbuste, fl. blanches, fruits roses, *E. E. Maire* s.n. (holo. *P. glabra* var. *occultipes*, E).

**523. *Prunus discadenia*** Koehne; Rehder in Journ. Arn. Arb. 13: 319 (1932).

*P. myrtacea* Lévl. in Bull. Acad. Géog. Bot. 25: 45 (1915) & Cat. Pl. Yunnan 234 (1917).

**524. *Prunus japonica*** Thunb. var. *nakaii* (Lévl.) Rehder in Journ. Arn. Arb. 3: 19 (1921) & 13: 319 (1932).

*P. nakaii* Lévl. in Fedde, Rep. Sp. Nov. 7: 198 (1909); Nakai in Journ. Coll. Sci. Imp. Univ. Tokyo 31: 484 (1911), in Fl. Sylv. Kor. 5: 36. t. 22 (1916), in Journ. Jap. Bot. 15: 678 (1939) & in Bull. Nat. Sci. Mus. Tokyo no. 31: 60 (1952); Koehne in Sarg., Pl. Wils. 1: 267 (1912); Kitagawa in Rep. Inst. Sci. Res. Manch. 3: App. I, 270 (1939).

*Prunus lyi* Blin ex Lévl. nomen = *Symplocos paniculata* (Thunb.) Miq. (Styracaceae).

**525. *Prunus maackii* Rupr. var. *diamantina* (Lévl.) Koehne; Rehder in Journ. Arn. Arb. 13: 321 (1932); Nakai in Fl. Sylv. Kor. 5: 17 (1916) & in Bull. Nat. Sci. Mus. Tokyo no. 31: 60 (1952) pro syn. sub *P. maackii*.**

*Prunus (Padus) diamantinus* Lévl. in Fedde, Rep. Sp. Nov. 7: 198 (1909); Nakai in Journ. Coll. Sci. Imp. Univ. Tokyo 31: 483 (1911).

*Prunus mairei* Lévl. = *Symplocos paniculata* (Thunb.) Miq. (Styracaceae).

**526. *Prunus mume* Sieb. & Zucc. var. *microcarpa* Makino in Bot. Mag. Tokyo 22: 71 (1908); Koidz. in Journ. Coll. Sci. Imp. Univ. Tokyo 34: Art. 2, 250 (1913).**

*P. makinoensis* Lévl., Cat. Pl. Yunnan 233 (1917) in adnot.

Léveillé's *P. makinoensis* was intended as a *nomen novum* for *P. microcarpa* Makino non Meyer (1831). However, Makino's variety was never given specific rank so the *nomen novum* was not required.

In Léveillé's footnote, *P. microcarpa* is spelt "*P. nigocarpa*".

**527. *Prunus padus* L.; Rehder in Journ. Arn. Arb. 13: 320 (1932).**

*P. fauriei* Lévl. in Fedde, Rep. Sp. Nov. 7: 198 (1909); Nakai in Journ. Coll. Sci. Imp. Univ. Tokyo 31: 483 (1911); in Bull. Nat. Sci. Mus. Tokyo no. 31: 60 (1952) pro syn. sub "*P. buergeri*" Miq.

**528. *Prunus padus* L. var. *seoulensis* (Lévl.) Nakai; Rehder in Journ. Arn. Arb. 13: 320 (1932).**

*P. seoulensis* Lévl. in Fedde, Rep. Sp. Nov. 7: 198 (1909); Nakai in Journ. Coll. Sci. Imp. Univ. Tokyo 31: 483 (1911) pro syn. sub *P. padus*.

T. T. Yu determined *P. seoulensis* as *P. padus* var. *laxa* Rehder from North Korea. If these two varieties are synonymous, var. *laxa* is then the earlier name.

**529. *Prunus persica* (L.) Batsch; Rehder in Journ. Arn. Arb. 13: 319 (1932); Vidal in Fl. Cambodge, Laos & Vietnam no. 6: 165 (1968).**

*P. persica* (L.) Batsch var. *lasiocalyx* Lévl. & Van. in Bull. Soc. Bot. Fr. 55: 58 (1908) & in Mem. Real Acad. Ci. Art. Barcelona ser. 3, 12: 560 (1916).

*P. daemonifuga* Lévl. & Van. in Bull. Soc. Bot. Fr. 55: 58 (1908).

**530. *Prunus persica* (L.) Batsch var. *longistyla* Lévl. in Bull. Soc. Bot. Fr. 55: 58 (1908) & in Mem. Real Acad. Ci. Art. Barcelona, ser. 3, 12: 560 (1916).**

**531. *Prunus serrula* Franch., Pl. Delav. 196 (1890).**

*P. odontocalyx* Lévl. in Bull. Acad. Géog. Bot. 25: 45 (1915) & Cat. Pl. Yunnan 234 (1917); Rehder in Journ. Arn. Arb. 13: 320 (1932).

*Prunus taquetii* Lévl. & Van. = *Rhamnus taquetii* (Lévl.) Lévl. (Rhamnaceae).

532. *Prunus (Padus) vaniotii* Lévl. in Bull. Acad. Géog. Bot. 25: 45 (1915) & Cat. Pl. Yunnan 234 (1917); Rehder in Journ. Arn. Arb. 13: 320 (1932) pro syn. sub *P. pubigera* (Schneid.) Koehne & 26: 475 (1945). Hsu in Acta Phytotax. Sin. 11: 192 (1966).

*P. pubigera* (Schneid.) Koehne var. *prattii* Koehne in Sarg., Pl. Wils. 1: 68 (1911).

*P. pubigera* (Schneid.) Koehne (1910) is antedated by *P. pubigera* Steudel (1841) and is a synonym of *P. vaniotii* var. *potaninii* (Koehne) Rehder.

533. *Prunus wilsonii* (Diels ex Schneid.) Koehne var. *leiobotrys* Koehne in Sarg., Pl. Wils. 1: 63 (1911); Lévl., Fl. Kouy-Tchéou 352 (1915); Rehder in Journ. Arn. Arb. 17: 340 (1936).

*P. dunniana* Lévl. in Fedde, Rep. Sp. Nov. 10: 377 (1912).

534. *Pyrus calleryana* Decne.; Rehder in Journ. Arn. Arb. 13: 310 (1932).

*P. mairei* Lévl. in Fedde, Rep. Sp. Nov. 12: 189 (1913) & Cat. Pl. Yunnan 231 (1917).

535. *Rosa acicularis* Lindl.; Rehder in Journ. Arn. Arb. 13: 317 (1932) & 18: 257 (1937); Juz. in Komarov, Fl. U.R.S.S. 10: 449 (1941).

*R. fauriei* Lévl. in Fedde, Rep. Sp. Nov. 7: 199 (1909) p.p. quoad *Faurie* 99; Card. in Bull. Mus. d'hist. Nat. Paris, 23: 126 (1917) pro syn. sub *R. cinnamomea* L. var. *dahurica* (Pall.) Regel.

*R. taqueti* Lévl. in Fedde, Rep. Sp. Nov. 7: 199 (1909) p.p. excl. spec. fruct.

*R. granulosa* Keller in Bot. Jahrb. 44: 46 (1910). Based on *Faurie* 99.

*R. korsakoviensis* Lévl. in Fedde, Rep. Sp. Nov. 10: 378 (1912).

536. *Rosa adenoclada* Lévl. in Fedde, Rep. Sp. Nov. 10: 431 (1912) & Fl. Kouy-Tchéou 353 (1915); Rehder in Journ. Arn. Arb. 13: 314 (1932) & 17: 339 (1936).

*R. gentiliana* Lévl. var. *adenoclada* (Lévl.) Lévl., Cat. Pl. Yunnan 234 (1917) nomen.

537. *Rosa banksiae* Ait.; Rehder in Journ. Arn. Arb. 13: 315 (1932).

*R. banksiae* Ait. f. *aculeata* Focke ap. Lévl., Cat. Pl. Yunnan 234 (1917)—nomen. *R. banksiae* Ait. f. *albiflora* Lévl., Cat. Pl. Yunnan 234 (1917)—nomen. *R. banksiae* Ait. f. *subinermis* Focke ap. Lévl., Cat. Pl. Yunnan 234 (1917)—nomen.

538. *Rosa banksiae* Ait. f. *lutea* Lindl.; Rehder in Journ. Arn. Arb. 13: 315 (1932).

*R. banksiae* Ait. f. *luteiflora* Lévl., Cat. Pl. Yunnan 234 (1917)—nomen.

539. *Rosa brunonii* Lindl.; Byhouwer in Journ. Arn. Arb. 10: 87 (1929); Rehder in Journ. Arn. Arb. 13: 312 (1932).

*R. clavigera* Lévl. in Fedde, Rep. Sp. Nov. 13: 338 (1914) & Cat. Pl. Yunnan 234 (1917).

**540. *Rosa cymosa*** Tratt., Ros. Monog. 1: 87 (1823); Rehder in Journ. Arn. Arb. 17: 339 (1936) & 18: 257 (1937).

*R. microcarpa* Lindl. (1820)—non Retz (1803) nec Besser (1811); Card. in Bull. Mus. d'hist. Nat. Paris 23: 120 (1917); Hu & Chun, Ic. Pl. Sinic. 2: 25, pl. 75 (1929) Rehder in Journ. Arn. Arb. 13: 314 (1932); Bouleng. in Bull. Jard. Bot. Brux. 14: 202 (1936).

*R. sorbiflora* Focke in Gard. Chron. ser. 3, 37: 227, f. 96 (1905); Lévl., Fl. Kouy-Tchéou 354 (1915).

*R. chaffanjoni* Lévl. & Van. in Bull. Soc. Bot. Fr. 55: 56 (1908).

*R. bodinieri* Lévl. & Van. in Bull. Soc. Bot. Fr. 55: 56 (1908); Lévl., Fl. Kouy-Tchéou 353 (1915).

*R. esquirolii* Lévl. & Van. in Bull. Soc. Bot. Fr. 55: 56 (1908); Lévl., Fl. Kouy-Tchéou 353 (1915).

*R. cavaleriei* Lévl. in Fedde, Rep. Sp. Nov. 8: 61 (1910).

*R. patrum* Lévl., Ros. univ. 00 (1917) & Cat. Ill. Pl. Seu-Tchouen 64 (1918) nomen.

**541. *Rosa davidii*** Crep. var. *elongata* Rehder & Wils.; Rehder in Journ. Arn. Arb. 13: 318 (1932) & 17: 339 (1936).

*R. parmentieri* Lévl. in Fedde, Rep. Sp. Nov. 13: 339 (1914) & Cat. Pl. Yunnan 235 (1917).

**542. *Rosa gentiliana*** Lévl. & Van. in Bull. Soc. Bot. Fr. 55: 55 (1908); Lévl. in Mem. Real Acad. Cienc. Art. Barcelona ser. 3, 12: 560 (1916) & Cat. Ill. Pl. Seu-Tchouen 164, pl. 59 (1918); Rehder in Journ. Arn. Arb. 13: 313 (1932) & 17: 338 (1936); Byhouwer in Bull. Jard. Bot. Brux. 14: 277 (1937).

*R. multiflora* Thunb. var. *gentiliana* (Lévl. & Van.) Yu & Tsai in Bull. Fan. Mem. Inst. Biol. 7: 117 (1936) excl. syn. *R. multiflora* Thunb. var. *cathayensis* Rehder & Wils. et seq.

**543. *Rosa laevigata*** Michx., Fl. Bor.-Amer. 1: 295 (1803); Bouleng. in Bull. Jard. Bot. Brux. 14: 196 (1936).

*R. argyi* Lévl. in Bull. Soc. Bot. Fr. 55: 56 (1908); Rehder in Journ. Arn. Arb. 18: 257 (1937) in obs.

CHINA. Kiangsu, Tou-tcha-chan; Tou-zuo-se; Song-kiang-fou, d'Argy s.n. (typus *R. argyi*—n.v.).

Rehder (l.c.) remarks "Boulenger cites *R. lucidissima*" (see no. 545) "as a synonym of *R. laevigata* Michx. and he also cites as another synonym, with a query, *R. argyi* Lévl. which I have not seen". Although Boulenger states that he had seen the type of *R. lucidissima* he does not say whether he had seen *R. argyi*. The type of *R. argyi* has not yet been found in the Lévillé herbarium.

**544. *Rosa longicuspis*** Bertol.; Lévl., Cat. Pl. Yunnan 235 (1917); Rehder in Journ. Arn. Arb. 13: 314 (1932) & 17: 339 (1936).

*R. willmottiana* Lévl. in Fedde, Rep. Sp. Nov. 11: 299 (1912).

*R. charbonneaui* Lévl., l.c. 13: 338 (1914).

**545. *Rosa lucidissima*** Lévl. in Fedde, Rep. Sp. Nov. 9: 444 (1911) & Fl. Kouy-Tchéou 354 (1915) p.p.; Rehder in Journ. Arn. Arb. 13: 316 (1932) & 18: 257 (1937); Bouleng. in Bull. Jard. Bot. Brux. 14: 197 (1936) pro syn. sub *R. laevigata* Michx.

*R. lucidissima* Lévl. f. *setosa* Card. in Bull. Mus. d'Hist. Nat. Paris 23: 125 (1917).

Rehder retained *R. lucidissima* as a species distinct from *R. laevigata* on the basis of "the less prickly and bristly branchlets and peduncles, in the adnate stipules and the red flowers".

Cardot's f. *setosa* was based on the type collection of *R. lucidissima*.

**546. *Rosa mairei*** Lévl. in Fedde, Rep. Sp. Nov. 11: 299 (1912); Rehder in Journ. Arn. Arb. 13: 319 (1932) & 17: 339 (1936); Hand.-Mazz., Symb. Sin. 7: 528 (1933).

Cardot (Bull. Mus. d'hist. Nat. Paris 23: 128, 1917) said that he found it impossible to distinguish *R. mairei* from *R. omeiensis* Rolfe.

**547. *Rosa marretii*** Lévl. in Fedde, Rep. Sp. Nov. 8: 281 (1910); Miyabe & Miyake, Fl. Saghal. 142 (1915) pro syn. sub *R. davurica* Pall.; Card. in Bull. Mus. d'hist. Nat. Paris 23: 126 (1917) pro syn. sub *R. cinnamomea* L. var. *dahurica* (Pall.) Regel; Nakai in Bot. Mag. Tokyo 36: 63 (1922); Kudo in Journ. Coll. Agric. Hokk. Imp. Univ. Japan 12: 44 (1923); Rehder in Journ. Arn. Arb. 13: 318 (1932) & 18: 257 (1937); Juz. in Komarov, Fl. U.R.S.S. 10: 460 (1941).

**548. *Rosa maximowicziana*** Regel; Nakai, Fl. Sylv. Kor. 7: 26, t. 1 (1918); Rehder in Journ. Arn. Arb. 13: 312 (1932); Nakai in Bull. Nat. Sci. Mus. Tokyo no. 31: 58 (1952) p. p.

*R. fauriei* Lévl. in Fedde, Rep. Sp. Nov. 7: 199 (1909) p.p. excl. spec. *Faurie* 99; Nakai in Journ. Coll. Sci. Imp. Univ. Tokyo, 31: 482 (1911).

*R. kelleri* Card. (in Bull. Mus. d'hist. Nat. Paris 23: 116, 1917) was a nomen novum for *R. coreana* Keller (1910) non Kom. (1901). *R. coreana* Keller (Bot. Jahrb. 44: 47, 1910) was based on *Faurie* 98 from Kan-ouen-to, and *R. kelleri* Baker ex Willmott (Gen. Rosa 1: 75, 1910) on an unnumbered *Faurie* specimen from Kan-ouen-to, possibly the same collection. Cardot cited *Faurie* 322 under his *R. kelleri* but this specimen is *R. maximowicziana*.

