

國立四川大學編印

峨眉植物圖誌

黃季陸題



第一卷

第二號

## ICONES PLANTARUM OMEIENSIIUM.

Volume 1.

Number 2

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LABORATOIRE FORESTIER DE TOULOUSE  
FACULTÉ DES SCIENCES

# 峨眉植物圖誌

# ICONES PLANTARUM OMEIENSIIUM

Volume 1

Number 2

英國愛丁堡大學博士 方文培主編  
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China

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ERRATA

Owing to unexperienced workmanship, many misprints have occurred in the present work. The following most important ones are herewith specially noted.

page	line	for	read
VI	40	" Collectgon	collection
VII	28	" continuable	continual
Plate	Line	for	read
51	8	" pubascent	pubescent.
51	51	" efimbaiate	efimbriate.
52	6	" be'owthe	below the and <i>for</i> lager <i>read</i> layer,
52	25	" fist	first.
53	9	" 2,5-4,5	3,5-4,5 cm.
53	33	" 2,5 mm.	2-5 mm.
next page	29	" intencodes	internodes.
54	8	" 4,14 mm.	4-14 mm.
54	18	" Mout	Mount.
55	9	" pubsscent	pubescent.
55	12	" crenate	crenate teeth.
55	25	" <i>strike out</i> dioecious pistillate flowers.	
55	27	<i>for</i> Staminata	<i>read</i> staminate.
55	29	" 4600	460
56	29	" Chiu-sze-chiu-tau-kui	Chiu-shih-chiu-tau-kuai.
57	5	" Calcuta	Calcutta.
57	16	" rerely	rarely
57	24	" precicous	precocious.
57	28	" parked	packed.
57	46	" Flowers light green	flowers light green.
58	16	" secondary	secondary.
58	29	" Octeber	October.
58	34	" SZECHUAN	SIKANG
58	35	" Tien-hsien	Tien-chuan-hsien.
58	38	" Yunnan	Yunnan.
59	16	" venis	veins.
59	19	" precicous	precocious.
60	3	" Lardiz a balaceae	Lardizabalaceae.
60	18	" 15 22	15-12.
60	19	" colum	column.
60	21	" peddicels	pedicels.
60	21	" l ong	long.
60	22	" sulture	suture.
60	40	" thts	this
60	43	" Southwestern Hunan . . . and yunnan	<i>read</i> southwestern Hunan, . . . and Yunnan
63	5	" <b>anthriscifoium</b>	<i>read</i> <b>anthriscitolium.</b>
63	7	" soft crispe, hairs throught	soft,crispe haier throughout,
63	18	" shensi	Shensi.
64	19	" geern	green.
64	25	<i>after</i> September 7, <i>insert</i> , 1940; same locality,	
67	6	<i>for</i> 492,	<i>read</i> 492. —
68	7	" pubeseeat	pubescent.
68	19	" mm; long;	mm. long,
68	21	" semisphericalor	semispherical or.
63	34	" Sunls	Sun's.
70	21	" staminsate	staminate.
70	48	" time	times.
71	21	" 1-2	<i>for</i> 2.
71	23	" occasinally	occasionally.



Plate	Line	for	read
72	14	„ ferruginous short	„ ferruginous short.
72	16	before yellowish insert staminate flower.	
72	20	for gynoeceium	read pistillate flower.
73	28	„ vaiaion	„ variation.
74	27	„ 1840	„ 1940.
75	3	„ Flacourtiaceae	„ Flacourtiaceae.
77	29	„ wan-nien-ssu	„ Wan-nien-ssu.
77	37	„ natural	„ natural
77	39	„ 5 times enlarged	„ (5 times enlarged).
78	41	„ IDESIA POLYCARPA . . . VESTITA	read <i>Idesia polycarpa</i> . . . <i>vestita</i>
78	42	„ Ti-tu ai	„ Ti-tzu-ai.
next page	3	„ width	„ width.
„	„ 3	„ averge	„ average.
79	13	„ eve green	„ evergreen.
79	46	„ natural	„ natural.
80	60	„ inflorescens	„ inflorescence
81	12	„ bese	„ base.
81	41	„ soc.	„ Soc.
81	44	„ 5 6	„ 5-6.
81	47	„ korangsi and southern yunnan	read Kwangsi and southern Yunnan.
81	48	„ Fa n	read Fang.
83	11	„ olliptica	„ elliptica.
83	41	„ enlarge	„ enlarged.
84	6	„ sargent	„ Sargent.
84	10	„ yeur	„ year.
84	12	„ lo g	„ long.
84	13	„ S ghtly	„ slightly.
84	13	„ e tire	„ entire.
84	17	„ oose	„ loose
85	24	„ P.T.Wang	„ F.T.Wang.
85	33	„ exocarpic	„ exocarpio.
85	35	„ shortter	„ shorter.
85	44	„ natiral	„ natural.
87	38	„ timees	„ times.
88	14	„ g abrous	„ glabrous.
88	18	„ acuminse	„ acuminate.
88	18	„ 15	„ 1.5.
88	29	„ No r.	„ No.
89	5	„ chron.	„ Chron
89	18	„ ve.rins	„ veins.
89	22	„ pedice s	„ pedicels.
89	28	„ stigms	„ stigmas.
90	12	„ <i>Trachelosperm</i>	„ <i>Trachelospermum</i>
90	32	„ 1721	„ 17211.
90	40	„ Tsaing	„ Tsiang.
92	4	„ Prain in in Journ.	„ Prain in Journ.
91	11	„ soc.	„ Soc.
93	4	„ (1814)	„ (1814) 32.
93	18	„ smrall	„ small.
93	29	„ Caesa pinla	„ Caesalpinia.
94	6	„ greyi shgreen	„ greyish green.
94	7	„ prick y	„ prickly.
94	32	„ chinese	„ Chinese.
96	23	„ discoviered	„ discovered.
96	24	„ charcters	„ characters.

Plate	Line	for		read	
97	10	„	betow	„	below.
97	10	„	inconspicuous	„	inconspicuous.
97	20	„	tauki	„	tao kuai.
98	18	„	subgloose	„	subglobose.
98	22	„	ye lowish	„	yellowish.
98	23		<i>after Chow, strike out Nos.</i>		
98	24		<i>after Fang, add Nos.</i>		
99	9	for	alternare	„	alternate.
99	38	„	obvoid	„	obovoid.
99	43	„	Ount	„	Mount.
99	44	„	It differs <i>S. Hunnanensis</i> read It differs from <i>S. yunnanensis</i> .		
99	48	„	natnral	read	natural
100	48	„	shrub	„	shrub.
next page	5	„	rus	„	runs
Index	2	„	published names are small capital read published nanes are in small capital.		

## 正 誤 表

圖版	行數	誤	正	圖版	行數	誤	正
55	13	球近	球形	73	16	6.大蕊(放大十倍)	6.大蕊(放大三倍)
58	10	花 四片	一花萼四片	74	17	海就	海波
58	13	胚殊	胚珠	81	9	疏狀	總狀
58	15	洗象	洗象池	83	11	端	先端
58	18	公厘半	公尺半	83	12	縱裂果	縱裂蒴果
61	5	被捲剛毛	被倒捲剛毛	85	13	綠色	綠色
62	3	毛茛	毛茛科	86	5	心臟形	心臟形
62	10	花瓣	花瓣	86	10	花約	花藥
64	9	與花等長	與花瓣等長	89	4	線點	腺點
65	7	中脈均顯著	中脈在葉之表裏兩面均顯著	89	6	二至聚繖花序	聚繖花序
67	31	成紫紅色	成淡紫紅色	89	13	柱顯	柱頭
70	2	翼梗五味子	翼梗北五味子	90	8	直經	直徑
70	2	享利五味子	享利北五味子	91	19	花 之解剖	花萼之解剖
70	19	着小蕊之枝	着小蕊花之枝	91	19	二十五倍	三十倍
71	5	藤木	藤本	92	9	約至六分之一	約六分之至
72	5	藤木	藤本	94	10	花 基部	花萼基部
73	10	邊緣	邊緣	95	6	表面深綠色	表面深綠色
				98	19	綠色	綠色



## Plate 51.

**SINOCALAMUS AFFINIS** (Rendle) McClure.

## Gramineae

**Sinocalamus affinis** (Rendle) McClure in Lingn. Univ. Sci. Journ. XIX (1940), 67.

*Dendrocalamus affinis* Rendle in Journ. Linn. Soc. Bot. XXXVI (1904), 447.

Culms arborescent, 5 to 10 metres tall, with long slender arcuate or pendulous apex, the lower internodes 15-30 cm. long, 3-6 cm. in diameter with a calibre 2-4 cm. across. Culm-sheaths coriaceous, usually 20-25 cm. long, densely appressed-pubescent with dark brown shaggy hairs, the concave or crescent apex slightly convex in the middle and marked on its inner side with a fimbriate ligule. Branches numerous at each node, the primary ones with lower internodes up to 10 cm. long, 5 mm. thick. Leaf-sheaths 4-8 cm. long, tightly overlapping, efinbiate, glabrous. Ligule truncate or erose, 1-1.5 mm. long, brownish or nigrescent. Blades rather thin, mostly 10-30 cm. long, 1-3 cm. wide, glabrous above, softly puberulent beneath. Floriferous branches fasciated, 20-60 cm. long or more, rather soft, drooping, slender with internodes 15-55 mm. long. Spikelets 2 to 4 at each node, brownish-purple, 4-5-flowered, 15 mm. long when well developed, the upper rachilla joint compressed, glabrous, about 2 mm. long. Glumes 2 to several, successively longer, 2-6 mm. long. Lemma broadly ovate, 8-10 mm. long, ciliate. Palea 7-9 mm. long, glabrous between the ciliate keels. Lodicules usually 3, oblong-lanceolate or sometimes forked, 3-4 mm. long, fimbriate at apex. Stamens 6, sometimes 1 or more of them aborted, the anthers 4-6 mm. long, apiculate or sometimes obtuse. Ovary 1 mm. long, attenuate into a hispidulous style 4 mm. long, the latter divided into 2-3 plunose stigmas 3-5 mm. long. Caryopsis fusiform, 7 mm. long, hirtellous above, ventrally broadly sulcate, with a thin yellowish brown pericarp separable from the seed.

MOUNT OMEI: Fu-hu-ssu, (伏虎寺), alt. 650 m., in bamboo-forests, bamboo 15 metres high, flowers blackish-purple, common, *W. P. Fang*, No. 14153, April 16, 1940; Lung-hsen-kang, (龍鼻崗), alt. 1100 m., near the temple, bamboo 10 metres high, flowers purplish, common, *W. P. Fang*, No. 16640, May 12, 1941; Pai-lung-tung (白龍洞), alt. 1000 m., bamboo 8 metres high, flowers greenish-brown, *W. P. Fang*, No. 15826, March 5, 1941; without precise locality, *E. Faber*, No. 1118 (type at Kew).

This is a common bamboo called "Tzuchu" (慈竹) in Szechuan province. The original description of this species is based upon an inflorescence which has probably immature spikelets with stamens reduced to 3. It is frequently misidentified as *Bambusa Beecheyana* Munro\*, a bamboo of Southern China now referred to *Sinocalamus Beecheyana* McClure, but the latter species is distinguished by the 7-11-flowered spikelets with pubescent rachilla joints ..... Y. L. Keng.

- Fig. 1. a part of culm with flowering and leafy branches (natural size);  
 2. a young stem (natural size);  
 3. a flower (5 times enlarged).

\* Trans. Linn. Soc. XXVI (1868), 108.

圖版五十一

慈竹

禾本科

稈喬木狀，高五至十公尺，先端彎曲或下垂，基部之節間長十五至三十公分，直徑三至六公分，內直徑二至四公分；籜革質，通常長二十至二十五公分，上覆密生暗棕色粗毛，先端凹陷或呈新月形，惟中部則稍凸起，在其內側之隱舌呈流蘇形；每節生枝甚多，大枝之基部節間長達十公分，徑達五公厘。葉鞘長四至八公分，互相緊覆，頂端無垢屬物，光滑無毛；葉舌呈截頭形或有不規則之破裂，長一至一公厘半，淡棕色或漸成褐色；葉片較薄，大多長十至三十公分，闊一至三公分，葉面光滑，葉背被細柔小毛。着花之枝叢生，長二十至六十公分或更長於此，較軟，下垂，細長，其節間長十五至五十五公厘；小穗每節着生二至四枚，紫棕色，每小穗有四至五花，發育良好者長可達十五公厘，上部之小花軸扁形，光滑無毛，長約二公厘；穎二至數枚，繼續長大，長二至二六公厘；外稃闊卵形，長八至十公厘，具纖毛，內稃長七至九公厘，龍骨突起被纖毛，中間光滑；麟被通常三枚，長方披針形或有時分叉，長三至四公厘，先端流蘇狀，小蕊六本，有時一本至一本以上發育不全，花藥長四至六公厘，尖形或有時鈍圓；子房長一公厘，花柱具剛毛，長四公厘，頂端分爲二至三羽毛狀住頭，其長三至五公厘，穎果紡錘形，長七公厘，背部具鬚毛，腹部闊溝狀，果皮黃棕色，薄而與種子可分離。

產峨眉山伏虎寺，龍昇崗，白龍洞等處，當海拔六百五十至一千一百公尺間，三四月開花。

本種爲四川省習見竹類，俗稱慈竹，首次發表時，其記載所根據之花序，可信爲未成熟之小穗，而僅具小蕊三枚者。又本種易與華南之大頭典竹 *Sinocalamus Beecheyana* (Munro) McClure 相混，但後者具七至十一花之小穗，且具有細毛之小穗軸，殊與本種不同也。

圖解：1. 稈之一段及花序與枝葉着生之情形 (原大)；2. 筍 (原大)；3. 花 (放大五倍)。

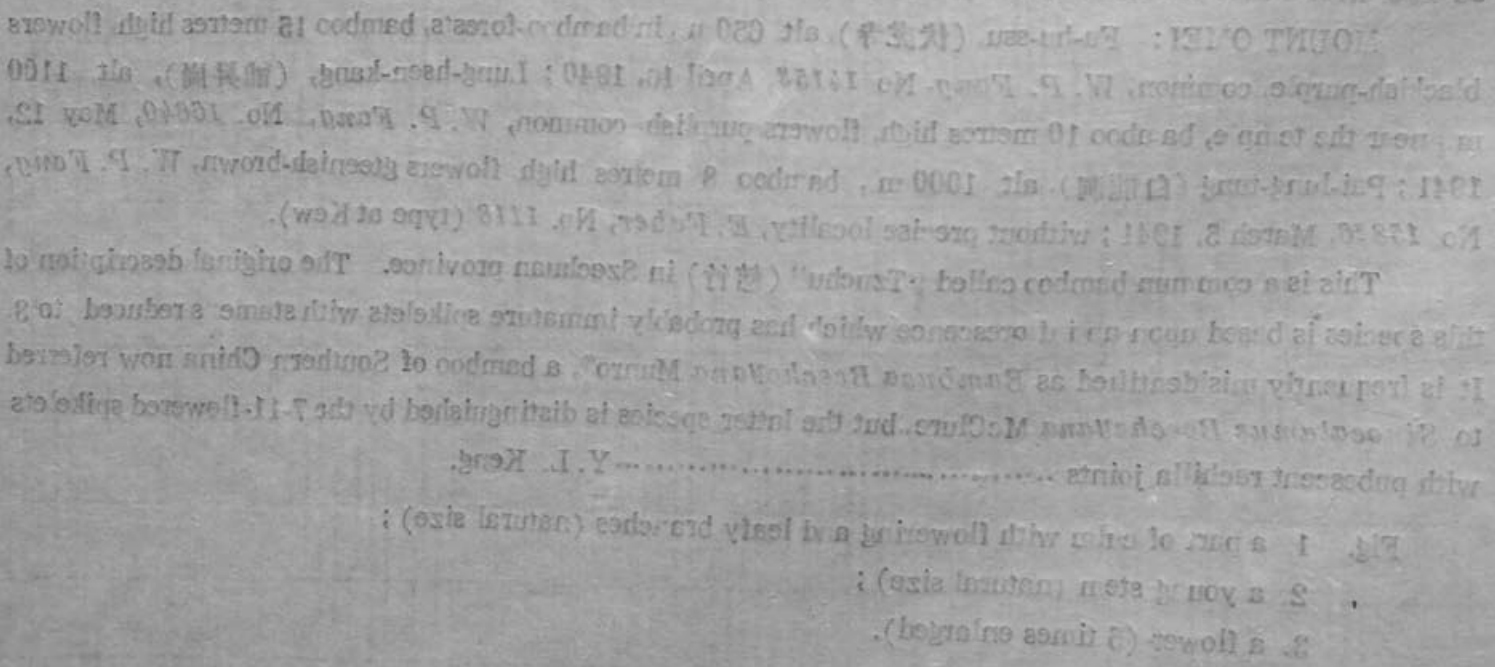
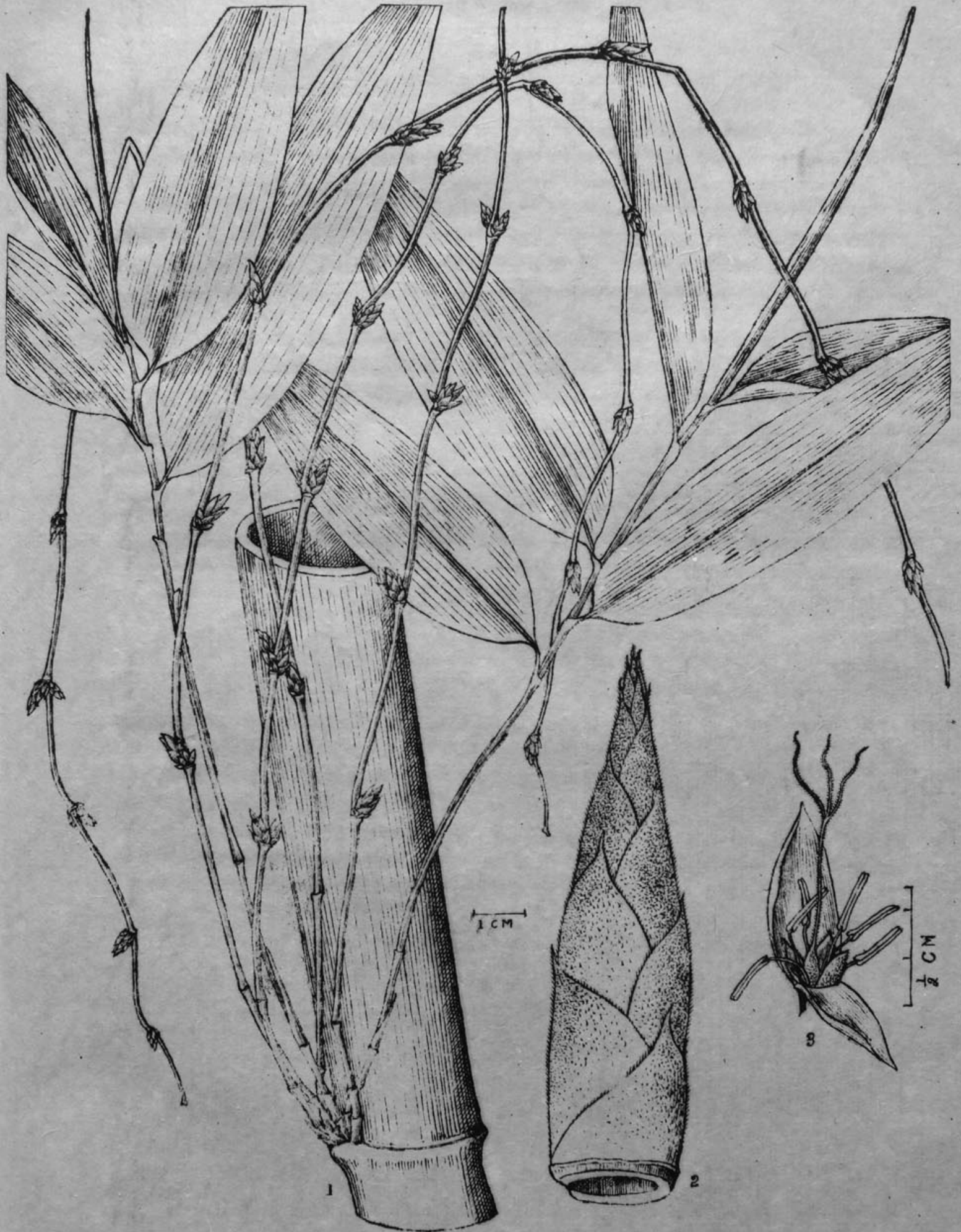


