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CATALOGUE OF THE NAMES PUBLISHED BY HECTOR LÉVEILLÉ: III*

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CRUCIFERAE**

143. **Arabis stelleri** DC. var. **japonica** (A. Gray) Fr. Schm. in Mém. Acad. Imp. Sci. St. Pétersb. 12: No. 2, 111 (1868); Nakai in Bot. Mag. Tokyo 32: 241 (1918); Ohwi, Fl. Jap. 579 (1956).

Arabis fauriei Lévl. in Fedde, Rep. Sp. Nov. 8: 281 (1910) non H. Boiss. (1899); Koidzumi, Fl. Symb. Or. As. 76 (1930) pro syn. sub *A. boissieuana* Nakai var *glauca* (Boiss.) Koidz.

SACHALIN: In littore Korsakof, 8 vii 1908, *Faurie* 527 (holo. *A. fauriei*, E).

BRASSICA

In a paper in Le Monde des Plantes (ser. 2, 12: 24–25: 1910) Léveillé published a key to the various forms of *Brassica oleracea* and *B. rapa*. Although the taxa in the key are expressed as binomials it is obvious that Léveillé did not intend to propose specific rank for them although they are cited as species in Index Kewensis.

Bailey (Gentes Herbarum 1: 69: 1922) has already drawn attention to Léveillé's paper and says that . . . "Léveillé probably makes the citations of authorities only as indicating the origin of a nomial and not as an authority for the combinations, although he is either not consistent or not accurate in this respect. . . ."

Despite this, however, Léveillé's combinations are validly made according to Article 33 of the Code and the short descriptions in the key validate the publication of his new names in accordance with Article 32.

As the names are validly published they are included in the normal format of this catalogue together with the other Léveilléan species of *Brassica*.

No herbarium or type specimens are cited by Léveillé although *Taquet* 2610 is labelled "var. *pseudocolza* Lévl." in his handwriting.

* For Part I see Vol. 23: 573–596 (1961).
Part II 24: 73–78 (1962).

** I am much indebted to my colleague Mr. Ian C. Hedge for his help in resolving some of the problems in this family.

O. E. Schulz has already taken Léveillé's paper into account and references to his publication in Pflanzenreich will be made.

The short summary below shows the actual ranks intended by Léveillé of those taxa only to which his name appears as the authority.

B. oleracea L.
var. suttoniana Lévl.
subvar. gemmifera Lévl.
subvar. millecapitata Lévl.

B. rapa L.
race napus var. pseudocolza Lévl.
race campestris var. colza Lévl.
race campestris var. rutabaga Lévl.

Léveillé later (Le Monde des Plantes, ser. 2, 12: 32: 1910) accepted the recommendation of M. A. Thellung concerning *B. campestris* and *B. rapa* and var. *colza* disappears into *B. campestris* L. sens. strict. which is given as a variety of *B. rapa*, whilst var. *rutabaga* also becomes a variety of *B. rapa*.

144. **Brassica integrifolia** (West) O. E. Schulz ap. Urb. Symb. Antill. 3: 509 (1903) et in Pflanzenr. (Cruciferae-Brassicae) 56 (1919).

Sinapis integrifolia West, Bijdr. St. Croix, 296 (1793).
Brassica taquetii Lévl. in Fedde, Rep. Sp. Nov. 10: 349 (1912).

KOREA: Quelpaert S., in littore Polmongi, feuilles lanceolées, toutes petiolés, 10 iii 1911, *Taquet* 4570 (holo. *B. taquetii*, E).

Taquet 555 and 4566, also from Quelpaert, belong to this species.

145. **Brassica juncea** (L.) Czern. Consp. Pl. Chark. 8 (1859); Cosson in Bull. Soc. Bot. Fr. 6: 609 (1859); O. E. Schulz in Pflanzenr. (Cruciferae-Brassicae) 55 (1919).

Sinapis juncea L. Sp. Pl. 668 (1753) excl. syn. Herm.
Brassica argyi Lévl. in Fedde, Rep. Sp. Nov. 4: 227 (1907) et in Mem. Real Acad. Cienc. Art. Barcelona, 12: no. 22, 547 (1916).

CHINA: Kiang-Sou, Tou-deu-tse, Talaikiao, *d'Argy* s.n. (holo. *B. argyi*, E).

146. **Brassica napus** L. Sp. Pl. 666 (1753) s.l.

B. rapa L. race *napus* L. var. *pseudocolza* Lévl. in Le Monde des Plantes, ser. 2, 12: 25 (1910); O. E. Schulz in Pflanzenr. (Cruciferae-Brassicae), 41 (1919).
B. oleracea L. race *napus* L. var. *hongnoensis* Lévl. in Fedde, Rep. Sp. Nov. 10: 350 (1912); O. E. Schulz in Pflanzenr. (Cruciferae-Brassicae), 44 (1919) sub *B. napus* L. var. *pabularia* (DC.) Reichb.

KOREA: Quelpaert, in agris Hongno, iii 1908, *Taquet* 4572 (holo. var. *hongnoensis*, E).

147. **Brassica napus** L. var. **chinensis** (L.) O. E. Schulz in Pflanzenr. (Cruciferae-Brassicae), 45 (1919).

B. chinensis L. Centur. I. Pl. (1755).
B. antiquorum Lévl. in Fedde, Rep. Sp. Nov. 4: 227 (1907), et in Mem.

Real Acad. Cienc. Art. Barcelona, 12: no. 22, 547 (1916); Bailey in Gentes Herbarum, 1: 69 (1922).

B. oleracea L. race *rapa* L. var. *tsiekentsiensis* Lévl. in Mem. Real Acad. Cienc. Art. Barcelona, 12: no. 22, 547 (1916); O. E. Schulz in Pflanzenr. (Cruciferae-Brassicae), 268 (1919).

CHINA: Kiang-Sou, Song-Kiang, iii, *d'Argy* s.n. (lecto. *B. antiquorum*, E); Tsie-ken-tse, feuilles radicales alongées, obtuses, portées sur une espèce de hampe, Sio-pa-tse lorsqu'il est petit, *d'Argy* s.n. (holo. var. *tsiekentsiensis*, E).