*R. coreana* Keller and *R. kelleri* Baker ex Willmott are synonymous with *R. maximowicziana* var. *jackii* (Rehder) Rehder (*R. jackii* Rehder).

**549. *Rosa multiflora*** Thunb. var. *adenophora* Franch. & Sav.; Rehder in Journ. Arn. Arb. 13: 310 (1932) & 17: 336 (1936).

*R. nakaiana* Lévl. in Fedde, Rep. Sp. Nov. 10: 432 (1912); Nakai in Bot. Mag. Tokyo 40: 569 (1926) pro syn. sub *R. polyantha* Sieb. & Zucc. var. *adenochaeta* (Koidz.) Nakai; Nakai in Bull. Nat. Sci. Mus. Tokyo no. 31: 58 (1952) pro syn. sub *R. maximowicziana* Regel var. *adenocalyx* Nakai.

550. *Rosa multiflora* Thunb. var. *cathayensis* Rehder & Wils.; Rehder in Journ. Arn. Arb. 13: 311 (1932).

*R. macrophylla* Lindl. var. *hypoleuca* Lévl., Fl. Kouy-Tchéou 354 (1915)—nomen.

551. *Rosa multiflora* Thunb. var. *carnea* Thory; Rehder in Journ. Arn. Arb. 13: 311 (1932).

*R. lebrunei* Lévl. in Bull. Acad. Géog. Bot. 25: 46 (1915) & Cat. Pl. Yunnan 235 (1917).

*R. blinii* Lévl. in Bull. Acad. Géog. Bot. 25: 46 (1915) & Cat. Pl. Yunnan 234 (1917).

552. *Rosa multiflora* Thunb. var. *mokanensis* (Lévl.) Rehder in Journ. Arn. Arb. 17: 336 (1936).

*R. mokanensis* Lévl. in Fedde, Rep. Sp. Nov. 7: 340 (1909) pro parte typica.

*R. multiflora* Thunb. var. *quelpaertensis* (Lévl.) Rehder & Wils. in Sarg., Pl. Wils. 2: 335 (1915) pro parte quoad syn. *R. mokanensis*.

*R. calva* Bouleng. var. *mokanensis* (Lévl.) Bouleng. in Bull. Jard. Bot. Brux. 9: 270 (1933).

*R. polyantha* Sieb. & Zucc. var. *mokanensis* (Lévl.) Nakai in Bull. Nat. Sci. Mus. Tokyo no. 31: 59 (1952).

The type specimen of *R. mokanensis*, as discussed by Rehder, consists of two branches. One of these fits Léveillé's meagre description of *R. mokanensis*, the other represents *R. wichuraiana*. There is doubt as to whether the collector's number is 770 or 778 as cited by Léveillé. In my opinion it is 778.

553. *Rosa multiflora* Thunb. var. *quelpaertensis* (Lévl.) Rehder & Wils. in Sarg., Pl. Wils. 2: 335 (1915) & Rehder in Journ. Arn. Arb. 13: 310 (1932) excl. syn. *R. mokanensis*; Rehder in Journ. Arn. Arb. 17: 337 (1937).

*R. quelpaertensis* Lévl. in Fedde, Rep. Sp. Nov. 10: 378 (1912).

*R. mokanensis* Lévl. var. *quelpaertensis* (Lévl.) Willmott, Gen. Rosa 2: 512 (1914).

*R. polyantha* Sieb. & Zucc. var. *quelpaertensis* (Lévl.) Nakai in Bot. Mag. Tokyo 40: 569 (1926) excl. syn. *R. mokanensis*; Nakai in Bull. Nat. Sci. Mus. Tokyo no. 31: 59 (1952).

554. *Rosa odorata* Sweet; Lévl., Cat. Pl. Yunnan 235 (1917); Rehder in Journ. Arn. Arb. 13: 316 (1932).

*R. gechoutangensis* Lévl. in Fedde, Rep. Sp. Nov. 11: 299 (1912).

*R. oulengensis* Lévl., l.c.: 299 (1912).

*R. tongchouanensis* Lévl., l.c.: 300 (1912).

555. *Rosa odorata* Sweet var. *gigantea* (Collet ex Crép.) Rehder & Wils.; Rehder in Journ. Arn. Arb. 13: 317 (1932).

*R. gigantea* Collet ex Crép. in Bull. Soc. Roy. Bot. Belg. 27: 148 (1888).

*R. duclouxii* Lévl. in herb. ex Rehder & Wils. in Sarg., Pl. Wils. 2: 339 (1915) & Lévl., Cat. Pl. Yunnan 235 (1917) nom. nud. pro syn. sub *R. odorata* var. *gigantea*.

556. *Rosa omeiensis* Rolfe; Lévl., Cat. Pl. Yunnan 235 (1917); Hu & Chun, Ic. Pl. Sinic. 2: 31, pl. 81 (1929). Rehder in Journ. Arn. Arb. 13: 318 (1932) & 17: 339 (1936).

*R. sorbus* Lévl. in Fedde, Rep. Sp. Nov. 13: 338 (1914).

*R. sericea* Crép. f. *aculeata* Focke ap. Lévl., Cat. Pl. Yunnan 235 (1917)—nomen. *R. sericea* Crép. f. *eglandulosa* Focke ap. Lévl., l.c.—nomen.

*R. sericea* Crép. f. *inermis* Focke ap. Lévl. l.c.—nomen.

557. *Rosa rubus* Lévl. & Van. in Bull. Soc. Bot. Fr. 55: 55 (1908); Lévl., Fl. Kouy-Tchéou 354 (1915); Rehder in Journ. Arn. Arb. 13: 312 (1932) & 17: 338 (1936).

*R. rubus* Lévl. & Van. var. *yunnanensis* Lévl. in Bull. Soc. Bot. Fr. 55: 55 (1908), Cat. Pl. Yunnan 235 (1917). & Cat. Ill. Pl. Seu-Tchouen 165 (1918).

558. *Rosa sertata* Rolfe; Byhouwer in Journ. Arn. Arb. 10: 100 (1929); Rehder in Journ. Arn. Arb. 13: 318 (1932) & 17: 339 (1936).

*R. iochanensis* Lévl. in Fedde, Rep. Sp. Nov. 13: 339 (1914) & Cat. Pl. Yunnan 234 (1917).

559. *Rosa wichuraiana* Crép.; Rehder in Journ. Arn. Arb. 13: 311 (1932) & 17: 337 (1936).

*R. taquetii* Lévl. in Fedde, Rep. Sp. Nov. 7: 199 (1909) p.p. quoad spec. fruct.; Willmott, Gen. Rosa 2: 511 (1914); Nakai in Bull. Nat. Sci. Mus. Tokyo no. 31: 59 (1952).

*R. acicularis* Lindl. var. *taquetii* (Lévl.) Nakai in Bot. Mag. Tokyo 30: 241 (1916) tantum quoad syn. cit. excl. *Taquet* 4228.

### Rubus

(with D. K. FERGUSON)

As with the ligneous species of other genera, Rehder has already evaluated the taxa of *Rubus* described by Léveillé and to a large extent Rehder's treatment of *Rubus* (*Journal Arnold Arboretum* 18: 26–53, 1937) is followed here. As a revision of the genus insofar as it occurs in China, Korea and Japan is outwith the scope of this Catalogue, we have endeavoured to make only those taxonomic and nomenclatural changes for which we see sufficient justification.

Many of the references given by Rehder are not repeated in this particular part of the Catalogue for reasons of brevity, but instead a list of the relevant and other major papers on *Rubus* is appended.

BAILLY, H. *Gent. Herb.* 5: 1–932 (1941–45).

CARDOT, M. J. *Bull. Mus. d'Hist. Nat. Paris* 23: 272–311 (1917).

— *Not. Syst. (Paris)* n.s. 3: 289–315 (1917).

FOCKE, W.O. *Bibl. Bot.* 72: 1–223 (1910) & 83: 1–274 (1914).

KOIDZUMI, G. *Journ. Coll. Sci. Imp. Univ. Tokyo* 34, 2: 104–163 (1913).

— *Fl. Symb. Or.-As.* 55–70 (1930).

KUNTZE, O. *Methodik Der Speciesbeschreibung und Rubus*, 1-160 (1879).

LÉVEILLÉ, H. *Bull. Acad. Géog. Bot. (Mém.)* 20: 1-138 (1909) non 20: (1910).

The abbreviation "Mém." is omitted throughout this text but all references to Vol. 20 apply to the "Mémoires".

METCALF, F. P. *Lingn. Sci. Journ.* 19: 21-37 (1940).

NAKAI, T. *Bot. Mag. Tokyo* 30: 219-230 (1916).

— *Fl. Sylv. Kor.* 7: 48-77 (1918).

THUAN, N. VAN. *Flore du Cambodge, Laos & Vietnam* no. 7: 1-80 (1968).

**560. *Rubus adenochlamys* (Focke) Focke; Rehder in Journ. Arn. Arb. 18: 49 (1937).**

*R. triphyllus* Thunb. var. *adenochlamys* Focke in Bot. Jahrb. 36, Beibl. 82: 55 (1905).

*R. kinashii* Lévl. & Van. var. *coreensis* Lévl. & Van. in Bull. Acad. Géog. Bot. 20: 80 (1909).

As pointed out by Rehder, Léveillé & Vaniot did not cite a specimen of *R. kinashii* var. *coreensis* but *Faurie* 1580 may, in our opinion, represent the type as it agrees with Léveillé's description. However, although we have seen no specimen of *R. adenochlamys* and thus rely on Focke's identification of *R. kinashii* var. *coreensis*, the glandular calyx and peduncles of *Faurie* 1580 agree with Focke's original diagnosis in 1905 of *R. triphyllus* var. *adenochlamys*.

**561. *Rubus alceifolius* Poir.; Rehder in Journ. Arn. Arb. 18: 32 (1937); Thuan in Fl. Cambodge, Laos & Vietnam no. 7: 49 (1968).**

*R. monguilloni* Lévl. & Van. in Bull. Acad. Géog. Bot. 11: 101 (1902) & 12: no. 160, t. 6 (1903); Lévl. in Bull. Acad. Géog. Bot. 20: 56 (1909) & Fl. Kouy-Tchéou 359 (1915).

*R. fimbriifolius* Focke in Bibl. Bot. 72: 80 (1910).

*R. multibracteatus* Lévl. & Van. var. *demangei* Lévl. in Fedde, Rep. Sp. Nov. 11: 548 (1913).

**562. *Rubus alnifoliolatus* Lévl. in Bull. Soc. Bot. Fr. 53: 549 (1906) & in Bull. Acad. Géog. Bot. 20: 77, 131 (1909); Koidz. in Bot. Mag. Tokyo 30: 78 (1916); Rehder in Journ. Arn. Arb. 18: 41 (1937); Li, Woody Fl. Taiwan 320 (1963).**

**563. *Rubus amphidasys* Focke; Rehder in Journ. Arn. Arb. 18: 35 (1937).**

*R. chaffanjonii* Lévl. & Van. in Bull. Acad. Géog. Bot. 11: 98 (1902) & 12: no. 160, t. 2 (1903); Lévl. in Bull. Acad. Géog. Bot. 20: 20 (1909) & Fl. Kouy-Tchéou 360 (1915); Lévl., Cat. Pl. Yunnan 239 (1917) pro syn. sub *R. polytrichus* Fr. non Progel nec Kerner.

**564. *R. blinii* Lévl. in Fedde, Rep. Sp. Nov. 7: 258 (1909), in Bull. Acad. Géog. Bot. 20: 112 (1909) & Fl. Kouy-Tchéou 357 (1915) p.p. quoad typo; Rehder in Journ. Arn. Arb. 18: 37 (1937).**

In his *Flore du Kouy-Tchéou*, Léveillé cites the type collection of *R. blinii*, also *Cavalerie* 3570 & 3949. *Cavalerie* 3949 is probably *R. rufus* Focke whilst *Cavalerie* 3570 is intermediate between *R. rufus* and *R. lasiotrichus* Focke, particularly in the lobing of the leaf. Cardot (*Bull. Mus. d'hist. Nat. Paris* 23: 287, 1917) refers both numbers to *R. rufus*.

565. *Rubus buergeri* Miq.; Rehder in Journ. Arn. Arb. 18: 37 (1937).  
*R. bodinieri* Lévl. & Van. in Bull. Acad. Géog. Bot. 11: 97 (1902) & 12: no. 160, t. 1 (1903); Lévl. in Bull. Acad. Géog. Bot. 20: 58 (1909) & Fl. Kouy-Tchéou 357 (1915).

566. *Rubus calycacanthus* Lévl. in Fedde, Rep. Sp. Nov. 8: 58 (1910) & Fl. Kouy-Tchéou 357 (1915); Rehder in Journ. Arn. Arb. 18: 31 (1937); Li in Journ. Arn. Arb. 25: 421 (1944) pro syn. sub *R. pinnatisepalus* Hemsl.

*R. calycacanthus* Lévl. var. *buergerifolia* Lévl. in Fedde, Rep. Sp. Nov. 8: 58 (1910).

*R. labbei* Lévl. & Van. in Fedde, Rep. Sp. Nov. 8: 549 (1910); Lévl., Fl. Kouy-Tchéou 359 (1915).

*R. darrisii* Lévl. in Fedde, Rep. Sp. Nov. 12: 188 (1913) & Fl. Kouy-Tchéou 358 (1915).

Li reduced *R. calycacanthus* to synonymy under *R. pinnatisepalus* Hemsl. of which we have seen no material. However, in Li's *Woody Flora of Taiwan* (307, f. 110, 1963), the illustration of *R. pinnatisepalus* does not show any acicles on the calyx whereas the Léveillé taxa enumerated above all have the calyx armed with numerous acicles. Furthermore, Li's description of *R. pinnatisepalus* makes no reference to the calyx being acicular, neither does Hemsley's original description. We are therefore reluctant to follow Li's reduction of *R. calycacanthus* to *R. pinnatisepalus*.

567. *Rubus chroosepalus* Focke; Lévl., Fl. Kouy-Tchéou 360 (1915) & Cat. Pl. Yunnan, 236 (1917); Card. in Bull. Mus. d'Hist. Nat. Paris 23: 281 (1917); Rehder in Journ. Arn. Arb. 18: 28 (1937).

*R. mouyousensis* Lévl. in Fedde, Rep. Sp. Nov. 4: 333 (1907) & in Bull. Acad. Géog. Bot. 20: 44 (1909) & Fl. Kouy-Tchéou 359 (1915).

*R. petaloideus* Lévl. in Fedde, Rep. Sp. Nov. 12: 506 (1913).

568. *Rubus corchorifolius* L.f.; Lévl., Fl. Kouy-Tchéou 358 (1915); Rehder in Journ. Arn. Arb. 18: 37 (1937); Nakai in Bull. Nat. Sci. Mus. Tokyo no. 31: 59 (1952); Thuan in Fl. Cambodge, Laos & Vietnam no. 7: 15 (1968).

*R. kerriifolius* Lévl. & Van. in Bull. Acad. Géog. Bot. 11: 100 (1902); Lévl. in Bull. Acad. Géog. Bot. 20: 27 (1909).

*R. vanioti* Lévl. in Fedde, Rep. Sp. Nov. 5: 280 (1908); Lévl. in Bull. Acad. Géog. Bot. 20: 31 (1909); Nakai in Journ. Coll. Sci. Imp. Univ. Tokyo 31: 476 (1911).