Fig. 1. A part of stem with flowering and leafy branches (natural size);  
 2. A young stem (natural size);  
 3. A flower (5 times enlarged).





51. *SINOCHLAMYS AFFINIS* (Rendle) McClure

## Plate 52.

**ARUNDINARIA AMARA** Keng.

## Gramineae.

**Arundinaria amara** Keng in *Sinensia*, VI, No. 2 (1935), 148, 154.

Culms fruticose, 1 to 4 metres tall, the lower internodes up to 25 cm. long, 15 mm. thick, pruinose below the nodes (the bloom soon becoming a black layer), otherwise naked, glabrous, the floriferous branches 2.5-11.5 cm. long, 1.5-2 mm. thick, fascicled, aphyllous or ending in a few blades. Sheaths 3 to 4 on the foliiferous branchlets, 3.5-7 cm. long, eflimbriate, glabrous. Ligule firm, 1-2 mm. long, truncate. Blades mostly 8-20 cm. long, 10-28 mm. wide, with 4 to 8 secondary nerves on either side, tessellate, acuminate, attenuate at the base into a petiole 2-7 mm. long, the lower surface pale, more or less pubescent especially towards the base, the margins setulose-scabrous or one of them smooth below. Racemes (or panicle when the lower branches bearing 2 spikelets) 3-10-spiculate, included below, the pedicels somewhat flattened, often flexuous, 3-12 mm. long, hispidulous especially on the edges (sometimes nearly glabrate). Spikelets mostly 8-12-flowered, 4-6 cm. long, greenish or slightly purplish, the rachilla joint stout, 4-5 mm. long, embraced below by the lemma, glabrous or puberulent above and ciliolate at the cupular apex. Glumes 3 to 5, successively longer, the lowermost 2-4.5 mm. long, glabrous or the keel and the apex pubescent, the uppermost similar to the lemma but smaller. Lemma ovate-lanceolate, mostly 8-11 mm. long, 9-11-nerved, cross-veined, acute or mucronulate, glabrous or the margins ciliolate above. Palea equaling or frequently longer than the lemma, entire, the keels and the narrow obtuse apex ciliate, the back strongly sulcate, hirtellous and heavily pruinose. Lodicules 3, ovate or obovate (the posterior 1 narrower), obtuse, about 4 mm. long, nervose below, ciliate above. Stamens 3, the anthers 5-6 mm. long, pale yellow. Ovary narrow, glabrous, about 2 mm. long, sub-triquetrous above, divided at the apex into 3 very short styles, the stigmas plumose, 3-5 mm. long.

OMEI-HSIEN: Tu-chu-Tzu (土主祠), alt. 450 m., bamboo about 3 metres high, *W.P. Fang*, No. 15963, March 28, 1941.

This species was first described from Chekiang, Kiangsu and Anhwei provinces. Its discovery in Szechuan is a new distribution. Besides the specimens cited above, another collection of the same species (Keng & f. no. 3663, collected on May 18, 1938) was made from Tsing-yun-shan (北碚縉雲山) in Eastern Szechuan. The culms of this bamboo are used in Souteastern China for umbrella-handles. The young shoots are said to have a bitter taste and inedible, hence the specific epithet "amara" which means bitter is given to the plant. .... Y. L. Keng.

- Fig. 1. a part of culm and with leafy branch (natural size);  
 2. the flowering branch (natural size);  
 3. a young shoot (natural size);  
 4. a flower (4 times enlarged).



# 圖版五十二

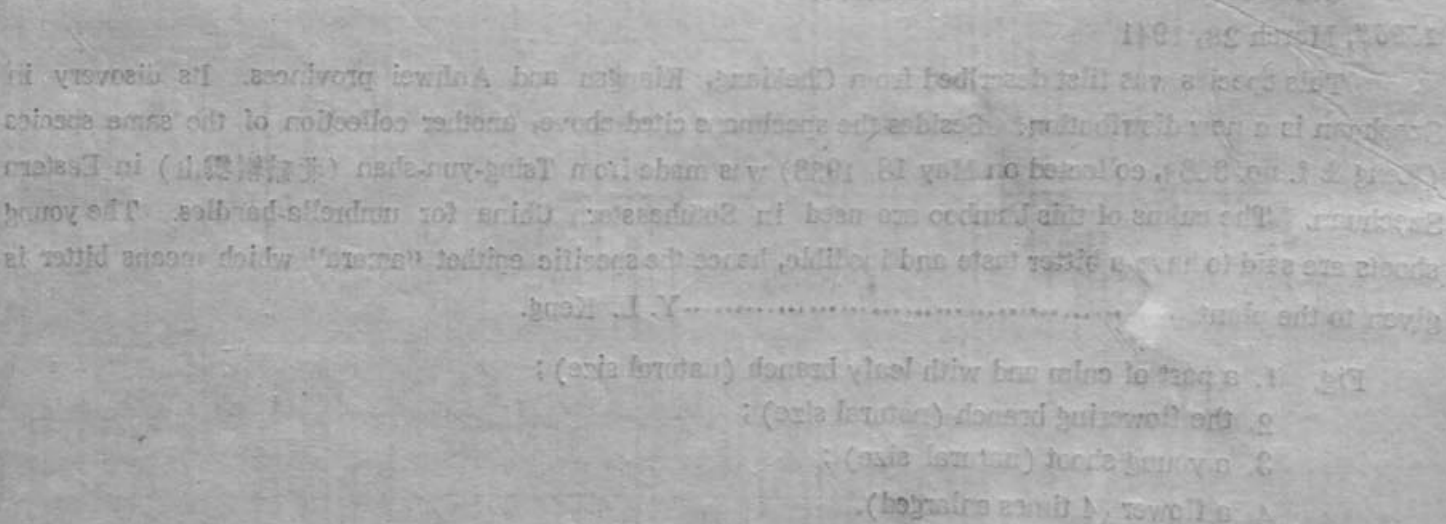
## 苦竹

### 禾本科

程灌木狀，高一至四公尺，基部之節間長達二十五公分，徑十五公厘，節下常有臘狀粉末，不久即變成黑污垢，除此則裸露，光滑無毛，着花之枝叢生，無葉，或先端具少數葉片，其節間長二十五至一百一十五公厘，徑一至二公厘，花枝之鞘長三十五至七十公厘，頂端無附屬物，光滑無毛葉舌堅韌，長一至二公厘，呈截頭形，葉大多長八至二十公分，寬十至二十八公厘，兩側各有四至八脈，小脈成方形花紋，先端漸尖，基部漸狹，柄長二至七公厘，葉背蒼白色，被毛多寡不定，向葉基處較多，葉緣硬刺狀或一邊之下部平滑。花成總狀花序，或有時較低之枝帶有小穗二枚而成圓錐花序，每花序具小穗三至十枚，基部內藏，花柄略呈扁形，常柔韌，長三至十二公厘，具硬毛，尤以邊緣處為然，有時近於平滑小穗多具八至十二花，長四至六公分，淡綠色或微帶紫色，小花軸粗壯，長四至五公厘，基部為外稃所包圍，光滑無毛或上部被短毛，杯狀之先端被纖毛；穎三至五枚，續長，最低一枚長二至四公厘，無毛，或背脊及先端被細毛，最上一枚與外稃相似但較小；外稃卵形或披針形，通常長八至十一公厘，具九至十一脈，小脈橫佈，先端銳形或尖頭狀，光滑無毛，或邊緣之上端具纖毛，內稃與外稃等長或常較長，全緣，龍骨脊及狹而鈍圓之頂端被毛，背部具深溝，被硬毛及厚粉，鱗被三枚，卵形或倒卵形，（後部一枚較窄），鈍圓形，長約四公厘，上部被纖毛，下部多脈，小蕊三枚，花藥長五至六公厘，蒼白黃色，子房窄而無毛，長約二公厘，頂部略呈三稜形，花柱三枚，極短，柱頭羽毛狀，長三至五公厘。

產峨眉山平地上主詞萬行庄黃灣一帶，海拔四百五十公尺處，三月開花。  
本種次發現於浙江江蘇安徽三省，新近始於四川發現，除峨眉外，在川東北碛之縉雲山亦曾採得，此竹之稈在東南各省用以造傘柄，其筭則據聞苦不可食，故名之為苦竹云。

圖解： 1. 稈之一部及着生枝葉之狀(原大)； 2. 花序着生於枝上之狀(原大)； 3. 筭(原大)； 4. 花(放大四倍)。



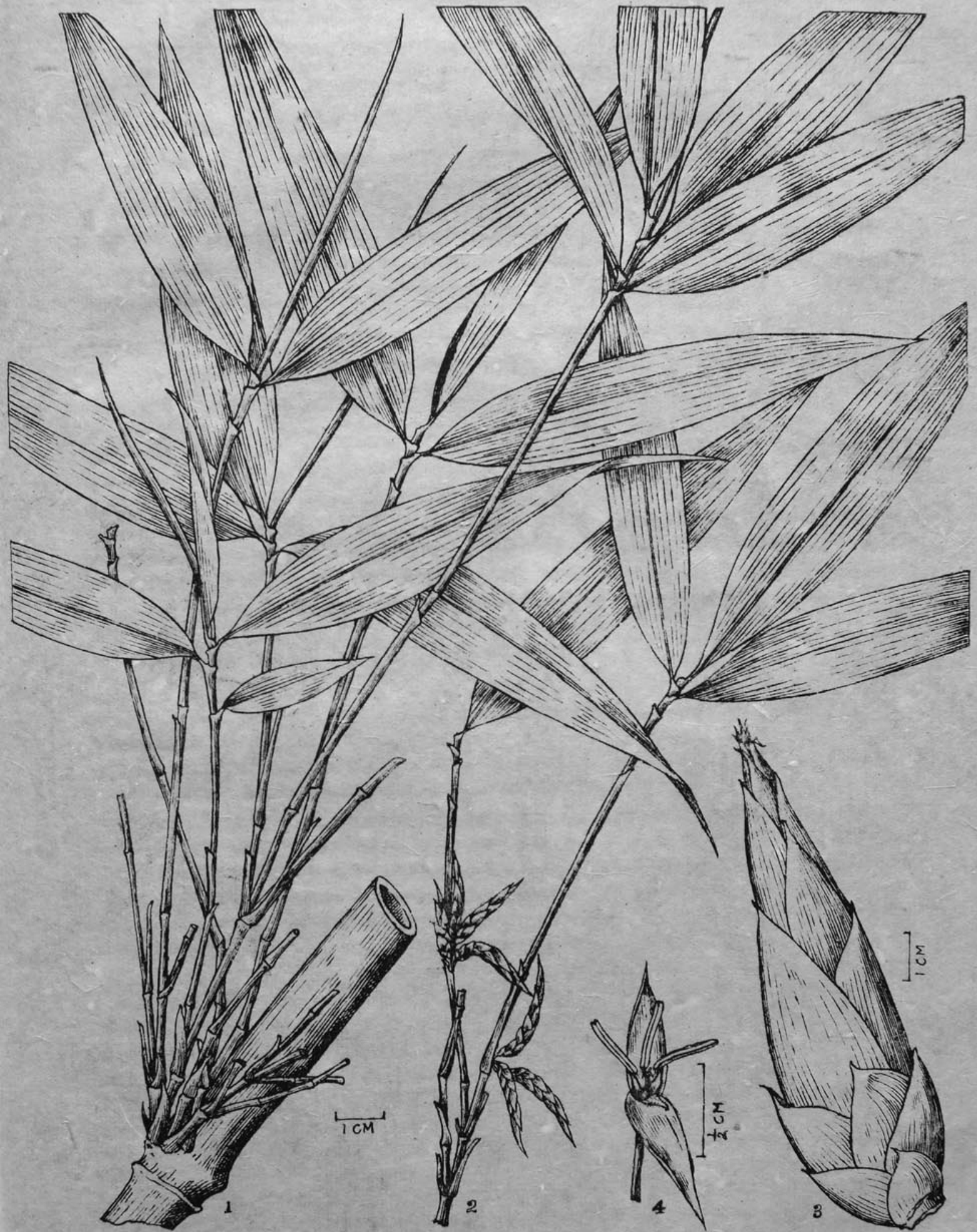




Plate 53.

**ARUNDINARIA CHUNGII** Keng.

Gramineae

**Arundinaria Chungii** Keng, sp. nov.

Frutex; internodia in specimine florifero teretia, rigida, 5-12 cm. longa, 3-5 mm. in diam., porrigine atra sordide obtecta. Vaginae culmi persistentes vel tarde deciduae, 1/2 ad totam longitudinem internodiorum aequantes, pilis adpressis setulosis circ. 1 mm. longis strigosae. Rami floriferi dense semiverticillati, 20-30 cm. longi, ramuli solitarii, omnes in inflorescentias terminantes. Foliorum vaginae infra inflorescentiam sese involventes, 2.5-4.5 cm. longae, apice inappendiculatae vel saepe setis paucis 2-5 mm. longis fimbriatae. Ligula firma, fuscata, circ. 2 mm. longa, decurrens. Laminae oblongo-lanceolatae, 5-10.5 cm. longae, 7-15 mm. latae, sensim acuminatae, basi in petiolum 2-4 mm. longum attenuatae, subtus plus minusve glauco-viridulae, tessellatae, glabrae, utrinque nervis secundariis 3-4 percursae, margine setuloso-scabrae vel altero fere laeves. Inflorescentia 8-12 cm. longa, usque ad ultra 20-spiculata, inferne inclusa vel breviter exserta, ramis glabris, viridulis, 2-3 spiculas ferentibus. Spiculae 4-7 florum, 2.5-5 cm. longae, brunneo-purpureae vel nigrescentes, pedicellis gracilibus 15-30 mm. longis fultae. Articuli rachillae compressi, 5-8 mm. longi, tenues, apicem versus pilis densioribus adpressis dorso pubescentes. Glumae 2, glabrae, acutae vel obtusiusculae, approximatae vel inter eas internodia 0.5-3.5 mm. longo remotae, prima 2.5-4 mm. longa, 1-nervis, secunda 4-7 mm. longa, pluri-nervis, Lemmata ovato-lanceolata, 9-11 mm. longa, 7-11 nervia, acuminata, praeter callum pilis canis vel fulvis circ. 1 mm. longis pubescentem glabra. Palea 8-9 mm. longa, superne inter carinas puberula, carinis apicem versus setuloso-scabris. Lodivulae 3, 1.5 mm. longae, inferne nervosae, superne fimbriatae. Stamina 3, antheris albidis, 5-6 mm. longis. Caryopsis linearis, triquetra, circ. 2 mm. longa, fusco-brunnea, reliquo circ. 0.8 mm. longo stylorum duorum coronata.