There are four specimens of *B. antiquorum*, two of which bear the word "mars" on the label, and one "mai". One of the former also has a label bearing the name *B. antiquorum* in Léveillé's handwriting. In his protologue Léveillé writes "Song-Kiang, mars-mai", which embraces at least two specimens. The specimen bearing Léveillé's label "*B. antiquorum*" is in good fruit and flower and is therefore chosen as the lectotype.

Léveillé did not cite a specimen with his description of var. *tsiekentsiensis*, but again a label bearing this name in his handwriting accompanies the specimen and is designated above as the holotype.

148. **Brassica oleracea** L. Sp. Pl. 667 (1753) s.l.

B. oleracea L. var. *suttoniana* Lévl. in Le Monde des Plantes, ser. 2, 12: 24 (1910); O. E. Schulz in Pflanzenr. (Cruciferae-Brassicae), 30 (1919) sub *B. oleracea* L. var. *ramosa* (DC.) Alefeld.

B. oleracea L. var. *suttoniana* Lévl. subvar. *gemmifera* Lévl. in Le Monde des Plantes, ser. 2, 12: 24 (1910); O. E. Schulz in Pflanzenr. (Cruciferae-Brassicae), 31 (1919) sub *B. oleracea* L. var. *bullata* DC. subvar. *gemmifera* DC.

B. oleracea L. var. *suttoniana* Lévl. subvar. *millecapitata* Lévl. in Le Monde des Plantes, ser. 2, 12: 24 (1910); O. E. Schulz in Pflanzenr. (Cruciferae-Brassicae), 31 (1919) sub *B. oleracea* L. var. *bullata* DC. subvar. *gemmifera* DC.

It is probable that Léveillé's subvar. *gemmifera* is the same as *B. oleracea* var. *bullata* subvar. *gemmifera* DC. Syst. 2: 585 (1821) and Prodr. 1: 214 (1824). Schulz cites it as *B. gemmifera* Lévl.

149. **Brassica rapa** L. Sp. Pl. 666 (1753) s.l.

B. oleracea var. *taquetii* Lévl. et Van. in Fedde, Rep. Sp. Nov. 8: 259 (1910); O. E. Schulz in Pflanzenr. (Cruciferae-Brassicae), 46 (1919) sub *B. campestris* L.

B. rapa L. race *campestris* L. var. *colza* Lévl. in Le Monde des Plantes, ser. 2, 12: 25 (1910); O. E. Schulz in Pflanzenr. (Cruciferae-Brassicae), 46 (1919) sub. *B. campestris* L.

B. rapa L. race *campestris* L. var. *rutabaga* Lévl. in Le Monde des Plantes, ser. 2, 12: 25 (1910); O. E. Schulz in Pflanzenr. (Cruciferae-Brassicae), 44 (1919) sub *B. napus* L. var. *napobrassica* (L.) Reichb.

B. rapa L. race *rapa* L. em. Metzger var. *rutabaga* Lévl. in Le Monde des Plantes, ser. 2, 12: 32 (1910).

KOREA: Quelpaert, in agris littoris, x 1908, *Taquet* 558 (holo. var. *taquetii*, E).

It is probable that Léveillé's var. *rutabaga* is the same as *B. campestris* var. *napobrassica* subvar. *rutabaga* DC. Syst. 2: 589 (1821) and Prodr. 1: 214 (1824). Schulz cites it as *B. rutabaga* DC. ap. Lévl.

150. **Capsella bursa-pastoris** (L.) Medik. Pflanzengatt. 85 (1792).

C. bursa-pastoris (L.) Medik. var. *coreana* Lévl. in Fedde, Rep. Sp. Nov. 7: 384 (1909).

KOREA: Quelpaert, in agris Tsonsyeng, 8 vi 1908, *Taquet* 562 (holo. E).

Léveillé's variety is based on the entire leaves. There are other varieties and forms of this world wide weed including a *f. integrifolia* Rchb. and it therefore seems unwise to perpetuate another sporadic entity with taxonomic rank.

151. **Cardamine amariformis** Nakai in Bot. Mag. Tokyo, 26: 324 (1912) et 33: 8 (1919), in Journ. Jap. Bot. 18: 29 (1942) et in Bull. Nat. Sci. Mus. Tokyo, no. 31, 49 (1952).

C. fauriei Lévl. in Fedde, Rep. Sp. Nov. 10: 350 (1912) non *C. fauriei* Franch. (1888).

KOREA: Secus torrentes montis des diamants, 23 vi 1906, *Faurie* 557 (holo. *C. fauriei* Lévl. and *C. amaraeformis*, E).

152. **Cardamine bodinieri** (Lévl.) Lauener **comb. nov.**

Dentaria bodinieri Lévl. in Fedde, Rep. Sp. Nov. 8: 452 (1910) et Fl. Kouy-Tchéou, 120 (1914).

CHINA: Kweichow, Kouy-Yang, mont du college, v 1910, *Bodinier* s.n. (holo. E).

The type specimen has only one or two very immature fruits and while it is difficult therefore, to be certain that it is a *Cardamine* (incl. *Dentaria*), it has the appearance of this genus. The species may be characterised by the trifoliate leaf, the leaflets of which are ciliate and cuspidate, and by the winged auriculate petiole.

153. **Cardamine calthifolia** Lévl. in Bull. Acad. Géog. Bot. 24: 281 (1914) et Cat. Pl. Yunnan, 62 (1916).

CHINA: Yunnan, vallée de Kiao-me-ti, plante annuelle, fl., blanches, 3000 m, v, *Maire* s.n. (holo. E).

154. **Cardamine impatiens** L. Sp. Pl. 655 (1753) s.l.; O. E. Schulz in Bot. Jahrb. 32: 455 (1903).

