papilla brevissima stigmatifera 3-4-lobulata superata; stigmata 3-4, interdum 5, annulo lobulato levi cineta. Semina 1 mm. longa, lunata, linearia-subcymbiformia, longitudinaliter minutissime costulata, raphe angusta alba, strophiolo angustissimo.

Tanna Island: on Mt. Tokosh Meru, in rain-forest, alt. 800 m., very common, no. 163, March 15, 1928 (climbing up the

trunks of trees).

This is a very fine and characteristic species remarkable for its narrow acuminate-subulate leaves, but chiefly for its very small seeds looking like little worms; they are curved and sickle-shaped, with a narrow but evident white raphe, while the strophiole is extremely narrow and hardly visible. Under the lens the seeds are densely marked with very minute longitudinal lines.

FLORENCE, ITALY.

#### NOTES ON CHINESE PLANTS

Franklin P. Metcalf

Desmodium floribundum (D. Don) Sweet, Hort. Brit. ed. 2, 150 (1830); ed. 3, edited by G. Don, 180 (1839).—G. Don in Gen. Syst. II. 297 (1832).—Rehder & Wilson in Sargent, Pl. Wilson. II. 103 (1914).—Rehder, Man. Cult. Trees & Shrubs, 515 (1927).

Hedysarum floribundum D. Don, Prodr. Fl. Nep. 244 (1825).

The erroneous citation of G. Don as the author of this combination is apparently due to the fact that the 2nd edition of Sweet's Hort. Brit. was overlooked, in which the transfer to *Desmodium* was first made 2 years earlier than that of G. Don.

Desmodium Dunnii Merrill in Herb. Arnold Arboretum, nom. nov. Lespedeza lanceolata Dunn in Jour. Linn. Soc. xxxv. 488 (1903). Desmodium lanceolatum (Dunn) Schindler MSS. ex Gagnepain in Lecomte, Fl. Gen. Indo-Chine, II. 572 (1920).

There is already a *Desmodium lanceolatum* Walpers, Rep. 1. 737 (1842), which was overlooked both by Schindler and by Gagnepain, hence this new name chosen by E. D. Merrill.

Spondias chinensis (Merrill) Metcalf, comb. nov. Poupartia chinensis Merrill in Philip. Jour. Sci. xv. 245 (1919).

In describing this species as a *Poupartia* E. D. Merrill stated that it was very closely related to the only other Chinese species of this genus, *P. Fordii* Hemsley, which now has been referred as a synonym to *Spondias axillaris* Roxburgh (see Rehder & Wilson in Sargent, Pl. Wilson. II. 172 [1914]); the species that still remain in *Poupartia* according to Engler (in De Candolle, Monog. Phan. IV. 260) are from Madagascar and Mauritius. Moreover this species apparently has valvate or subvalvate petals and so should be placed in *Spondias*.

Known from Kwangtung, Fukien, Hainan and Tonkin.

Bredia amoena Diels in Notizbl. Bot. Gard. Mus. Berlin, IX. 197 (1924).

Bredia chinensis Merrill in Jour. Arn. Arb. vIII. 11 (1927); synon. nov. Dr. E. D. Merrill evidently overlooked the description by Diels, published 3 years earlier. The type in both cases was Hu's no. 30, from Wenchow, Chekiang.

Schefflera Delavayi (Franchet) Harms in Bot. Jahrb. xxix. 486 (1900).

Heptapleurum Delavayi Franchet in Jour. de Bot. x. 307 (1896).

Type from Yunnan (*Delavay*, no. 3865); also known from Hunan, (*Handel-Mazzetti*, no. 12251); Szechuan (*Wilson*, no. 4559; *Fang*, nos. 3241, 5713).

Schefflera Delavayi var. ochrascens Handel-Mazzetti in Anzeig. Akad. Wiss. Wien Math.-Nat. Kl. 1924, p. 120 (Pl. Nov. Sin. Forts. 27, p. 1) (1924).

Schefflera discolor Merrill in Lingnan Sci. Jour. vii. (1929) 318 [March

1931]; synon. nov.