Culms fruticose, the internodes terete, 5-12 cm. long, 3-5 mm. in diam., narrowly fistulose, usually covered with a layer of black substance formed from the white pruinose secretion of the culm. Culm-sheaths persistent or tardily deciduous, dark brown, about 1/2 to equaling the length of the internodes, retrorsely or antrorsely strigose with appressed setulose hairs about 1 mm. long, or sometimes dorsally glabrous, the outer margins more or less ciliate above, neither auriculate nor fimbriate in the flowering specimens seen. Flowering branches densely semiverticillate, 20-30 cm. long or those from the lower nodes of the culm much shorter, the branchlets solitary, each terminated with an inflorescence, the latter usually subtended with a few sheaths bearing ordinary or much reduced blades. Leaf-sheaths overlapping, 3.5-4.5 cm. long, striate, glabrous or the outer margins ciliate, efimbriate or often fringed at the apex with a few setae 2.5 mm. long, sometimes also auriculate. Ligule firm, dusky, rounded or truncate, about 2 mm. long, decurrent. Blades oblong-lanceolate, 5-10.5 cm. long, 7-15 mm. wide, gradually acuminate, attenuate at the base into a petiole 2-4 mm. long, somewhat thickish, tessellate, more or less glaucous green beneath, traversed with 3-4 secondary nerves on either side of the midrib, the margins setulose-scabrous or one of them nearly smooth. Inflorescence a panicle of several to over 20 (sometimes a raceme, arising from the lower nodes of the branches, of 5) spikelets, 8-12 cm. long, included below or shortly exserted, the branches glabrous, 2-3-spiculate, simple or the lower ones branching below and subtended with bracts or reduced sheaths. Pedicels slender, somewhat flexuous, 15-30 mm. long, erect or frequently ascending with pulvini in the axils, spikelets 4-7-flowered, 2.5-5 cm. long, 1.5-2 mm. wide, brownish-purple to nigrescent. Rachilla joints compressed, 5-8 mm. long, about 0.5 mm. wide in the middle, dorsally pubescent with denser appressed hairs towards the thickened apex. Glumes 2, glabrous, mostly yellowish-brown, acute or obtusish, approximate or with an internode 0.5-3.5 mm. long between them, the first ovate-oblong, 2.5-4 mm. long, 1-nerved (i.e., the midrib evanescent above) with a few cross-veinlets near the middle of it, the second ovate-lanceolate, 4-7 mm. long, 7-9-nerved, cross-veined between the nerves. Lemmas ovate-lanceolate, 9-11 mm. long, 7-11-nerved, reticulate papery-herbaceous, acuminate or shortly pointed, mostly purplish, glabrous except the callus pubescent with greyish

or fulvous hairs about 1 mm. long. Palea 8-9 mm. long, notched at the narrow apex, canaliculate below and puberulent above between the keels, the latter setulose-scabrous above. Lodicules 3, the lateral 2 oblique or dimidiate-ovate, the posterior 1 ovate, about 1.5 mm. long, nervose below, fimbriate above. Stamens 3, the anthers linear, creamy, 5-6 mm. long, terminally exerted. Caryopsis linear, about 2 mm. long, triquetrous, dark-brown, surmounted with light-coloured remnant of 2 style-bases about 0.8 mm. long.

Type in the Herbarium of the Department of Biology, National Central University, Chungking (重慶) China, collected on hill slopes, Golden Summit (Chin-ting 金頂), Mount Omei (峨眉山), Szechuan province, July 1, 1938, by H. C. Chow (周鶴昌), No. 7678; duplicate types in the Herbarium of the National Wu-han University, Kiating (嘉定), and in the Herbarium of the National Szechuan University, Chengtu (成都), both in Szechuan province. Other collections of the same species are as follows.

SZECHUAN: Mount Omei, Golden Summit (Chin-ting 金頂), on slope, July 1, 1938, H. C. Chow (周鶴昌), No. 7680, below the monastery Chieh-yin-tien (接引殿), roadside, altitude 2450 m., July 19, 1935, T. H. Tu (杜大華), No. 358, Yen-wang-po (閻王坡), bamboo grove along roadside, August 24, 1942, Keng & f. No. 3788 (in part, sterile), between Chieh-yin-tien (接引殿) and Lei-tung-ping (雷洞坪), roadside thickets, August 26, 1942, Keng & f. No. 3835 (sterile); Mapien-hsien (馬邊縣) Ta-fung-ting (大風頂), shady place under thickets, alt. 3800 m., June 6, 1930, W. P. Fang (方文培), No. 1917.

This species is named in honour of Professor H. H. Chung (鍾心煊教授) in the National Wu-han University, who kindly sent to the author this bamboo and other grasses collected by Mr. H. C. Chow (周鶴昌君) under his direction. The description given above is based upon the flowering specimens, H. C. Chow nos. 7678 and 7680. An examination of the sterile specimens, Keng & f. nos. 3788 (in part) & 3835, shows that this species attains more than 2 metres in height with lower internodes of the culm 15-21 cm. long, 1 cm. in diameter, and that its culm-sheaths are 7-9 cm. long, blackish spotted or straw-coloured, strigose with fimbriate auricles especially in the upper ones, and with reflexed linear limbs 1-5.5 cm. long (the upper the longer).

This species was first misidentified as *Arundinaria Faberi* Rendle\*, from which it differs, however, in having the culms with much longer internodes, the inflorescence included below or shortly exerted with several or many spikelets, and in the fewer-flowered spikelets with shorter glabrous florets and 2 stigmas. It is probably related to *Arundinaria Fangiana* A. Camus, but the latter species is mainly distinguished by the culm-sheaths being glabrous (except the margins sometimes ciliate) and eifimbriate, the leaf-sheaths usually with fimbriate auricles, the inflorescence 3-4-rarely up to 9-spiculate, and by the spikelets frequently with cuspidate pubescent lemmas and with densely greyish-velutinous rachilla joints usually 4-5 mm. long. . . . . Y. L. Keng, December 16, 1942.

Fig. 1. a part of culm and flowering branches (natural size);

2. a flower (5 times enlarged).

\* Journ. Linn. Soc. Bot. XXXVI (1904), 435.



## 圖版五十三

## 鍾氏冷竹 新種 (俗名墨竹或大箭竹)

## 禾本科

稈灌木狀，節間圓形，長五至十二公分，直徑三至五公厘，中空甚狹，表面常被有黑色物，係稈之白色臘質分泌物堆積變化而成。籜宿存或脫落甚遲，暗褐色，其長約及節間之半或至等長，背面常具向下或向上平臥之毛，長一公厘，間或有時背部光滑無毛，外緣偶具纖毛，在開花之枝既無葉舌，又無飾物。着花之枝近於輪生，長二十至三十公分，或自稈之基部節上生者較短，小枝單生，其頂端常具一花序，其下具少數葉鞘，被以尋常或小形之葉片。葉鞘互相包裹，長三十五至四十五公厘，具條紋，光滑或外緣具纖毛，先端具或不具長二至五公厘之少數剛毛，偶或具葉耳。葉舌堅韌，略帶黑色，圓形或截形，長二公厘，向下延接葉鞘之邊緣。葉片長方披針形，長五十至一百零五公厘，寬七至十五公厘，先端漸尖銳，基部漸尖成長二至四公厘之葉柄，葉片厚，具間格，背面作淡綠色，中肋兩側各具側脈三至四條，邊緣具微刺而粗糙，或其一邊近於光滑。圓錐花序具數個至二十以上之小穗(着生於枝之基部之花序有時為總狀，僅具五小穗)，長八至十二公分，下端為葉鞘所覆蓋或略凸出，其枝光滑，具二至三小穗，下部之枝或再分歧，且具苞片或退化之葉鞘。花柄纖小，略成蛇蟠狀，長十五至三十公厘，直立或向上伸展而於腋間生有瓣狀物，每小穗具四至七花，長二十五至五十公厘，寬一公厘半至二公厘，紫褐色至淺黑色，花軸扁形，長五至八公厘，寬半公厘，先端厚而具密毛。穎二枚，光滑無毛，多為黃褐色，尖形或鈍形，節間長半公厘至三公厘半，第一穎長方卵形，長二公厘半至四公厘，具一中脈及少數橫脈，第二穎披針卵形，長四至七公厘，具七至九主脈，其間仍具橫脈，外稃披針卵形，長九至十一公厘，七至十一脈，網狀，紙質，銳形或短尖形，常為紫色，除其基部具灰色或黃色之毛外，餘均光滑。內稃長八至九公厘，先端窄而成叉狀，下部成溝狀，上部微具毛。鱗被三枚，兩側者斜卵形，其後側一枚卵形，長一公厘半，下部脈顯著，上部成流蘇狀。小蕊三本，花藥綫形，白色，長五至六公厘，自花之先端凸出。穎果細長約二公厘，呈三稜形，暗褐色，頂端為長約十分之八公厘之殘餘花柱所覆蓋。

原產於峨眉山之金頂，接引殿，雷洞坪，閻王坡及馬邊縣之大風頂等處。

此種大箭竹之命名為鍾氏冷竹，係從國立武漢大學鍾心煊教授之姓，因此種竹及其他禾本科植物標本，係彼指導周鶴昌君採得後，寄贈與作者研究者也。以上之說明，係根據周鶴昌君之 7678 及 7680 兩號標本而作者。嗣檢閱作者之 3788 之一部份及 3835 等號標本後，知此種竹高可逾兩公尺，基部之節間長十五至二十一公分，直徑一公分，籜長七至九公分，具黑色斑點或呈黃色，且具流蘇狀之葉耳與反捲之小葉，長十至五十五公厘(愈在上者愈長)。

本種初誤認為費伯冷竹，其與該種之區別在此種之稈具較長之節間，花序具數個至多數小穗，且下部有鞘包圍或略凸出，小穗花亦較少，且每花亦較短而光滑及僅具兩柱頭以異。此種當與方氏冷竹親緣較近，但該種極易辨別在籜光滑而不成流蘇狀，惟葉鞘則具流蘇狀之葉耳，花序具三至四稀至九個之小穗，及其小穗具尖而有毛之外稃，暨密被灰色毛茸，通常長四至五公厘之花軸云。

圖解：1. 稈之一部及着花之枝(原大)；2. 花(放大五倍)。





53. ARUNDINARIA CHUNGII Keng, sp. nov.



## Plate 54.

**ARUNDINARIA FANGIANA** A. Camus.

## Gramineae.

**Arundinaria Fangiana**, A. Camus in Journ. Arn. Arb. XI (1930), 192.

Culms suffruticose, terete, glabrous, about 50 cm. tall, the branches densely fascicled, 2-4-foliolate, all terminating in an inflorescence. Sheaths glabrous or the overlapping outer margins ciliate, frequently fringed at the apex, the upper or the lower ones shorter than the internodes. Ligule about 0.5 mm. long, truncate. Blades 3-7.5 cm. long, 4-14 mm. wide, 3-5-nerved on each side, finely acuminate, rounded at the base with a petiole about 2 mm. long, tessellate, glabrous, the margins scabrous. Raceme 3-4-spiculate or frequently a panicle 8-9-spiculate, with lower branches bearing 2 to 3 spikelets, 4-6 cm. long, included below, the pedicels erect, smooth, up to 2 cm. long. Spikelets 6-7-flowered, 25-33 mm. long, bronze-coloured or purplish, the rachilla joint 4-5 mm. long, densely greyish or fulvous-velutinous as in the callus of the lemma. Glumes acuminate or the first sometimes obtusish, 1-2 mm., the second 3-7 mm. long. Lemmas ovate-lanceolate, acuminate-cuspidate, 7-nerved, glabrous or the sides frequently puberulent above, the first 10-13 mm. long (including the subulate tip). Palea 8-9 mm. long, 2-toothed, the keels ciliate above. Anthers 5-6 mm. long. Stigmas 2-3, about 1 mm. long. Caryopsis (immature) glabrous, with 2 very short styles at its apex.

MOUT OMEI: Lei-tung-ping (雷洞坪) alt. 250 m., *W.P. Fang*, No. 3002 (type), August 15, 1928; same locality, in thickets, bamboo 1-2 metres high, abundant, *W.P. Fang*, No. 16551, May 16, 1940; same locality, in thickets, bamboo 0.5-1 metre high, *W.P. Fang*, No. 14779, May 20, 1940; same locality, bamboo 2-3 metres high, abundant, *W.P. Fang*, No. 18425, April 21, 1942; Chieh-yin-tien (接引殿), alt. 2642 m., bamboo 1 metre high, flowers greenish brown, *W.P. Fang*, No. 18295, June 18, 1942.

This species is sometimes misidentified as *Arundinaria Faberi* Rendle, from which it differs, however, in having a smaller inflorescence of fewer and shorter spikelets, and in the shorter rachilla joints covered with velutinous indumentum.....Y.L. Keng.

- Fig. 1. a tufted flowering branch (natural size);  
2. a flower (5 times enlarged).

## 圖版五十四

## 方氏苦竹 (俗名: 冷箭竹)

## 禾本科

釋為小灌木，圓形，光滑無毛，高約五公尺，枝密集叢生，具葉二至四枚，均有花序生於其頂端；葉鞘光滑無毛或外側之邊緣具有纖毛，頂端常呈流蘇狀，在枝之上部或下部者其長短於節間。葉舌長約半公厘，呈截頭形；葉身長三十至七十五公厘，闊四至十四公厘，側脈每側三至五條，頂端細而漸尖，基部圓形，葉柄長約二公厘，小葉脈成方形之網，光滑無毛，葉緣粗糙。總狀花序具三或四小穗，亦常為圓錐花序，具小穗八至九枚，其下部之枝各具二至三小穗，花序長四至六公分，基部內藏，花梗直立，平滑，長至二公分；小穗具花六至七枚，長二十五至三十三公厘，古銅色或帶紫色，小花軸長四至五公厘，被密生灰色或黃色絨毛，與在外稃繖體上之情形相同；穎漸尖，或第一穎為鈍圓形，長一至二公厘；第二穎長三至七公厘；外稃卵狀披針形；頂端漸尖成針狀，七脈，光滑或上部側面常有細毛；第一外稃長十至十三公厘(包括頂端之尖頭)；內稃長八至九公厘，具二齒，龍骨脊之上部具纖毛，花藥長五至六公厘；柱頭二至三枚，長約一公厘。

產峨眉山雷洞坪及接引殿一帶，海拔約二千餘公尺處。

本種每被誤認為費伯苦竹，然本種具有較小之花序，每花序之小穗數亦較少而短，小花軸較短而被絨毛，與費伯苦竹實不相同也。

圖解：1. 叢生之花枝(原大)；2. 花(放大五倍)。





54 . ARUNDINARIA FANGIANA A. Camus

## Plate 55.

**ALCHORNEA DAVIDII** Franchet.

## Euphorbiaceae

**Alchornea Davidii**, Franchet in Nouv. Arch. Mus. Paris, ser. 2, VII (1884), 74, t. 6 (Pl. David. I. 264). Hemsley in Journ. Linn. Soc. XXVI (1894), 438.—Leveille, Fl. Kouy-Tcheou (1914), 157.—J. Hutchinson in Sargent, Pl. Wilson. II (1916), 524.

Shrub usually 2 or 3 rarely to 4 metres high; branchlets short, slender, those of the current year green, pubescent, those of more than one year old brown or dark brown, pubescent; buds axillary, with 2 pairs of scales pubescent on the outer surface. Leaves deciduous, chartaceous, alternate, orbicular or suborbicular, 12-20 cm. long, 10-20 cm. broad, very shortly acute or obtuse on the apex, cordate or slightly cordate at the base, glandular and with 2 or 4 pointed appendages at the sinus of leaf-base near the apex of petiole, coarsely serrate with appressed crenate, upper surface green or purplish green while young, changing to light green when matured, glabrescent, lower surface purple while young and changing to purplish green or green when matured, grey-tomentose, primary nerves 3, conspicuous above, prominent below, secondary nerves 7-9, conspicuous above, prominent below; petioles cylindrical, 4-7 cm. long, tomentose, stipules subulate, tomentose. Flowers unisexual, dioecious, sessile, apetalous, precocious; staminate flowers in compact spikes 1.5-2.5 cm. long, calyx subglobose, splitting into 4 purple, ovate sepals, stamens 8, filaments glabrous, anthers oblong, yellow, 2-celled, dorsifixed, pistillode absent; pistillate flowers in a loose racemes, sepals 4 or 5, imbricate, triangular, pubescent outside, staminode absent, ovary superior, globose, pubescent, 3-celled, style usually 3-branched, linear, pubescent, ovules 1 in each cell. Fruit a subglobose capsule 14 mm. in diameter, densely pubescent, with persistent style.

MOUNT OMEI: south of and near Wan-hsing-chuang, alt. 450 m., at the side of a stream, shrub 3 metres high, flowers appearing before leaves, staminate flowers yellowish, with 8 stamens and 2 bracts *W.P. Fang*, No. 13904, May 12, 1940; same locality, a shrub about 2 metres high flowers dioecious, pistillate flowers dioecious, pistillate flowers with a 3-branched style and a 3-celled ovary, *W.P. Fang*, No. 13911, March 19, 1940; west of Pa-ning-ssu, in thickets, small tree 4 metres high, leaves cordate, reddish, pubescent on both surfaces, especially on the veins, staminate flowers greenish yellow, pistillate flowers pale green with 3 crimson styles, *W.P. Fang*, No. 13979, April 3, 1940; same locality, shrub 3 metres high, fruits green, globose, with 3 rubby styles, *W.P. Fang*, No. 14221, April 28, 1940; Kan-chi-ku, alt. 4600 m., at the side of a stream, shrub 2 metres high, flowers dioecious, *W.P. Fang*, No. 15928, March 25, 1941; Lung-men-tung, alt. 546 m., shrub 3 metres high, pistillate flowers purple, *C.L. Chow*, No. 5571, March 19, 1942; near Shun-yang-tien, alt. 1095 m., shrub 2 metres high, flowers yellow, *C.L. Chow*, No. 5736, April 3, 1942; en route from Fu-hu-ssu to Hsin-kai-ssu, alt. 1200 m., small tree 4 metres high, fruits a subglobose capsule, *C. L. Chow*, No. 5968B, April 28, 1942.

