

## NOTES ON THE FLORA OF KUNG PING SHAN, KWANGTUNG

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RECENT expeditions to Indo-China during the years 1936, 1939, and 1940, undertaken jointly by the Botanical Survey, Lingnan University, and the Arnold Arboretum, Harvard University, resulted in the collection of approximately 2800 numbers, each number with abundant duplicates. Of these, about three hundred and fifty were actually collected in Kwangtung Province. Kung Ping Shan is located in the extreme western part of Kwangtung Province, a few miles north of the Tonkin border.

This collection was made by Tsang Wai-Tak during July, August, and September, 1936, from two localities, Na Leung and Kung Ping Shan, Fang Cheng District, located on the north side of the river that separates Kwangtung from Tonkin, northeast of the town of Tung Hing, Kwangtung, and about equidistant between the sea-coast of Kwangtung at the Tonkin border and the Kwangsi boundary.

This region, so close to both the Tonkin (Indo-China) and the Kwangsi borders, would be expected to have a flora somewhat similar to both these regions, but an unusual aspect of the problem is the fact that the flora is apparently more closely related to that of Hainan than to those of central, eastern, or northern Kwangtung. Of the species recorded in this paper as new to Kwangtung, about ten were formerly known only from Hainan, eight were previously known from both Hainan and Tonkin, and ten were known only from Tonkin.

In this paper notes are given on 32 species that are here first reported from Kwangtung, representing the following genera: *Tacca*, *Hedyosmum*, *Ficus*, *Artocarpus*, *Boehmeria*, *Helicia*, *Talauma*, *Fissistigma*, *Desmodium*, *Walsura*, *Dichapetalum*, *Elaeocarpus*, *Flacourtia*, *Homalium*, *Clethra*, *Diospyros*, *Anodendron*, *Xylinabariopsis*, *Heterostemma*, *Tabernaemontana*, *Erycibe*, *Premna*, *Gomphostemma*, *Rhynchoetechum*, *Hedyotis*, *Lasianthus*, *Nauclea*, *Paederia*, *Uncaria*, *Wendlandia*, and *Xanthophytum*. Of these 32 species, about 20 are actually new to China proper. The genera *Talauma* and *Xylinabariopsis* are here first recorded from Kwangtung and China. In addition, distributional or technical notes are included on species of *Itea*, *Prunus*, *Turpinia*, *Schizomussaenda*, *Urophyllum*, and *Pentaphragma*.

These notes constitute only a preliminary report, as the novelties, of which there are about ten, need further study. In addition, some special groups, such as the Euphorbiaceae, Lauraceae, Caprifoliaceae, and Thea-

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ceae are being taken care of by specialists, while the species of *Ormosia* and *Sabia* are reported in Sargentia 3: 1-120. 1943. It is probable that in this small collection from Kwangtung at least twenty per cent of the species will represent new records for the province.

## TACCACEAE

*Tacca Esquirolii* (H. Lév.) Rehder, Jour. Arnold Arb. 17: 64. 1936.

*Clerodendron Esquirolii* H. Lév. Rep. Sp. Nov. 11: 298, 302. 1912; Fl. Kouy-Tchéou 439. 1915.

*Tacca Paxiana* Limpr. Pflanzenr. 92(IV. 42): 16. 1928; Pei, Mem. Sci. Soc. China 1: 162. 1932.

KWANGTUNG: Kung Ping Shan, Fang Cheng District, along the Kwangtung-Tonkin border, W. T. Tsang 26661, Aug. 15-24, 1936. New to Kwangtung. Previously recorded from Kweichow, Yunnan, and Tonkin.

## CHLORANTHACEAE

*Hedyosmum orientale* Merr. & Chun, Sunyatsenia 3: 36. 1940.

*Hedyosmum nutans* sensu Merr. Lingnan Sci. Jour. 5: 59. 1928; Groff, Lingnan Sci. Jour. 11: 87. 1930; *non* Swartz.

KWANGTUNG: Kung Ping Shan, Fang Cheng District, along the Kwangtung-Tonkin border, W. T. Tsang 26692, Aug. 15-24, 1936. The first record for Kwangtung and China proper. Formerly known only from Hainan.