**569. *Rubus coreanus* Miq. var. *coreanus*;** Rehder in Journ. Arn. Arb. 18: 46 (1937) p.p. excl. *R. hoatiensis* Lévl.; Nakai in Bull. Nat. Sci. Mus. Tokyo no. 31: 59 (1952).

*R. pseudosaxatilis* Lévl. in Fedde, Rep. Sp. Nov. 5: 280 (1908) & in Bull. Acad. Géog. Bot. 20: 72 (1909); Nakai in Journ. Coll. Sci. Imp. Univ. Tokyo 31: 476 (1911).

*R. pseudosaxatilis* Lévl. var. *kouytchensis* Lévl. in Fedde, Rep. Sp. Nov. 5: 280 (1908) & in Bull. Acad. Géog. Bot. 20: 72 (1909).

*R. quelpaertensis* Lévl. in Fedde, Rep. Sp. Nov. 5: 280 (1908) & in Bull. Acad. Géog. Bot. 20: 107 (1909); Nakai in Journ. Coll. Sci. Imp. Univ. Tokyo 31: 476 (1911).

*R. coreanus* Miq. var. *nakaianus* Lévl. in Fedde, Rep. Sp. Nov. 8: 358 (1910); Nakai in Journ. Coll. Sci. Imp. Univ. Tokyo 31: 477 (1911).

*R. coreanus* Miq. var. *kouytchensis* (Lévl.) Lévl., Fl. Kouy-Tchéou 358 (1915).

We have identified *R. hoatiensis* Lévl. with *R. parvifolius* L. (see no. 603).

**570. *Rubus crataegifolius* Bunge f. *itoensis* (Lévl. & Van.) Koidz.;** Rehder in Journ. Arn. Arb. 18: 39 (1937).

*R. itoensis* Lévl. & Van. in Bull. Soc. Agric. Sci. Arts Sarthe 40: 62 (1905) & in Fedde, Rep. Sp. Nov. 2: 175 (1906); Lévl. in Bull. Acad. Géog. Bot. 20: 128 (1909).

*R. ouensanensis* Lévl. & Van. in Bull. Soc. Agric. Sci. Arts Sarthe 40: 62 (1905) & in Fedde, Rep. Sp. Nov. 2: 175 (1906); Lévl. in Bull. Acad. Géog. Bot. 20: 67 (1909); Nakai in Journ. Coll. Sci. Imp. Univ. Tokyo 26, 1: 187 (1909) & 31: 476 (1911); Thuan in Fl. Cambodge, Laos & Vietnam no. 7: 29 (1968) pro syn. sub *R. triphyllus* Thunb.

*R. wrightii* A. Gray var. *itoensis* (Lévl. & Van.) Koidz. in Bot. Mag. Tokyo 43: 391 (1929). *R. wrightii* A. Gray var. *ouensanensis* (Lévl. & Van.) Koidz., l.c.

**571. *Rubus crataegifolius* Bunge f. *makinoensis* (Lévl. & Van.) Koidz.;** Rehder in Journ. Arn. Arb. 18: 39 (1937).

*R. makinoensis* Lévl. & Van. in Bull. Soc. Agric. Sci. Arts Sarthe, 40: 60 (1905) & in Fedde, Rep. Sp. Nov. 2: 174 (1906); Lévl. in Bull. Acad. Géog. Bot. 20: 125 (1909).

*R. ampelophyllus* Lévl. in Fedde, Rep. Sp. Nov. 5: 279 (1908) & in Bull. Acad. Géog. Bot. 20: 49 (1909).

*R. wrightii* A. Gray var. *makinoensis* (Lévl. & Van.) Koidz. in Bot. Mag. Tokyo 43: 391 (1929). *R. wrightii* A. Gray var. *ampelophyllus* (Lévl.) Koidz., l.c.

**572. *Rubus croceacanthus* Lévl.** in Fedde, Rep. Sp. Nov. 11: 33 (1912); Rehder in Journ. Arn. Arb. 18: 42 (1937); Nakai in Bull. Nat. Sci. Mus. Tokyo no. 31: 59 (1952); Ohwi, Fl. Jap. 643 (1953) & Fl. Jap. (Engl. ed.) 534 (1965); Hara & Ohashi in Hara, Fl. E Himal. 128 (1966) in nota.

Rehder remarks that this species "seems closely related to *R. rosaefolius* Sm.". We are of the opinion that it is akin to *R. asper* Wall. ex Don (syn. *R. indotibetanus* Koidz.). Hara & Ohashi also draw attention to the affinity of *R. asper* and *R. croceacanthus*, the latter species having "roundish fruits and generally coarser less-pointed serration of the leaves".

Hara and Ohashi place *R. indotibetanus* as a synonym of *R. asper*, having seen the types of both species. Thuan (*Fl. Cambodge, Laos & Vietnam* no. 7: 22, 1968), however, considers *R. indotibetanus* to be a synonym of *R. rosaefolius* Sm. It appears to us that Thuan's circumscription of *R. asper* may be erroneous since he refers to the long glandular setae, whereas true *R. asper*, according to Merrill (*Contr. Arn. Arb.* no. 8: 71, 1934) and Hara and Ohashi, has only short glandular setae c. 0.5–1 mm long.

See also *R. sumatranus* (no. 616).

**573. *Rubus damienii*** Lévl. in Fedde, Rep. Sp. Nov. 10: 121 (1911); Focke in *Bibl. Bot.* 83: 37 (1914).

HAWAIIAN (SANDWICH) ISLANDS. Molokai, Kamolo, 1000 m, vii 1910, *Faurie* 805 (holo.—n.v.).

**574. *Rubus delavayi*** Franch.; Lévl., *Cat. Pl. Yunnan* 236 (1917); Rehder in *Journ. Arn. Arb.* 18: 41 (1937).

*R. duclouxii* Lévl. in Fedde, Rep. Sp. Nov. 6: 111 (1908) & in *Bull. Acad. Géog. Bot.* 20: 80 (1909).

**575. *Rubus ellipticus*** Sm. in Rees, *Cyclop.* 30: n. 16 (1815); Thuan in *Fl. Cambodge, Laos & Vietnam* no. 7: 33 (1968).

*R. pinfaensis* Lévl. & Van. in *Bull. Soc. Agric. Sci. Arts Sarthe* 39: 320 (1904) & in Fedde, Rep. Sp. Nov. 6: 374 (1909); Lévl. in *Bull. Acad. Géog. Bot.* 20: 106 (1909) & *Fl. Kouy-Tchéou* 359 (1915); Rehder in *Journ. Arn. Arb.* 18: 50 (1937); Li in *Journ. Arn. Arb.* 25: 421 (1944) & *Woody Fl. Taiwan* 312 (1963).

*R. erythrolasius* Focke in *Bibl. Bot.* 72: 197, f. 79 (1911).

*R. fasciculatus* Duthie in *Ann. Roy. Bot. Gard. Calc.* 9: 39, pl. 48 (1901).

**576. *Rubus esquirolii*** Lévl. in Fedde, Rep. Sp. Nov. 4: 333 (1907), in *Bull. Acad. Géog. Bot.* 20: 21 (1909) & *Fl. Kouy-Tchéou* 358 (1915); Rehder in *Journ. Arn. Arb.* 18: 34 (1937).

**577. *Rubus feddei*** Lévl. & Van. in Fedde, Rep. Sp. Nov. 8: 549 (1910); Lévl., *Fl. Kouy-Tchéou* 358 (1915); Rehder in *Journ. Arn. Arb.* 18: 35 (1937); Thuan in *Fl. Cambodge, Laos & Vietnam* no. 7: 70 (1968).

**578. *Rubus foliolosus*** D. Don; Rehder in *Journ. Arn. Arb.* 18: 48 (1937).

*R. bonatii* Lévl. in Fedde, Rep. Sp. Nov. 7: 338 (1909).

*R. mairei* Lévl., l.c. 12: 283 (1913) non Lévl. (1912).

*R. boudieri* Lévl., l.c. 12: 534 (1913) & *Cat. Pl. Yunnan* 236 (1917).

*R. longistylus* Lévl. in Fedde, Rep. Sp. Nov. 12: 534 (1913) & *Fl. Kouy-Tchéou* 359 (1915).

**579. *Rubus fragarioides* Bertol. var. *adenophora* Franch.;** Rehder in Journ. Arn. Arb. 18: 26 (1937).

*R. franchetianus* Lévl. in Bull. Acad. Géog. Bot. 20: 71 (1909).

Rehder remarks that there is no specimen of *R. franchetianus* in the Lévillé herbarium, but it is clear from Lévillé's protologue that he intended *R. franchetianus* as a nomen novum for *R. fragarioides* var. *adenophora*. We have seen no material of var. *adenophora*, the type of which is in Paris.

*R. franchetianus* is not listed in Index Kewensis.

**580. *Rubus gentilianus* Lévl. & Van.** in Bull. Acad. Géog. Bot. 11: 99 (1902) & 12: no. 160, t. 3 (1903); Lévl. in Bull. Acad. Géog. Bot. 20: 35 (1909); Fl. Kouy-Tchéou 358 (1915), Cat. Pl. Yunnan 239, f. 58 (1917) & Cat. Ill. Pl. Seu-Tchouen 166, pl. 60 (1918); Rehder in Journ. Arn. Arb. 18: 29 (1937); Metcalf in Lingn. Sci. Journ. 19: 36 (1940) pro syn. sub *R. xanthoneurus* Focke.

*R. gentilianus* has a thick felty tomentum on the underside of the leaves and does not belong to *R. xanthoneurus*. We consider *R. gentilianus* to be very close to *R. chroosepalus* Focke.

**581. *Rubus hastifolius* Lévl. & Van.** in Bull. Soc. Bot. Fr. 51: 218 (1904); Lévl. in Bull. Acad. Géog. Bot. 20: 28 (1909) & Fl. Kouy-Tchéou 358 (1915); Rehder in Journ. Arn. Arb. 18: 36 (1937); Thuan in Fl. Cambodge, Laos & Vietnam no. 7: 39 (1968).

**582. *Rubus hillebrandii* Lévl.** in Fedde, Rep. Sp. Nov. 10: 120 (1911); Focke in Bibl. Bot. 83: 37 (1914).

HAWAIIAN (SANDWICH) ISLANDS: Glenwood, v 1909, *Faurie* 802; Maui, Haleakala, viii 1909, *Faurie* 806 (syntypes—n.v.).

**583. *Rubus hirsutus* Thunb.,** Diss. Bot.-Med. de Rubo 7 (1813); Ohwi, Fl. Jap. 643 (1953) & Fl. Jap. (Engl. ed.) 535 (1965).

*R. thunbergii* Sieb. & Zucc.; Rehder in Journ. Arn. Arb. 18: 44 (1937)—non Blume-(1826).

*R. argyi* Lévl. in Fedde, Rep. Sp. Nov. 4: 333 (1907) & in Bull. Acad. Géog. Bot. 20: 105 (1909).

*R. talaikiensis* Lévl. in Fedde, Rep. Sp. Nov. 4: 334 (1907) & in Bull. Acad. Géog. Bot. 20: 105 (1909).

*R. stephanandria* Lévl. in Fedde, Rep. Sp. Nov. 8: 358 (1910); Nakai in Journ. Coll. Sci. Imp. Univ. Tokyo 31: 477 (1911).

*R. thunbergii* Sieb. & Zucc. var. *argyi* (Lévl.) Focke in Bibl. Bot. 72: 160 (1911); Lévl. in Mem. Real Acad. Ci. Art. Barcelona ser. 3, 12: 560 (1916).

*R. thunbergii* Sieb. & Zucc. var. *talaikiensis* (Lévl.) Focke in Bibl. Bot. 72: 160 (1911); Lévl. in Mem. Real Acad. Ci. Art. Barcelona ser. 3, 12: 560 (1916).

*R. hirsutus* Thunb. var. *argyi* (Lévl.) Nakai in Bot. Mag. Tokyo 44: 526 (1930).

Whereas Ohwi maintains *R. hirsutus* Thunb. (1813) with *R. thunbergii* Sieb. & Zucc. (1844) as a synonym, Rehder rejects *R. hirsutus* Thunb. as a "nomen dubium". Nakai in 1916 applied the name *R. thunbergii* but in 1930 rejected this in favour of *R. hirsutus*.

In the absence of original material we are unable to verify the opinions of Nakai, Rehder or Ohwi. However, Rehder's use of *R. thunbergii* Sieb. & Zucc. is not tenable being antedated by *R. thunbergii* Blume (1826), and we therefore follow current Japanese botanists.

**584. *Rubus holadenus*** Lévl. in Fedde, Rep. Sp. Nov. 12: 536 (1913) & Fl. Kouy-Tchéou 358 (1915); Rehder in Journ. Arn. Arb. 18: 31 (1937).

**585. *Rubus hosseusii*** Lévl. in Bull. Acad. Géog. Bot. 24: 316 (1914) & Rev. Chil. Hist. Nat. 21: 93 (1917).

CHILE. Puerto Varas, 1914, *C. C. Hosseus* s.n. (holo. E).

We are unable to assess the status of *R. hosseusii*. Léveillé himself placed it near *R. floribundus* H.B.K.

**586. *Rubus ichangensis*** Hemsl. & Kuntze; Lévl., Fl. Kouy-Tchéou 360 (1915); Rehder in Journ. Arn. Arb. 18: 29 (1937).

*R. papyrus* Lévl. in Fedde, Rep. Sp. Nov. 4: 332 (1907) & in Bull. Acad. Géog. Bot. 20: 30 (1909).

**587. *Rubus ikenoensis*** Lévl. & Van. in Bull. Soc. Bot. Fr. 53: 549 (1906); Lévl. in Bull. Acad. Géog. Bot. 20: 130 (1909); Rehder in Journ. Arn. Arb. 18: 27 (1937); Ohwi, Fl. Jap. 646 (1953) & Fl. Jap. (Engl. ed.) 536 (1965).

**588. *Rubus innominatus*** S. Moore in Journ. Bot. 13: 226 (1875).

*R. xanthacantha* Lévl. in Fedde, Rep. Sp. Nov. 4: 333 (1907) & in Bull. Acad. Géog. Bot. 20: 99 (1909); Focke in Bibl. Bot. 72: 195 (1911) pro syn. sub *R. kuntzeanus* Hemsl.; Rehder in Journ. Arn. Arb. 18: 49 (1937) pro syn. sub *R. innominatus* S. Moore var. *kuntzeanus* (Hemsl.) Bailey.

*R. kuntzeanus* Hemsl. var. *xanthacantha* (Lévl.) Lévl., Fl. Kouy-Tchéou 360 (1915).

*R. innominatus* was described by Moore as being glandular and the leaves as . . . "Foliis bijugatis pinnatis supremis trifoliolatis". . . . Bailey (*Gent. Herb.* 1: 30, 1920) states that the type specimen of *R. innominatus* at Kew "shows only ternate leaves". He made *R. kuntzeanus* a variety of *R. innominatus* stating that "the glandular character of the inflorescence distinguishes this plant from *R. innominatus* but it is not constant". He appears to have confused the eglandular *R. kuntzeanus* with the glandular *R. innominatus*. Bailey differentiated the 5-foliolate specimens of *R. kuntzeanus* under his var. *quinatus*.

In describing *R. kuntzeanus*, Hemsley said it was possibly "only an eglandular variety" of *R. innominatus*, and that all the leaves of his species were trifoliate.