C. nakaiana Lévl. in Fedde, Rep. Sp. Nov. 10: 350 (1912); Nakai in Journ. Jap. Bot. 18: 291 (1942).

KOREA: Quelpaert in humidis Tpjengen, 11 vi 1910, *Taquet* 4116 (holo. *C. nakaiana*, E).

155. **Cardamine impatiens** var. **fumaria** Lévl. in Fedde, Rep. Sp. Nov. 12: 100 (1913); Nakai in Bull. Nat. Sci. Mus. Tokyo, no. 31, 49 (1952).

KOREA: Quelpaert S. in agris Syekeni, rara, 15 iv 1912, *Taquet* 6052 (holo. var. *fumaria*, E).

Although *C. impatiens* has a wide distribution this specimen seems to merit varietal rank for its habit of branching from the base and for its rather fumarioid leaves.

156. **Cardamine komarovii** Nakai in Fedde, Rep. Sp. Nov. 13: 271 (1914) et in Bull. Nat. Sci. Mus. Tokyo, no. 31, 49 (1952); Kitagawa in Rep. Inst. Sci. Res. Manch. 3, App. I, 237 (1939).

Alliaria auriculata Kom. in Acta Hort. Petrop. 18: 437 (1901), et 22, 354, t. 7 (1903) et Fl. Manch. 2, 359, t. 7 (1950); Nakai in Journ. Coll. Sci. Imp. Univ. Tokyo, 31: 444 (1911), non Wats. (1882).

Arabis cebennensis DC. var. *coreana* Lévl. in Bull. Acad. Géog. Bot. 19: II (between pp. 260–261) (1909).

KOREA: In petrosis rivorum montis des diamants, 24 vi 1906, *Faurie* 570 (holo. *A. cebennensis* var. *coreana*, synt. *C. komarovii*, E).

In an article entitled "Sur la présence de *l'Arabis cebennensis* en Corée", Léveillé clearly indicated that *Faurie* 570 could be separated from the species under the name var. *coreana* Lévl. He also mentions that Komarov appears to have described this plant under the name *Alliaria auriculata*.

Nakai described *C. komarovii* citing *Faurie* 570 and 127 as the types giving *A. auriculata* as a synonym. (The name *C. auriculata* was already preoccupied for a Californian species of *Cardamine*).

In his protologue Komarov cited 5 collections and one of them, a lectotype, has been examined in Edinburgh by kind permission of Leningrad.

The siliques are described by Komarov as pilose but in the lectotype only the framework of the septa remains. There are no seeds to compare with those of *Faurie* 570 which have the accumbent radicle and stalked cotyledons of *Cardamine*, and glabrous siliques.

The Faurie specimen is without basal leaves which are reniform in *A. auriculata*.

The illustrations of *A. auriculata* show the cauline leaves to be cuneate at the base but they are cordate in the lectotype. In this and the winged auriculate petioles they agree with Nakai's type although it has rather larger leaves.

Neither of the two specimens possesses flowers. The absence of seeds in *A. auriculata* makes it impossible to determine whether the radicle is accumbent as in *Cardamine* in the *Arabideae* or incumbent as in *Alliaria* in the *Sisymbrieae*.

157. **Cardamine lyrata** Bunge in Mém. Sav. Etr. Pétersb. 2: 573 (1835); O. E. Schulz in Bot. Jahrb. 32: 504 (1903).

C. argyi Lévl. in Mem. Real Acad. Cienc. Art. Barcelona, 12: 547 (1916).

CHINA: Kiang-Sou, *d'Argy* s.n. (holo. *C. argyi*, E).

There is no label of any description with the type specimen, neither is any field note given in Léveillé's protologue. The only indication that this is the type specimen is the name written on the folder enclosing it.

158. **Cardamine potentillifolia** Lévl. in Mem. Real Acad. Cienc. Art. Barcelona, 12: 548 (1916).

CHINA: Kiang-Sou, Ton-Zouo-Ze, rochers, 12 iii 1863, *d'Argy* s.n. (holo. E).

Although there is no fruiting material in the type and only specimen, there are several reasons for believing that it is not a *Cardamine*. Until more material is collected, however, it would be difficult to assign it to the correct genus.

159. **Cardamine scutata** Thunb. subsp. **regeliana** (Miq.) Hara in Journ. Fac. Sci. Tokyo (Botany), 6: 59 (1952).

C. regeliana Miq. in Ann. Mus. Bot. Lugd.-Bat. 2: 73 (1865–66).
C. hirsuta var. *regeliana* (Miq.) Maxim. in Bull. Acad. Pétersb., 18: 279 (1873) et in Mèl. Acad. Pétersb. 9: 8 (1873).
C. flexuosa With. subsp. *regeliana* (Miq.) O. E. Schulz in Bot. Jahrb. 32: 476 (1903).
C. flexuosa var. *regeliana* (Miq.) Kom. in Acta Hort. Petrop. 22: 369 (1904).
C. taquetii Lévl. in Fedde, Rep. Sp. Nov. 8: 259 (1910); Nakai in Journ. Coll. Sci. Imp. Univ. Tokyo, 31, 442 (1911) et in Journ. Jap. Bot. 18: 290 (1942).

KOREA: Quelpaert in orizetis Hongno, x 1908, *Taquet* 563 (holo. *C. taquetii*, E).

I have followed the Japanese treatment of this taxon which is characterised by the flaccid habit and very thin leaves.

160. **Cardamine violifolia** O. E. Schulz in Bot. Jahrb. 32: 440 (1903).
Cardamine glechomifolia Lévl. in Fedde, Rep. Sp. Nov. 11: 495 (1913); Nakai in Bull. Nat. Sci. Mus. Tokyo, no. 31, 49 (1952).

KOREA: Quelpaert secus torrentes, Mokan, v 1911, *Taquet* 5385 (holo. *C. glechomifolia*, E).

There are 5 specimens of *C. violifolia* in Edinburgh including the type, *Henry* 3298 from Hupeh. Two of the other four are from Yunnan, one from Szechuan, and one from the Kewkiang hills in Kiangsi. The occurrence of this species in Korea is unexpected, nevertheless the type of *C. glechomifolia* agrees well with *C. violifolia*. More material would help to verify it.