## MORACEAE

*Ficus fistulosa* Reinw. in Blume, Bidjr. 470. 1825; King, Ann. Bot. Gard. Calcutta 1: 114. t. 150, 151. 1888; Hook. f. Fl. Brit. Ind. 5: 525. 1888.

KWANGTUNG: Kung Ping Shan, Fang Cheng District, along the Kwangtung-Tonkin border, W. T. Tsang 26829, Sept. 10-18, 1936. The first record for Kwangtung and China. Formerly known from India to Burma, Indo-China, and the Malay Archipelago.

*Ficus sikkimensis* Miquel, Ann. Mus. Lugd.-Bat. 3: 225, 292. 1867; King, Ann. Bot. Gard. Calcutta 1: 89. t. 113. 1888; Hook. f. Fl. Brit. Ind. 5: 521. 1888.

KWANGTUNG: Kung Ping Shan, Fang Cheng District, along the Kwangtung-Tonkin border, W. T. Tsang 26856, Sept. 10-18, 1936. The first record for Kwangtung. Formerly known from Sikkim to the Khasia Hills in India, and Yunnan.

*Artocarpus tonkinensis* A. Chev. ex Gagnep. Bull. Soc. Bot. France 73: 90. 1926; Merr. Lingnan Sci. Jour. 6: 275. 1930, op. cit. 7: 303. 1931.

KWANGTUNG: Kung Ping Shan, Fang Cheng District, along the Kwangtung-Tonkin border, W. T. Tsang 26749, Aug. 25-30, 1936. YUNNAN: Szemao, Henry 13015. The first record for Yunnan, and the first as a wild plant in Kwangtung. Formerly known from Tonkin and Hainan; cultivated in Kwangtung.

This species seems to be very close to *Artocarpus Petelotii* Gagnep., which was described by him at the same time as *A. tonkinensis*. Specimens from Indo-China, determined as representing *A. Petelotii*, have very similar but somewhat more pubescent leaves.

## URTICACEAE

*Boehmeria macrophylla* D. Don, Prodr. Fl. Nepal. 60. 1825; Wedd. in DC. Prodr. 16(1): 209. 1869; Hook. f. Fl. Brit. Ind. 5: 577. 1888.



KWANGTUNG: Kung Ping Shan, Fang Cheng District, along the Kwangtung-Tonkin border, *W. T. Tsang* 26844, Sept. 10-18, 1936. The first record for Kwangtung.

As usually interpreted, this species is reported from India, Indo-China, and Yunnan. The Yunnan and Indo-China material undoubtedly represents the same form as this Kwangtung specimen. There is, however, some question as to whether or not this represents the same species as that described by D. Don from Nepal; unfortunately we have seen no material from the classical locality.

#### PROTEACEAE

*Helicia silvicola* W. W. Smith, Notes Bot. Gard. Edinb. 10: 181. 1918.

KWANGTUNG: Kung Ping Shan, Fang Cheng District, along the Kwangtung-Tonkin border, *W. T. Tsang* 26665, Aug. 15-24, 1936.

This species was previously known only from the type locality, Szemao, Yunnan. Two specimens of *Henry* 13075, the type collection, are available for study; these are in flower. The Kwangtung specimen has mature fruits, of which a description follows:

Fruit ovoid to ellipsoid, 6-8 mm. long and 4-6 mm. wide, minutely and closely rufous-puberulent, with persistent style 15-18 mm. long, and short, rather stout pedicels 4-6 mm. long.

#### MAGNOLIACEAE

*Talauma Candollii* Blume, Bidjr. 1: 9. 1825; Hook. Bot. Mag. 72: t. 4251. 1846.

KWANGTUNG: Kung Ping Shan, Fang Cheng District, along the Kwangtung-Tonkin border, *W. T. Tsang* 26656, Aug. 15-24, 1936.

This represents the first record for the genus from China and from Kwangtung. The species ranges from Java, Sumatra, and Borneo to the Malay Peninsula, Siam, and Indo-China. The cited specimen closely matches a specimen collected by Sargent in Java and *Pierre* 742 from Cambodia, Indo-China.