Focke differentiated the two species in his key as follows:—

Eglandulosus; folia ramorum fertilium ternata; inflorescentia elongata, conferta ... .. *R. kuntzeanus*

Glandulosus; folia ramorum fertilium multa pinnato—quinata; inflorescentia laxa paniculata ... .. *R. innominatus*

In *Plantae Wilsonianae* (1: 54–55, 1911), Focke still retains both species, while in the corrections and additions in vol. 3: 424 (1917), Rehder & Wilson consider *R. kuntzeanus* to be a synonym of *R. innominatus*, although Rehder changed his mind later and reverted to var. *kuntzeanus*.

Cardot (in *Not. Syst. (Paris)* 3: 311, 1917) described his *R. kuntzeanus* var. *glandulosus* and later (in *Bull. Mus. d'Hist. Nat. Paris*, 23: 305, 1917) discusses var. *glandulosus* and *R. xanthacanthus*, commenting that Léveillé's species is perhaps another form of *R. kuntzeanus*.

We have examined several sheets of the *R. innominatus-kuntzeanus* complex and find that glandular specimens tend to occur in the south-western provinces, i.e. Yunnan, Kweichow, Kiangsi and occasionally Hupeh, whereas the eglandular specimens occur further east in Anhwei, Chekiang and Hupeh.

*R. xanthacanthus* from Kweichow is a glandular plant and should therefore be associated with *R. innominatus* rather than with *R. kuntzeanus* whether or not *R. kuntzeanus* is united with *R. innominatus* in synonymy, as a variety of it, or as a distinct species.

**589. *Rubus irenaeus*** Focke; Lévl., Fl. Kouy-Tchéou 360 (1915); Rehder in Journ. Arn. Arb. 18: 36 (1937).

*R. jamini* Lévl. & Van. in Bull. Acad. Géog. Bot. 11: 102 (1902) & 12: no. 160, t. 7 (1903); Lévl., l.c. 20: 52 (1909) & Fl. Kouy-Tchéou 358 (1915).

**590. *Rubus koehnei*** Lévl. in Fedde, Rep. Sp. Nov. 10: 121 (1911) non *R. koehneanus* Focke (1908–10).

*R. maucicola* Focke in Bibl. Bot. 83: 37 (1914).

HAWAIIAN (SANDWICH) ISLANDS. Maui, Olinda, 1200 m, viii 1909, Faurie 801 (holo. *R. koehnei*—n.v.).

Focke unnecessarily proposed the new name *R. maucicola* to replace Léveillé's name, in view of his own *R. koehneanus*. *R. koehneanus* Focke is a synonym of *R. microphyllus* L.f. var. *subcrataegifolius* (Lévl. & Van.) Ohwi (q.v.) and includes a type collection of that taxon.

**591. *Rubus lambertianus*** Ser. var. *minimiflorus* (Lévl.) Card.; Rehder in Journ. Arn. Arb. 18: 30 (1937).

*R. minimiflorus* Lévl. in Fedde, Rep. Sp. Nov. 4: 332 (1907), in Bull. Acad. Géog. Bot. 20: 32 (1909) & Fl. Kouy-Tchéou 359 (1915).

**592. *Rubus lambertianus*** Ser. var. *paykouangensis* (Lévl.) Hand.-Mazz., Symb. Sin. 7: 489 (1933).

*R. paykouangensis* Lévl. in Fedde, Rep. Sp. Nov. 4: 333 (1907), in Bull. Acad. Géog. Bot. 20: 19 (1909) & Fl. Kouy-Tchéou, 359 (1915); Rehder in Journ. Arn. Arb. 18: 30 (1937).

Rehder preferred to retain this taxon at specific rank and Handel-Mazzetti at varietal. We follow here Handel-Mazzetti, as var. *paykouangensis* appears to be a progression from var. *minimiflorus* and from var. *glandulosus* Card.

593. *Rubus lyi* Lévl. in Fedde, Rep. Sp. Nov. 12: 536 (1913) & Fl. Kouy-Tchéou 359 (1915); Rehder in Journ. Arn. Arb. 18: 35 (1937).

594. *Rubus mairei* Lévl. in Bull. Acad. Géog. Bot. 22: 232 (1912) & Cat. Pl. Yunnan 239 (1917)—non Lévl. (1913); Rehder in Journ. Arn. Arb. 18: 28 (1937).

Rehder noted that Handel-Mazzetti erroneously referred *R. mairei* to *R. henryi*. We have seen one of Handel-Mazzetti's collections which he cites under *R. henryi* (Handel-Mazzetti 1203), and this specimen undoubtedly belongs to *R. mairei*.

595. *Rubus malifolius* Focke; Rehder in Journ. Arn. Arb. 18: 28 (1937).  
*R. arbor* Lévl. & Van. in Bull. Soc. Bot. Fr. 51: 217, pl. 3 (1904); Lévl. in Bull. Acad. Géog. Bot. 20: 26 (1909) & Fl. Kouy-Tchéou 357 (1915).

The holotype and an isotype of *R. arbor* are present in the Edinburgh herbarium. The isotype differs from the holotype in having acicular calyces with scattered glandular setae—characters which are not found in *R. malifolius* but which are present in *R. swinhoei* Hance. These two species are closely related and the isotype of *R. arbor* appears to be intermediate between them.

CHINA. Kweichow, Pin-fa, route Siao-tchang, arbre, fl. blanches, 7 v 1903, Cavalerie 1003 (holo. iso. *R. arbor*, E).

596. *Rubus mesogaeus* Focke in Bot. Jahrb. 29: 399 (1900) & in Pl. Wils. 1: 56 (1911); Rehder in Journ. Arn. Arb. 18: 50 (1937); Ohwi, Fl. Jap. 645 (1953) & Fl. Jap. (Engl. ed.) 535 (1965).

*R. kinashii* Lévl. & Van. in Bull. Soc. Agric. Sci. Arts Sarthe 40: 66 (1905) & in Fedde, Rep. Sp. Nov. 2: 175 (1906); Lévl. in Bull. Acad. Géog. Bot. 20: 80, 134 (1909).

*R. occidentalis* auct. non L.; Lévl. in Bull. Acad. Géog. Bot. 20: 133 (1909).

*R. eous* Focke in Bibl. Bot. 72: 204 (1911) & 83: 47 (1914).

*R. illudens* Lévl. in Fedde, Rep. Sp. Nov. 12: 283 (1913) & Cat. Pl. Yunnan 239 (1917); Rehder in Journ. Arn. Arb. 18: 48 (1937).

Rehder mentions the affinity between *R. illudens* and *R. mesogaeus* but having examined Japanese and Chinese material of *R. mesogaeus* we can find no constant difference between the two species. The leaves of Japanese specimens of *R. mesogaeus* are somewhat larger than those of Chinese specimens but the entire variation in leaf size can well encompass that displayed by *R. illudens*.

Rehder also draws attention to the white flowers of *R. mesogaeus* as opposed to the pink flowers of *R. illudens*. However, Focke, in *Plantae Wilsonianae*, mentions a form of *R. mesogaeus*, "floribus roseis", citing Wilson 1042, 3013 & 3015 (E); Fang 897 (E) also has pinkish flowers.

**597. *Rubus microphyllus*** L.f., Suppl. Plant. Syst. Veget. 263 (1781); Ohwi, Fl. Jap. 640 (1953) & Fl. Jap. (Engl. ed.) 532 (1965).

*R. incisus* Thunb., Fl. Jap. 217 (1784); Rehder in Journ. Arn. Arb. 18: 40 (1937).

*R. grossularia* Lévl. & Van. in Bull. Soc. Agric. Sci. Arts Sarthe 40: 61 (1905) & in Fedde, Rep. Sp. Nov. 2: 175 (1906); Lévl. in Bull. Acad. Géog. Bot. 20: 128 (1909).

**598. *Rubus microphyllus*** L.f. var. *subcrataegifolius* (Lévl. & Van.) Ohwi, Fl. Jap. (Engl. ed.) 533 (1965) & Fl. Jap. (rev. ed. Jap.) 1440 (1965).

*R. crataegifolius* Bunge var. *subcrataegifolius* Lévl. & Van. in Bull. Soc. Agric. Sci. Arts Sarthe 40: 61 (1905) & in Fedde, Rep. Sp. Nov. 2: 174 (1906); Koidz. in Bot. Mag. Tokyo 30: 78 (1916).

*R. subcrataegifolius* (Lévl. & Van.) Lévl. in Bull. Acad. Géog. Bot. 20: 127 (1909).

*R. koehneanus* Focke in Spath, Cat. 123 (1908-9) & in Bibl. Bot. 72: 140, f. 60 (1910).

*R. incisus* Thunb. var. *subcrataegifolius* (Lévl. & Van.) Rehder in Journ. Arn. Arb. 18: 40 (1937).

JAPAN. Honshu, Jizogatake, vii 1903, *Faurie* 5370 (lecto. var. *subcrataegifolius*, E).

**599. *Rubus minusculus*** Lévl. & Van. in Bull. Soc. Agric. Sci. Arts Sarthe 40: 63 (1905); Lévl. in Bull. Acad. Géog. Bot. 20: 129 (1909); Rehder in Journ. Arn. Arb. 18: 41 (1937); Ohwi, Fl. Jap. 643 (1953) & Fl. Jap. (Engl. ed.) 534 (1965).

**600. *Rubus multibracteatus*** Lévl. & Van. in Bull. Acad. Géog. Bot. 11: 99 (1902) & 12: no. 160, t. 5 (1903); Lévl. in Bull. Acad. Géog. Bot. 20: 57 (1909) & Fl. Kouy-Tchéou 359 (1915); Rehder in Journ. Arn. Arb. 18: 33 (1937); Thuan in Fl. Cambodge, Laos & Vietnam no. 7: 65 (1968).

*R. andropogon* Lévl. in Fedde, Rep. Sp. Nov. 8: 58 (1910) & Cat. Pl. Yunnan 236 (1917).

*R. clincephalus* Focke in Bibl. Bot. 72: 102, f. 44 (1910); Lévl., Fl. Kouy-Tchéou 357 (1915) & Cat. Pl. Yunnan 236 (1917).

*R. mallodes* Focke in Bibl. Bot. 72: 104, f. 45 (1910), fide Rehder.

*R. major* Focke in Notes R.B.G. Edinb. 5: 72, pl. 63 (1911) & in Bibl. Bot. 83: 34 (1914).

We have not seen any authentic specimens of *R. mallodes*.

**601. *Rubus niveus*** Thunb., Diss. Bot.-Med. de Rubo 9, fig. p. 13 (1813); Focke in Bibl. Bot. 72: 182 (1911); Thuan in Fl. Cambodge, Laos & Vietnam no. 7: 26 (1968).

*R. lasiocarpus* Sm. in Rees, Cyclop. 32: n. 6 (1816).

*R. micranthus* D. Don, Prodr. Fl. Nep. 235 (1825); Lévl., Cat. Pl. Yunnan 239 (1917); Rehder in Journ. Arn. Arb. 18: 45 (1937).

*R. lasiocarpus* Sm. var. *micranthus* (D. Don) Hook. f., Fl. Brit. Ind. 2: 339 (1878).

*R. pyi* Lévl. in Fedde, Rep. Sp. Nov. 6: 111 (1908) & in Bull. Acad. Géog. Bot. 20: 72 (1909).

**602. *Rubus palmatus* Thunb. var. *coptophyllus* (A. Gray) Koidz. in Journ. Coll. Sci. Imp. Univ. Tokyo 34, 2: 118 (1913); Ohwi, Fl. Jap. 642 (1953) & Fl. Jap. (Engl. ed.) 534 (1965).**

*R. coptophyllus* A. Gray in Perry's Exped. Jap. Bot. 2: 311 (1856); O. Kuntze, Methodik der Speciesbeschreibung und Rubus 95 (1879).

*R. fauriei* Lévl. & Van. in Bull. Soc. Agric. Sci. Arts Sarthe 40: 60 (1905) & in Fedde, Rep. Sp. Nov. 2: 174 (1906); Lévl. in Bull. Acad. Géog. Bot. 20: 126 (1909); Rehder in Journ. Arn. Arb. 18: 38 (1937).

*R. coptophyllus* has been attributed to Kuntze as a variety of *R. palmatus* but in our opinion there is no clear indication that he intended it to be regarded as such. Koidzumi seems to have been the first to make the formal transfer.

**603. *Rubus parvifolius* L., Sp. Pl. 1197 (1753) excl. syn.**

*R. hoatiensis* Lévl. in Fedde, Rep. Sp. Nov. 11: 32 (1912); Rehder in Journ. Arn. Arb. 18: 47 (1937) pro syn. sub *R. coreanus* Miq.

Whereas Rehder considered *R. hoatiensis* to be synonymous with *R. coreanus*, it would appear on the basis of the trifoliate leaves and acicular calyx to belong to *R. parvifolius*.

**604. *Rubus parvifolius* L. var. *taquetii* (Lévl.) Lauener & Ferguson, comb. nov.**

*R. schizostylus* Lévl. in Fedde, Rep. Sp. Nov. 5: 280 (1908) & in Bull. Acad. Géog. Bot. 20: 83 (1909); Nakai in Journ. Coll. Sci. Imp. Univ. Tokyo 31: 476 (1911); Rehder in Journ. Arn. Arb. 18: 48 (1937).

*R. taquetii* Lévl. in Fedde, Rep. Sp. Nov. 7: 340 (1909); Nakai in Journ. Coll. Sci. Imp. Univ. Tokyo 31: 477 (1911); Rehder in Journ. Arn. Arb. 18: 47 (1937) pro syn. sub *R. parvifolius* L.; Nakai in Bull. Nat. Sci. Mus. Tokyo no. 31: 59 (1952) pro syn. sub *R. parvifolius* L.

*R. triphyllus* Thunb. var. *taquetii* (Lévl.) Nakai in Bot. Mag. Tokyo 30: 227 (1916) pro parte quoad Taquet 765 & 2832.

KOREA. Quelpaert: in sepibus, 600 m, 12 v 1908, Taquet 765 (holo. var. *taquetii*, E); vii 1907, Faurie 1590 (holo. *R. schizostylus*, E).

We prefer to retain *R. taquetii* Lévl. as a variety of *R. parvifolius*. Furthermore, *R. schizostylus* Lévl., which Rehder maintained as a good species, we also consider to be the same as *R. parvifolius* var. *taquetii*.

**605. *Rubus perrieri* Lévl. in Le Monde des Pl. 19: 15 (1918).**

MADAGASCAR. Forêt d'Andasibe; bassin de l'Onive (Mangoro), 1400 m, bois, sur gneiss, xi 1911, H. Perrier de la Bâthie 6228 (holo.—n.v.).

**606. *Rubus pseudojaponicus* Koidz. in Bot. Mag. Tokyo 25: 74 (1911) & in Journ. Coll. Sci. Imp. Univ. Tokyo 34: Art. 2, 110 (1913); Rehder in Journ. Arn. Arb. 18: 26 (1937); Ohwi, Fl. Jap. 646 (1953) & Fl. Jap. (Engl. ed.) 536 (1965).**

*R. triflorus* Rich. var. *diversifolius* Lévl. in Bull. Soc. Agric. Sci. Arts Sarthe 40: 58 (1905), in Fedde, Rep. Sp. Nov. 2: 174 (1906) & in Bull. Acad. Géog. Bot. 20: 122 (1909).

*R. pseudojaponicus* Koidz. var. *diversifolius* (Lévl.) Koidz. in Journ. Coll. Sci. Imp. Univ. Tokyo 34: Art. 2, 110 (1913).