This is a very beautiful shrub discovered by the French missionary, A. David, in Shensi province and is a wide distributed species extending from Chekiang, through Kiangsi, Honan and Hupeh to Kweichow. It is the first time found this species in Szechuan, occurring fairly commonly on roadsides, in ravines or by streams at the foot of Mount Omei.....W.P. Pang.

- Fig. 1. a staminate flowering branch (natural size);  
 2. a portion of pistillate flowering branch (natural size);  
 3. a branch with matured fruits (natural size);  
 4. a staminate flower (5 times enlarged);  
 5. a pistillate flower (5 times enlarged).



圖版五十五

山麻桿

大戟科

灌木通常高二至三公尺，罕達四公尺；幼枝細短，本年生者綠色，被毛，一年以上者棕色或深棕色，被毛；芽腋生，被芽鱗兩對，外側被毛。葉冬季脫落，紙質，互生，圓形或近於圓形，長十二至二十公分，闊十至二十公分，先端成極短銳形或鈍圓形，基部心臟形，於近柄端之葉基凹匯處具腺體并附有二至四尖銳似托葉狀物，邊緣具粗齒，葉面幼時綠色或紫綠色，長成變淺綠色，略被毛痕，葉背幼時紫色，長成紫綠色，被灰色短毛，主脈三出，在葉面清晰，在葉背突起，側脈每側七至九，在葉面清晰，在葉背突起；葉柄圓柱形，長四至七公厘，被白色短毛，托葉錐形，被白色短毛。花單性，大小蕊花異株，無梗，無瓣，先葉開花；小蕊花成密集穗狀花序，長十五至二十五公厘，花萼近於圓形，四裂，裂片紫色，卵形，小蕊八本，花絲光滑無毛，花藥長方形，黃色，二室背聯，子房退化無存；大蕊花成疏鬆總狀花序，萼片四至五枚，覆瓦排列，三角形，外側被毛，小蕊退化無存，子房上位，圓球形，被毛，三室，花柱通常三枚，綫形，被毛，胚珠每室一枚。果為近於圓球近之蒴果，直徑十四公厘，被濃毛，花柱宿存。

產峨眉山麓之，萬行庄，保寧寺，龍門洞及純陽殿等處，海拔四百五十至一千公尺間，水隅路旁及亂石堆中均常見之，三四五月為其花期，樹形甚佳，頗有觀賞價值。

本種初發現於陝西，為法國教士大衛氏所採得。分佈於河南，浙江，江西，湖北，貴州諸省。在峨山此尚為首次見到也。

圖解： 1. 小蕊花枝（原大）； 2. 大蕊花枝（原大）； 3. 着果之枝（原大）； 4. 小蕊花（放大五倍）； 5. 大蕊花（放大五倍）。

Fig. 1. a staminate flowering branch (natural size);  
 2. a pistillate flowering branch (natural size);  
 3. a branch with matured fruits (natural size);  
 4. a staminate flower (5 times enlarged);  
 5. a pistillate flower (5 times enlarged).



55. ALCHORNEA DAIVIDII Franchet



## Plate 56.

**AESCULUS WILSONII** Rehder.

## Hippocastanaceae.

**Aesculus Wilsonii**, Rehder in Sargent, Pl. Wilson. I (1913), 498; Ill (1917), 445; Manual Cult. Trees & Shrubs, (1927), 580.

*Aesculus chinensis* Diels (non Bunge) in Engler, Bot. Jahrb. XXIX (1900), 450.—  
Schneider, Ill. Handb. II (1909) 249, fig. 171f, 173b-c.—Pampanini in Nuov.  
Giorn. Bot. Ital. N. Ser. XVIII (1911), 235.

*Aesculus indica* Pampanini (non Colebrooke) in Nuov. Giorn. Bot. Ital. N. Ser. XVII  
(1910), 423.

Tree usually 8 to 10 metres high; bark pale green or greyish brown, smooth, with conspicuous lenticels; branchlets with conspicuous ovate or linear lenticels and with soft white pith, those of the current year pubescent, those of more than one year old grey or greyish brown, glabrescent; winter-buds terminal or axillary, ovoid, 15-20 mm. long, chestnut-brown, resinous, with several pairs of obtuse scales. Leaves deciduous, opposite, digitate-compound, on a petiole 13-20 cm. long, at first tomentose, then glabrescent, leaflets 5-9, usually 7, oblong-obovate or oblong-oblancoate, 15-20 cm. long, 55-70 mm. broad, acuminate or shortly acuminate on the apex, broadly cuneate or subrotund at the base, serrulate on the margin with appressed teeth, upper surface deep green, glabrous, lower surface pale green, greyish tomentose, less so when matured, midrib and 15-20 lateral nerves slightly raised above, prominent below; petiolules slender, tomentose, 8-20 mm. long. Flowers fragrant, polygamous, in terminal villous panicle about 20 cm. long, on a stout peduncle about 15 cm. long; calyx tubular, 5-7 mm. long, puberulous outside, shallowly and unequally 5-lobed, lobes obtuse, 1-2 mm. long, minutely ciliate; petals 3-5, usually 4, white, obovate, cuneate and clawed at base, 14 mm. long, 4 mm. broad at the widest part, tomentose outside, glabrous inside; stamens usually 7, unequally, 22-30 mm. long, exerted, slender, filaments glabrescent, anthers yellow, ovoid or oblong-ovoid; in perfect flower pistil about 3 cm. long, ovary ovoid, 5 mm. long, rufo-tomentose, style densely villous except glabrous near the apex, in staminate flower the rudimentary pistil about 7 mm. long. Fruit an ovoid 3-valved capsule, 3.5-4 cm. in diameter, green with brown spots, on a stout pedicel 3.5-4 cm. long, seed 1, subglobose, 2.8-3 cm. in diameter.

**MOUNT OMEI:** Chiu-sze-chiu-tau-kui, *H.C. Chow*, Nos. 7515 & 7782, July 1938; same locality, alt. 1500 m., in forests, small tree 6-7 metres high, fruits brown, subglobose, *T.C. Lee*, No. 3114, July 31, 1940; near Chiu-lao-tung, alt. 1800 m., *T.H. Tu*, Nos. 111 & 782, in 1935; same locality, small tree about 8 metres high, *S.S. Chien*, No. 6081, July 11, 1937; same locality, *C.L. Sun*, No. 508, May 22, 1939; same locality, in forests, small tree 7 metres high, flowers white, *C.L. Sun*, No. 2149, May 25, 1940; same locality, small tree 6-8 metres high, bark blackish grey, flowers white, with 4 carpels and 7 stamens, *W.W. Ma*, No. 2398, June 17, 1940; same locality, *W.P. Fang*, No. 14715, May 19, 1940; west of Mount Omei, Opien-hsieh, sha-ping, in forests, small tree 8 metres high, fruits subglobose, green with brown spots, *C.L. Sun*, No. 969, August 11, 1939; without precise locality, *C.W. Yao*, Nos. 4551 & 4882, in 1939.

The genus *Aesculus* is well known as of very pretty tree. *Aesculus Wilsonii* is of high value in horticulture. It was discovered by Wilson in western Hupeh and Szechuan. Through our extensive explorations this species has been found to be not uncommon at the middle part of Mount Omei.....*W.P. Fang*.

- Fig. 1. a flowering branch (natural size);  
2. a fruiting branch (natural size);  
3. flower (4 times enlarged);  
4. a pistil (8 times enlarged);  
5. a portion of leaf to show the hairs at the lower surface (5 times enlarged).

圖版五十六

威氏七葉樹

七葉樹科

喬木通常高八至十公尺；樹皮淡綠色或灰棕色，平滑，上集明顯皮孔，木髓白色質軟，本年生者被毛，一年以上者灰色或灰棕色，略被毛痕；冬芽頂生或腋生，卵圓形，長十五至二十公分，栗棕色，分泌膠質，外被鈍形芽鱗數對。葉冬季脫落，對生，掌狀複葉，葉柄長十三至二十公厘，初被白色短分泌膠質，外被鈍形芽鱗數對。葉冬季脫落，對生，掌狀複葉，葉柄長十三至二十公厘，初被白色短毛，後僅餘毛痕，小葉片五至九枚，以七為常，長方倒卵形或長方倒披針形，長十五至二十公分，闊五十五至七十公厘，先端尖尾狀或短尖尾狀，基部闊楔形或近於圓形，葉緣細齒裂，葉面深綠無毛，葉背淡綠，被淡灰厚短絨毛，長成毛漸少，中脈及十五至二十對側脈在葉面稍凸，在葉背凸起甚顯；小葉柄纖細，被短厚白毛，長八至二十公厘。花芳香，雜性，成頂生被毛圓錐花序，花梗粗壯，長約十五公分，花萼管狀，長五至七公厘，外側被疏短小毛，五淺裂，裂片不等大，鈍形，長一至二公厘，週圍有細小纖毛；花瓣三至五枚，以四為常見，白色，倒卵形，基部楔形，末端成爪狀，長十四公厘，最闊部份寬四公厘，外側被短密絨毛，內側無毛；小蕊通常七本，長短不齊，長廿二至三十公厘，伸出花瓣之外，纖細，花絲略帶毛痕，花藥黃色，卵形或長方卵形；在完全花中大蕊長約三公分，子房卵形，長五公厘，被紅棕色短毛，花柱頂端無毛，餘部被濃密長毛，在小蕊花中有發育不全之大蕊，長約七公厘。果為三瓣裂之卵形蒴果，直徑卅五至四十公厘，果柄粗壯，長卅五至四十公厘；種子一枚，近於圓形，直徑二十八至三十公厘。

產峨眉山九十九道拐至九老洞一帶，海拔一千五百至一千八百公尺處，五六月開花，本屬植物向以美麗悅目見稱，本種尤然，峨山向西峨邊沙坪亦產之。

本種初為威爾遜氏發現於湖北西部及四川，余等在峨山探求結果，知山腰一帶此種亦頗不少也。

圖解：1. 着花之枝（原大）；2. 着果之枝（原大）；3. 花（放大四倍）；4. 大蕊（放大八倍）；5. 葉之一部示葉背之毛（放大五倍）。

The genus *Aesculus* is well known as of very pretty tree. *Aesculus wilsonii* is of high value in particular. It was discovered by Wilson in western Hunan and Szechuan. Through our extensive exploration this species has been found to be not uncommon at the middle part of Mount Omei. W. P. Fang.

Fig. 1. A flowering branch (natural size);  
2. A fruiting branch (natural size);





56. *AESCULUS WILSONII* Behder

## Plate 57.

**EUPTELEA PLEIOSPERMA** Hooker et Thomson.

## Trochodendraeae.

**Euptelea pleiosperma**, Hooker et Thomson in Journ. Linn. Soc., Bot. VII (1864), 240, t. 2; in Hooker f., Fl. Brit. Ind. I (1872), 39.—King in Ann. Bot. Gard. Calcuta, III (1891), 139, t. 39A.—Solereider in Ber. Deutsch. Bot. Ges. XVII (1899), 399.—Finet et Gagnepain in Bull. Soc. Bot. France, LII, Mem. IV (1905), 25; Contrib. Fl. As. Or. II (1907), 25.—Rehder et Wilson in Sargent, Pl. Wilson, I (1913), 313.—Chun, Chinese Economic Trees, (1921), 129, plate 49.

*Euptelea Davidiana*. Baillon in Adansonia, XI (1875), 305.—Franchet in Nouv. Arch. Mus Paris, ser. 2, VIII (1886), 193 (Pl. David, II, 11).—Van Tieghem in Journ. de Bot. XIV (1900), 271.—Hensley in Hooker Icon. Pl. XXVIII (1905), sub. t. 2787, cited specimens from Mupin and Yunnan included.—Finet et Gagnepain in Bull. Soc. Bot. France, LII Mem. IV (1905), 25; Contrib. Fl. As. Or. II (1907), 25.

*Euptelea Delavayi* Van Tieghem in Journ. de Bot. XIV (1900), 273.

Shrub or small tree usually 5 metres high rarely up to 8 metres high; bark dark or brownish dark, smooth; branchlets slender, glabrous, yellowish grey or brownish grey, with ovate lenticels; winter-buds axillary, subovoid, with several imbricate, shining dark brown ovate scales, glabrous on both sides. Leaves alternate, deciduous, chartaceous, broadly elliptical rarely ovate, 5-10 cm. long, 3-8 cm. broad, broadly acute or acute at base, acute or rounded rarely acuminate on the apex, with a narrow acumen about 15 mm. in length, regularly and remotely serrate with appressed acute teeth on the margin, upper surface deep green, glabrous, lower surface whitish glaucous, papillose and sparsely pubescent on the veins, midrib and 7-9 lateral veins impressed above, prominent below; petioles 1.5-3 cm. long, slender, cylindrical except dilated at base; stipules absent. Flowers precocious to leaves, hermaphrodite, proterandrous, in axillary fascicles on two-years old branchlets, sepals and petals absent, stamens 15-20, in one whorl, red or purplish red, anthers linear, 6-8 mm. long, filaments slender, glabrous, 2 mm. long, carpels as many as stamens, obovate, compressed, stigma sessile, decurrent, mature after the stamens have fallen away, pedicels 2 mm. long. Fruit a flat and oblique samara 8 mm. long, 4 mm. broad, on a slender pedicel 8-10 mm. long, seeds 3-4, flat, closely packed.

MOUNT OMEI: Ta-o-ssu, alt. 1103 m., small tree with purplish green flowers, W.P. Fang, No. 15957, March 11, 1941; Wan-nien-ssu, alt. 1041 m., W.P. Fang, No. 16258, April 19, 1941; Niu-hsin-ssu, alt. 1014 m., in forests, shrub 3 metres high, C.L. Sun, No. 2039 May 18, 1940; same locality, shrub 5 metres high, young fruits greenish purple, W.P. Fang, No. 16174, April 12, 1941; Hung-chun-ping, alt. 1147 m., in thickets, small tree 5 metres high, S.S. Chien, No. 5503, May 5, 1936; same locality, H.C. Chow, No. 7503, June 12, 1938; same locality, in thickets, small tree 4 metres high, bark blackish brown, C.L. Sun, No. 1419, March 19, 1940; same locality, small tree 5 metres high, flowers with red anthers, T.C. Lee, No. 4407, March 20, 1940; same locality, in forests, shrub 5 metres high, C.L. Sun, No. 2080, May 18, 1940; same locality, small tree 8 metres high, fruits red, common, C.L. Sun, No. 3085, July 31, 1940; same locality, W.P. Fang, No. 14975, October 7, 1940; same locality, small tree 5 metres high, samara brownish, W.P. Fang, No. 15284, November 13, 1940; same locality, W.P. Fang, No. 17619, August 31, 1941; She-tao-tui, alt. 1300 m., shrub with purplish young fruits, W.P. Fang, No. 14338, May 10, 1940; Ta-ping, alt. 1400 m., shrub 2 metres high, C.L. Sun No. 1718, April 26, 1940; Kuan-hsin-po, alt. 1378 m., a shrub with purple flowers, W.P. Fang, No. 13909, March 15, 1940; same locality, small tree 8 metres high, young fruits purple, W.P. Fang, No. 16800, May 28, 1941; Hsi-hsin-so, alt. 1620 m., small tree 7 metres high, T.C. Lee, No. 4474, April 1, 1940; same locality, small tree 5 metres high, W.P. Fang, No. 17050, June 23, 1941; en route from Hsi-hsin-so to Chu-tien; alt. 1500 m., in thickets, shrub 4 metres high, bark brownish grey, flowers light green, C.L. Sun, No. 1481, April 11, 1940; Chia-tze-wan, alt. 1200 m., small tree 8 metres high, W.P. Fang, No. 15206, November 7, 1940; Chu-tien, alt. 1800 m., small tree 8 metres high, W.P. Fang, No. 15519, November 25, 1940; same locality, W.P. Fang, No. 17813, September 25, 1941; Hu-yen-ding, alt. 2096 m., small tree 5 metres high, S.S. Chien, No. 6142, July 15, 1937; Chiu-lao-tung, alt. 1920 m., in thickets, small tree 8 metres high, flowers red, T.C. Lee No. 4450, March 30, 1940, same locality, in woods, shrub 5 metres high, C.L. Sun, No. 1829, May 1, 1940; same locality, in thickets, shrub 5 metres high, flowers purple, C.L. Sun, No. 1592, April 18, 1940; same locality,



in forests, shrub 4 metres high, flowers pinkish, occasionally, *W.W. Ma*, No. 2436, June 18, 1940; same locality, in thickets, shrub 4 metres high, common, *T.C. Lee*, No. 4450, March 20, 1940; *Hsi-hsiang-chih*, alt. 2240 m., in forests, small tree with purple flowers, *W.P. Fang*, No. 16006, March 31, 1941; Without precise locality, *C.L. Sun*, Nos. 35 & 91, May 1939; without precise locality, *C.W. Yao*, Nos. 3663, 4548, & 4863, in 1939.

This is a well known species distributed from the Mishmi Hills of the Himalayas eastward to Western Szechuan and Yunnan. On Mount Omei it is fairly common at the lower part about 1000 to 2000 metres above sea level. By the glaucous and papillose lower surface of the leaves it is easily distinguished from the other Chinese species, *Euptelea Franchetii* Van Tieghem, which has leaves green and nonpapillose at the lower surface and which is confined to Western Hupeh and Eastern Szechuan..... *W.P. Fang*.

Fig. 1. a fruiting branch (natural size); 2. a flowering branch (natural size); 3. a flower (3 times enlarged); 4. a carpel (10 times enlarged); 5. 2 fruits (3 times enlarged).