#### ANNONACEAE

*Fissistigma polyanthum* (Wall.) Merr. Philip. Jour. Sci. 15: 135. 1919; Merr. & Chun, Sunyatsenia 5: 59. 1940.

*Uvaria polyantha* Wall. List No. 6467. 1832, *nomen nudum*.

*Melodorum polyanthum* Hook. f. & Thoms. Fl. Ind. 121. 1851; King, Ann. Bot. Gard. Calcutta 4: 131. t. 172A. 1893.

KWANGTUNG: Na Leung and Kung Ping Shan, Fang Cheng District, along the Kwangtung-Tonkin border, *W. T. Tsang* 26503, 26667, July-August, 1936. The first record for this species from Kwangtung. Formerly known from Assam to northern Burma, Siam, Indo-China, Hainan, and Kwangsi.

#### SAXIFRAGACEAE

*Itea amoena* Chun, Sunyatsenia 1: 258. 1934, Ic. Pl. Sin. 5: 19. t. 219. 1937.

KWANGTUNG: Na Leung and Kung Ping Shan, Fang Cheng District, along the Kwangtung-Tonkin border, *W. T. Tsang* 26510, 26675, July-August, 1936.

This represents the second collection for this province, the type being from Shap-Man-Tai Shan, a mountain on the Kwangtung-Kwangsi border. The species is to be expected in Tonkin, Indo-China, as the present collec-

tion was made only a few miles north of the border. Also known from Kwangsi (*Ching* 8059).

#### ROSACEAE

*Prunus Fordiana* Dunn, Jour. Bot. 45: 402. 1907; Dunn & Tutcher, Kew. Bull. Add. Ser. 10: 93. 1912; Groff, Lingnaam Agr. Rev. 2: 12. 1924; Merr. Lingnan Sci. Jour. 5: 87. 1930, in nota, sub *Prunus phaeosticta* (Hance) Maxim.

KWANGTUNG: Na Leung and Kung Ping Shan, along the Kwangtung-Tonkin border, *W. T. Tsang* 26588, 26590, 26627, 26741, August, 1936. HAINAN: Tai Un, CCC 7742 (*McClure*); Paak Shek Shan, LU 17444 (*Tsang*); Chim Shan, *Fung* 20182; Manning and Poting, *How* 71520, 71653, 72723.

This species was based on a specimen collected by Dunn's collector at Sanning, southern Kwangtung. Apparently this is its second collection in Kwangtung, though the species has been credited to Hainan. It has been confused with *Prunus phaeosticta* (Hance) Maxim., both having black-punctate leaves, but in *P. Fordiana* Dunn the apex is acuminate, not caudate-acuminate, the veins are obscure, and the fruit is larger, 8 mm. long, and ellipsoid rather than globose.

#### LEGUMINOSAE

*Desmodium longipes* Craib, Kew Bull. 1910: 20. 1910; Gagnep. in Lecomte, Fl. Gén. Indo-Chine 2: 570. 1920.

*Desmodium pulchellum* sensu Williams, Bull. Herb. Boiss. II. 5: 20. 1904, *non* Bak. (fide Schindler).

*Desmodium tonkinense* Schindler, Bot. Jahrb. 54: 53. 1917.

*Phyllodium longipes* Schindler, Rep. Sp. Nov. 20: 270. 1924.

KWANGTUNG: Na Leung and Kung Ping Shan, Fang Cheng District, along the Kwangtung-Tonkin border, *W. T. Tsang* 26511, 26702, July-August, 1936; also Sie-lung, Loting, *Y. Tsiang* 1141, Sept. 14, 1928.

This is the first record for this species from Kwangtung and China. Formerly known from Siam and from Cambodia, Laos, Cochinchina, Annam, and Tonkin, in Indo-China. The species has been confused with both *Desmodium pulchellum* (Linn.) Benth. (*Phyllodium pulchellum* Desv.) and *Desmodium elegans* (Lour.) Benth. (*Phyllodium elegans* Desv.), but it is easily distinguished from both of these by the much larger bracts (3.5 cm., not 1–1.5 cm.) and the larger leaves. In the size of the bracts it resembles *Desmodium Kurzii* Craib, a species of Siam, Burma, and China (Kwangsi), but it is readily separated from that species by the fact that the trifoliolate leaves have leaflets that are very variable in size: in *Desmodium longipes* Craib the terminal leaflet is very much larger than the two lateral leaflets, while in *D. Kurzii* Craib the three leaflets are all approximately of the same size.