161. **Chorispora tenella** (Pall.) DC. Syst. 2: 435 (1821); Lévl. in Bull. Acad. Géog. Bot. 27: 74 (1917).
Raphanus tenellus Pall. Reise. 3: App. No. 105, 653, 741, tab. 50, fig. 3 (1776).
R. monnetii Lévl. in Le Monde des Plantes, 18: 31 (1916) et in Bull. Acad. Géog. Bot. 27: 74 (1917); Schulz in Pflanzenr. (Cruciferae-Brassicae), 206 (1919).

CHINA: Hopei, Pai-Hiang, cultures, viii 1906, *Chanet* 167 (holo. *R. monnetii*, E).

Schulz placed *R. monnetii* as a probable synonym of *R. sativus* Linn. var. *dasycarpus* O. E. Schulz but it is apparent that he had not seen the type specimen of it.

162. **Draba yunnanensis** Franch. in Bull. Soc. Bot. Fr. 33: 402 (1886); O. E. Schulz in Pflanzenr. (Cruciferae-Draba et Erophila), 181 (1927).
D. mairei Lévl. in Bull. Acad. Géog. Bot. 24: 281 (1914) et Cat. Pl. Yunnan, 63 (1916).

CHINA: Yunnan, sommet du Io-chan, 3400 m, plante annuelle en petites touffes, fl. jaunes, *E. E. Maire* s.n., vi (holo. *D. mairei*, E).

In his paper on *Draba* and *Erophila*, Schulz cites *D. mairei* as a probable synonym of *D. surculosa* Franch. Presumably he did not see the type of *D. mairei* for it is clearly conspecific with *D. yunnanensis*, which is, however, closely related to *D. surculosa*.

163. **Nasturtium kouytchense** Lévl. & Van. in Bull. Soc. Agric. Sci. Arts Sarthe, 39: 321 (1904) at Lévl. Fl. Kouy-Tchéou, 120 (1914).

CHINA: Kweichow, environs de Gan-pin, plante rare, ne poussent que sous les grands rochers, à l'abri du soleil et de la pluie, entrée des grottes, fleurs blanches, 20 ix 1897, *Martin & Bodinier* 1804 (holo. E).

There is some doubt as to the correct genus for this species. The leaves, stems and fruits are hairy and the specimen does not have the general aspect of a *Nasturtium*. As far as may be seen from the immature seeds the radicle is accumbent, but the fruit is often just 1-seeded which latter condition does not occur in *Nasturtium*. It is difficult at this stage to assign it to the correct genus.

N. kouytchense is very similar to *N. henryi* Oliv. from Ichang, Hupeh. They appear to differ only in the more flaccid leaves and the zig-zag arrangement of the pedicels of *N. kouytchense*, although Oliver describes the radicle of his species "distinctly, though sometimes obliquely, incumbent."

164. **Neomartinella violifolia** (Lévl.) Pilger in Engl. & Prantl, Nat. Pflanzenfam. iii, II. Nachtr. 134 (1906); Schulz in Engl. Pflanzenfam. 2 viii 17b: 539 (1936).

Martinella violifolia Lévl. in Bull. Soc. Bot. Fr. 51: 290 (1904) et Fl. Kouy Tchéou, 120 (1914).

Esquiroliella violifolia (Lévl.) Lévl. in Le Monde des Plantes, ser. 2, 18: 31 (1916).

CHINA: Kweichow, environs de Gan-pin, parois du Ta-tong, district de Tsin-gay, mont. de Kao-tchay, 11 ii et 8 iii 1898, *Martin & Bodinier* 2069 (holo. E).

165. **Orychophragmus violaceus** (L.) O. E. Schulz in Engler's Bot. Jahrb. 54: Beibl. no. 119, 56 (1916) et in Pflanzenr. (Cruciferae-Brassicae), 74 (1923); Cheo in Bot. Bull. Acad. Sin., 2: 182 (1948); Nakai in Bull. Nat. Sci. Mus. Tokyo, No. 31, 50 (1952).

Brassica violacea L. Sp. Pl. 667 (1753).

Arabis chanetii Lévl. in Fedde, Rep. Sp. Nov. 11: 548 (1913), et in Bull. Acad. Géog. Bot. 27: 74 (1917).

Raphanus chanetii Lévl. in Le Monde des Plantes, ser. 2, 18: 31 (1916) et in Bull. Acad. Géog. Bot. 27: 74 (1917).

Raphanus courtoisii Lévl. in Mem. Real Acad. Cienc. Art. Barcelona, 12: 548 (1916).

CHINA: Hopei (Tché-Ly), Tcheng-Ting-Fou, jardins, décembres, rare, 25 vi 1907, *Chanet* 171 (holo. *Arabis chanetii*, E): Tcheng-Ting-Fou, 2 iv 1908, *Chanet* 200 (holo. *Raphanus chanetii*, E): Kiangsu, montagnes de Sa-keu-se, iv 1863, *d'Argy* s.n. (holo. *R. courtoisii*, E).

166. **Raphanus sativus** L. Sp. Pl. 669 (1753); O. E. Schulz in Pflanzenr. (Cruciferae-Brassicae), 205 (1919).

R. macropoda Lévl. in Fedde, Rep. Sp. Nov. 10: 349 (1912).

R. taquetii Lévl. in Fedde, Rep. Sp. Nov. 10: 349 (1912); Nakai in Bull. Nat. Sci. Mus. Tokyo, no. 31, 50 (1952).

R. sativus Linn. var. *macropodus* (Lévl.) Makino in Journ. Jap. Bot. 5: 34 (1928).

KOREA: Quelpaert in agris Hongno, 12 iv 1908, *Taquet* 4573 (holo. *R. macropoda*, E); in agris Quelpaert, iv 1909, *Taquet* 2612 (holo. *R. taquetii*, E).