Franchet in the original description of Schefflera Delavayi (l. c.) says "folia . . . subtus albo-tomentella" and the numbers listed under the species are typical. Handel-Mazzetti in describing the var. ochrascens only says "tomentum ochraceum." An isotype of Handel-Mazzetti's no. 4994 at the Arnold Arboretum matches very well with McClure's no. 13773 which is an isotype of Merrill's new species S. discolor from Kwangtung. Chun's no. 5672 and Tsiang's no. 1335, formerly identified and distributed as S. Delavayi (Fr.) Harms also agree perfectly with Merrill's type. Merrill states "that it is nearest to S. Delavayi Harms of Szechuan Prov., which has usually toothed leaves, closer and thinner pubescence and shorter racemes." This holds true for the species, except as to the racemes. On the other hand the species S. discolor does agree with the var. ochrascens Handel-Mazzetti, which was possibly overlooked by him.

There might be a question as to whether this should be of varietal or specific rank, but on account of the presence of intermediate forms it can hardly be maintained as a species. In both the variety and the species the leaves vary from entire to coarsely toothed and Schneider's no. 314 and Henry's no. 9214 from Yunnan have a tomentum intermediate between "albo-tomentella" of S. Delavayi and the "tomentum ochraceum" of the variety ochrascens.

DISTRIBUTION OF THE VARIETY: Y u n n a n: Handel-Mazzetti, no. 4994 (isotype of var.) and no. 9553. K w a n g t u n g: Mc-Clure, no. 13773 (Arnold Arboretum; isotype of S. discolor Merrill); also Chun, no. 5672 and Tsiang, no. 1335. Schneider's no. 314 and

Henry's no. 9214 from Yunnan also approach this variety. (All in Herb. Arnold Arboretum.)

Xylosma congestum (Lour.) Merr. var. kwangtungensis Metcalf, var. nov.

A typo differt foliis elongato-ellipticis vel oblanceolatis grosse serratis supra pallidioribus subtus plerumque castaneo-brunneis.

K w a n g t u n g: Honan Island, Levine, nos. 172 and 177 (syntypes), 279 and 365, ex Herb. Canton Christian University; Canton and vicinity, Levine, nos. 18, 1809, 2084, 3261, all ex Herb. Canton Christian University; Peiyunchan, Tsiang, no. 1594, ex Herb. Sun Yatsen University; Lofaushan, W. Y. Chun, no. 1741 and Tsiang, no. 1680, both ex Herb. Sun Yatsen University.

This variety differs from the type in the elongate elliptical or oblanceolate coarsely serrate leaves, usually paler above and chestnut-brown beneath.

Vaccinium mandarinorum Diels in Bot. Jahrb. XXIX. 516 (1901). Vaccinium Donianum Maximowicz in Mél. Biol. I. 608 (1872); in Bull. Acad. Sci. St. Pétersb. XVIII. 43 (1873); in part, in note under V. bracteatum Thbg.—Hemsley in Jour. Linn. Soc. XXVI. 15 (1889) in note under V. bracteatum.—Rehder & Wilson in Sargent, Pl. Wilson. I. 557 (1913), exclusive of synons. V. affine Wight, Epigynium affine Klotzsch and E. Donianum Klotzsch.—Non V. Donnianum Wight, nec V. Donianum Miquel).

Vaccinium parvibracteum Hayata in Ic. Pl. Formos. III. 128 (1913). Vaccinium Donianum Wight var. hangchouense Matsuda in Bot. Mag. Tokyo xxvi. 319 (1912).

Vaccinium hangchouense (Matsuda) Komatsu in Ic. Pl. Koisikav. III. 95, t. 193 (1917); synon. nov.

All the Chinese material referred by most authors to the Himalayan V. Donnianum Wight (usually spelled V. Donianum Wight) is really not this species at all, but a distinct Chinese species with good characters which, however, have been mostly overlooked. This discovery was made while attempting to verify V. parvibracteum Hayata, which was described from Mt. Kosan, Fukien. This species was listed by Komatsu (l. c.) as a synonym of his V. hang-chouense which he raised to a species from the variety originally described by Matsuda. In Matsuda's original description (l. c.) of this variety under V. Donnianum Wight, he said that the variety could be distinguished by having a glabrous non-ciliated calyx and

¹ The transfer of the specific epithet from Apactis japonica Thunberg (the oldest name, 1783) to Xylosma can not be made as there already exists a Xylosma japonica (Walpers) A. Gray. This is according to the International Rules, even if the second name is actually a synonym of the first as in this case. The specific epithet of the next oldest name therefore should be used which is Croton congestum Loureiro. Koidzumi (in Tokyo Bot. Mag. xxxix. 316 [1925] and Nakai (Fl. Sylv. Kor. xvii. 51, t. 14 [1928]) use the combination Xylosma Apactis (Thunberg) Koidzumi for this plant, but I see no justification under the International Rules of abandoning the next oldest specific name and adopting this generic name for this species.