#### MELIACEAE

*Walsura robusta* Roxb. Hort. Beng. 32. 1814, *nomen nudum*, Fl. Ind. ed. 2, 2: 386. 1832; Pellegr. in Lecomte, Fl. Gén. Indo-Chine 1: 785. 1911; Merr. Lingnan Sci. Jour. 14: 20. 1935.

KWANGTUNG: Kung Ping Shan, Fang Cheng District, along the Kwangtung-Tonkin border, *W. T. Tsang* 26690, August 12–24, 1936. The first record for Kwangtung. Formerly known from India to Burma, Indo-China, Yunnan, and Hainan.



## DICHAPETALACEAE

*Dichapetalum hainanense* (Hance) Engl. in Engl. & Prant!, Nat. Pflanzenfam. 3(4): 348. 1896; Merr. Lingnan Sci. Jour. 5: 105. 1930.

*Chaillertia hainanensis* Hance, Jour. Bot. 23: 322. 1885.

KWANGTUNG: Kung Ping Shan, Fang Cheng District, along Kwangtung-Tonkin border, *W. T. Tsang* 26818, Sept. 10-18, 1936.

This represents the first record of this species for Kwangtung and China proper; formerly known only from Hainan. The species is rather close to *Dichapetalum tonkinense* Engl., recorded from Hainan and from Tonkin, Indo-China. It can usually be separated from that species by the fact that the lower surfaces of the leaves are rather uniformly pubescent, the pubescence not being confined to the midrib and secondary nerves as in *D. tonkinense* Engl. The leaves also average slightly smaller.

## ELAEOCARPACEAE

*Elaeocarpus hainanensis* Oliver in Hook. Ic. Pl. 25: t. 2462. 1896; Merr. Lingnan Sci. Jour. 5: 123. 1928.

KWANGTUNG: Na Leung, Fang Cheng District, along the Kwangtung-Tonkin border, *W. T. Tsang* 26636, Aug. 1-10, 1936. Formerly known only from Hainan.

## STAPHYLEACEAE

*Turpinia glaberrima* Merr. var. *stenophylla* Merr. & Perry, Jour. Arnold Arb. 22: 552. 1941.

KWANGTUNG: Kung Ping Shan, Fang Cheng District, along the Kwangtung-Tonkin border, *W. T. Tsang* 26739, Aug. 25-30, 1936. This number is the type collection of the variety, which also occurs in Kwangsi. The species occurs in Kwangtung, Kwangsi, Hainan, and Indo-China.

## FLACOURTIACEAE

*Flacourtia Rukam* Zoll. & Mor. Syst. Verz. 33. 1854; King, Jour. As. Soc. Beng. 59(2): 117. 1890; Merr. Philip. Jour. Sci. 10: Bot. 329. 1915, op. cit. 29: 401. 1926, op. cit. 30: 411. 1926, Lingnan Sci. Jour. 5: 132. 1930.

KWANGTUNG: Kung Ping Shan, Fang Cheng District, along the Kwangtung-Tonkin border, *W. T. Tsang* 26837, Sept. 10-18, 1936. Indo-China to Malaysia, Polynesia, the Philippines, and Yunnan and Hainan in China. New to Kwangtung.

*Homalium Petelotii* Merr. Jour. Arnold Arb. 21: 377. 1940.

KWANGTUNG: Na Leung, Fang Cheng District, along the Kwangtung-Tonkin border, *W. T. Tsang* 26568, Aug. 1-10, 1936. Formerly known only from the type collection, *Pételot* 5983, from Tonkin, Indo-China. New to China and to Kwangtung.

## CLETHRACEAE

*Clethra annamensis* F. Dop, Bull. Soc. Bot. France 75: 732. 1928, et in Lecomte, Fl. Gén. Indo-Chine 3: 717. 1930.

KWANGTUNG: Kung Ping Shan, Fang Cheng District, along the Kwangtung-Tonkin border, *W. T. Tsang* 26761, Sept. 1-9, 1936. Formerly known only from Annam and Quang-tri, Indo-China. New to China and to Kwangtung.