**607. *Rubus refractus* Lévl.** in Fedde, Rep. Sp. Nov. 4: 332 (1907), in Bull. Acad. Géog. Bot. 20: 54 (1909) & Fl. Kouy-Tchéou 359 (1915); Rehder in Journ. Arn. Arb. 18: 27 (1937).

**608. *Rubus rocheri* Lévl.** in Bull. Acad. Géog. Bot. 24: 250 (1914), Fl. Kouy-Tchéou 360 (1915) & Cat. Pl. Yunnan 240, f. 60 (1917); Rehder in Journ. Arn. Arb. 18: 27 (1937).

**609. *Rubus sachalinensis* Lévl.** in Fedde, Rep. Sp. Nov. 6: 332 (1909) & in Bull. Acad. Géog. Bot. 20: 134 (1909); Juz. in Fl. U.R.S.S. 10: 19 (1941); Heslop-Harrison in Fl. Europ. 2: 10 (1968).

*R. idaeus* L. var. *aculeatissimus* Reg. & Til. in Nouv. Mém. Soc. Nat. Mosc. 11: 87 (1858); Rehder in Journ. Arn. Arb. 18: 53 (1937); Ohwi, Fl. Jap. 644 (1953) & Fl. Jap. (Engl. ed.) 535 (1965) excl. *R. melanolasius* Focke. *R. matsumuranus* Lévl. & Van. in Bull. Soc. Agric. Sci. Arts Sarthe 40: 66 (1905) & in Fedde, Rep. Sp. Nov. 2: 176 (1906); Lévl. in Bull. Acad. Géog. Bot. 20: 135 (1909).

*R. idaeus* L. subsp. *sachalinensis* (Lévl.) Focke in Bibl. Bot. 72: 210 (1911); Koidz. in Journ. Coll. Sci. Imp. Univ. Tokyo 34: Art. 2, 136 (1913); Hultén in Lunds Univ. Arsskr. N.F. 42, Avd. 2: 1000 (1945).

*R. idaeus* L. subsp. *melanolasius* Focke var. *matsumuranus* (Lévl. & Van.) Koidz. in Journ. Coll. Sci. Imp. Univ. Tokyo 34: Art. 2, 135 (1913).

*R. idaeus* L. var. *matsumuranus* (Lévl. & Van.) Nakai in Bot. Mag. Tokyo 30: 229 (1916), alt. syn. non vidi.

We have not seen any authentic material of *R. melanolasius* Focke and are therefore unable to decide whether it is conspecific with *R. sachalinensis*. Opinions in the literature differ. Bailey (*Gentes Herbarium* 5: 875, 1945) restricts *R. melanolasius* to Saskatchewan and Alberta. Hara considers that several forms are a single geographical race under subsp. *melanolasius* Focke.

We prefer to treat *R. sachalinensis* and the following two varieties as a unit distinct from *R. idaeus*.

Focke discusses *R. melanolasius* and other subspecies ("Unterarten") of *R. idaeus* in *Abh. Naturwiss. Ver. Bremen* 13: 469-474 (1896) and in *Bibl. Bot.* 72: 209-210 (1911).

**610. *Rubus sachalinensis* Lévl. var. *concolor* (Kom.) Lauener & Ferguson, comb. nov.**

*R. melanolasius* Focke var. *concolor* Kom. in *Acta Hort. Petrop.* 22: 486 (1904).

*R. kanayamensis* Lévl. & Van. in Bull. Soc. Bot. Fr. 53: 549 (1906); Lévl. in Bull. Acad. Géog. Bot. 20: 130 (1909); Koidz. in Journ. Coll. Sci. Imp. Univ. Tokyo 34: Art. 2, 150 (1913); Rehder in Journ. Arn. Arb. 18: 51 (1937).

*R. idaeus* L. subsp. *kanayamensis* (Lévl.) Koidz. in Bot. Mag. Tokyo 30: 78 (1916).

*R. idaeus* L. var. *concolor* (Kom.) Nakai in Bot. Mag. Tokyo 30: 230 (1916); Hara in Journ. Fac. Sci. Univ. Tokyo (Bot.) 6: 74 (1952).

*R. strigosus* Michx. var. *kanayamensis* (Lévl. & Van.) Koidz., Fl. Symb. As.-Or. 56 (1930).

*R. idaeus* L. var. *aculeatissimus* Reg. & Til. f. *concolor* (Kom.) Ohwi in Fl. Jap. 644 (1953) & Fl. Jap. (Engl. ed.) 535 (1965).

**611. *Rubus sachalinensis* Lévl. var. *diamantinus* (Lévl.) Lauener & Ferguson, comb. nov.**

*R. diamantina* Lévl. in Fedde, Rep. Sp. Nov. 5: 279 (1908) & in Bull. Acad. Géog. Bot. 20: 77 (1909); Nakai in Journ. Coll. Sci. Imp. Univ. Tokyo, 31: 476 (1911) sphalm. "*diamanticus*".

*R. idaeus* L. var. *diamantinus* (Lévl.) Rehder in Journ. Arn. Arb. 18: 52 (1937).

**612. *Rubus sandwicensis* Lévl. in Fedde, Rep. Sp. Nov. 11: 32 (1912).**

HAWAIIAN (SANDWICH) ISLANDS. Sine loc., *Faurie* 1 (holo.—n.v.).

**613. *Rubus setchuenensis* Bur. & Franch.; Rehder in Journ. Arn. Arb. 18: 34 (1937).**

*R. cavaleriei* Lévl. & Van. in Bull. Soc. Bot. Fr. 51: 218 (1904); Lévl. in Bull. Acad. Géog. Bot. 20: 22 (1909), Fl. Kouy-Tchéou 357 (1915) & Cat. Pl. Yunnan 236 (1917).

**614. *Rubus sinosudrei* Lévl. in Bull. Acad. Géog. Bot. 24: 251 (1914), Fl. Kouy-Tchéou 360 (1915) & Cat. Pl. Yunnan 241, f. 61 (1917); Rehder in Journ. Arn. Arb. 18: 36 (1937).**

There is a strong resemblance between *R. sinosudrei* and *R. flagelliflorus* Focke (1901). In Léveillé's species the inner surface of the calyx lobes is much more tomentose and whereas both species have a felty tomentum on the underside of the leaves, the veins in *R. sinosudrei* are covered with longer hairs. In addition, the conical glands on the teeth of the leaves are more distinct in *R. sinosudrei*.

**615. *Rubus subornatus* Focke var. *subornatus*; Notes R.B.G. Edinb. 5: 77, Pl. 69 (1911) & Bibl. Bot. 83: 47 (1914).**

*R. subornatus* Focke var. *fockeii* Lévl., Cat. Pl. Yunnan, 242 (1917).

Léveillé does not cite a specimen under his variety which is described as "parce vel non glandulosus", and which agrees with Focke's protologue of his typical form of *R. subornatus*. Focke distinguished glandular plants as var. *melanadenus*.

*R. subornatus* very closely resembles *R. gracilis* Roxb. but in the absence of type material of *R. gracilis*, we are reluctant to consider them synonymous.

**616. *Rubus sumatranus*** Miq.; Merrill in Contr. Arn. Arb. no. 8: 70 (1934); Rehder in Journ. Arn. Arb. 18: 43 (1937); Hara & Ohashi in Hara, Fl. E. Himal. 132 (1966).

*R. myriadenus* Lévl. & Van. in Bull. Soc. Bot. Fr. 51: 218 (1904); Lévl. in Bull. Acad. Géog. Bot. 20: 81 (1909); Lévl., Fl. Kouy-Tchéou 357 (1915) pro syn. sub *R. asper* Wall. ex Don; Thuan in Fl. Cambodge, Laos & Vietnam no. 7: 24 (1968), pro syn. sub *R. asper* Wall. ex Don.

*R. myriadenus* Lévl. & Van. var. *grandifoliolatus* Lévl. in Fedde, Rep. Sp. Nov. 4: 334 (1907); Lévl. in Bull. Acad. Géog. Bot. 20: 81 (1909).

*R. asper* Wall. ex Don var. (subsp?) *myriadenus* (Lévl. & Van.) Focke in Bibl. Bot. 72: 158 (1911).

*R. asper* Wall. ex Don var. (subsp?) *myriadenus* (Lévl. & Van.) Focke subvar. *grandifoliolatus* (Lévl.) Focke in Bibl. Bot. 72: 158 (1911).

*R. asper* Wall. ex Don var. *myriadenus* (Lévl. & Van.) Lévl., Cat. Pl. Yunnan 236 (1917).

Although Thuan places *R. myriadenus* as a synonym of *R. asper*, we here follow the opinions of Merrill and of Rehder. Hara does not mention *R. myriadenus* but he has examined *R. asper* and *R. sumatranus* type material which we have not seen. However, our examination of *R. myriadenus* confirms that it is more likely to be conspecific with *R. sumatranus*.

Material of *R. myriadenus* has long glandular setae (c. 2–4 mm long) as in *R. sumatranus*, whereas *R. asper* has only short glandular setae.

See also *R. croceacanthus* (no. 572).

**617. *Rubus tephrodes*** Hance var. *ampliflorus* (Lévl. & Van.) Hand.-Mazz.; Rehder in Journ. Arn. Arb. 18: 30 (1937); Metcalf in Lingn. Sci. Journ. 19: 34 (1940).

*R. ampliflorus* Lévl. & Van. in Bull. Soc. Bot. Fr. 51: 218 (1904); Lévl. in Bull. Acad. Géog. Bot. 20: 52 (1909) & Fl. Kouy-Tchéou 357 (1915).

**618. *Rubus tongchouanensis*** Lévl. in Fedde, Rep. Sp. Nov. 12: 283 (1913) & Cat. Pl. Yunnan 242 (1917); Rehder in Journ. Arn. Arb. 18: 45 (1937).

Rehder remarks that *R. tongchouanensis* "is apparently closely related to *R. micranthus* Don and *R. niveus* Thunb.". The two latter species are now generally united under *R. niveus*. We also consider *R. tongchouanensis* to be extremely close to several specimens labelled *R. lasiocarpus* (which is a synonym of *R. niveus*) or *R. niveus* in the Edinburgh herbarium, and the leaf shape in particular shows a wide variation which could encompass *R. tongchouanensis*. Typical *R. niveus* has longer leaves and leaflets, with generally more, and up to 11 leaflets. *R. tongchouanensis* has shorter leaves and leaflets and shorter internodes. In particular the terminal leaflet is more ovate and rounded and the leaflets are more finely toothed. It may be that *R. tongchouanensis* should be considered synonymous with *R. niveus*.

It is interesting to note that part of Thuan's description of *R. niveus* reads "Feuilles . . . de dimensions très variables".

*Rubus umbellifer* Lévl. = *Grewia biloba* G. Don var. *biflora* (Bge.) Hand.-Mazz. (Tiliaceae).

**619. *Rubus yabei*** Lévl. & Van. in Bull. Soc. Agric. Sci. Arts Sarthe 40: 65 (1905) & in Fedde, Rep. Sp. Nov. 2: 175 (1906); Lévl. in Bull. Acad. Géog. Bot. 20: 133 (1909); Koidz. in Bot. Mag. Tokyo 30: 78 (1916); Ohwi, Fl. Jap. 644 (1953) & Fl. Jap. (Engl. ed.) 535 (1965).

*R. idaeus* L. var. *yabei* (Lévl. & Van.) Koidz. in Bot. Mag. Tokyo 43: 389 (1929); Rehder in Journ. Arn. Arb. 18: 51 (1937); Hara in Journ. Fac. Sci. Univ. Tokyo (Bot.) 6: 74 (1952).

Ohwi states that glandular hairs are present usually only on pedicels and calyx whilst Hara refers to these parts as being quite glabrous. Our examination of the type specimen confirms Hara's observation.

**620. *Rubus yabei*** Lévl. & Van. var. *marmoratus* (Lévl. & Van.) Ohwi in Bull. Nat. Sci. Mus. Tokyo no. 26: 10 (1949).

*R. marmoratus* Lévl. & Van. in Bull. Soc. Agric. Sci. Arts Sarthe 40: 64 (1905) & in Fedde, Rep. Sp. Nov. 2: 175 (1906); Lévl. in Bull. Acad. Géog. Bot. 20: 131 (1909); Koidz. in Bot. Mag. Tokyo 30: 78 (1916); Rehder in Journ. Arn. Arb. 18: 42 (1937).

*R. idaeus* L. subsp. *nipponicus* Focke var. *marmoratus* (Lévl. & Van.) Hara in Journ. Fac. Sci. Univ. Tokyo (Bot.) 6: 74 (1952).

*R. yabei* Lévl. & Van. f. *marmoratus* (Lévl. & Van.) Ohwi, Fl. Jap. 645 (1953) & Fl. Jap. (Engl. ed.) 535 (1965).

**621. *Sibbaldia micropetala*** (D. Don) Hand.-Mazz. in Karst. & Schenk, Vegetationsbild. 22, Heft. 8: 6 (1932) in obs.; H. R. Fletcher in Notes R.B.G. Edinb. 20: 217 (1950).

*Potentilla micropetala* D. Don, Prodr. Fl. Nepal. 231 (1825).

*P. mairei* Lévl., Cat. Pl. Yunnan 232 (1917) nom. nud.

CHINA. Yunnan, coteaux près du fleuve Bleu, 490 m, potentilla vivace, rampante, argentée, fl. jaunes petites, *E. E. Maire* s.n. (*P. mairei*, E).

In his *Catalogue des Plantes du Yunnan* Léveillé gives the original reference of *Potentilla mairei* as Bull. Acad. Géog. Bot. 43 (1915) but this is an error because although other rosaceous species are described here, and the above collection is annotated *Potentilla mairei* in Léveillé's hand, there is no mention of *Potentilla mairei* in this paper.

**622. *Sorbus hemsleyi*** (Schneid.) Rehder; Rehder in Journ. Arn. Arb. 13: 304 (1932); Yu & Kuan in Acta Phytotax. Sin. 8: 222 (1963).

*Pirus koehnei* Lévl. in Fedde, Rep. Sp. Nov. 10: 378 (1912) & Fl. Kouy-Tchéou 351 (1915)—non Schneid. 1906.

**623. *Sorbus keissleri*** (Schneid.) Rehder; Rehder in Journ. Arn. Arb. 13: 304 (1932); Yu & Kuan in Acta Phytotax. Sin. 8: 222 (1963).

*Micromeles keissleri* Schneid., Ill. Handb. Laubholz. 1: 701, f. 388c, 389d (1906).

*Sorbus aria* Crantz var. *mairei* Lévl. in Fedde, Rep. Sp. Nov. 13: 341 (1914).

*Pirus keissleri* (Schneid.) Lévl., Fl. Kouy-Tchéou 351 (1915) p.p.; Card. in Bull. Mus. d'Hist. Nat. Paris 24: 77 (1918).

*Sorbus mairei* (Lévl.) Rehder & Lévl. apud Lévl., Cat. Pl. Yunnan 242 (1917)—nomen.

**624. *Sorbus koehneana*** Schneid.; Rehder in Journ. Arn. Arb. 13: 303 (1932): Yu & Kuan in Acta Phytotax. Sin. 8: 223 (1963).

*S. valbrayi* Lévl. in Le Monde des Pl. ser. 2, 18: 28 (1916) & Cat. Pl. Yunnan 242, f. 62 (1917).

**625. *Spiraea cavaleriei*** Lévl. in Fedde, Rep. Sp. Nov. 9: 321 (1911) & Fl. Kouy-Tchéou, 361 (1915); Rehder in Journ. Arn. Arb. 13: 300 (1932).

*Spiraea holorhodantha* Lévl. = *Rodgersia pinnata* Franch. (Saxifragaceae).