## 圖 版 五 十 七

# 多 子 領 春 木

### 雲 葉 科

灌木或小喬木，通常高五公尺，罕達八公尺，樹皮暗黑色或帶棕色，平滑；幼枝纖細，黃灰色或棕灰色，上有卵形皮孔；冬芽腋生，近於卵形，芽鱗數片，覆瓦排列，卵形，亮棕褐色，兩面無毛。葉互生，冬季脫落，紙質，闊橢圓形罕為卵形，長五至十公分，闊三至八公分，先端圓形，罕為尖尾狀而具長約十五公厘之窄尖，邊緣有疎稀銳形細齒，葉面深綠，無毛，葉背色淡被白粉，帶囊狀突起，脈上被疎毛，中脈及七至九對側脈在葉面下凹，在葉背突起；葉柄長十五至三十公分，纖細，圓柱形，基部寬大；無托葉。花先葉開放，兩性，小蕊成熟在大蕊之前，花叢生於二年老枝之腋，萼瓣俱無，小蕊十五至廿本，排成一輪，紅色或紫紅色，花藥綫形，長六至八公厘，花絲纖細，無毛，長二公厘；心皮與小蕊同數，倒卵形，側扁，無花柱，柱頭生於子房上，心皮成熟在小蕊凋落之後，花梗長二公厘。果實為扁斜翅果，長八公厘，闊四公厘，果柄纖細，長八至十公厘；種子三至四枚，扁形，緊包於果內。

產峨眉山大峨寺，萬年寺，牛心寺，洪椿坪，大坪，觀心坡，息心所，初殿，華嚴頂及九老洞等處，海拔一千至二千公尺間均習見之，三四月開花。

此種分佈遼遠，為世習知，自喜馬拉亞山之密薩密山東入雲南及四川西部，峨山上亦頗多此樹。本種之葉，背面被白粉并成囊繃，此特性使之與川東及鄂西特產之綠葉領春木甚易辨別，蓋後者之葉背綠色，亦無囊繃也。

圖解： 1. 着果之枝（原大）； 2. 着花之枝（原大）； 3. 花（放大三倍）； 4. 心皮（放大十倍）； 5. 果實（放大三倍）。



57. EUPTELEA PLEIOSPERMA Hook. et Thoms.



## TETRACENTRON SINENSE Oliver.

Trochodendraceae.

**Tetracentron sinense**, Oliver in Hooker Icon. Pl. XIX (1889), t. 1892.—Diels in Engler Bot. Jahrb. XXIX (1903), 323.—Finet & Gagnepain in Bull. Soc. Bot. France, LII, Mem. IV (1905), 26; Contrib. Fl. As. Or. II (1907), 26.—Bean in Kew. Bull. Misc. Inform. (1909), 356, fig.—Rehder & Wilson in Sargent, Pl. Wilson. I (1913), 417; Manual Cult. Trees & Shrubs (1927), 261.—Chun, Chin. Economic Trees (1921), 132.—Handel-Mazzetti, Symbolae Sincae, VII, Lieferung 2 (1931), 245.

Tree usually 10 to 12 metres high; bark grey or blackish grey, smooth; long branchlets slender, glabrous, yellowish-green or brownish-green, short branchlets dark brown, with conspicuous leaf-scars; winter-buds terminal on short branchlets, pointed, with 2 yellow sheathing opposite scales, slightly covered by the expanded petiole base. Leaves deciduous, alternate, exstipulate, chartaceous or subcoriaceous, suborbicular or ovate-elliptical, 9-15 cm. long, 7-9 cm. broad, acuminate or short-acuminate on the apex, subcordate or cordate rarely rounded at the base, crenulate-serrulate on the margin with appressed obtuse glandular-teeth, upper surface deep green, glabrous, with main nerves slightly impressed, lower surface pale green, with palmately 5-7 main nerves prominent, secondary nerves reticulate; petioles 2-3 cm. long, slender, glabrous, cylindrical except expanded at the base. Flowers small, sessile, apetalous, hermaphrodite, in slender, pendulous racemes 8-20 cm. long, produced with a single leaf and terminal on the short branchlets; sepals 4, imbricate, ovate, 1-1.5 mm. long, glabrous, green or greenish yellow; stamens 4, opposite to the sepals, 2-2.5 mm. long, exerted, anthers yellow, subovoid, 2-celled, filaments slender, glabrous; carpels 4, connate along the ventral suture, ovary superior, ovoid, styles, at first terminal and slightly curved, then lateral by oblique growth of the ovary, finally basal, ovules usually 4 in each cell, pendulous. Fruit a brown deeply 4 lobed loculicidal dehiscent capsule, with the 4 styles persistent as short spurs at the base, seeds linear-oblong.

**MOUNT OMEI:** Chiu lao-tung, alt. 1800 m., *H.C. Chow*, Nos. 7774 & 8310, July 3 to September 9, 1938; same locality, at shaded slopes, tree 10-12 metres high, bark blackish grey, leaves green above, light green below, flowers light green, common, *W.W. Ma*, No. 2425, June 17, 1940; same locality, in woods, tree 12 metres high, flowers light yellow, occasionally, *T.C. Lee* No. 3219, August 8, 1940; same locality, in woods, tree 10 metres high, flowers yellow, *T.C. Lee*, No. 2815, July 14, 1940; same locality, in forests tree 10 metres high, fruits light green, common, *T.C. Lee*, No. 3768, October 9, 1940; near and below Hsi-shiang-chih, alt. 2100 m., tree 10 metres high, flowers yellowish green, occasionally, *T.C. Lee*, No. 3893, October 4, 1940; northwest of Mount Omei, Hung-ya-hsien, shui-tung-shan, in forests, tree 10 metres high, *C.L. Sun*, No. 1160, August 27, 1939; west of Mount Omei, Opien-hsien, Lung-men-ku, *W.C. Cheng*, Nos. 6319, & 6688, July 1936; without precise locality, *C.W. Yao*, Nos. 2802 & 3804.

**SZECHUAN:** Tien-chuan-hsien, Kan-yang-chen, alt. 2700 m., *K.L. Chu*, No. 3378, August 3, 1936; Tien-hsien, Men-kan-shan, in woods, tree with light green fruits, *C.M. Teng*, & *F.C. Tai*, No. 5230, September 22, 1939.

This is one of the well known monotypic species confined to Western China. It has been reported in Shensi, Hupeh and Yunnan that this species is a tree 25 to 30 metres in height. However, this species on Mount Omei is usually a tree of 10 metres high and with a trunk 1 to 1.5 metres in diameter at the base. The best habitat for this species is usually in woods or on the shaded and moist slopes.

.....W.P. Fang.

- Fig. 1. a flowering branch (natural size);  
 2. a fruiting branch (natural size);  
 3. a flower (10 times enlarged);  
 4. young stage of fruit (10 times enlarged);  
 5. a fruit (10 times enlarged);  
 6. a dissection of a fruit (10 times enlarged);  
 7. a seed (10 times enlarged).

圖版五十八

水青樹

雲葉科

喬木通常高十至十二公尺；樹皮灰色或黑灰色，平滑，幼枝長者纖細，光滑無毛，黃綠色或棕綠色，短者深棕色，上具明顯葉痕，多芽着生於短枝頂端，尖頂，具對生黃色鞘狀芽鱗二枚，略為葉柄之擴大基部所覆蓋。葉冬季脫落，互生，無托葉，紙質或近於革質，近於圓形，或卵狀橢圓形，長九至十五公分，闊七至九公分，先端尖尾狀或短尖尾狀，基部近於心臟形，或為心臟形，罕為圓形，邊緣具細小圓齒，齒上具腺體，葉面深綠色，光滑無毛，中脈略下陷，葉背淡綠，主脈五出或七出，凸起，側脈網狀；葉柄長二至三公公分，纖細，無毛，圓柱形，僅基部平展。花小，無梗，無瓣，雜性，成細長下垂總狀花序，長八至廿公分，旁帶一葉，着生於短枝頂端；花四片，覆瓦排列，卵形，長一公厘至一公厘半，無毛，綠色或黃綠色；小蕊四本，與萼對生，長二公厘至二公厘半，伸出花萼之外，花藥黃色，近於卵形，二室，花絲纖細無毛；心皮四枚腹縫相聯，子房上位，卵狀，花柱四枚，初為頂生，微彎，繼因子房一側增長而成側生，最後形成基生，胚珠每室四枚，下垂。果為棕色四深裂蒴果，成熟背裂，花柱宿存果之基部如四短距，種子線狀長方形。

產峨眉山九老洞，洗象及大乘寺一帶，海拔一千八百至二千三百公尺間，以九老洞一帶較多，峨山西北之洪雅及西部之峨邊亦均產之。

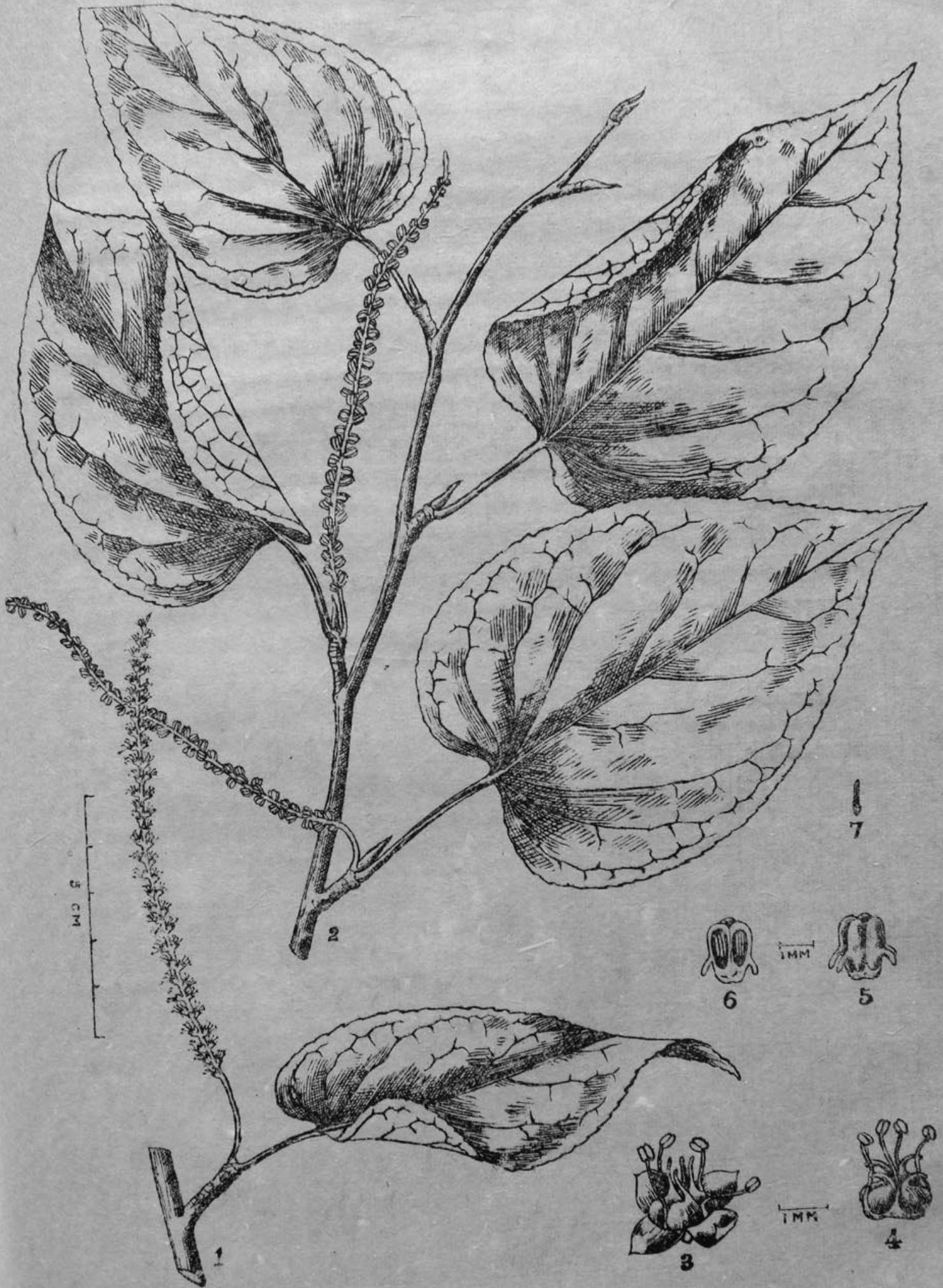
本種為 *Tetracentron* 水青樹屬之單種名樹，產地僅限於華西之陝西，湖北及雲南諸省。通常為高廿五至三十公尺之喬木，然在峨山此樹高僅十公尺，樹幹基部直徑一至一公厘半，以林中或陰濕處為最佳之產地。

圖解：1. 着花之枝（原大）；2. 着果之枝（原大）；3. 花（放大十倍）；4. 幼果（放大十倍）；5. 果（放大十倍）；6. 果之解剖（放大十倍）；7. 種子（放大十倍）。

This is one of the well known tree species confined to Western China. It has been reported in Shaan, Hubei and Yunnan that this species is a tree 25 to 30 metres in height. However, this species on Mount Omei is usually a tree of 10 metres high and with a trunk 1 to 1.5 metres in diameter at the base. The habitat for this species is usually in woods or on the shaded and moist slopes.

1. a flowering branch (natural size);  
 2. a fruiting branch (natural size);  
 3. a flower (10 times enlarged);  
 4. young stage of fruit (10 times enlarged);





58. TETRACENTRON SINENSE Oliver

## Plate 59.

**CERCIDIPHYLLUM JAPONICUM** Siebold et Zuccarini,  
var. **SINENSE** Rehder et Wilson.

## Cercidiphyllaceae.

**Cercidiphyllum japonicum**, Siebold et Zuccarini in *Abhand Akad. Munch.* IV. pt. III (1846), 238 (*Fl. Jap. Fam. Nat.* II. 114).

This species is confined to Japan and does not occur in China.

**Cercidiphyllum japonicum** Siebold et Zuccarini, var. **sinense** Rehder et Wilson in Sargent, *Pl. Wilson.* I (1913), 319.; Rehder, *Manual Cult. Trees and Shrubs*, (1927), 214.

Tree 10-20 metres high, rarely up to 40 metres high, 1-3 metres in diameter; bark dark-grey or dark-brown, smooth or rarely scaling off into thin flakes; lateral branches from the trunk usually about 2 metres above the ground, grey or dark grey, smooth, long branchlets slender, glabrescent, short branchlets usually opposite on the long branchlets; winter-buds axillary conical, with 2 outer brownish ovate scales. Leaves deciduous, solitary on the short branchlets, suborbicular or broadly ovate rarely ovate, 5-7 cm. long, 4-5 cm. broad, acute or obtuse on the apex, subcordate or cordate at the base, crenate-serrate with appressed obtuse glandular teeth on the margin, deep green above, glaucescent and pubescent on the veins below, both surfaces changing to yellow or red in the autumn, palmately veined with 7 primary veins just showing above and prominent below; petioles 1-2.5 cm. long, slender, slightly channelled above, rounded below, dilated at the base. Flowers precocious to leaves, several, developed from the buds of the short branchlets, dioecious, petals absent; staminate flowers subsessile, stamens several, 8-12 mm. long, anthers linear, yellow, filaments very slender; pistillate flowers shortly pedicelled, carpels 3-5, styles 8 mm. long, purple. Fruits 2-3 pod-like capsules with persistent styles 10-12 mm. long, 4 mm. broad, on slender peduncle 5-8 mm. long.

MOUNT OMEI: Chiu-lao-tung, alt. 1876 m., tree 20 metres high, bark dark brown, *C.L. Sun*, Nos. 1659, & 1792, April 22-31, 1940; same locality, tree 20 metres high, staminate flowers yellowish, *W.P. Fang*, No. 18394, April 29, 1942; Yang-chen-pu, tree 10 metres high, *W.C. Cheng*, No. 5945, June 13, 1936.

This is a very ornamental tree, confined to China. This variety differs from the Japanese type-species in the smaller leaves which are pubescent on the veins of the lower surface. The author believes that all the Chinese plants belong to this variety. The Omei plants differ from other Chinese plants in having all the leaves from the short branchlets and none from the long branchlets.....W.P. Fang.

- Fig. 1. a fruiting branch (natural size);  
2. a staminate flowering branch (natural size);  
3. a staminate flower (2.5 times enlarged);  
4. a pistillate flower (2.5 times enlarged).