## EBENACEAE

*Diospyros potingensis* Merr. & Chun, Sunyatsenia 5: 164. 1940.

KWANGTUNG: Kung Ping Shan, Fang Cheng District, along the Kwangtung-Tonkin border, *W. T. Tsang* 26705, Aug. 25-30, 1936.

The cited specimen apparently represents this species. It differs slightly

from the type in having proportionately longer and narrower leaves of a slightly different color, but the color difference may be due to the method of drying. If it is correctly named, this is the first record of the species for Kwangtung. Formerly known from Hainan and Hupeh.

#### APOCYNACEAE

*Anodendron punctatum* Tsiang, Sunyatsenia 2: 129. 1934, op. cit. 3: 140. 1936.

KWANGTUNG: Kung Ping Shan, Fang Cheng District, along the Kwangtung-Tonkin border, *W. T. Tsang* 26724, Aug. 25–30, 1936. Formerly known only from three collections from Hainan. A species readily recognized by its punctate leaves.

*Xylinabariopsis napeensis* (Quintaret) comb. nov.

*Microchites napeensis* Quintaret, Compt. Rend. Acad. Sci. 134: 438 (Seance du lundi 17 Février; received Harvard College Library, March 21). 1902.

*Xylinabaria Reynaudi* Jumelle, Rev. Cult. Colon. 11: 228. 1902.

*Ecdysanthera napeensis* Pierre, Rev. Cult. Colon. 11: 228. 1902.

*Parabarium napeense* Jumelle, in Spire, Caoutch. Indo-Chine 33. 1906.

*Xylinabariopsis Reynaudi* Pitard in Lecomte, Fl. Gén. Indo-Chine 3: 1261. 1933.

KWANGTUNG: Na Leung and Kung Ping Shan, Fang Cheng District, along the Kwangtung-Tonkin border, *W. T. Tsang* 26523, 26643, July–August, 1936.

It is difficult to understand why Pitard used the specific epithet *Reynaudi*, when both Pierre and Jumelle had already accepted the earlier epithet *napeense*. Formerly known from Annam, Laos, and Tonkin (Indo-China), and hence new to both China and Kwangtung.

#### ASCLEPIADACEAE

*Heterostemma oblongifolium* Constantin in Lecomte, Fl. Gén. Indo-Chine 4: 120. 1912; Merr. Lingnan Sci. Jour. 5: 153. 1930.

KWANGTUNG: Kung Ping Shan, Fang Cheng District, along the Kwangtung-Tonkin border, *W. T. Tsang* 26857, Sept. 10–15, 1936. Formerly known only from Laos, Indo-China, and Hainan, and hence new to both the Chinese mainland and Kwangtung.

*Tabernaemontana bufalina* Lour. Fl. Cochinch. 117. 1790; Pitard in Lecomte, Fl. Gén. Indo-Chine 3: 1160. 1933; Merr. Trans. Am. Philos. Soc. II. 24(2): 312. 1935 (Comment. Lour. Fl. Cochinch.).

KWANGTUNG: Na Leung and Kung Ping Shan, Fang Cheng District, along the Kwangtung-Tonkin border, *W. T. Tsang* 26547, 26654, July–August, 1936. Previously known from Indo-China and Hainan, and hence new to the Chinese mainland and to Kwangtung.

#### CONVOLVULACEAE

*Erycibe hainanensis* Merr. Philip. Jour. Sci. 21: 353. 1922, Lingnan Sci. Jour. 5: 153. 1930.

KWANGTUNG: Kung Ping Shan, Fang Cheng District, along the Kwangtung-Tonkin border, *W. T. Tsang* 26640, Aug. 15–24, 1936. Formerly known only from Hainan.

#### VERBENACEAE

*Premna Maclurei* Merr. Lingnan Sci. Jour. 6: 330. 1930.

KWANGTUNG: Kung Ping Shan, Fang Cheng District, along the Kwangtung-Tonkin border, *W. T. Tsang* 26657, Aug. 15–24, 1936. Formerly known only from Hainan.