167. **Sisymbrium irio** L. Sp. Pl. 659 (1753); Schulz in Pflanzenr. (Cruciferae-Sisymbrieae), 89 (1924).

Arabis charbonnelii Lévl. in Fedde, Rep. Sp. Nov. 12: 100 (1913) et in Bull. Acad. Géog. Bot. 27: 74 (1917).

CHINA: Frontière du Chan-Si et du Tché-Ly (Shansi and Hopei), à 6 km de la Grande Muraille, rare, 15 vi 1908, *Chanet* 223 (holo. *A. charbonnelii*, E).

168. **Thlaspi arvense** L. Sp. Pl. 646 (1753).

T. arvense Linn. var. *sinuatum* Lévl. in Mem. Real Acad. Cienc. Art. Barcelona, 12: 548 (1916) et Cat. Pl. Yunnan, 64 (1916).

Léveillé's paper in *Memorias de la Real Academia de Ciencias y Artes de Barcelona* is a Catalogue of Plants of the Chinese province of Kiang-Sou and many of the new species and varieties therein are based on material collected by d'Argy. Léveillé, however, has often not cited a specimen at all in his protologue. Field notes on d'Argy's specimens are almost entirely lacking and usually only the locality is given.

No specimen is cited for var. *sinuatum* but the holotype is probably a specimen labelled "So eu tse".

CAPPARACEAE*

169. **Capparis acutifolia** Sw. subsp. **bodinieri** (Lévl.) Jacobs in Blumea 12: 431 (1965).

C. bodinieri Lévl. in Fedde, Rep. Sp. Nov. 9: 450 (1911); Rehder in Journ. Arn. Arb. 10: 195 (1929).

C. subtenera Craib & W. W. Sm. in Notes R.B.G. Edinb. 9: 90 (1916).

170. **Capparis acutifolia** Sw. subsp. **viminea** Jacobs in Blumea 12: 429 (1965).

C. viminea Hook. f. & Thoms. Fl. Brit. Ind. 1: 179 (1872); Rehder in Journ. Arn. Arb. 17: 332 (1936) non Oliv. Fl. Trop. Afr. 1: 97 (1868).

Ficus marchandii Lévl. in Fedde, Rep. Sp. Nov. 12: 533 (1913) et Fl. Kouy-Tchéou, 432 (1915).

171. **Capparis cantoniensis** Lour.; Rehder in Journ. Arn. Arb. 17: 332 (1936) et 18: 257 (1937).

Cudrania bodinieri Lévl. in Fedde, Rep. Sp. Nov. 13: 265 (1914).

Vaniera bodinieri (Lévl.) Chun in Journ. Arn. Arb. 8: 21 (1927); Merrill in Lingn. Sci. Journ. 5: 64 (1927).

Capparis masaikai Lévl. *pro parte quoad Cavalerie* 2347 (not 3347 as cited in Fl. Kouy-Tchéou); see Rehder in Journ. Arn. Arb. 15: 96 (1934) = **Reevesia pubescens** Mast. (Sterculiaceae).

* I am grateful to Dr. M. Jacobs for his assistance with the Capparaceae and for vetting the manuscript for this family.

172. **Capparis sikkimensis** Kurz subsp. **masaikai** (Lévl.) Jacobs in Blumea 12: 496 (1965).

C. masaikai Lévl. Fl. Kouy-Tchéou, 59 (1914) *pro parte quoad Esquirol* 3230; Rehder in Journ. Arn. Arb. 10: 195 (1929).

VIOLACEAE

173. **Isodendrion pyrifolium** Gray in Proc. Am. Acad. 2: 324 (1852); Rock in Fedde, Rep. Sp. Nov. 13: 355 (1914).

Isodendrion fauriei Lévl. in Fedde, Rep. Sp. Nov. 11: 63 (1912).

SANDWICH ISLANDS: Molokai, Kamolo, vi 1910, *Faurie* 693 (holo. *I. fauriei*—n.v.).

174. **Viola bulbosa** Maxim. subsp. **tuberifera** (Franch.) Becker in Beih. Bot. Centralbl. 34: Abt. 2, 418 (1917) et in Fedde, Rep. Sp. Nov. 19: 235 (1923). *V. tuberifera* Franch. in Bull. Soc. Bot. Fr. 33: 410 (1886) et Pl. Delavay. 70, t. 19, fig. A (1889); Hand.-Mazz. Symb. Sin. 378 (1931).

V. tuberifera Franch. var. *pseudopalustris* Lévl. in Fedde, Rep. Sp. Nov. 13: 343 (1914); Becker in Beih. Bot. Centralbl. 40: Abt. 2, 139 (1924).

CHINA: Yunnan, sous brousse de mont. Io-chan, 3300 m., viola vivace, fl. blanches, petites, inodores, vi 1913, *E. E. Maire* s.n. (holo. *V. tuberifera* var. *pseudopalustris*, E).

175. **Viola delavayi** Franch. in Bull. Soc. Bot. Fr. 33: 413 (1886) et Pl. Delavay. 73 (1889); Becker in Beih. Bot. Centralbl. 36: Abt. 2, 43 (1918) et in Fedde, Rep. Sp. Nov. 19: 234 (1923).

V. boissieui Lévl. & Maire in Fedde, Rep. Sp. Nov. 12: 282 (1913) et Lévl. Cat. Pl. Yunnan, 278 (1917); Becker in Beih. Bot. Centralbl. 40: Abt. 2, 140 (1924)—non *V. boissienana* Makino in Bot. Mag. Tokyo 16: 127 (1902). *V. impatiens* Lévl. in Fedde, Rep. Sp. Nov. 13: 343 (1914) et Cat. Pl. Yunnan, 278 (1917); Becker in Beih. Bot. Centralbl. 40: Abt. 2, 139 (1924).