# 圖版五十九

## 連香樹 (別名：紫荊葉木或山白果)

### 連香樹科

喬木高十至二十公尺，罕達四十公尺，樹幹直徑一至三公尺；樹皮深灰色或深棕色，平滑，稀剝落成薄片；樹幹距地二公尺以上始生枝，枝灰色或深灰色，平滑，幼枝長者纖細，略被毛痕，短者通常對生於長枝之上；冬芽腋生，圓錐形，外側被卵形淡棕色芽鱗二枚。葉冬季脫落，單生於短枝之上，近於圓形或闊卵形，罕為卵形，長五至七公分，闊四至五公分，先端銳形或鈍形，基部心臟形或近於心臟形，葉緣有齒，齒細小鈍圓具腺體，葉面深綠，葉背藍綠被粉，脈上被毛，秋季時通體轉為黃色或紅色，主脈掌狀分出，七條，在葉面甚平，在葉背突起；葉柄長十至二十五公厘，纖細，上面淺溝狀，下面圓形，基部膨大。花先葉開放，數朵由短枝之芽發出，大小蕊花異株，無瓣；小蕊花若無梗，小蕊數本，長八至十二公厘，花藥綫形，黃色，花絲極細；大蕊花具極短花梗，心皮三至五枚，花柱長八公厘，紫色。果為莢狀蒴果，二至三枚，具宿存花柱，果長十至十二公厘，直徑四公厘，果柄纖細，長五至八公厘。

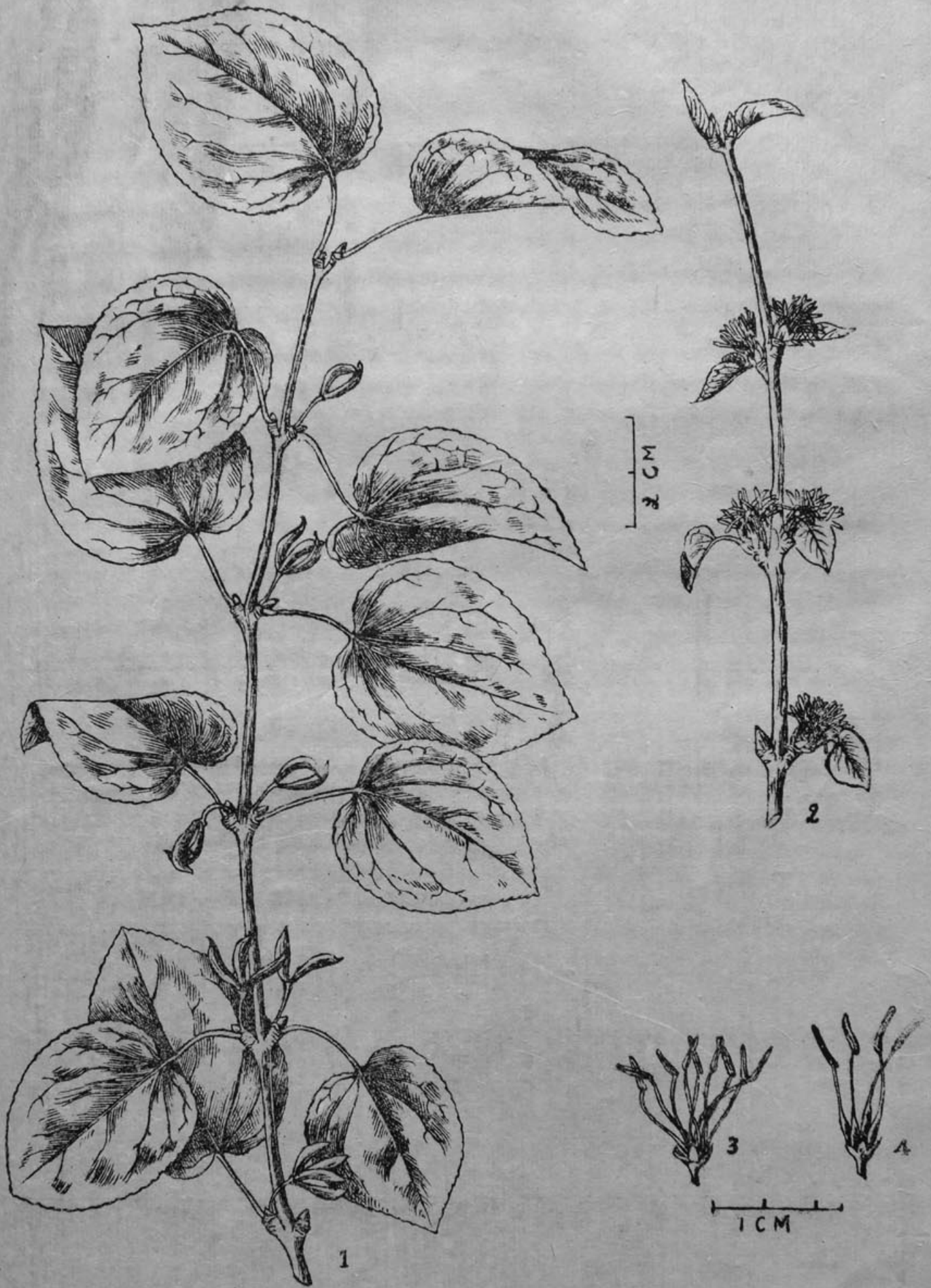
產峨眉山九老洞。

此樹極富觀賞價值，產地限於中國。此樹僅為一變種，原種則產於日本，二者不同之處在於此變種具較小之葉，葉背之脈具毛。作者意謂中國之連香樹均為此變種也，峨山所產者與其他國內各地者略有不同，則為其葉均由短枝生出而長枝全無葉。

圖解： 1. 着果之枝 (原大)； 2. 小蕊花枝 (原大)； 3. 小蕊花 (放大二倍半)； 4. 大蕊花 (放大二倍半)。

This is a very ornamental tree, confined to China. This variety differs from the Japanese type-species in the smaller leaves which are pubescent on the veins of the lower surface. The author believes that all the Chinese plants belong to this variety. The Gumi plants differ from other Chinese plants in having all the leaves from the short branches and none from the long branches.

Fig. 1. a fruiting branch (natural size);  
2. a staminate flowering branch (natural size);  
3. a staminate flower (2.5 times enlarged);  
4. a pistillate flower (2.5 times enlarged).



59. *CERCIDIPHYLLUM JAPONICUM* Var. *Sinense* R. & W.



## Plate 60.

**DECAISNEA FARGESII** Franchet.

Iardiz a balaceae.

**Decaisnea Fargesii**, Franchet in Journ. de Bot. VI (1892), 234. Bois in Rev. Hort. (1900), 270, fig. 122-124.—Diels in Engler, Bot. Jahrb. XXIX (1900), 342.—Hooker f. in Bot. Mag. CXXVIII (1902), t. 7848.—Schneider, Ill. Handb. Laubholz. II (1912), 912, fig. 571.—Rehder in Sargent, Pl. Wilson. I (1913), 344.—Handel-Mazzetti, Symbolae Sinicae, VII (1931), 262.

*Decaisnea insignis*, Diels (non Hooker f. et Thomson) in Engler, Bot. Jahrb. XXIX (1900), 342; in Engler, Bot. Jahrb. XXXVI. Beibl. LXXXII (1905), 44.—Pampanini in Nuov. Giorn. Bot. Ital. n.s. XVII (1910), 273.

Shrub or small tree usually about 5 metres high, bark grey or dark grey, smooth; branchlets slender, glabrous, green or purplish green, with conspicuous lenticels and large white soft pith. Leaves alternate, odd-pinnate, 60-70 cm. long, with 13-17 leaflets; leaflets ovate or ovate-oblong, rarely lanceolate, 6-10 cm. long, 3-4.5 cm. broad, acuminate on the apex, broadly cuneate at base; green and glabrous above, pale green and more or less pubescent below, nerves inconspicuous above, slightly prominent below; petiolule 5 mm. long, on a cylindrical rhachis 40-50 cm. long, on a petiole 20 cm. long, jointed at base. Flowers polygamous, in drooping racemes or panicles 25-40 cm. long; sepals 6, greenish or greenish-yellow, lanceolate, acuminate, petaloid, 15-22 mm. long, 5 mm. broad; petals absent; stamens 6, in staminate flowers usually with long filaments connate into a column 5 mm. long, in pistillate flowers usually short and distinct, anthers yellow, oblong on a subulate connective; carpels 3, distinct, ovary cylindrical, glabrous, curved, style short or subsessile, stigma subglobose; pedicels slender, 15-20 mm. long, glabrous. Fruits curved, cylindrical, fleshy follicles 5-10 cm. long, dehiscent along the ventral suture and with numerous flattened ovoid black seeds 1 cm. in diameter.

**MOUNT OMEI:** Hung-chun-ping, alt. 1200 m., *T.H. Tu*, No. 30, May 1935; same locality, shaded slopes, shrub 3 metres high, leaves compound, exstipulate, staminate flowers green, perianth 6, in 2 whorls, stamens united into a tube, anthers 6, styles and stigmas 3, *S.S. Chien*, No. 5509, May 5, 1936; same locality, in forests, small tree 2 metres high, flowers green, *C.L. Sun*, No. 143, May 8, 1939; same locality, in woods, small tree 4 metres high, flowers light green, *C.L. Sun*, No. 1772, April 29, 1940; same locality, in forests, small tree 4 metres high, flowers green, *C.L. Sun*, No. 2076, May 19, 1940; same locality, small tree 3 metres high, young fruits cylindrical, green, *W.P. Fang*, No. 16418, May 6, 1941; She-tao-tui, alt. 1300 m., in forests, small tree 5 metres high, flowers greenish, *W.P. Fang*, No. 16330, April 26, 1941; Pien-tan-ai, alt. 1400 m., in forests, small tree 5 metres high, flowers green, occasionally, *W.P. Fang*, No. 14664, May 18, 1940; Hua-yen-ting, alt. 1950 m., at roadside, small tree 4 metres high, fruits light green, *T.C. Lee*, No. 3394, August 25, 1940; Chiu-lao-tung, alt. 1876 m., in forests, small tree 3 metres high, fruits light green, common, *W.P. Fang*, No. 12754, May 30, 1933; same locality, *H.C. Chow*, No. 8000, August 3, 1933; same locality, in forests, small tree 4 metres high, flowers green, *C.L. Sun*, No. 2168, May 26, 1940;

The habit is very pretty and the fruits are very attractive. Therefore, this species has been highly appreciated by the horticulturists. The fruits, although they are tasteless, are ordinarily eaten by monkeys on this mountain. This tree has colloquially been named "Ai-che-shu" (矮漆樹) for the habit looks like a dwarf "Lacquer varnish tree," and, also colloquially, as "Maio-erh-shih" (貓兒屎) for its fruits resemble the excrement of cats. The distribution of the species is confined to western China, southern Shensi, western Hupeh Southwestern Hunan, Szechuan and Yunnan provinces. On Mount Omei it is fairly common between 1000 to 2000 metres in altitude. .... W.P. Fang.

- Fig. 1. a flowering branch (natural size);  
 2. a staminate flower (2 times enlarged);  
 3. stamens of staminate flower (2 times enlarged);  
 4. a pistillate flower having perianth removed to show the staminoides and pistils (2 times enlarged);  
 5. the pistil (2 times enlarged);  
 6. a follicle (natural size);  
 7. a follicle dissected to show the seeds (natural size).

# 圖版六十

## 狄凱木 (俗名矮漆樹或貓兒屎)

### 木通科

灌木或小喬木高約五公尺，樹皮灰色或深灰色，光滑，幼枝細小，無毛，綠色或紫綠色，具顯著之皮孔及白色寬大而柔軟之髓心。葉互生，奇數羽狀複數，長六十至七十公分，具小葉片十三至十七枚；小葉片卵形或長卵形，稀為披針形，長六至十公分，寬三十至四十五公厘，先端銳尖形，基部闊楔形，表面綠色無毛，背面淡綠微具細毛，葉脈在表面不現，但在背面則微凸出；小葉柄長五公厘，着生於圓形之葉梗上，葉梗長四十至五十公分，梗下之柄長二十公分，基部細小。花雜性，着生下垂而長約二十五至四十公分之總狀花序或圓錐花序；萼片六枚，淡綠色或綠黃色，披針形，先端尖銳，狀似花瓣，長十五至二十二公厘，寬五公厘，花瓣缺如；小蕊六本，在小蕊花中常具長花絲且其基部連合成圓柱形長達五公厘，在大蕊花中則小蕊短而花絲不連合，花藥黃色長形，藥隔形尖如錐；大蕊為三離生心皮組成，子房圓柱形，光滑無毛，略彎曲，花柱短或近於缺如，柱頭亞圓形；花梗長十五至二十公厘，光滑無毛。果實為圓柱形略彎曲之肉質蓇葖，長五至十公分，成熟時緣內縫線裂開，具多數黑色扁平圓形之種子，其直徑一公分。

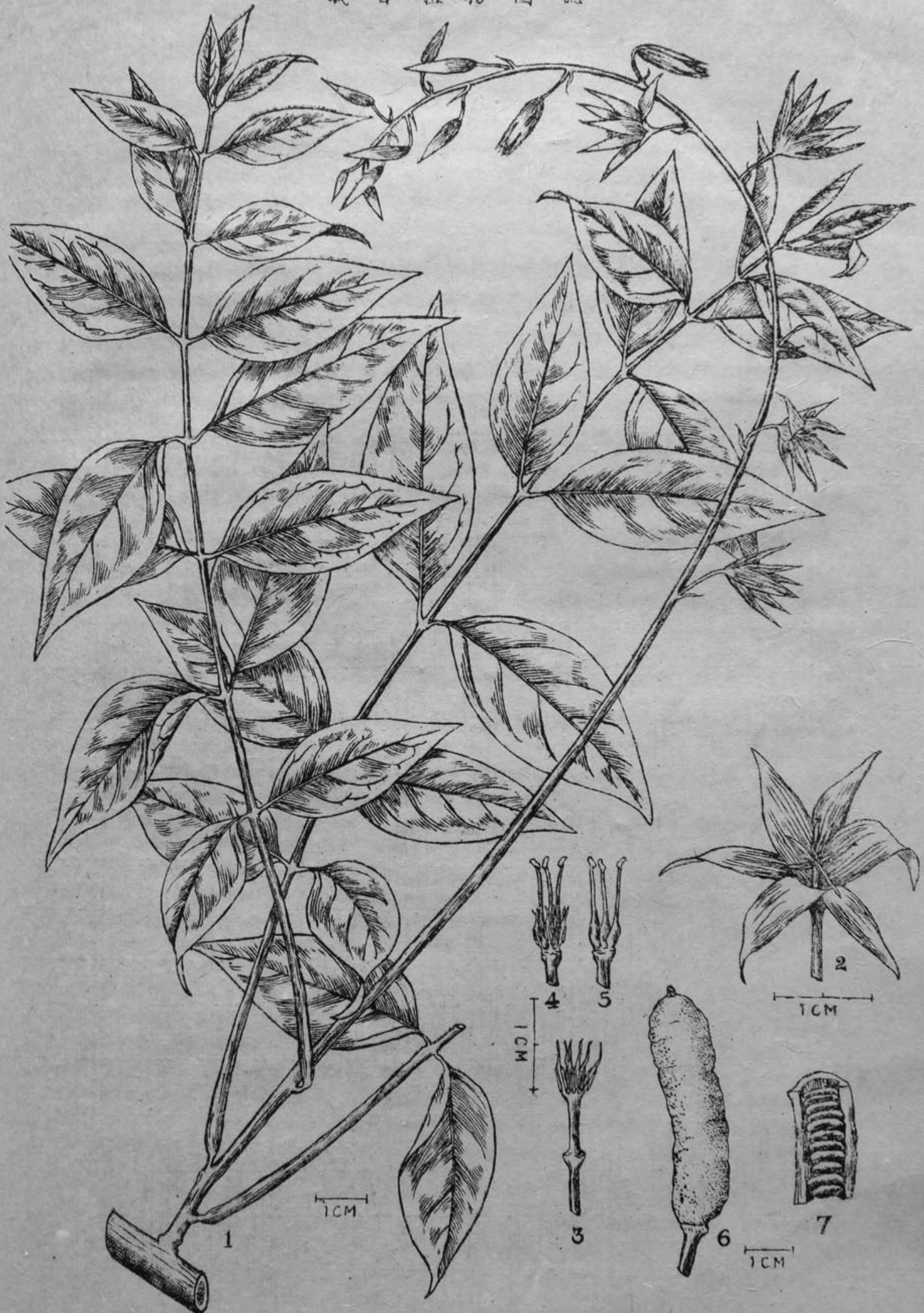
產峨眉山洪椿坪，蛇倒退，扁担巖，九老洞，華嚴頂等處。

此種為美觀之樹，果實尤令人注目。故園藝學者甚珍視之，果實味雖不佳，而猿猴則視為主要食料，極喜食之。樹形如矮小之漆樹故俗名矮漆樹，至又有俗名為貓兒屎者則以其果形似貓之糞也。其分布區域限於華西之陝西南部，湖北之西部，湖南之西南部，四川西康及雲南等處。在峨眉山則海拔一千至二千間極為常見。

圖解：1. 着花之枝(原大)；2. 小蕊花(放大二倍)；3. 小蕊(放大二倍)；4. 大蕊花去花被以示其原始小蕊及大蕊(放大二倍)；5. 大蕊(放大二倍)；6. 蓇葖(原大)；7. 一蓇葖剖開以示其種子(原大)。

The habit is very pretty and the fruits are very attractive. Therefore, this species has been highly appreciated by the horticulturists. The fruits, although they are tasteless, are ordinarily eaten by monkeys on the mountain. This tree has colloquially been named "Ai-che-shu" (矮漆樹) for the habit looks like a dwarf "Asian varnish tree", and also colloquially as "Miao er shi" (貓兒屎) for its fruits resemble the excrement of cats. The distribution of the species is confined to western China, southern Shanai, western Hubei, southwestern Hunan, Szechuan and Yunnan provinces. On Mount Qian it is fairly common between 2000 to 3000 meters in altitude. W.P. Tang.





60. *DECAISNEA FARGESII* Franchet

## Plate 61

**DELPHINIUM DAVIDII** Franchet.

Ranunculaceae.

Section Kolobopetala Huth.

**Delphinium Davidii**, Franchet in Bull. Soc. Phil. om. Paris, VIII 5, (1893), 179.

Plant about 60-70 cm. high with long taproot. Stem covered with retrorse-pilose hairs all over. Leaves both basal and cauline, basal ones with petioles about 20 cm. long, covered with retrorse-pilose hairs; lamina 10-12 cm. across, palmately lobed, lobes broad rhombic, deeply and unequally pinnate-incised, sparsely covered with shining yellow pilose hairs on both sides, cauline or upper leaves much smaller with shorter petioles. Flowers few, blue, in simple raceme; pedicels 5-6 cm. long, densely pilose. Bracts 1 cm. long, linear, pilose. Sepals ovate, 15-18 mm. long, pubescent outside, glabrous inside; spur 25 mm. long, slightly curved toward apex. Upper petals glabrous, dirty yellow, oblong to obliquely lanceolate, lower ones blue, bilobed, covered with barbed hairs. Carpels 3, hirsute.