#### LABIATAE

*Gomphostemma leptodon* Dunn, Notes Bot. Gard. Edinb. 8: 170. 1913, op. cit. 6: 190. 1915; T. Doan in Lecomte, Fl. Gén. Indo-Chine 4: 1036. 1936.



KWANGTUNG: Kung Ping Shan, Fang Cheng District, along the Kwangtung-Tonkin border, *W. T. Tsang* 26790, 26825, Sept., 1936. Formerly known only from Kwangsi (*Morse* 257) and from Tonkin, Indo-China; new to Kwangtung.

#### GESNERIACEAE

*Rhynchotechum ellipticum* (Wall.) A. DC. in DC. Prodr. 9: 285. 1845, *in nota*; C. B. Clarke, Commel. Cyrtandr. Bengal. t. 91. 1874 (*Rhyncotechum*), in DC. Monogr. Phan. 5: 198. 1893; Hook. f. Fl. Brit. Ind. 4: 373. 1884; Merr. Lingnan Sci. Jour. 13: 71. 1934.

KWANGTUNG: Kung Ping Shan, Fang Cheng District, along the Kwangtung-Tonkin border, *W. T. Tsang* 26854, Sept. 10–18, 1936. Formerly known from India and Hainan; the first record for the Chinese mainland and Kwangtung.

#### RUBIACEAE

*Hedyotis obliquinervis* Merr. Lingnan Sci. Jour. 14: 56. 1935.

KWANGTUNG: Na Leung and Kung Ping Shan, Fang Cheng District, along the Kwangtung-Tonkin border, *W. T. Tsang* 26518, 26644, July–August, 1936. Previously known only from the type collection, *Lau* 452, from Fung Leng, Ngai District, Hainan. Additional collections of this species from Hainan are: *Lau* 1265, Tai Tin Shan, Changkiang District, *Liang* 62029, Yaichow, *Gressitt* 960, Ta Hau, and without definite locality, *Liang* 64974 and 66230 and *Wang* 32842. The first record for the Chinese mainland and for Kwangtung.

*Lasianthus Koi* Merr. & Chun, Sunyatsenia 2: 47. 1934.

KWANGTUNG: Na Leung and vicinity, Fang Cheng District, along the Kwangtung-Tonkin border, *W. T. Tsang* 26558, July 24–31, 1936. Previously known only from the type collection, *Ko* 52243, from Tingnan, Hainan. *Liang* 54368 and 65280 and *Wang* 35807, from Hainan, without definite locality, also represent this species.

The original description was based on a flowering specimen. The following description of the fruit is based on *Tsang* 26558.

Fruit sessile, subglobose, black, subglabrous, 5 mm. long and about 4 mm. wide, capped by persistent calyx-lobes; lobes of calyx lanceolate, glabrous toward base, but covered with numerous, prominent, whitish, jointed hairs above the middle.

*Schizomussaenda dehiscens* (Craib) Li, Jour. Arnold Arb. 24: 100. 1943.

*Mussaenda dehiscens* Craib, Kew Bull. 1916: 263. 1916; Pitard in Lecomte, Fl. Gén. Indo-Chine 3: 174. fig. 12, 2–3. 1923; Chun, Sunyatsenia 1: 306. 1934.

KWANGTUNG: Na Leung and Kung Ping Shan, Fang Cheng District, along the Kwangtung-Tonkin border, *W. T. Tsang* 26513, 26576, 26668, July–August, 1936.

While this note was originally prepared to record the species as *Mussaenda dehiscens* Craib as occurring in Kwangtung, Dr. Li's findings have been accepted. The species extends from Burma, Siam, and Indo-China to Yunnan, Kwangsi, and Kwangtung, having first been recorded from the latter province by Chun, without any citation of specimens, and by Li, who cites *Liang* 69546 from Shih Wan Tai Shan. *Schizophragma macrosepalum* Hu (1930) and *Emmenopterys Rehderi* Metcalf (1932) are synonyms, according to Dr. Li, both of these genera belonging to the Saxifragaceae.

*Nauclea officinalis* Pierre ex Pitard in Lecomte, Fl. Gén. Indo-Chine 3: 26. 1922, *in syn.*; Merr. & Chun, Sunyatsenia 5: 188. 1940.

*Sarcocephalus officinalis* Pierre ex Pitard, l. c.