CHINA: Yunnan, pâturages des mont. à Pe-long-tsin, 3200 m, violette jaune vivace, fl. jaunes d'or, v 1912, *E. E. Maire* s.n. (holo. *V. boissieui*, E). Yunnan, pâturages des mont. à Lou-pou, 3000 m, viola vivaxe, fl. jaunes, vi 1913, *E. E. Maire* s.n. (holo. *V. impatiens*, E).

176. **Viola javanica** Lévl. i, Cat. Pl. Yunnan, 278 (1917) non Becker (1916), in adnot. *V. japonica* Langsd.

In a footnote to *V. japonica* Langsdorf, Léveillé wrote "Le *V. japonica* Korth. d'ailleurs douteux, devra porter le nom de *javanica* Lévl." This specific epithet was used by Becker a year earlier to describe a new species from Java. *V. japonica* Korth. is a synonym of *V. arcuata* Bl.

177. **Viola mairei** Lévl. in Fedde, Rep. Sp. Nov. 13: 343 (1914) et Cat. Pl. Yunnan, 278 (1917); Becker in Fedde, Rep. Sp. Nov. 19: 234 (1923) et in Beih. Bot. Centralbl. 40: Abt. 2, 139 (1924).

CHINA: Yunnan, flanc du Io-chan, 3200 m, viola vivace, fl. blanches, petites, rares, v 1913, *E. E. Maire* s.n. (holo. E).

Viola sandwicensis Lévl. = **Cyrtandra sandwicensis** (Lévl.) St. John (Gesneriaceae).

BIXACEAE

178. **Carriera dunniana** Lévl. in Fedde, Rep. Sp. Nov. 9: 458 (1911) et Fl. Kouy-Tchéou, 51 (1914); Rehder in Journ. Arn. Arb. 15: 102 (1934); Gagnep. in Not. Syst. 8: 132 (1939) descr. ampl.

Erythrospermum cavaleriei Lévl. = **Celastrus hindsii** Benth. (Celastraceae).

179. **Xylosma racemosum** (Sieb. & Zucc.) Miquel; Rehder in Journ. Arn. Arb. 15: 101 (1934).

Croton congestum Lour. Fl. Cochinch. 582 (1790) p.p.; Merrill in Trans. Amer. Phil. Soc. New Ser. 24: part 2, 273 (1935).
Crataegus academiae Lévl. in Mem. Real Acad. Cienc. Art. Barcelona, 12: 19 (1916).

180. **Xylosma racemosum** var. **kwangtungense** (Metcalf) Rehd. in Journ. Arn. Arb. 15: 102 (1934).

X. dunnianum Lévl. in Fedde, Rep. Sp. Nov. 9: 455 (1911) et Fl. Kouy-Tchéou, 52 (1914).
Flacourtia cavaleriei Lévl. in Fedde, Rep. Sp. Nov. 9: 457 (1911) et Fl. Kouy-Tchéou, 51 (1914).

PITTOSPORACEAE

181. **Pittosporum brevicalyx** (Oliv.) Gagnep. in Bull. Soc. Bot. Fr. 55: 545 (1908); Gowda in Journ. Arn. Arb. 32: 329 (1931).

Pittosporum pauciflorum Hook. & Arn. var. *brevicalyx* Oliv. in Hook. Icon. Pl. 16: 1579 (1887).
Euonymus provicarii Lévl. Cat. Pl. Yunnan, 34 (1915); Rehder in Journ. Arn. Arb. 12: 280 (1931); Blakelock in Kew Bull. 1951: 285 (1951).
"*Pittosporum truncatum* Pritz."; Rehder in Journ. Arn. Arb. 12: 280 (1913).
CHINA: Yunnan, collines rocheuses de Pi-ka-tong, 2550 m, petit arbre toujours vert, fl. jaunes, v 1912, *E. E. Maire* s.n. (holo. *E. provicarii*, E).

182. **Pittosporum glabratum** Lindl. var. **neriifolium** Rehd. & Wils., Pl. Wils. 3: 328 (1916); Gowda in Journ. Arn. Arb. 32: 293 (1951).

P. cavaleriei Lévl. in Fedde, Rep. Sp. Nov. 11: 492 (1913) et Fl. Kouy-Tchéou, 315 (1915) pro syn. *P. glabrata*.
"*P. glabratum* Lindl."; Rehder in Journ. Arn. Arb. 12: 280 (1931)—p.p.
CHINA: Kewichow, Pin-fa, fl. jaune, odor., rare, près ruis., 5 iv 1904, *Cavalerie* 1746 (holo. *P. cavaleriei*, E).

183. **Pittosporum glabrum** Hook. & Arn. Bot. Beech. Voy. 110 (1832); Rock in Fedde, Rep. Sp. Nov. 13: 353 (1914).

P. fauriei Lévl. in Fedde, Rep. Sp. Nov. 10: 121 (1911).
SANDWICH ISLANDS: Oahu, Kaliki, x 1909, *Faurie* 18, 38 (synt. *P. fauriei*—n.v.).

184. **Pittosporum hillebrandii** Lévl. in Fedde, Rep. Sp. Nov. 10: 121 (1911); Rock in Fedde, Rep. Sp. Nov. 13: 353 (1914).
SANDWICH ISLANDS: Molokai, Pukoo, v 1910, *Faurie* 17 (holo.—n.v.).

185. **Pittosporum trigonocarpum** Lévl. in Fedde, Rep. Sp. Nov. 11: 492 (1913) et Fl. Kouy-Tchéou, 315 (1915); Gowda in Journ. Arn. Arb. 32: 298 (1951).
"*P. glabratum* Lindl."; Rehder in Journ. Arn. Arb. 12: 280 (1931)—p.p.
CHINA: Kweichow, bois 100 km sud de Tin-fan, xi 1904, *Cavalerie* 1857 (holo. E).

POLYGALACEAE

186. **Polygala arillata** Ham.; Rehder in Journ. Arn. Arb. 18: 211 (1937).
Piptanthus esquirolii Lévl. MSS. in herb.
Crotalaria duboisii Lévl., China Rev. ann. 4 (1916).
Rehder states that *Crotalaria duboisii* was not validly published. The China Revue annuelle, however, is listed in Merrill & Walker, Bibliography of Eastern Asia (1938) where it is described as "a lithographed manuscript series of annual reviews of botanical progress". Léveillé's species, therefore, is validly published within the provisions of Article 29 of the Code.
Part I of the original manuscript of China Revue annuelle is at Edinburgh.