MOUNT OMEI: Chin-ting, alt. 3150 m., at roadside, herbs with dark-blue flowers, occasionally, *T.C. Lee*, No. 2868, July 16, 1940; same locality, at roadside, herbs with hairy leaves and blue flowers, *T.C. Lee*, No. 3250, August 29, 1940; same locality, on grassy slopes, herbs with hairy leaves and blue flowers, common, *T.C. Lee*, No. 3474, September 10, 1940.

Type comes from Moupine (Pao-hsing-hsien), Sikang, not uncommonly found in Szechuan but for the first time recorded in Mount Omei.

Feng-hwai Chen,  
Yunnan Botanical Institute,  
Kunming, Yunnan.  
1941.

Fig. 1. a flowering plant (natural size)

2. a flower (2.5 times enlarged);

3. a flower having perianth removed to show the stamens and carpels (3 times enlarged).



# 圖版六十一

## 大衛飛燕草

### 毛茛科

莖高六十至七十公分，具長直根，通常具倒捲剛毛。葉基生或莖生，基部之葉具長十至十二公分之葉柄，被捲剛毛，葉片之直徑十至十二公分，掌狀分裂，裂片菱形，具羽狀分裂或羽狀粗鋸齒，兩面均被黃色剛毛，莖葉較小，其葉柄亦較短。花少，藍色，總狀花序，花柄長五至六公分，密被剛毛，花苞長一公分，線狀，具剛毛，萼片卵圓形，長十五至十八公厘，表面具纖毛，裏面光滑，上部馬刺狀之萼片長二十五公厘，略彎曲，上部花瓣光滑，呈暗黃色，長斜披針形，下部者常二分裂，呈藍色，具剛毛，心皮三枚，具剛毛。

產於峨眉山金頂。

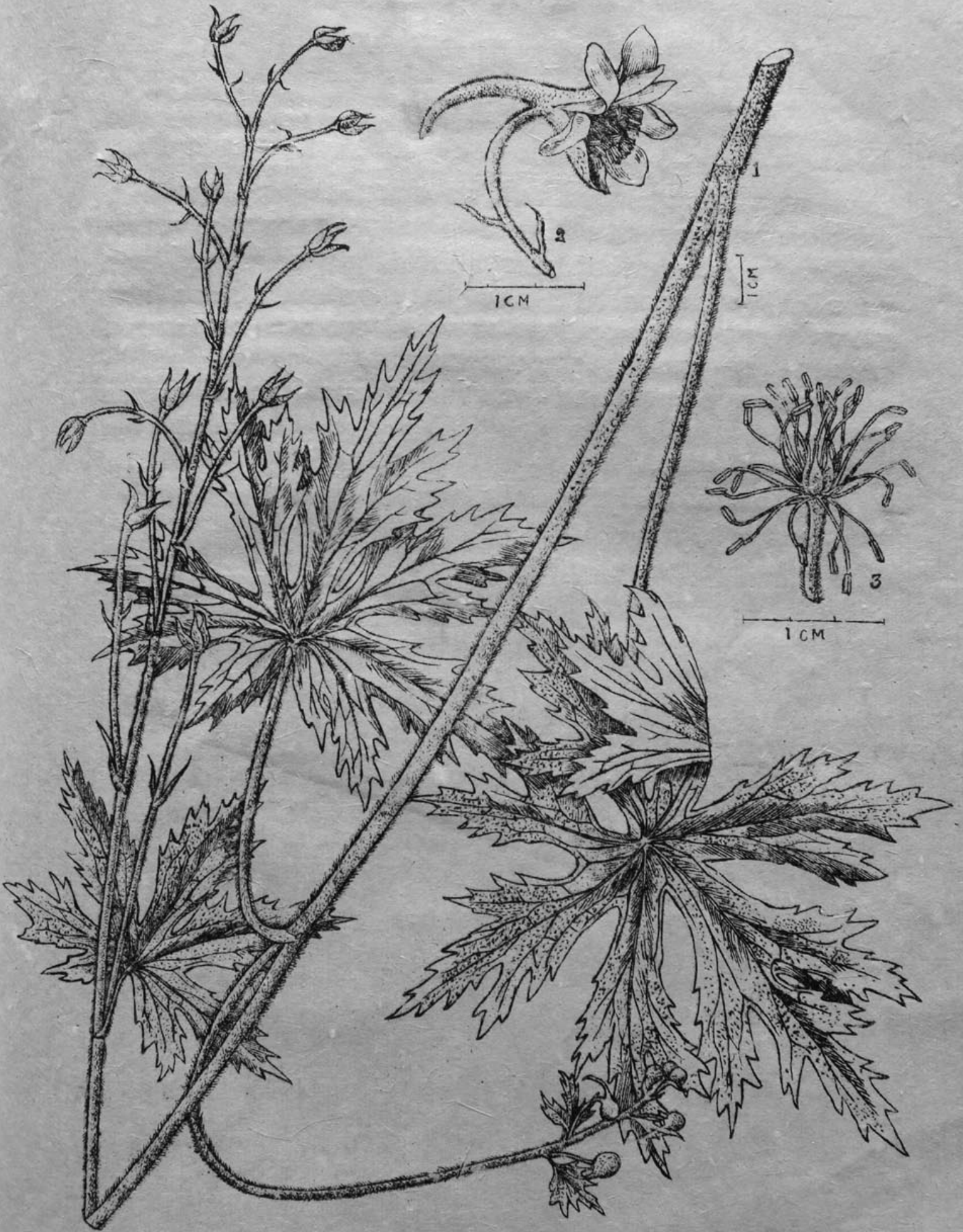
此植物首次發現於寶興縣，四川本部甚多有此記載。首次發現於峨眉山。

圖解：1. 着花植物（原大）；2. 花（放大二倍半）；3. 一花折去其花被以示大小蕊（放大三倍）。

Fig. 1. a flowering plant (natural size)

2. a flower (2.5 times enlarged);

3. a flower having perianth removed to show the stamens and carpels (3 times enlarged).



61. DALPHINIUM DAVIDII Franchet



## Plate 62.

**DELPHINIUM FARGESII** Franchet.Ranunculaceae. Section *Dierdropetala* Huth.**Delphinium Fargesii**, Franchet in Bull. Soc. Phil. om. Paris VIII. 5 (1893), 8.

Plant about one metre high with long taproot. Stem quite glabrous or slightly pubescent towards the inflorescence. Leaves all cauline, lower ones with long petioles which about 14-16 cm. long, upper ones much shorter; lamina 8-10 cm. across, palmately 5-7-lobed, lobes broad cuneate, middle one much longer, sharply irregular-incised, upper surface dark green, quite glabrous or sometimes with a few pilose hairs along the nerves, lower surface pale green, often glabrous, margin pilose-ciliate. Inflorescence loose panicle with 10 or more flowers. Lower bracts leafy, trilobed, lobes linear-lanceolate about 1 cm. long, upper ones linear, all about 1-1.5 cm. long. Flowers blue, outer lower sepals 2 cm. long, oblong-ovate, dorsal surface covered with yellow hirsute hairs, ventral surface glabrous, uppermost one broader with 2 cm. long spur, densely covered with yellow hirsute hairs, the inner ones 1.5 cm. long, glabrous on both sides; upper petals with spur oblong to obliquely lanceolate, about 1 cm. long, glabrous on both sides, dirty yellow, lower ones ovate, bilobed, light purple-blue, densely covered with bright yellow barbed hairs on ventral surface and also along the margin. Carpel 3, with a few yellow pilose hairs.

MOUNT OMEI: Chiu-lao-tung, alt. 1800 m., under forests, herb 2/3 metre high, flowers blue, colloquially named as "*Wu-Tze*," rare, June 13, *C.L. Sun*, No. 476, June 13, 1939; same locality, common, *W.W. Ma*, No. 2392, June 16, 1940; hsi-hsiang-chih, alt. 2240 m., herb about 1 metre high, flowers purple or bluish purple, *W.P. Fang*, No. 16894, June 13, 1941.

The type-specimen was collected by Farges from Tchen-keou-tin (Chen-kou-hsien), Northeastern Szechuan.

Although this plant is commonly found in both East and West of Szechuan, its occurrence in Mount Omei has been only recently recorded since the collection made by the department of Biology of National Szechuan University under the guidance of Dr. W.P. Fang.

Feng-hwai Chen,  
Yunnan Botanical Institute,  
Kunming, Yunnan.

- Fig. 1. a flowering plant (natural size);  
2. a flower (2 times enlarged);  
3. the gynocium and androecium (5 times enlarged)  
4. a stamen (5 times enlarged).

# 圖版六十二

## 法氏飛燕草

### 毛茛科

莖高一公尺，具長直根，光滑或頂略具纖毛。葉皆莖生，基部之葉具較長之葉柄，通常長十四至十六公分，頂端之葉具較短之葉柄，葉片直徑八至十公分，掌狀分裂，裂片五至七枚，闊楔形，中間裂片較長，具深刻不整齊之鋸齒，表面深綠色，較光滑，有時略具剛毛，通常生於葉脈上，下面暗綠色，光滑，周圍具繸狀之剛毛。花序成稀散圓錐花序，具花十餘枚。下部花苞呈葉狀，三裂，裂片線狀披針形，約長一公分，上部呈線狀約長一至一公分半。花藍色，外面下部之萼片長二公分，長橢圓形，上面具黃色之剛毛，下面光滑，最上者較寬闊，約二公分長，呈馬刺狀之花距，上面滿具黃色剛毛，內部萼片約長一公分半，兩面光滑；上部花瓣具馬刺狀之花距成長斜披針形，約長一公分，兩面光滑，呈暗黃色；下部者卵圓形，二分裂，淡紫色，下面及周圍具鈍黃色之剛毛。心皮三枚，略具黃色剛毛。

產峨眉山九老洞及洗象池。俗名附子。

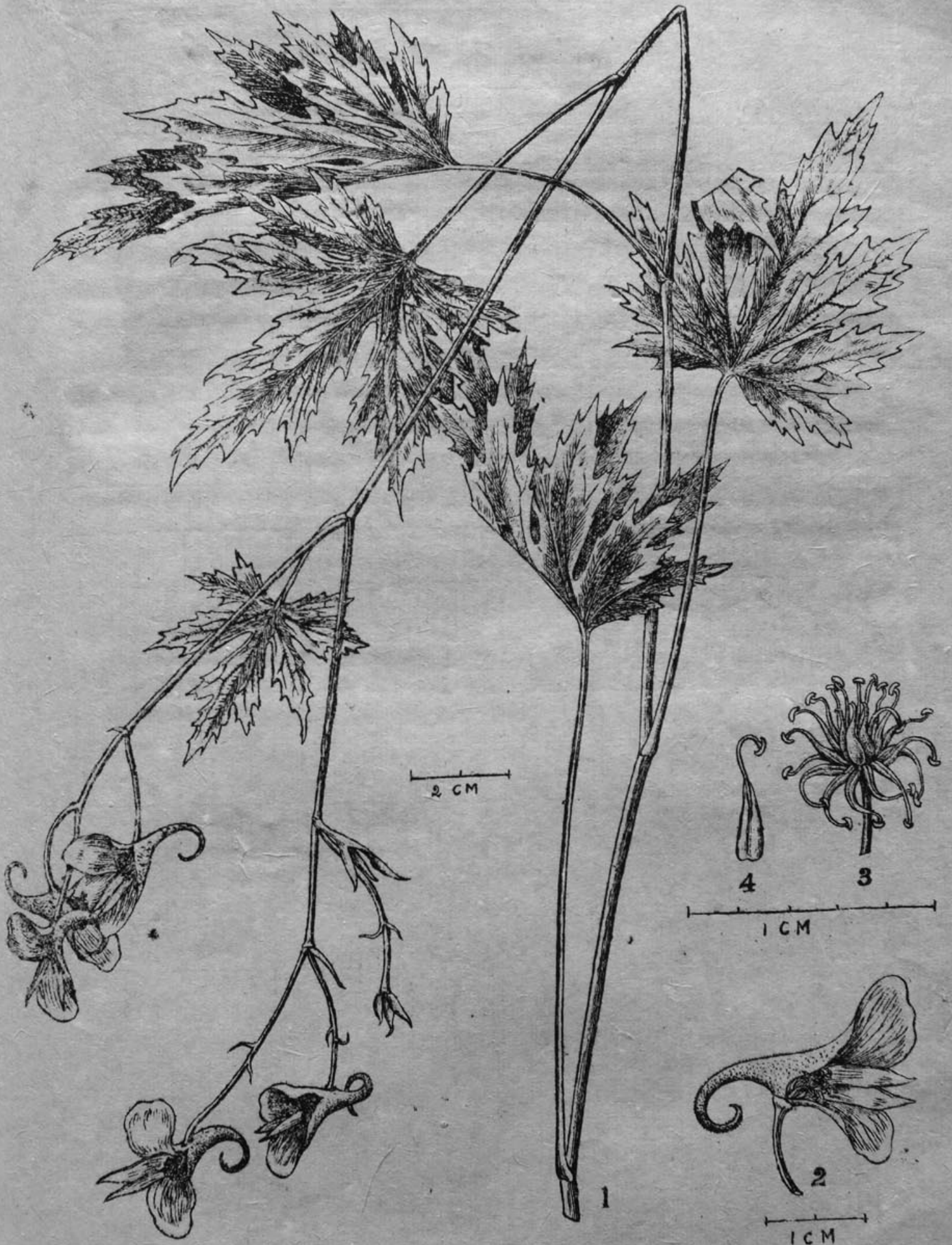
此植物最初發現於城口縣，但在川東川西分佈較為普遍，峨山向無此種植物之記載，故此為首次發現也。

圖解：1. 着花之植物(原大)；2. 花(放大二倍)；3. 大蕊及小蕊(放大五倍)；4. 小蕊(放大五倍)。

Feng-hwei Chen  
Yunnan Botanical Institute  
Kunming, Yunnan

Fig. 1. A flowering plant (natural size);  
2. A flower (2 times enlarged);  
3. The stamens and pistil (5 times enlarged);  
4. A stamen (5 times enlarged).





62. DALPHINIUM FARGESII Franchet

## Plate 63.

**DELPHINIUM ANTHRISCIFOLIUM** Hance.

Ranunculaceae.

Section *Diedropetala* (Hutchinson) Huth.***Delphinium anthriscifolium***, Hance in Journ. Bot. VI (1868), 207.

Plant 20-40 cm. high with short taproot and scattered fibrous roots. Stem single or branched, usually covered with soft crispe hairs through. Leaves all cauline; lower ones with about 6-7 cm. long petioles; lamina thin, membranaceous, quite glabrous on both sides, margin ciliate, 5-7 cm. long, ternately parted, part triangular with 1-2 cm. long petiohules, compound pinnate-lobed, lobes cuneate-lanceolate. Flowers pale blue, few, scattered on simple raceme or on axillary branches. Pedicels about 1 cm. long, with white crispe-villose hairs, sepals pubescent, ovate, about 7 mm. long. Spur pubescent, 10 mm. long or longer. Upper petals trilobed, terminal lobe larger, truncate at apex, pale violet with yellow veins, lower ones bilobed, glabrous, pale violet. Carpels 3, glabrous or pubescent.

MOUNT OMEI: Chu-tSao, herbs with purplish flowers, *W.P. Fang*, No. 14166, April 21, 1940; Hsi-hsin-so, herbs 30 cm. high, flowers purplish, *W.P. Fang*, No. 16236, April 19, 1941; Pien-tan-ai, alt. 1400 m., Herb 20 cm. high, flowers whitish, *C.L. Sun*, No. 1765 April 22, 1940.

This is a widespread species found in China. It extends from south to Kwangtung and northwest to shensi. Apparently, it is more frequently ocured in the central part of China.

The plant had not been previously recorded from Mount Omei.

Feng-hwai Chen,  
Yunnan Botanical Institute,  
Kunming, Yunnan.

- Fig. 1. a flowering plant (natural size);  
2. a flower (5 times enlarged);  
3. the carpels (5 times enlarged);  
4. a stamen (5 times enlarged).