**626. *Spiraea japonica*** L.f. var. *acuminata* Franch.; Rehder in Journ. Arn. Arb. 13: 301 (1932).

*S. bodinieri* Lévl. in Fedde, Rep. Sp. Nov. 9: 322 (1911) & Fl. Kouy-Tchéou 361 (1915) & Cat. Pl. Yunnan 242 (1917).

*S. bodinieri* Lévl. var. *concolor* Lévl. in Fedde, Rep. Sp. Nov. 9: 322 (1911).

*S. esquirolii* Lévl. in Fedde, Rep. Sp. Nov. 9: 322 (1911), Fl. Kouy-Tchéou 361 (1915) & Cat. Pl. Yunnan 244 (1917).

Rehder said "There is no specimen of *S. bodinieri* with the data "Mont du College, juillet 3, 1900 in the Léveillé Herbarium", but this specimen, one of the syntypes of *S. bodinieri*, has been found at E.

**627. *Spiraea mairei*** Lévl. in Bull. Acad. Géog. Bot. 25: 43 (1915) & Cat. Pl. Yunnan 244 (1917); Rehder in Journ. Arn. Arb. 13: 301 (1932).

**628. *Spiraea martinii*** Lévl. in Fedde, Rep. Sp. Nov. 9: 321 (1911) & Cat. Pl. Yunnan 244 (1917); Rehder in Journ. Arn. Arb. 13: 300 (1932); Hand.-Mazz., Symb. Sin. 7: 450 (1933).

**629. *Spiraea media*** Schmidt var. *monbetsusensis* (Franch. ex Schneid.) Card. apud Nakai; Rehder in Journ. Arn. Arb. 13: 299 (1932); Hara in Journ. Fac. Sci. Univ. Tokyo (Bot.) 6: 78 (1952).

*S. fauriei* Lévl. in Fedde, Rep. Sp. Nov. 8: 281 (1910)—non *S. fauriana* Schneid. (1905); Miyabe & Miyake, Fl. Saghal. 122 (1915) pro syn. sub *S. media* var. *sericea* Reg.

*S. monbetsusensis* Franch. ex Schneid. in Bull. Herb. Boiss. ser. 2, 5: 339 (1905).

**630. *Spiraea myrtilloides*** Rehder in Sarg., Pl. Wils. 1: 440 (1913) & Bibl. Cult. Trees & Shrubs 224 (1949).

*S. virgata* Franch., Pl. Delavay. 199 (1890); Rehder in Journ. Arn. Arb. 20: 93 (1939)—non Raf. (1838).

*S. canescens* D. Don var. *glaucophylla* Franch., Pl. Delavay. 200 (1890).

*S. microphylla* Lévl. in Bull. Acad. Géog. Bot. 25: 44 (1915) & Cat. Pl. Yunnan 244 (1917); Rehder in Journ. Arn. Arb. 13: 300 (1932) pro syn. sub *S. ovalis* Rehder.

**631. *Spiraea pubescens*** Turcz.; Rehder in Journ. Arn. Arb. 13: 300 (1932).

*S. ouensanensis* Lévl. in Fedde, Rep. Sp. Nov. 7: 197 (1909); Nakai in Journ. Coll. Sci. Imp. Univ. Tokyo 31: 472 (1911) & in Bull. Nat. Sci. Mus. Tokyo no. 31: 57 (1952) pro syn. sub *S. salicifolia* L. var. *lanceolata* Torr. & Gray.

There are two different collections under *Faurie* 315, one of which is labelled "*Spiraea ouensanensis*" in Lévillé's hand, and another which is *S. salicifolia* and obviously the source of Nakai's misapplication of *S. ouensanensis*, but not an error in identification.

632. *Spiraea veitchii* Hemsl.; Rehder in Journ. Arn. Arb. 13: 301 (1932).  
*S. atemnophylla* Lévl. in Bull. Acad. Géog. Bot. 25: 44 (1915) & Cat. Pl. Yunnan 242 (1917).

633. *Stranvaesia davidiana* Decne. var. *davidiana*; Rehder in Journ. Arn. Arb. 13: 307 (1932); Vidal in Adansonia n.s. 5: 233 (1965) & in Fl. Cambodge, Laos & Vietnam no. 6: 56 (1968).

*Pirus cavaleriei* Lévl. in Fedde, Rep. Sp. Nov. 11: 67 (1912), Fl. Kouy-Tchéou 350 (1915) & Cat. Pl. Yunnan 231 (1917).

## SAXIFRAGACEAE

634. *Astilbe rivularis* Buch. Ham. ex D. Don, Prodr. Fl. Nepal. 211 (1825);  
*Rodgersia prillieuxii* Lévl. in Bull. Soc. Bot. Fr. 51: cxliii (1904), Cat. Pl. Yunnan 255 (1917) & Fl. Kouy-Tchéou 389 (1915).

CHINA. Kweichow, rocaïlles hors du Si-men, *Bodinier* 66 (holo. *R. prillieuxii*, E).

635. *Astilbe taquetii* (Lévl.) Koidz. in Acta Phytotax. Geobot. 5: 124 (1936).  
*A. thunbergii* (Sieb. & Zucc.) Miq. var. *taquetii* Lévl. in Fedde, Rep. Sp. Nov. 8: 282 (1910); Nakai in Journ. Coll. Sci. Imp. Univ. Tokyo 31: 484 (1911).

KOREA. Quelpaert, in rupibus torrentium Hallaisan, 900 m, 3 ix 1908, *Taquet* 800 (holo. E).

*Astilbe thunbergii* (Sieb. & Zucc.) Miq. var. *aethusifolia* Lévl. = *Aruncus dioicus* (Walt.) Fern. var. *aethusifolius* (Lévl.) Hara (Rosaceae).

636. *Chrysosplenium delavayi* Franch. in Bull. Soc. Bot. Fr. 32: 7 (1885); Hara in Journ. Fac. Sci. Univ. Tokyo (Bot.) 7: 20 (1957).

*C. subargenteum* Lévl. & Van. in Fedde, Rep. Sp. Nov. 9: 441 (1911) & Fl. Kouy-Tchéou 386 (1915).

CHINA. Kweichow, Ma-jo and Pin-fa, 22 iv 1908, *Cavalerie* 3003 (holo. *C. subargenteum*, E).

637. *Chrysosplenium hydrocotylifolium* Lévl. & Van. in Fedde, Rep. Sp. Nov. 9: 441 (1911) & Fl. Kouy-Tchéou 386 (1915); Hara in Journ. Fac. Sci. Univ. Tokyo (Bot.) 7: 77 (1957).

*C. esquirolii* Lévl. in Fedde, Rep. Sp. Nov. 9: 444 (1911) & Fl. Kouy-Tchéou 386 (1915).

CHINA. Kweichow: Gan-pin, ouverture de grotte, 5 v 1904, *Cavalerie* 2111 (holo. *C. hydrocotylifolium*, E); Gan-pin, grotte, 1300 m, iv 1910, *Esquirol* 2026 (holo. *C. esquirolii*, E).

638. *Chrysosplenium lanuginosum* Hk. f. & Thoms. var. *dunnianum* (Lévl. & Van.) Hara in Journ. Fac. Sci. Univ. Tokyo (Bot.) 7: 83 (1957).

*C. dunnianum* Lévl. & Van. in Fedde, Rep. Sp. Nov. 9: 441 (1911), Fl. Kouy-Tchéou 385 (1915) & Cat. Pl. Yunnan 253 (1917).

CHINA. Kweichow, Pin-fa and Ma-jo, très rare, vi 1908, *Cavalerie* 3004 (holo. *C. dunnianum*, E).

639. *Chrysosplenium macrophyllum* Oliv. in Hook., Icon. Pl. 18: t. 1744 (1888); Hara in Journ. Fac. Sci. Univ. Tokyo (Bot.) 7: 86 (1957).

*Triplotegia mairei* Lévl. in Bull. Acad. Géog. Bot. 24: 282 (1914) & Cat. Pl. Yunnan 82 (1916).

CHINA. Yunnan, vallons herbeux de In-ko-tsoui, 2000 m, composée vivace, fl. blanches, *E. E. Maire* s.n. (holo. *T. mairei*, E).

640. *Chrysosplenium nepalense* D. Don var. *cavaleriei* (Lévl. & Van.) Hara in Journ. Fac. Sci. Univ. Tokyo (Bot.) 7: 30 (1957).

*C. cavaleriei* Lévl. & Van. in Fedde, Rep. Sp. Nov. 9: 441 (1911) & Fl. Kouy-Tchéou 385 (1915).

CHINA. Kweichow, Kai-tchéou en un endroit, vi 1908, *Cavalerie* 3005 (holo. E).

641. *Chrysosplenium pseudofauriei* Lévl. in Fedde, Rep. Sp. Nov. 8: 282 1910; Nakai in Journ. Coll. Sci. Imp. Univ. Tokyo 31: 485 (1911); Hara in Journ. Fac. Sci. Univ. Tokyo (Bot.) 7: 33 (1957).

KOREA. In lacunis montium Ouen-san, 4 vii 1906, *Faurie* 379 (holo. E).

642. *Deutzia coreana* Lévl., in Fedde, Rep. Sp. Nov. 8: 283 (1910); Nakai in Journ. Coll. Sci. Imp. Univ. Tokyo 31: 486 (1911) & Fl. Sylv. Kor. 15: 60, t. 16 (1926); Rehder in Journ. Arn. Arb. 12: 276 (1931).

643. *Deutzia cyanocalyx* Lévl. in Fedde, Rep. Sp. Nov. 10: 438 (1912) & Fl. Kouy-Tchéou 386 (1915); Rehder in Journ. Arn. Arb. 12: 276 (1931).

644. *Deutzia esquirolii* (Lévl.) Rehder in Journ. Arn. Arb. 14: 202 (1933) & 17: 333 (1936).

*Styrax esquirolii* Lévl. in Fedde, Rep. Sp. Nov. 9: 446 (1911) & Fl. Kouy-Tchéou 387 (1915) pro syn. sub *D. lancifolia*.

*Deutzia lancifolia* Rehder in Sarg., Pl. Wils. 1: 147 (1912) & in Journ. Arn. Arb. 12: 276 (1931); Lévl., Fl. Kouy-Tchéou 387 (1915).

*D. chaffanjoni* Lévl., l.c. nom. nud. pro syn. sub *D. lancifolia*.

*D. esquirolii* Lévl., l.c. nom. nud. pro syn. sub *D. lancifolia*.

*Deutzia funebris* Lévl. = *Brandisia racemosa* Hemsl. (Scrophulariaceae).

645. *Deutzia glabrata* Kom.; Nakai, Fl. Sylv. Kor. 15: 63, t. 19 (1926); Rehder in Journ. Arn. Arb. 12: 276 (1931); Hu & Chun, Ic. Pl. Sinic. 5: 31, t. 231 (1937); Kitagawa in Rep. Inst. Sci. Res. Manch. 3, App. 1: 251 (1939).

*D. fauriei* Lévl. in Fedde, Rep. Sp. Nov. 8: 283 (1910); Nakai in Journ. Coll. Sci. Imp. Univ. Tokyo 31: 486 (1911).

*Crataegus pomasae* Lévl. in Fedde, Rep. Sp. Nov. 12: 189 (1913).

646. *Dichroa febrifuga* Lour., Fl. Cochinch. 301 (1790); Lévl., Fl. Kouy-Tchéou 387 (1915); Rehder in Journ. Arn. Arb. 12: 278 (1931); Wu in Bot. Jahrb. 71: 180 (1940) in clavi spec. sin.; Chun in Acta Phytotax. Sin. 3: 177 (1954).

*Callicarpa esquirolii* Lévl. in Fedde, Rep. Sp. Nov. 9: 456 (1911) & Fl. Kouy-Tchéou 439 (1915)—non Lévl. in Fedde, Rep. Sp. Nov. 9: 325 (1911).

*Dichroa henryi* Lévl., Sert. Yunnan 1 (1916) & Cat. Pl. Yunnan 254 (1917).

647. *Hydrangea anomala* D. Don subsp. *petiolaris* (Sieb. & Zucc.) McClintock in Journ. Arn. Arb. 37: 373 (1956) & in Proc. Calif. Acad. Sci. ser. 4, 29: 199 (1957).

*H. petiolaris* Sieb. & Zucc., Fl. Jap. 1: 108, t. 54 (1839); Nakai, Fl. Sylv. Kor. 15: 71, t. 22 (1926); Rehder in Journ. Arn. Arb. 12: 278 (1931); Chun in Acta Phytotax. Sin. 3: 160 (1954).

*H. tiliaefolia* Lévl. in Fedde, Rep. Sp. Nov. 8: 282 (1910); Nakai in Journ. Coll. Sci. Imp. Univ. Tokyo 31: 486 (1911).

648. *Hydrangea aspera* D. Don subsp. *robusta* (Hk. f. & Thoms.) McClintock in Journ. Arn. Arb. 37: 373 (1956) & in Proc. Calif. Acad. Sci. ser. 4, 29: 194 (1957); Lecompte in Fl. Cambodge, Laos & Vietnam no. 4: 18 (1965).

*H. robusta* Hk. f. & Thoms. in Journ. Linn. Soc. (Bot.) 2: 76 (1858).

*H. rosthornii* Diels in Bot. Jahrb. 29: 374 (1900); Lévl., Fl. Kouy-Tchéou 388 (1915); Rehder in Journ. Arn. Arb. 12: 277 (1931); Chun in Acta Phytotax. Sin. 3: 158 (1954).

*H. maximowiczii* Lévl. in Bull. Acad. Géog. Bot. 12: 114 (1903).

649. *Hydrangea aspera* D. Don subsp. *strigosa* (Rehder) McClintock in Journ. Arn. Arb. 37: 373 (1956) & in Proc. Calif. Acad. Sci. ser. 4, 29: 193 (1957); Lecompte in Fl. Cambodge, Laos & Vietnam no. 4: 16 (1965).

*H. strigosa* Rehder in Sarg., Pl. Wils. 1: 31 (1911) & in Journ. Arn. Arb. 12: 277 (1931); Chun in Acta Phytotax. Sin. 3: 154 (1954).

*Premna merinoi* Lévl., Sert. Yunnan 3 (1916) & Cat. Pl. Yunnan 278 (1917).

*Hydrangea villosa* Rehder var. *mairei* Lévl., Cat. Pl. Yunnan 254 (1917).

650. *Hydrangea paniculata* Sieb. in Nov. Act. Leop.-Carol. 14: 691 (1829); Rehder in Journ. Arn. Arb. 12: 277 (1931); Hu & Chun, Ic. Pl. Sinic. 3: 36, t. 136 (1933); Chun in Acta Phytotax. Sin. 3: 139 (1954); McClintock in Proc. Calif. Acad. Sci. ser. 4, 29: 211 (1957).

*H. kamienskii* Lévl. in Bull. Acad. Géog. Bot. 12: 115 (1903) & Fl. Kouy-Tchéou 388 (1915).

*H. sachalinensis* Lévl. in Fedde, Rep. Sp. Nov. 8: 282 (1910).

651. *Hydrangea scandens* (L.f.) Ser. subsp. *chinensis* (Maxim.) McClintock in Journ. Arn. Arb. 37: 373 (1956) & in Proc. Calif. Acad. Sci. ser. 4, 29: 206 (1957).

*H. chinensis* Maxim. in Mém. Acad. Sci. St. Pétersb. ser. 7, 10 (16): 7 (1867); Chun in Acta Phytotax. Sin. 3: 119 (1954).