KWANGTUNG: Kung Ping Shan, Fang Cheng District, along the Kwangtung-Tonkin border, *W. T. Tsang* 26867, Sept. 10–18, 1936. Formerly known from Indo-China and Hainan.

*Paederia verticillata* Blume, Bidjr. 968. 1825; Merr. Bibl. Enum. Born. Pl. 580. 1921, Enum. Philip. Fl. Pl. 3: 570. 1923.

KWANGTUNG: Kung Ping Shan, Fang Cheng District, along the Kwangtung-Tonkin border, *W. T. Tsang* 26751, 26787, 26874, Aug.–Sept., 1936. A widespread species, known from the Malay Peninsula to Java and the Philippines. The first record for China and for Kwangtung.

*Uncaria scandens* (Sm.) Hutch. in Sargent, Pl. Wils. 3: 406. 1916; Merr. Lingnan Sci. Jour. 11: 59. 1930; Rehder, Jour. Arnold Arb. 16: 319. 1935.

*Nauclea scandens* Sm. in Rees, Cyclop. 39: no. 9. 1819.

*Uncaria pilosa* Roxb. Fl. Ind. ed. 2. 1: 520. 1832; Hook. f. Fl. Brit. Ind. 3: 32. 1880; Pitard in Lecomte, Fl. Gén. Indo-Chine 3: 47. 1922.

KWANGTUNG: Kung Ping Shan, Fang Cheng District, along the Kwangtung-Tonkin border, *W. T. Tsang* 26833, Sept. 10–18, 1936. Also known from India and Indo-China, and from Yunnan, Kweichow, and Hainan, China. The first record for Kwangtung.

*Urophyllum chinense* Merr. & Chun, Sunyatsenia 2: 19. 1934.

KWANGTUNG: Na Leung and Kung Ping Shan, Fang Cheng District, along the Kwangtung-Tonkin border, *W. T. Tsang* 26512, 26770, July and Sept., 1936.

This species is the only representative of this genus known from China proper, and it was formerly known only from the type collection, *Tso* 23555, from Sup Man Ta Shan, along the Kwangtung-Kwangsi border. One of the two collections cited above is in bud; the original description was based on a fruiting specimen only. A description of the young flowers is here added.

Buds ovoid, noticeably constricted at the base, glabrous; calyx saucer-shaped or broadly and shallowly campanulate, 5-lobed, the lobes broadly ovate-triangular, with glandular margins; pedicels filiform, about 6 mm. long, puberulent.

*Wendlandia tinctoria* DC. subsp. *orientalis* Cowan, Notes Bot. Gard. Edinb. 16: 268. 1932, op. cit. 18: 184. 1934.

*Wendlandia glabrata* auctt., in part, *non* DC.

KWANGTUNG: Na Leung, Fang Cheng District, along the Kwangtung-Tonkin border, *W. T. Tsang* 26542, July 24–31, 1936. Formerly known from India, Siam, Indo-China, and from Yunnan and Kwangsi in China; new to Kwangtung.

*Xanthophytum ferrugineum* (DC.) Merr. Mitt. Inst. Bot. Hamb. 7: 270. 1937.

*Metabolos ferrugineus* DC. Prodr. 4: 436. 1830.

*Xanthophytum Villarii* Vidal, Rev. Pl. Fasc. Filip. 150. 1886.

*Xanthophytum fruticosum* sensu Merr. Philip. Jour. Sci. 4: Bot. 328. 1909, Enum. Philip. Fl. Pl. 3: 492. 1923, *non* Reinw.

KWANGTUNG: Kung Ping Shan, Fang Cheng District, along the Kwangtung-Tonkin border, *W. T. Tsang* 28721, Aug. 25–30, 1936. KWANGSI: Shap Man Taai Shan, near Iu Shan village, Siangsze District, along the Kwangtung border, *W. T. Tsang* 22306, May 16, 1933. New records for both Kwangtung and Kwangsi, and also for China.

These specimens are associated with the Philippine species, which has only recently been segregated from the form of Java, Borneo, and Sumatra, on account of the differences in the inflorescences. The specimens seems to agree fairly well with the Philippine plant, but when flowering material





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