a corolla glabrous within and without, and stated that the species  $V.\ Donnianum$  had a ciliated calyx and a corolla glabrous without but villose within, as shown by Wight's Icones, t. 1191. When I examined the material named  $V.\ Donnianum$  I soon found that almost all had a glabrous non-ciliated calyx and a glabrous corolla within and without. We have therefore 2 distinct species, one  $V.\ Donnianum$  of Wight from the Himalayan region and another which is distinctly Chinese. To make sure of this, topotype material was critically examined in the Gray Herbarium. The only two sheets there from Khasia (type locality) and East Bengal, as well as two others at Arnold Arboretum had a distinctly ciliated calyx and a corolla villous within, agreeing perfectly with the original descriptions and plate of Wight.

The next question was what should the Chinese material be named. It is certainly of specific rank. The oldest name applied to this species is that of V. mandarinorum Diels. Vaccinium parvibracteum of Hayata is much later. Unfortunately Matsuda who actually first noticed the difference between the real V. Donnianum and the Chinese species separated the latter much later (1912) and only as a variety. Diels (l. c.) apparently did not get hold of the real distinguishing characters but distinguished it from the Himalayan V. Donnianum Wight by broader leaves and shorter pedicels. Rehder and Wilson reduced this rightly to the Chinese V. Donnianum, but did not separate it from the true Himalayan species.

A cotype of Diels *V. mandarinorum* was examined (Henry, no. 5807<sup>B</sup>, at the Gray Herbarium) with which the Chinese material agrees. In making dissections of these two species additional characters were found which may also help in identification. A synopsis of the differences are given below:

# Vaccinium Donnianum Wight

Calyx ciliate; corolla villose within, glabrous without; staminal appendages 1.2–1.4 mm. long and horns ½ to ½ the length of anther (minus the appendage).

DISTRIBUTION: Wight (l. c.) lists Khasia by Griffith. K h a s i a: 3-5000 ft., Hooker f. & Thomson, Herb. Ind. Or. (Gray Herbarium); same locality 5000 ft., Ruse, no. 146, in 1923 (Arnold Arboretum). E a s t B e n g a l: Herb. E. India Co., Griffith, no. 3457/1 (Gray Herbarium). B u r m a: Mergin, 1800 m., Parker, no. 3108 (Arnold Arboretum). N a g a Hills: 4500 ft., Prain, May 10, 1886. (Arnold Arboretum).

Wilson's no. 1010 from Patung, W. China, approaches this, having

a pubescent, not ciliate calyx and a corolla subglabrous to slightly pubescent within, or may not be this species. Henry's no. 11917 from Szemao Mts., 5000 ft., Yunnan, appears to be this species having a ciliate calyx and pubescent corolla within. It represents apparently the only specimen of this species from China proper. Other sheets collected from these same mountains are distinctly V, mandarinorum Diels.

# Vaccinium mandarinorum Diels

Calyx not ciliate; corolla glabrous within and without; staminal appendages about 3 mm. long and horns about same length as anther

(minus the appendage).

DISTRIBUTION: Diels (l. c.) lists only Henry's no. 5807<sup>B</sup> from Hupeh (Berlin; cotype seen in Gray Herbarium). Many specimens examined from Fukien, Chekiang, Kiangsi, Anhwei, Kiangsu, Hunan, Hupeh, Szechuan, Yunnan and E. Tibet.

Vaccinium Donnianum Wight, Icon. IV<sup>1</sup> 5, t. 1191 (1845–46); Calcutta Jour. Nat. Hist. VIII. 174 (1847).

Vaccinium affine Wight, Icon. t. 1190 (1845-46).

Vaccinium Donianum Wight apud Clarke in Hooker, Fl. Brit. Ind. III. 453 (1882).—Matsuda in Tokyo Bot. Mag. xxvi. 319 (1912) excl. var.—Non V. Donianum Maximowicz, nec V. Donianum Miquel.

The original spelling in Wight's Icones, in two places and in the Calcutta Journal was "Donnianum." Why "Donianum" was taken up by the Kew Index is a mystery. Others followed this error. Possibly it was on account of V. Donianum Miquel. The species was probably named after Donn and not Don.

There are a number of varieties grouped under V. Donnianum Wight by various authors. All this varietal material, however, is more closely allied to the Chinese species V. mandarinorum Diels, having a glabrous calyx and glabrous corolla. For that reason all these varieties should be transferred from V. Donnianum Wight to V. mandarinorum Diels. These combinations are made below:

Vaccinium mandarinorum Diels var. laetum (Diels) Metcalf, comb. nov.