*H. davidii* Franch. in Nouv. Arch. Mus. d'Hist. Nat. Paris, ser. 2, 8: 227 (1885); Rehder in Journ. Arn. Arb. 12: 276 (1931).

*H. arborescens* Lévl. in Bull. Acad. Géog. Bot. 12: 115 (1903).

*H. davidii* Franch. var. *arborescens* (Lévl.) Lévl., Fl. Kouy-Tchéou 387 (1915).

652. *Itea yunnanensis* Franch.; Rehder in Journ. Arn. Arb. 12: 279 (1931); Chang in Acta Phytotax. Sin. 2: 118 (1952).

*I. bodinieri* Lévl. in Fedde, Rep. Sp. Nov. 9: 457 (1911).

*I. esquirolii* Lévl., Fl. Kouy-Tchéou, 388 (1915) nom. nud.

653. *Parnassia delavayi* Franch. in Journ. de Bot. 10: 267 (1896) & in Bull. Soc. Bot. Fr. 44: 262 (1897); Lévl., Cat. Pl. Yunnan 255 (1917); Hand.-Mazz. in Öst. Bot. Zeitschr. 90: 135 (1941).

*P. mairei* Lévl. in Fedde, Rep. Sp. Nov. 12: 282 (1913).

CHINA. Yunnan, plateaux herbeux de Ié-ma-tchouan, 3200 m, plante vivace, variété à grandes fleurs blanches, vii 1912, *E. E. Maire* s.n. (holo. *P. mairei*, E.)

654. *Parnassia esquirolii* Lévl. in Fedde, Rep. Sp. Nov. 13: 258 (1914) & Fl. Kouy-Tchéou 388 (1915); Evans in Notes R.B.G. Edinb. 13: 173 (1921); Hand.-Mazz. in Öst. Bot. Zeitschr. 90: 132 (1941).

CHINA. Kweichow, Lang-tchang-po, sous arête des rochers humides, fleur blanche, v 1910, *Esquirol* 3147 (holo. E).

In his original description Léveillé misquoted the collector's number as 3127.

655. *Parnassia petitmenginii* Lévl. in Fedde, Rep. Sp. Nov. 8: 285 (1910) & Fl. Kouy-Tchéou 388 (1915); Hand.-Mazz. in Öst. Bot. Zeitschr. 90: 132 (1941).

CHINA. Kweichow, environs de Kouy-Yang, mont. du Collège, gorges de Yang-pa, sur les rochers, fleurs blanches, ix 1898, *Chaffanjon* in Herb. Bodinier 2497 (holo. E).

656. *Parnassia wightiana* Wall. in Wight & Arn., Prodr. Fl. Penins. Ind. Or. 35 (1834).

*P. wightiana* var. *martini* Lévl., Fl. Kouy-Tchéou, 388 (1915) nom. nud.

CHINA. Kweichow, environs de Gan-pin, bord des ruisseaux, environs de Kouy-yang, fleurs blanches (routes de Tsin-tchen), 8-12 ix 1897, *Martin* & *Bodinier* 1895 (var. *martini*, E).

657. *Philadelphus henryi* Koehne; Rehder in Journ. Arn. Arb. 12: 275 (1931); Hu in Journ. Arn. Arb. 36: 346 (1955).

*Deutzia mollis* var. *erythrocalyx* Lévl. in herb.—exsicc. name.

658. *Philadelphus pekinensis* Rupr.; Rehder in Journ. Arn. Arb. 12: 275 (1931); Hu in Journ. Arn. Arb. 36: 93 (1955).

*Deutzia chanetii* Lévl. in Fedde, Rep. Sp. Nov. 9: 451 (1911) & in Bull. Acad. Géog. Bot. 27: 85 (1917).

659. *Philadelphus sericanthus* Koehne in Gartenfl. 45: 561 (1896); Hu in Journ. Arn. Arb. 36: 343 (1955).

*P. magdalenae* auct. non Koehne; Rehder in Journ. Arn. Arb. 12: 275 (1931).

*P. coronarius* L. var. *chinensis* Lévl., Fl. Kouy-Tchéou 389 (1915) nom. nud.

660. *Ribes laurifolium* Jancz.; Rehder in Journ. Arn. Arb. 12: 279 (1931).

*Cavaleria enkianthoidea* Lévl. in Fedde, Rep. Sp. Nov. 11: 66 (1912) & Fl. Kouy-Tchéou 389 (1917) pro syn. sub "*Ribes pachysandroidea* Lévl." non Oliv.

661. *Rodgersia pinnata* Franch. in Nouv. Arch. Mus. Paris, ser. 2, 10: 176 (1888) & Pl. David. 2: 214 (1888) in obs.

*Spiraea holorhodantha* Lévl. in Bull. Acad. Géog. Bot. 25: 44 (1915).

*Astilbe pinnata* Franch., Pl. Delav. 231 (1890).

CHINA. Yunnan: rochers des mont. à Pé-long-tsin, 3200 m, grande plante vivace, grappe rose, fl. blanches, vi 1912, *E. E. Maire* s.n.; rochers des mont. à Kiao-me-ti, 3100 m, tige florale unique, rose, fl. blanc ou rosées, vi 1912, *E. E. Maire* s.n. (syntype *S. holorhodantha*, E).

Franchet's observation on *Rodgersia pinnata* refers to a footnote which contains a minimal description of the species. *R. pinnata* could be accepted as being validly published and in view of the full description of *Astilbe pinnata* two years later, the making of a new combination seems hardly merited.

662. *Saxifraga brachyphylla* Franch., Pl. Delavay. 237 (1890); Anth. in Notes R.B.G. Edinb. 18: 25 (1933).

*S. severtiaeflora* Lévl. in Fedde, Rep. Sp. Nov. 13: 341 (1914) & Cat. Pl. Yunnan, 260 (1917) "*swertiiflora*"; Engl. & Irmsch. in Pflanzenr. 4.117: 166 (1916).

CHINA. Yunnan, marécages de Lou-pou, 3000 m, plante aquatique annuelle, fl. jaunes, x 1913, *E. E. Maire* s.n. (holo. *S. severtiaeflora*, E).

663. *Saxifraga clavistaminea* Engl. & Irmsch. in Notes R.B.G. Edinb. 5: 124 (1912) & in Pflanzenr. 4.117: 67 (1916); Anth. in Notes R.B.G. Edinb. 18: 217 (1934).

*S. blinii* Lévl. in Bull. Acad. Géog. Bot. 25: 43 (1915) & Cat. Pl. Yunnan 256 (1917).

CHINA. Yunnan, vallée de Ou-ma-hai, 2300 m, plante vivace, fl. blanches, v 1912, *E. E. Maire* s.n. (holo. *S. blinii*, E).

664. *Saxifraga diversifolia* [Wall. ex] Ser. var. *diversifolia* f. *foliata* Engl. & Irmsch. in Notes R.B.G. Edinb. 5: 138 (1912) & in Pflanzenr. 4.117: 659 (1916).

*S. dunniana* Lévl. in Fedde, Rep. Sp. Nov. 13: 174 (1914) & Cat. Pl. Yunnan, 256, f. 63 (1917); Engl. & Irmsch. in Pflanzenr. 4.117: 165 (1916).

CHINA. Yunnan, pâturages des mont. derrière Tong-tchouan, 2700 m, plante vivace, dressée, fl. jaunes, voisines du millepertuis herbacé, x 1912, *E. E. Maire* s.n. (iso. *S. dunniana*, E).

665. *Saxifraga filicaulis* [Wall. ex] Ser. in DC., Prodr. 4: 46 (1830); Engl. & Irmsch. in Pflanzenr. 4.117: 659 (1919).

*S. mairei* Lévl. in Fedde, Rep. Sp. Nov. 13: 174 (1914) & Cat. Pl. Yunnan 259 (1917); Engl. & Irmsch. in Pflanzenr. 4.117: 166 (1916).

CHINA. Yunnan, rochers derrière Tong-tchouan, 2600 m, plante vivace, gazonnante, toujours verte, fl. jaunes, ix 1912, *E. E. Maire* s.n. (holo. *S. mairei*, E).

666. *Saxifraga gemmipara* Franch. in Journ. de Bot. 10: 262 (1896); Engl. & Irmsch. in Pflanzenr. 4.117: 138 (1916); Anth. in Notes R.B.G. Edinb. 18: 217 (1934).

*S. gasterosteus* Lévl. in Le Monde des Pl. ser. 2, 18: 28 (1916) & Cat. Pl. Yunnan 258 (1917).

CHINA. Yunnan: rochers des pics derrière Tong-tchouan, 2700 m, saxifrage vivace, fl. blanches, ix 1912, *E. E. Maire* s.n. (syntype); mont. calcaires de La-kou, 2600 m, saxifrage vivace, gazonnante, fl. blanches, ix 1912, *E. E. Maire* s.n. (syntype); rochers de Ma-hong, 2700 m, saxifrage vivace, gazonnante, fl. blanches, étamines jaunes, viii 1912, *E. E. Maire* s.n. (syntype *S. gasterosteus*, E).

667. *Saxifraga hastigera* Lévl. in Fedde, Rep. Sp. Nov. 13: 257 (1914) & Cat. Pl. Yunnan 258, f. 64 (1917); Anth. in Notes R.B.G. Edinb. 18: 25 (1933).

CHINA. Yunnan, rochers de Ié-ma-tchouan, 3200 m, plante annuelle, fl. jaunes, viii 1912, *E. E. Maire* s.n. (holo. E).

668. *Saxifraga hispidula* D. Don. var. *doniana* Engl., Monogr. Saxifr. 222 (1872); Anth. in Notes R.B.G. Edinb. 18: 28 (1933).

*S. potentillaeflora* Lévl. in Fedde, Rep. Sp. Nov. 13: 341 (1914) & Cat. Pl. Yunnan 259 (1917); Engl. & Irmsch. in Pflanzenr. 4.117: 166 (1916).

CHINA. Yunnan, rochers du Io-chan, 3300 m, petite plante vivace, en touffes, étalées, fl. jaune, viii 1913, *E. E. Maire* s.n. (holo. *S. potentillaeflora*, E).

669. *Saxifraga iochanensis* Lévl., Sert. Yunnan 2 (May 1916) & Cat. Pl. Yunnan 258 (1917).

*S. dumetorum* Balf. f. in Trans. Bot. Soc. Edin. 27: 71 (Oct? 1916); Anth. in Notes R.B.G. Edinb. 18: 217 (1934).

CHINA. Yunnan: rochers de Io-chan, 3300 m, vivace, feuilles pubescentes, rouges en dessous, fl. blanches, viii 1912, *E. E. Maire* s.n. (lecto. *S. iochanensis*, E); rochers moussus des mont. à Pé-long-tsin, 3200 m, vivace stolonifère tumescente, feuil. rouges endessous, vi 1912, *E. E. Maire* s.n., (E).

It is almost certain that Lévillé's name has priority over Balfour's. *Sertum Yunnanense* is dated May 1916 whereas the *Transactions of the Botanical Society of Edinburgh* are not dated. However, the *Transactions* are always printed after the final meeting of the Session, in this case 13th April 1916, and in the Society's minutes there is evidence that this particular issue of the *Transactions* was not published until October.

In his protologue, Balfour cites as a syntype of *S. dumetorum*, a duplicate of the Pé-long-tsin specimen in Lévillé's herbarium. The Lévillé specimen

itself is a syntype of *S. iochanensis*. As the specimen from Io-chan is adequate and more appropriate I have chosen it as the lectotype of *S. iochanensis*.

**670. *Saxifraga stolonifera* Meerb. var. *immaculata* (Diels) Hand.-Mazz., Symb. Sin. 7: 427 (1931).**

*S. sarmentosa* L.f. var. *immaculata* Diels in Bot. Jahrb. 29: 364 (1900); Engl. & Irmsch. in Pflanzenr. 4.117: 653 (1919).

*S. chaffanjonii* Lévl. in Fedde, Rep. Sp. Nov. 9: 452 (1911) & Fl. Kouy-Tchéou 389 (1915); Anth. in Notes R.B.G. Edinb. 18: 217 (1934) pro syn. sub *S. sarmentosa* L.f.

*S. martini* Lévl., Fl. Kouy-Tchéou 389 (1915) nom. nud.

CHINA. Kweichow: environs de Kouy-yang, mont. du Collège, à la cascade sur les rochers, 20 iv 1898, *Chaffanjon in Herb. Bodinier* 2219; trou de Long-tong, 990 m, blanche et panachée, 1 v 1910, *Esquirol* 2112 (syntype *S. chaffanjonii*, E); environs de Gan-pin, sur les rochers, près de la ville, 16 vi 1895, *Martin & Bodinier* 1626 (*S. martini*, E).

Léveillé also records *S. chaffanjonii* in his *Catalogue des Plantes du Yunnan* without citing collections. Of the two Yunnanese specimens in Léveillé's herbarium under *S. chaffanjonii* one, from Ta-hai, is *S. rufescens* Balf. f. and is a duplicate of one of Balfour's syntypes of *S. rufescens*. The other, from Lou-pou, belongs to *S. imparilis* Balf. f. and is likewise a duplicate of one of Balfour's syntypes of *S. imparilis*.

*S. martini* is also listed in Léveillé's *Catalogue* but the specimen from Yunnan which he included in his herbarium under that name, is also *S. imparilis* Balf. f.

Anthony has already drawn attention to the above misidentifications in *Notes R.B.G. Edinb.* 18: 217 (1934).

**671. *Saxifraga strigosa* [Wall. ex] Ser. in DC., Prodr. 4: 41 (1830); Engl. & Irmsch. in Pflanzenr. 4.117: 137 (1916); Anth. in Notes R.B.G. Edinb. 18: 217 (1934).**

*S. echinophora* Lévl. in Le Monde des Pl. ser. 2, 18: 28 (1916) & Cat. Pl. Yunnan 256 (1917).

CHINA. Yunnan, tertres des mont. derrière Tong-tchouan, 2700 m, saxifrage isolée, vivace, fl. blanches, tiges roses, x 1912, *E. E. Maire* s.n. (holo. *S. echinophora*, E).

**672. *Schizophragma hydrangeoides* Sieb. & Zucc.; Nakai, Fl. Sylv. Kor. 15: 73, t. 24 (1926); Rehder in Journ. Arn. Arb. 12: 278 (1931).**

*Hydrangea taquetii* Lévl. in Fedde, Rep. Sp. Nov. 8: 282 (1910); Nakai in Journ. Coll. Sci. Imp. Univ. Tokyo 31: 486 (1911).

**673. *Tiarella polyphylla* D. Don, Prodr. Fl. Nepal. 210 (1825).**

*T. bodinieri* Lévl., Fl. Kouy-Tchéou 389 (1915) nom. nud. pro syn. sub *T. polyphylla* D. Don.

*T. polyphylla* D. Don var. *oligophylla* Lévl., Pl. Seu-Tchouen, 185 (1918).

Léveillé's description of var. *oligophylla* is merely "parce foliata" and no specimens are cited.

## CRASSULACEAE

**674. *Orostachys chanetii* (Lévl.) Berger** in Pflanzenfam. ed. 2, 18a: 464 (1930).

*Sedum chaneti* Lévl. in Fedde, Rep. Sp. Nov. 5: 99 (1908) & in Bull. Acad. Géog. Bot. 27: 74 (1917) pro syn. sub *S. spinosum* Thunb.; Praeger in Journ. Roy. Hort. Soc. 46: 165, f. 90, 91 (1921).

*S. fimbriatum* (Turcz.) Franch. var. *chaneti* (Lévl.) Fröd. in Acta Hort. Gotoburg. 6, App.: 13, text figs. 33-40 (1931).