187. **Polygala dunniana** Lévl. in Fedde, Rep. Sp. Nov. 9: 326 (1911) et Fl. Kouy-Tchéou, 316 (1915); Rehder in Journ. Arn. Arb. 18: 211 (1937).

188. **Polygala furcata** Royle, Ill. Bot. Himal. 76, t. 19B (1839); Craib in Notes Roy. Bot. Gard. Edinb. 11: 188 (1919).
Salomonia seguinii Lévl. in Bull. Soc. Bot. Fr. 51: 291 (1904) et Fl. Kouy-Tchéou, 316 (1915) pro. syn. sub *Polygala glaucescens* Royle.
CHINA: Kweichow, environs de Hoang-ko-chou, dans les herbes. Fleurs jaunes. Tou-chan, sommet de la mont., x 1898 et 10 viii 1899, *Cavalerie & Seguin* 2495 (holo. *S. seguinii*, E).
P. furcata and *P. tatarinowii* (see below) were at one time a source of confusion which Craib cleared up in his paper, wherein fuller synonymy will be found.
Léveillé had already, in his Flore du Kouy-Tchéou, reduced *S. seguinii* and *S. martinii* to "*P. glaucescens* Royle" and "*P. triphylla* Ham." respectively but the correct synonymy is as given under *P. furcata* and *P. tatarinowii*.
The occurrence in China of *P. furcata* seems to be a new extension of its range, although the type of *S. seguinii* is not the only specimen of it in the Edinburgh herbarium. *Cavalerie* 7633 and *T. T. Yu* 17469 from Yunnan are also *P. furcata*, and *Esquirol* 602 is a mixture of this species and of *P. tatarinowii* which is quite common in W. China.

189. **Polygala japonica** Houtt.; Chodat in Mem. Soc. Phys. d'Hist. Nat. Genève, 31: part 2, no. 2, tab. 28, figs. 18–20, 353 (1893); Rehder in Journ. Arn. Arb. 18: 211 (1937); Migo in Acta Phytotax. Geobot. 13: 84 (1943); Nakai in Bull. Nat. Sci. Mus. Tokyo, no. 31, 71 (1952).
P. taquetii Lévl. in Fedde, Rep. Sp. Nov. 12: 181 (1913).

190. **Polygala longifolia** Poir. in Lam. Encycl. 5: 501 (1804); Chodat in Mem. Soc. Phys. d'Hist. Nat. Genève, 31: part 2, no. 2, tab. 28, fig. 26, 358 (1893); Merrill, Enum. Philipp. Pl. 2, 384 (1923); Craib in Fl. Siam. Enum. 1: 103 (1925).

P. leptalea DC. Prodr. 1: 325 (1824).
P. oligophylla DC. Prodr. 1: 325 (1824).
P. pyramidalis Lévl. Fl. Kouy-Tchéou, 317 (1915).

CHINA: Kweichow, ouest de Lo-fou de Li-lé à Ouang-li, bord du sentier, fl. roses-viol., ix 1905, *Cavalerie* 2587; Ouang-mou, fl. rosée, vi 1906, *Esquirol* 877 (synt. *P. pyramidalis*, E).

P. longifolia was described from a specimen gathered in Java by Commerson whilst *P. leptalea* was described from a Wallich specimen from Nepal.

Sometimes *P. leptalea* has been kept as a separate species. Although the writer has not seen the types of either species, material in the Edinburgh Herbarium from India, China, Siam and Australia is conspecific. I therefore follow Merrill in synonymy.

191. **Polygala tatarinowii** Regel in Bull. Soc. Nat. Mosc. 34: 523 (1861); Craib in Notes Roy. Bot. Gard. Edinb. 11: 187 (1919).

Salomonia martinii Lévl. in Bull. Soc. Bot. Fr. 51: 290 (1904) et Fl. Kouy-Tchéou, 317 (1915).

CHINA: Kweichow, environs de Gan-pin, dans les herbes de la montagne, environs de Tou-chan, 28 vii 1897, *Martin & Bodinier* 1786 (holo. *S. martinii*, E).

192. **Salomonia ciliata** (L.) DC. Prodr. 1: 334 (1824); Merrill in Philipp. Journ. Sci. (Bot.) 7: 237 (1912) et Fl. Manila, 279 (1912) et Sp. Blancoanae, 214 (1918) et Enum. Philipp. Pl. 2: 386 (1923).

Polygala ciliata L. Sp. Pl. 705 (1753).
Salomonia oblongifolia DC. Prodr. 1: 334 (1824); Lévl. Fl. Kouy-Tchéou, 317 (1915).
S. cavaleriei Lévl. in Bull. Soc. Bot. Fr. 51: 291 (1904) et Fl. Kouy-Tchéou, 317 (1915) pro syn. sub *S. oblongifolia*.

CHINA: Kweichow, Tou-chan, 6 viii, *Cavalerie* 71 (holo. *S. cavaleriei*, E).

Merrill remarks that *S. oblongifolia* and *S. ciliata* are sometimes regarded as separate species.

CARYOPHYLLACEAE

193. **Arenaria trichophora** Franch. in Bull. Soc. Bot. Fr. 33: 431 (1886) et Pl. Delav. 94 (1889–90).

Drymaria cerastium Lévl., Cat. Pl. Yunnan, 29 (1915) nom. nud.

CHINA: Yunnan, cultures des plateaux à Lou-Ke-Suin, 3000 m, stellaria vivace, tomenteuse, rampante, fl. blanc, mouchetées de noir, novembre, *E. E. Maire* s.n.