Vaccinium laetum Diels in Bot. Jahrb. XXIX. 516 (1901).

Vaccinium Donianum Wight var. laetum (Diels) Rehder and Wilson in Sargent, Pl. Wilson. 1. 558 (1913).

Szechuan only.

Vaccinium mandarinorum var. austrosinense (Hand.-Mazz.) Metcalf, comb. nov.

Vaccinium Donianum Wight var. austrosinense Handel-Mazzetti in Anzeig. Akad. Wiss. Wien Math.-Nat. Kl. 1921, p. 176 (Pl. Nov. Sin. Forts. 13, p. 1) (1921) Type from Hunan, also known from Fukien, Kwangtung and Kiangsi.

The type of *V. Donianum* var. brachybotrys Franchet was not seen but I believe it is better here to follow Handel-Mazzetti (Anzeig. Akad. Wiss. Math.-Nat. Kl. 1925, p. 146 [Pl. Nov. Sin. Forts. 35, p. 4] [1925]) who has raised this to a species.

Xolisma ovalifolia (Wallich) Rehder var. hebecarpa (Franchet and Hemsley) Metcalf, comb. nov.

Pieris ovalifolia D. Don var. hebecarpa Franchet in litt. in Hemsley, Jour. Linn. Soc. xxvi. 17 (1889).

DISTRIBUTION: Chekiang: Meichi (*Poli* ex Franchet) in Hemsley, l. c.; Ningpo, *Macgregor*, in 1908 (Arnold Arboretum).

DEPARTMENT OF BIOLOGY, LINGNAN UNIVERSITY, CANTON, CHINA.

# NOTES ON THE LIGNEOUS PLANTS DESCRIBED BY H. LÉVEILLÉ FROM EASTERN ASIA<sup>1</sup>

#### Alfred Rehder

#### SAXIFRAGACEAE

Philadelphus pekinensis Ruprecht in Bull. Phys. Math. Acad. Sci. St. Pétersb. xv. 365 (1857); in Mél. Biol. 11. 543 (1858).

Deutzia Chanetii Léveillé in Fedde, Rep. Spec. Nov. IX. 451 (1911); synon. nov.

China. Chili: "Montagnes de Kou-ping," very rare, L. Chanet, no. 416, June, 1909 (holotype).

Philadelphus Henryi Koehne in Fedde, Rep. Spec. Nov. x. 126 (1911).

Deutzia mollis var. erythrocalyx Léveillé in herb.

China. Y u n n a n: "rochers du mont à Pe-long-tsin, alt. 3280 m." E. E. Maire, June (holotype).

The leaves of Maire's specimen are more densely pubescent beneath than in typical *P. Henryi*. I have been unable to find the place of publication of Léveillé's name, probably it is only a manuscript name.

Philadelphus Magdalenae Koehne in Mitt. Deutsch. Dendr. Ges. xiii. 83 (1904).

Philadelphus coronarius var. chinensis Léveillé, Fl. Kouy-Tchéou, 389 (1916), nom. nudum; synon. nov.

CHINA. K weichou: "Tou-chan," J. Cavalerie (herb. Bodinier, no. 2343), May 1898 (holotype).

Cavalerie's specimen represents apparently a glabrescent form of <sup>1</sup> Continued from vol. x. 196 (1929).



Metcalf, Franklin P. 1931. "Notes on Chinese Plants." *Journal of the Arnold Arboretum* 12(4), 270–275. <a href="https://doi.org/10.5962/p.185237">https://doi.org/10.5962/p.185237</a>.

View This Item Online: <a href="https://www.biodiversitylibrary.org/item/33588">https://www.biodiversitylibrary.org/item/33588</a>

**DOI:** https://doi.org/10.5962/p.185237

Permalink: <a href="https://www.biodiversitylibrary.org/partpdf/185237">https://www.biodiversitylibrary.org/partpdf/185237</a>

# **Holding Institution**

Missouri Botanical Garden, Peter H. Raven Library

## Sponsored by

Missouri Botanical Garden

## **Copyright & Reuse**

Copyright Status: In copyright. Digitized with the permission of the rights holder.

Rights Holder: Arnold Arboretum of Harvard University

License: http://creativecommons.org/licenses/by-nc-sa/3.0/

Rights: <a href="https://biodiversitylibrary.org/permissions">https://biodiversitylibrary.org/permissions</a>

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at https://www.biodiversitylibrary.org.