CHINA. Pé-Tche-Li (Chihli), Tcheng-Ting-Fou, sur les toits des pagodes, 15 ix 1905, *Chanet* 125 (holo. E).

**675. *Sedum definitum* Lévl.** in Bull. Soc. Agric. Sci. Arts Sarthe 39: 319 (1904) & in Fedde, Rep. Sp. Nov. 6: 373 (1909).

CHINA. Peking, environs de la ville, talus des champs, murs, vii 1889, *Bodinier* s.n. (holo.—n.v.).

The type specimen of this species is not in Edinburgh. There is a specimen *Chanet* 433, identified by Praeger as *S. hybrida* L. bearing the words "*Sedum definitum* Lévl. & Vant." on the label. *S. definitum* is not listed in Lévillé's *Catalogue des Plantes de Peking et du Tche-Li*.

**676. *Sedum drymarioides* Hance var. *stellariifolium* (Franch.) R. Hamet** in Notes R.B.G. Edinb. 5: 116 (1912), in Bull. Soc. Bot. Fr. 71: 1216-1242 (1924) & 72: 50-63 (1925); Fröd. in Hand.-Mazz., Symb. Sin. 7: 410 (1931) & in Acta Hort. Gotoburg. 6, App.: 40, Pl. 24, f. 2-3, text figs. 284-291 (1931).

*S. stellariaefolium* Franch. in Nouv. Arch. Mus. Paris ser. 2, 6: 10 (1883) & Pl. David. 1: 130 (1884).

*S. bodinieri* Lévl. & Van. in Bull. Soc. Agric. Sci. Arts Sarthe 39: 317 (1904) & in Fedde, Rep. Sp. Nov. 6: 372 (1909); Lévl., Fl. Kouy-Tchéou 118 (1914).

*S. esquirolii* Lévl. in Fedde, Rep. Sp. Nov. 5: 99 (1908) & Fl. Kouy-Tchéou 118 (1914); Berger in Pflanzenfam. ed. 2, 18a: 460 (1930) pro syn. sub *S. drymarioides*.

*S. drymarioides* auct. non Hance; Lévl., China Revue Annuelle, 19 (1916).

*S. viscosum* Praeger in Journ. Bot. 57: 57 (1919) & in Journ. Roy. Hort. Soc. 46: 289, f. 172-3 (1921).

CHINA. Kweichow: environs de Kouy-Yang, surs les rochers à Hong-Gay, fleurs jaunes, 26 vi 1898, *Bodinier* 1657 bis; environs de Gan-pin, sur les rochers, bord du torrent des Ligularia, 19 iv 1898, *Bodinier* 1657 (syntype *S. bodinieri*, E); route de Tchei-Fong, mousse des rochers, viii 1904, *Esquirol* 185 (holo. *S. esquirolii*, E).

**677. *Sedum fastigiatum* Hk. f. & Thoms.** in Journ. Linn. Soc. (Bot.) 2: 98 (1858); Praeger in Journ. Roy. Hort. Soc. 46: 53, f. 19 (1921); Berger in Pflanzenfam. ed. 2, 18a: 442 (1930).

*Triplostegia pinifolia* Lévl. in Bull. Acad. Géog. Bot. 24: 282 (1914) & Cat. Pl. Yunnan 82, f. 19 (1916).

*Sedum quadrifidum* Pall. var. *fastigiatum* (Hk. f. & Thoms.) Fröd. in Acta Hort. Gotoburg. 5, App.: 30, pl. 6, 7, text figs. 61–67 (1930).

*Rhodiola fastigiata* (Hk. f. & Thoms.) Fu in Acta Phytotax. Sin. 12, Add. 1: 122 (1965).

CHINA. Yunnan, pâturages du Io-chan, naine, fl. jaunes, 3300 m, vi 1913, E. E. Maire s.n. (holo. *T. pinifolia*, E).

**678. *Sedum kirilowii*** Regel in Nouv. Mém. Soc. Nat. Mosc. 11: 92 (1858); Lévl. in Bull. Acad. Géog. Bot. 27: 74 (1917); Praeger in Journ. Roy. Hort. Soc. 46: 34, f. 8 (1921); Fröd. in Acta Hort. Gotoburg. 5, App.: 40, Pl. 14, text fig. 133 (1930); Berger in Pflanzenfam. ed. 2, 18a: 440 (1930).

*Rhodiola kirilowii* (Regel) Maxim. in Mém. Acad. Sci. St. Pétersb. 9: 472 (1859); Fu in Acta Phytotax. Sin. 12, Add. 1: 124 (1965).

*Sedum caerulans* Lévl. & Van. in Bull. Soc. Agric. Sci. Arts Sarthe 39: 318 (1904) & in Fedde, Rep. Sp. Nov. 6: 373 (1909).

CHINA. Peking, hautes prairies au sommet du Sy lin chan, vi 1888, Bodinier s.n. (holo. *S. caerulans*, E).

The authority for *Rhodiola kirilowii* has been cited as “(Regel) Regel in (or ex) Maxim.”, but Regel validly described *Sedum kirilowii*, and was not involved in the transfer to *Rhodiola*.

**679. *Sedum linearifolium*** Royle var. *balfourii* (R. Hamet) R. Hamet in Notes R.B.G. Edinb. 8: 140 (1913); Fröd. in Acta Hort. Gotob. 5, App.: 52, pl. 18, f. 1, text figs. 193–198 (1930) & in Hand.-Mazz., Symb. Sin. 7: 405 (1931); Berger in Pflanzenfam. ed. 2, 18a: 442 (1930).

*S. trifidum* Wall. var. *balfourii* R. Hamet in Notes R.B.G. Edinb. 5: 119 (1912).

*S. chrysanthemifolium* Lévl. in Fedde, Rep. Sp. Nov. 12: 283 (1913).

*S. trifidum* Wall. var. *chrysanthemifolium* (Lévl.) Lévl., Cat. Pl. Yunnan 62 (1916).

*Rhodiola chrysanthemifolia* (Lévl.) Fu in Acta Phytotax. Sin. 12, Add. 1: 127 (1965).

CHINA. Yunnan, Ié-Ma-Tchouan, rochers du haut plateau, fl. blanches, 3000 m, viii 1912, E. E. Maire s.n. (holo. *S. chrysanthemifolium*, E).

**680. *Sedum pekinense*** Lévl. & Van. in Bull. Soc. Agric. Sci. Arts Sarthe 39: 318 (1904) & in Fedde, Rep. Sp. Nov. 6: 373 (1909); Lévl. in Bull. Acad. Géog. Bot. 27: 74 (1917).

CHINA. Peking, sommet du Sy lin chan, viii–ix 1888, Fr. Francois s.n. (holo. E).

The type specimen consists only of a small portion of the epigeaeous caudex with a few old persistent stems attached, and several detached flowers. Although Léveillé described the leaves as “plana, lata”, there are none present on the specimen.

*S. pekinense* appears to belong to Fröderstrom’s Group *Chamae-Rhodiola* and may be related to *S. algidum* Ledeb. which, however, usually has unisexual flowers whilst those of *S. pekinense* are bisexual.

**681. *Sedum phyllanthum*** Lévl. & Van. in Bull. Soc. Agric. Sci. Arts Sarthe 39: 318 (1904) & in Fedde, Rep. Sp. Nov. 6: 373 (1909); Lévl., Fl. Kouy-Tchéou 118 (1914).

CHINA. Kweichow, environs de Gan-pin, sur les hauts rochers, fleurs jaune d'or, 6 vii 1898, *Martin & Bodinier* 2406 (holo. E).

This species is obviously in Group *Bracteata* Fröd. and very near to *S. leptophyllum* Fröd. from the Chekiang-Anhwei border, of which I have not seen any material. Both species have the same conspicuous bract subtending the flower but whereas *S. leptophyllum* has only 3 carpels, there are 5 in *S. phyllanthum*. Furthermore the leaves of *S. leptophyllum* are ternate whilst those of *S. phyllanthum* are not. The latter species also has a strong affinity with the Japanese *S. hakonense* Mak.

**682. *Sedum sarmentosum*** Bge. in Mém. Sav. Étr. Acad. Sci. St. Pétersb. 2: 104 (1833); Lévl., China Revue Annuelle, 19 (1916); Praeger in Journ. Roy. Hort. Soc. 46: 226, f. 130 (1921); Berger in Pflanzenfam. ed. 2, 18a: 458 (1930); Fröd. in Acta Hort. Gotoburg. 6, App.: 85, pl. 52, text figs. 654-674 (1931).

*S. kouyangense* Lévl. & Van. in Lévl., Fl. Kouy-Tchéou, 118 (1914) nom. nud.

CHINA. Kweichow, Kouy-yang, plain et mont., sur les rochers, fleurs jaunes. 26 v 1898, *Bodinier* 2296 (E).

The above specimen was listed under *S. kouyangense*.

**683. *Sedum stevenianum*** Rouy & Camus, Fl. Fr. 7: 94 (1901); A. Bor. in Fl. URSS 9: 72 (1939).

*S. roseum* Stev. in Mém. Soc. Nat. Mosc. 3: 263 (1812)—non Scop.

*S. hametianum* Lévl., Cat. Pl. Yunnan, 62 (1916).

*S. hametianum* was merely Lévillé's *nomen novum* for *S. roseum* Stev. non Scop.

**684. *Sedum telephium*** L. subsp. *alboroseum* (Baker) Fröd. in Acta Hort. Gotoburg. 5, App.: 61, pl. 23, text figs. 242-247 (1930).

*S. alboroseum* Baker in Saund., Refug. Bot. 1: t. 33 (1868).

*S. (Telephium) labordei* Lévl. & Van. in Lévl., Fl. Kouy-Tchéou, 118 (1914) nom. nud.

CHINA. Kweichow, Mont de Kao-po (Tsin Gay), dans les rocaillies, fleurs roses, rares, 11 ix 1899, *Laborde in herb. Bodinier* s.n., (E).

The above specimen was cited under *S. labordei*.

**685. *Sinocrassula indica*** (Decne.) Berger in Pflanzenfam. ed. 2, 18a: 463 (1930); Fu in Acta Phytotax. Sin. 12, Add. 1: 113 (1965).

*Crassula indica* Decne. in Jacq., Voy. Bot. 61, t. 73, f. 1 (1844).

*Sedum martini* Lévl. in Fedde, Rep. Sp. Nov. 5: 99 (1908) & Fl. Kouy-Tchéou 118 (1914).

*Sedum cavaleriei* Lévl. in Fedde, Rep. Sp. Nov. 5: 100 (1908).

*Sedum indicum* R. Hamet var. *genuinum* in Notes R.B.G. Edinb. 5: 116 (1912) nom. nud.; Lévl., China Revue Annuelle, 19 (1916).

*Sedum cavaleriense* Lévl., Fl. Kouy-Tchéou 118 (1914).

*Sedum indicum* (Decne.) R. Hamet ex Praeger in Journ. Roy. Hort. Soc. 46: 283, figs. 167-8 (1921); R. Hamet in Bull. Soc. Bot. Fr. 74: 271 (1927) & 76: 1099 (1929); Fröd. in Hand.-Mazz., Symb. Sin. 7: 408 (1931) & in Acta Hort. Gotoburg. 6, App.: 19, pl. 7, f. 1, pl. 8, text figs. 110-125 (1931).

CHINA. Kweichow: environs de Gan-pin, aux grandes rocaïlles, sur les rochers, fleurs blanc-jaunâtre; Lou-tsong-koan, rochers, 20 viii 1897, Martin & Bodinier 1808 (holo. *S. martini*, E); Pin-fa, bois, rochers, rare, 17 x 1903, Cavalerie 1555 (holo. *S. cavaleriei*, E); Gan-chouan, rochers, Cavalerie 3879 (holo. *S. cavaleriense*, E).

In his *Flore du Kouy-Tchéou*, Léveillé cited Cavalerie 1555 under *S. martini*, without reference to it being the type of *S. cavaleriei*. *S. indicum* Hamet is given as a synonym of *S. martini*.

*S. indicum* R. Hamet var. *genuinum* (Notes R.B.G. Edinb. 5: 116, 1912) is a *nomen nudum* and var. *forrestii* briefly described on the preceding page, is therefore not valid.

Praeger assumed that Hamet's *S. indicum* prior to 1927 was based on *Crassula indica* Decne. but Hamet did not indicate that this was his intention. Praeger (1921), therefore, was probably the first to validate *S. indicum* R. Hamet of 1912, when he also gave *Crassula indica* as a synonym.

#### HAMAMELIDACEAE

*Cavaleria enkianthoidea* Lévl. = *Ribes laurifolium* Jancz. (Saxifragaceae)

686. *Corylopsis multiflora* Hance in Ann. Sci. Nat. Ser. 4 (Bot.) 15: 224 (1861).

*C. wilsonii* Hemsl.; Rehder in Journ. Arn. Arb. 12: 281 (1931).

*C. cavaleriei* Lévl. in Fedde, Rep. Sp. Nov. 11: 295 (1912) & Fl. Kouy-Tchéou 193 (1914).

687. *Corylopsis platypetala* Rehder & Wils. in Sarg., Pl. Wils. 1: 426 (1913).

*C. alnifolia* (Lévl.) Schneid.; Rehder in Journ. Arn. Arb. 12: 280 (1931).

*Berchemia alnifolia* Lévl. in Fedde, Rep. Sp. Nov. 10: 433 (1912).

688. *Distylium buxifolium* (Hance) Merr. in Sunyatsenia 3: 251 (1937); Walker in Journ. Arn. Arb. 25: 326 (1944).

*Myrsine buxifolia* Hance in Ann. Sci. Nat. ser. 4 (Bot.) 15: 225 (1861).

*Distylium chinense* (Franch.) Diels in Bot. Jahrb. 29: 380 (1900); Rehder in Journ. Arn. Arb. 12: 280 (1931) & 17: 333 (1936).

*Distylium dunnianum* Lévl. in Fedde, Rep. Sp. Nov. 11: 67 (1912) & Fl. Kouy-Tchéou 194 (1914).

*Myrica seguini* Lévl. in Fedde, Rep. Sp. Nov. 12: 537 (1913).

*Myrica rapaneoidea* Lévl. in Bull. Acad. Géog. Bot. 24: 146 (1914) & Fl. Kouy-Tchéou 281 (1915).

689. *Symingtonia populnea* (R. Br. ex Griff.) van Steenis in Acta Bot. Neerl. 1: 444 (1952).

*Bucklandia populnea* [R. Br. ex] Griff. in As. Res. 19, 1: 94, t. 13-14 (1836); Rehder in Journ. Arn. Arb. 17: 333 (1936).

*Aeschynanthus esquirolii* Lévl. in Fedde, Rep. Sp. Nov. 11: 495 (1913) & Fl. Kouy-Tchéou 180 (1914).

CHINA. Kweichow, Tchei-Chou, *Esquirol* 737 (holo. *A. esquirolii*, E).

#### HALORAGACEAE

*Halorrhagis esquirolii* Lévl. nom. nud. = *Rotala rotundifolia* (Ham. ex Roxb.) Koehne (Lythraceae)

690. *Hippuris tetraphylla* L.f., Suppl. 81 (1781); Miyabe & Miyake, Fl. Saghal. 171 (1915); Gorschk. in Fl. URSS 15: 670 (1949).

*H. fauriei* Lévl. in Fedde, Rep. Sp. Nov. 8: 280 (1910).

SACHALIN. In paludosis littoris Soriofka, viii 1908, *Faurie* 776 (holo. *H. fauriei*, E).

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