In the catalogue, Léveillé writes "*Drymaria mairei* Lévl. in Fedde, Rep. Decad. 1426". This number is *Sorbus aria* Crantz var. *mairei* Lévl. and the specimen cited is a different one from that above. I can find no record of

Drymaria cerastium having been described by Léveillé although the specimen bears this name in his handwriting.

194. **Arenaria trichophora** Franch. var. **angustifolia** Franch. Pl. Delavay, 95 (1889–90).
Cerastium mairei Lévl. in Fedde, Rep. Sp. Nov. 13: 341 (1914).
Drymaria mairei (Lévl.) Lévl., Cat. Pl. Yunnan, 29 (1915).
CHINA: Yunnan, sommet du Io-chan, sur roches, 3400 m, stellaria annuelle, étalée, toute poilue, fl. blanc, mouchetées de gris, viii 1913 *E. E. Maire* s.n. (holo. *C. mairei*, E).

In the catalogue Léveillé clearly indicates that he is transferring *Cerastium mairei* to *Drymaria* by citing the reference number 1425 which is the running number in the Decades Plantarum. *Drymaria mairei* is therefore validly published under Article 33 of the Code. It is not cited in Index Kewensis.

195. **Cucubalus baccifer** L. Sp. Pl. 414 (1753).
C. baccifer L. var. *cavaleriei* Lévl. Fl. Kouy-Tchéou, 67 (1914).
CHINA: Kweichow, Pin-fa, 12 viii 1902, *Cavalerie* 178 (holo. var. *cavaleriei*, E).

196. **Dianthus superbus** L. Cent. I. Pl. (1755) et Amoen. Acad. 4: 272 (1760).
D. fauriei Lévl. & Van. in Fedde, Rep. Sp. Nov. 7: 200 (1909).
KOREA: In apice Hallaisan, 2000 m, viii 1907, *Faurie* 1784 (holo. *D. fauriei*, E).

197. **Sagina japonica** (Swartz) Ohwi in Journ. Jap. Bot. 13: 438 (1937); Hara in Journ. Jap. Bot. 33: 147 (1958); Mizushima in Journ. Jap. Bot. 35: 257 (1960).
Spergula japonica Swartz in Gesellsch. Nat. Freunde Berlin, Neue Schrift 3: 164, t. 1, fig. II (1801).
Sagina taquetii Lévl. in Fedde, Rep. Sp. Nov. 10: 350 (1912); Ohwi in Acta Phytotax. Geobot. 11: 251 (1942).
Spergula coreana Lévl. in Fedde, Rep. Sp. Nov. 11: 495 (1913).
Tissa coreana (Lévl.) Nakai in Tokyo Bot. Mag. 48: 775 (1934).
Spergula salina J. & C. Presl var. *asiatica* Hara in Journ. Jap. Bot. 13: 171 (1937); Kitagawa in Rep. Inst. Sci. Res. Manch. 3: App. 1, 204 (1939).
KOREA: Quelpaert S. in littore, rara, 6 vii 1910, *Taquet* 4125 (holo. *Sagina taquetii*, E). Quelpaert in arenosis littoris, vi 1911, *Taquet* 5413 (holo. *Spergula coreana*, E).

198. **Silene aprica** Turcz. in Linnaea 10: ii, 102 (1836).
S. taquetii Lévl. in Fedde, Rep. Sp. Nov. 10: 350 (1912); Nakai in Bull. Nat. Sci. Mus. Tokyo, no. 31, 37 (1952).
Melandrium taquetii (Lévl.) Nakai in Fedde, Rep. Sp. Nov. 13: 269 (1915).
KOREA: Quelpaert in rupibus littoris, 6 vi 1910, *Taquet* 4126 (holo. *S. taquetii* E).

Two other specimens of *S. aprica*, cited by Nakai under *M. taquetii*, are *Taquet* 4607 and 5423.

Silene esquirolii Lévl. = **Swertia bimaculata** C. B. Cl. (Gentianaceae).

199. **Silene fortunei** Vis. Ind. Sem. Hort. Patav. (1847); Hand.-Mazz., Symb. Sin. 7: 203 (1929).

S. argyi Lévl. in Bull. Acad. Géog. Bot. 24: 292 (1914) et Mem. Real Acad. Cienc. Art. Barcelona, 12: 545 (1916).

CHINA: Kiang-Sou, Vou-Tse-Hien, Long chan, *d'Argy* s.n. (holo. *S. argyi*, E).

200. **Silene repens** Patrin in Pers. Syn. Pl. 1: 500 (1805); Nakai in Journ. Jap. Bot. 18: 290 (1942) et Bull. Nat. Sci. Mus. Tokyo, no. 31, 38 (1952).

S. fauriei Lévl. in Fedde, Rep. Sp. Nov. 7: 200 (1909); Nakai in Journ. Coll. Sci. Imp. Univ. Tokyo 31: 449 (1911).

KOREA: In petrosis montium, vii 1906, *Faurie* 922 (holo. *S. fauriei*, E).

201. **Silene viscidula** Franch. in Bull. Soc. Bot. Fr. 33: 421 (1886).

Melandrium viscidulum (Franch.) F. N. Williams in Journ. Linn. Soc. (Bot.) 38: 407 (1909); Hand.-Mazz. Symb. Sin. 7: 205 (1929).

S. bodinieri Lévl. in Fedde, Rep. Sp. Nov. 10: 350 (1912) et Fl. Kouy-Tchéou, 68 (1914).

S. mairei Lévl. in Bull. Acad. Géog. Bot. 25: 13 (1915) et Cat. Pl. Yunnan, 31 (1916).

CHINA: Kweichow, environs de Mou-You-Se, fleurs rosées, croissant en touffes gazonneuses, la racine est employer dans le pays pour savonner le linge, plante recueillie jadis par Mgr. Faurie, viii 1899, *Bazin & Bodinier* 2691 (holo. *S. bodinieri*, E). Yunnan, pâturages des coteaux à Ma-li-ouan, 2550 m, Silene annuel, tomenteux, fl. violacées, viii 1912, *E. E. Maire*, s.n. (holo. *S. mairei*, E).