# 圖版六十三

## 小花飛燕草

### 毛茛科

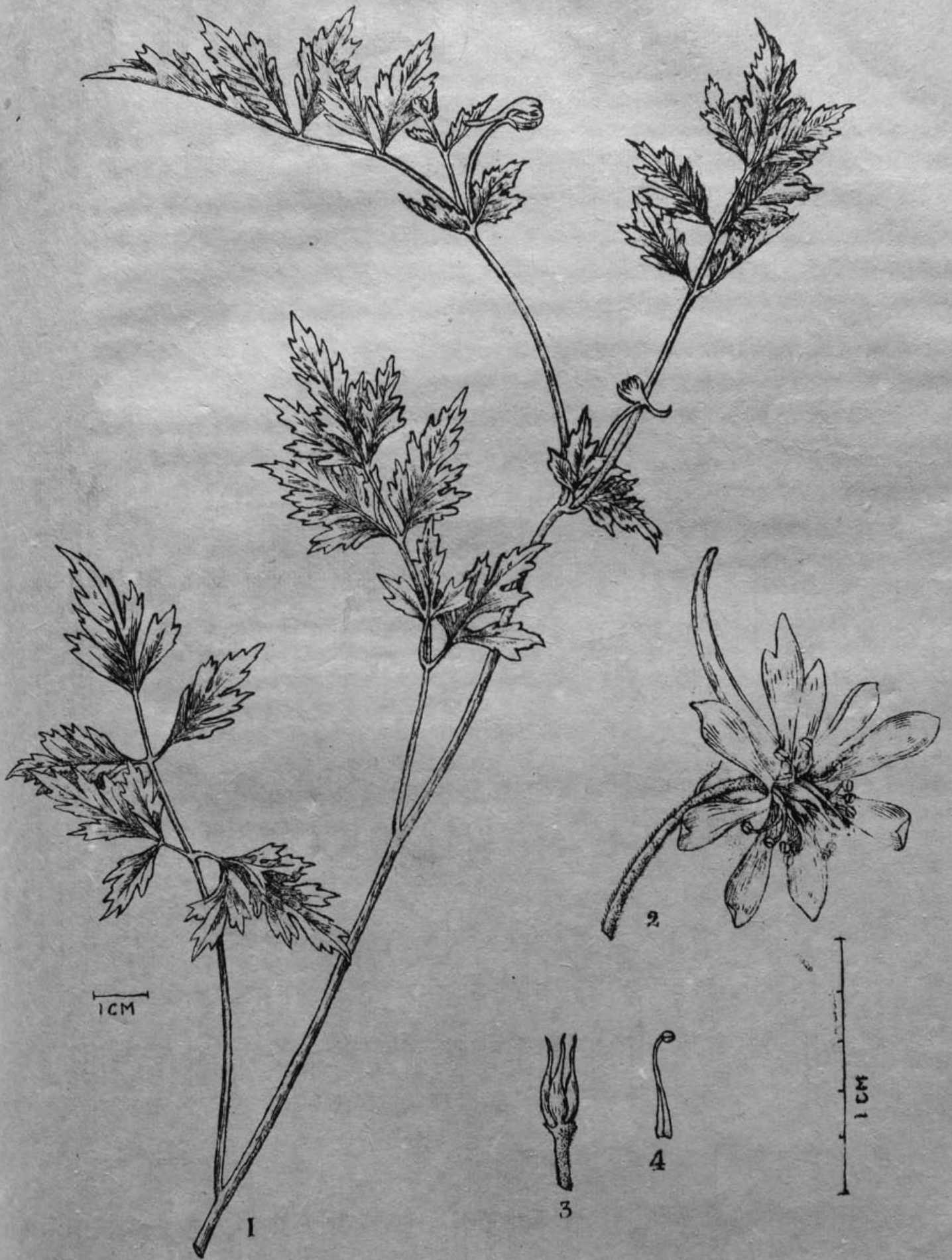
莖高廿至四十公分，具直根及周圍鬚根，單獨或分枝，常滿具捲纖毛，葉皆莖生，下部之葉具六至七公分長之葉柄；葉片薄，兩面光滑，周圍具剛毛，長五至七公分，三分裂，三角形，具一至二公分之小葉柄，複數羽狀分裂，裂片楔形披針形。花暗藍色，稀少，單形總狀花序或腋生，花柄長一公分，具白色之絨毛，萼片具纖毛，卵形，長七公厘，上部萼片馬刺形，具纖毛，長十公厘或較長，上部花瓣三分裂，中間裂片較大，頂端平禿，暗深紫色，具黃色條紋，下部者二分裂，光滑，暗深紫色，心皮三枚，光滑或具纖毛。

產峨眉山鞠漕，洪椿坪，扁担巖附近及息心所等處。此種植物為分佈最廣之一種，南至廣東，西北達陝西一帶，在中部更為普遍，但在峨眉山為首次發現也。

圖解：1. 着花之植物（原大）；2. 花（放大五倍）；3. 大蕊（放大五倍）；4. 小蕊（放大五倍）。

Fong-hwei Chen  
Yunnan Botanical Institute  
Kunming, Yunnan

Fig. 1. a flowering plant (natural size);  
2. a flower (5 times enlarged);  
3. the carpels (5 times enlarged);  
4. a stamen (5 times enlarged).



63. DELPHINIUM ANTHRISCIFOLIUM Hance



## Plate 64.

**TURPINIA NEPALENSIS WALLICH**

Staphyleaceae.

**Turpinia nepalensis** Wallich Cat. (1830), No. 4277 (nomen nudum), excludendo synonymo.  
 —Wight & Arnott, Prodr. Fl. Ind. (1834), 156.—Wight, Icon. III. (1843-50), t. 972.—Bentham, Fl. Hongk. (1861), 48.—Beddome, Fl. Sylv. S. Ind. I (1869), t. 159.—Rehder et Wilson in Sargent, Pl. Wilson. II (1914), 187.

*Turpinia microcarpa*, Wight & Arnott, Prodr. Fl. Ind. (1834) 156.

*Turpinia pomifera*, B. (*T. nepalensis*), Hiern in Hooker f. Fl. Brit. Ind. I (1875), 699.

*Turpinia Pomifera* Hensley (non De Candolle) in Journ. Linn. Soc. XXIII. (1886), 143.

Small tree usually 7 to 12 metres high; branchlets slender, terete, those of the current year green or purplish green, glabrescent, those more than two years old brown or dark brown, glabrous, with conspicuous ovate lentice's. Leaves coriaceous, evergreen, opposite, odd-pinnate with 5-7 rarely 9- leaflets, leaflets oblong, ovate-oblong or obovate-oblong, 10-12 cm. long, 4-5 cm. broad, acuminate or shortly acuminate rarely abruptly acuminate on the apex, broadly cuneate or cuneate rarely rounded at the base, serrulate with obtuse teeth on the margin, both surfaces green, glabrous, midrib depressed above, prominent below, lateral veins 7-9 pairs, terminal leaflet on a petiolule 1.5-2 cm. long, lateral leaflets on petiolules 5-7 mm. long, rhachis 6-9 cm. long, slender, glabrous, on petioles 5-8 cm. long, terete, glabrous. Flowers small, about 5 mm. in diameter, in compound terminal panicles 20-25 cm. long; sepals 5, ovate, 3 mm. long, 2 mm. broad, green or greenish yellow; petals 5, obovate, 3 mm. long, 2 mm. broad, white or yellowish white; stamens 5, as long as the petals, inserted outside of the crenulate disk, anthers 2-celled; filaments slender, flattened, glabrous; ovary superior, ellipsoid, glabrous, 2- to 4-celled, style glabrous, ovules several in each cell. Fruit subglobose, purple or purplish-green, 5-8 cm. in diameter, pedicels 3-5 mm. long.

MOUNT OMEI: Ching-yin-ko, alt. 900 m., in forests, small tree 10 metres high, young fruits greenish, *T.C. Lee*, No. 3049, July 29, 1940; same locality, *T.C. Lee*, No. 3451, September 7, *W.P. Fang*, No. 16101, April 3, 1941; same locality, tree 10 metres high, flowers whitish green, *W.P. Fang*, No. 16635, May 12, 1941; Kwang-fu ssu, alt. 1000 m, small tree 6 metres high, *W.P. Fang*, No. 17443, July 28, 1941; Hung-chun-ping, alt. 1200 m., in forests, small tree 6 metres high, *W.P. Fang*, No. 12574, July 27, 1937; same locality, tree 12 metres high, *W.P. Fang*, No. 15272, November 13, 1940; Ta-ping, alt. 1400 m., *T.C. Lee*, No. 3348, August 19, 1940; same locality, tree 12 metres high, *W.P. Fang*, No. 17868, September 29, 1941; from Chang-lau-ping to Chu-tien, alt. 1600 m., in forests of shaded ravine, tree 10 migh, flowers white, rare, *C.L. Sun*, No. 397, May 30, 1939; Chu-tien, alt. 1920 m., small tree with white flowers in panicles, *W.P. Fang*, No. 16754, May 28, 1941; same locality, *W.P. Fang*, No. 17611, August 31, 1941; without precise locality, *C.W. Yao*, Nos. 4115 & 5042, June 1942.

This is a small tree and has been appreciated by the horticulturists for its beautiful subglobose fruits on a long pendulous panicle. ....W.P. Fang.

- Fig. 1. a fruiting branch (natural size);  
 2. a fruit dissected to show the seeds (2 times enlarged);  
 3. a flower (5 times enlarged).

圖版六十四

大果山香圓

省沽油科

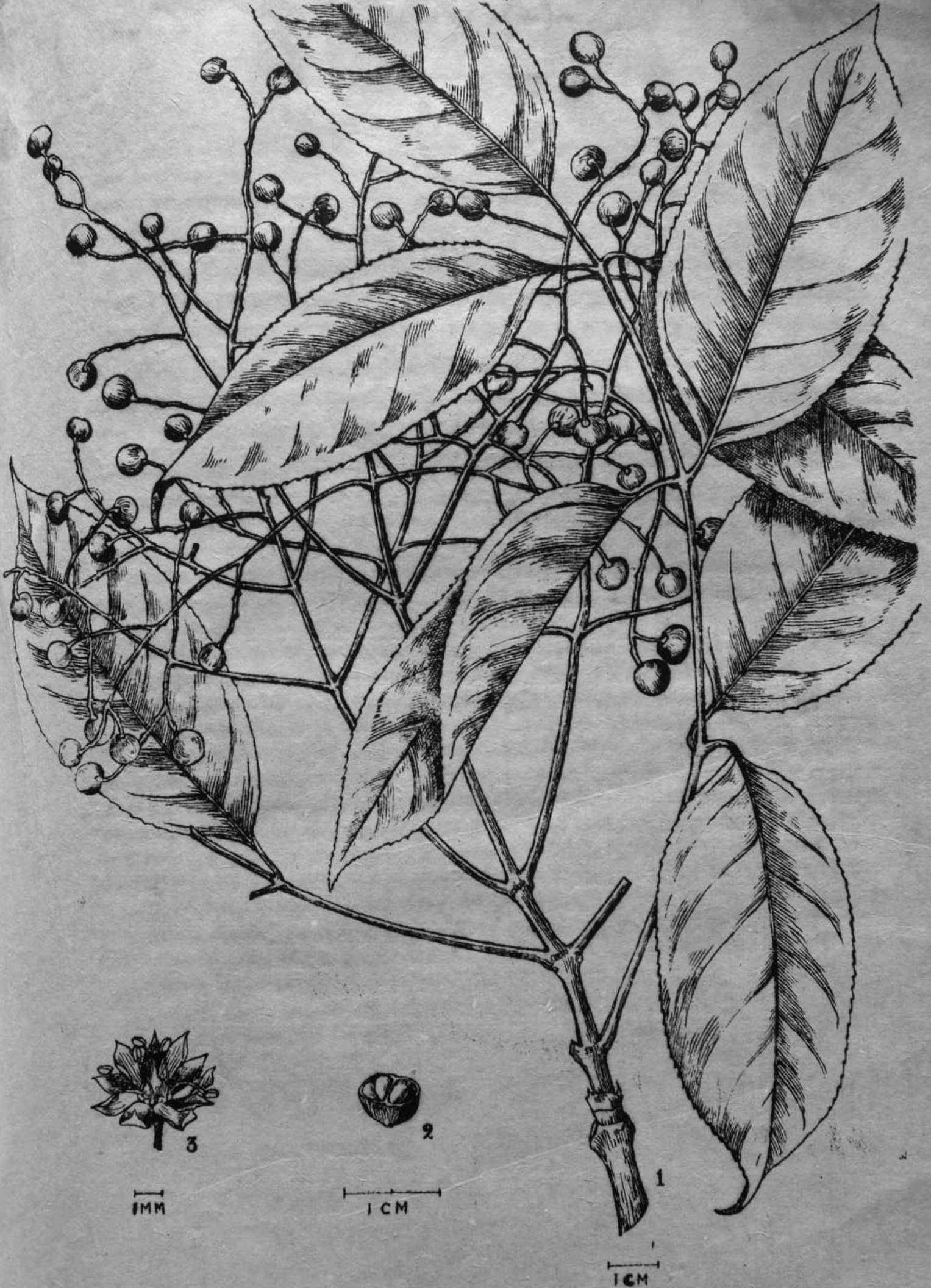
落葉喬木高七至十二公尺；枝圓形，當年之枝綠色或紫綠色，兩年以上之老枝褐色或黑褐色。羽狀複葉對生，具小葉片五至七枚，長卵形，或長倒卵形，長十至十二公分，寬四至五公分，先端尖，基部闊楔形，邊緣具鈍鋸齒，兩面均綠色，且極光滑，主脈向葉背凸出，側脈八至十對，頂端小葉具長兩公分之葉柄，兩側小葉具長八至十公厘之葉柄。花小直徑僅五公厘，淡綠色，着生於頂生之圓錐花序，長二十公分，萼片五枚，深綠色或黃綠色，卵形，長三至四公厘，寬二公厘。花瓣五枚，淡黃色，長卵形或長倒卵形，與萼片等長。小蕊五本與花等長，花蕊黃色二室，花絲細柔。子房卵圓形，上位，二至四室，每室具胚珠數枚，花柱一枚。果實圓形，紫色，直徑五至八公厘。

峨眉山長老坪，洪椿坪及伏虎寺附近森林中均產之。並分布於長江流域及西南各省。山香圓屬 *Turpinia* Vent. 產於中國者僅兩種。除此種外尚有山香圓 *Turpinia arguta* Seemen, 其區別在山香圓具單葉，且果實亦較小。

圖解：1. 着果之枝（原大）2. 果實橫剖面（放大二倍）；3. 花（放大五倍）。

1. A branch with fruit (natural size); 2. A transverse section of the fruit (2 times enlarged); 3. A flower (5 times enlarged).





64. TURPINIA NEPALENSIS Wallich

## Plate 65.

**MAPPIA PITTOSPOROIDES** Oliver.

## Icacinaceae

**Mappia pittosporoides**, Oliver in Hooker Icon. Pl. XVIII (1888), t. 1762, —Diels in Engler, Bot. Jahrb. XXIX (1900), 447. —Rehder et Wilson in Sargent, Pl. Wilson. II (1914), 190. —Handel-Mazzetti, Symbolae Sinicae, VII (1933), 667.

Shrub or rarely small tree 2, rarely up to 5 metres high; branchlets angular, those of the current year green, grey-pubescent, with conspicuous oval lenticels, those of more than one year old grey or blackish grey, sparsely pubescent or glabrescent, conspicuously lenticellate. Leaves deciduous, chartaceous, alternate or opposite, lanceolate or oblong-lanceolate, 8-11 cm. long, 1.5-2.8 cm. broad, acuminate on the apex, cuneate or broadly cuneate at the base, glabrous, deep green above, pale green below, midrib conspicuous on both surfaces, lateral nerves 6-7 at each side, slightly depressed above and slightly conspicuous below; petioles 1-2 cm. long, flattened above, rounded below, pubescent. Flowers in pubescent terminal cymes; calyx yellowish green, cup-shaped, 2 mm. long, shallowly 5-lobed, puberulous outside; petals 5, yellow, lanceolate or oblong-lanceolate, 7 mm. long, 1-1.5 mm. broad, united each other about one-third of its length, pubescent outside, densely greyish hirsute inside, especially on the upper part; stamens 5, as long as and alternate with the petals, anthers yellow, introrse, filaments sparsely pubescent, disk intrastaminal, cup-shaped, slightly lobed; pistil 3-4 mm. long, ovary superior, ellipsoid, yellowish-pubescent, style stout, glabrous, stigma capitate. Fruit an oblong-obovoid drupe, 1.4 cm. long, 9 mm. in diameter.

MOUNT OMEI: Ching-yin-ko, alt. 900 m., at roadside, shrub 1-2 metres high, bark greenish grey, fruits red, *C.L. Sun*, No. 579, June 19, 1939; Hei-lung-kiang, alt. 1000 m., in thicket, shrub 2 metres high, flowers yellow, *C.L. Sun*, No. 2054, May 18, 1940; Hung-chun-ping, alt. 1147 m., *S.S. Chen*, No. 6059, June 11, 1937; same locality, *H.C. Chow*, Nos. 7508, 7511 & 7818, June 12 to July 3, 1938; same locality, in forests, shrub 4 metres high, bark brownish, flowers in buds, *C.L. Sun*, No. 1634, April 21, 1940; same locality, in forests, small tree 5 metres high, bark blackish grey, young fruits light green, common, *W.W. Ma*, No. 2380, June 16, 1940; at the vicinity of Hung-chun-ping, shrub about 70 cm. high, branchlets dark green, prominently 4-angled and slightly hairy, leaves dark green and glabrous above except the midrib loosely hairy, light green and glabrous below, fruits bright red, oblong-obovoid, 1.5 cm. long, 9 mm. across, drupe-like, in terminal short racemes, *W.C. Cheng*, Nos. 10384, 10572 & 10573, May 14 to June 10, 1940; same locality, shrub 2 metres high, flowers yellow, *W.P. Fang*, No. 16728, May 20, 1941; same locality, shrub 2 metres high, fruits purplish red, oblong-ovoid, *W.P. Fang*, No. 16982, June 23, 1941; at roadside from Niu-hsinssu to Taping, alt. 1300 m., in thickets, small tree 5 metres high, *C.L. Sun*, No. 588, June 24, 1939; Chutien, alt. 1920 m., small tree 3 metres high, fruits oblong-ovoid with persistent calyx, *W.P. Fang*, No. 16758, May 20, 1941; same locality, small tree 5 metres high, flowers yellow, *W.P. Fang*, No. 18954, June 6, 1942; Chiu-lao-tung, alt. 1876 m., *W.P. Fang*, No. 17078, June 30, 1941; Lien-hua-shih, alt. 1921 m., shrub 2 metres high, flowers yellow, *W.P. Fang*, No. 16952, June 13, 1941; without precise locality, *C.W. Yao*, No. 4176, June 1939.

This is an ornamental shrub with very attractive red drupes. Although this species was discovered by Henry and Wilson in western Hupeh and Szechuan, and by Handel-Mazzetti in western Hunan, this is the first record of its common occurrence on the lower part of Mount Omei. .... W.P. Fang.

- Fig. 1. a flowering branch (natural size);  
 2. a fruiting branch (natural size);  
 3. a flower (10 times enlarged);  
 4. a pistil with disk (10 times enlarged);  
 5. the inner surface of corolla and stamens (10 times enlarged).



# 圖版六十五 馬比木

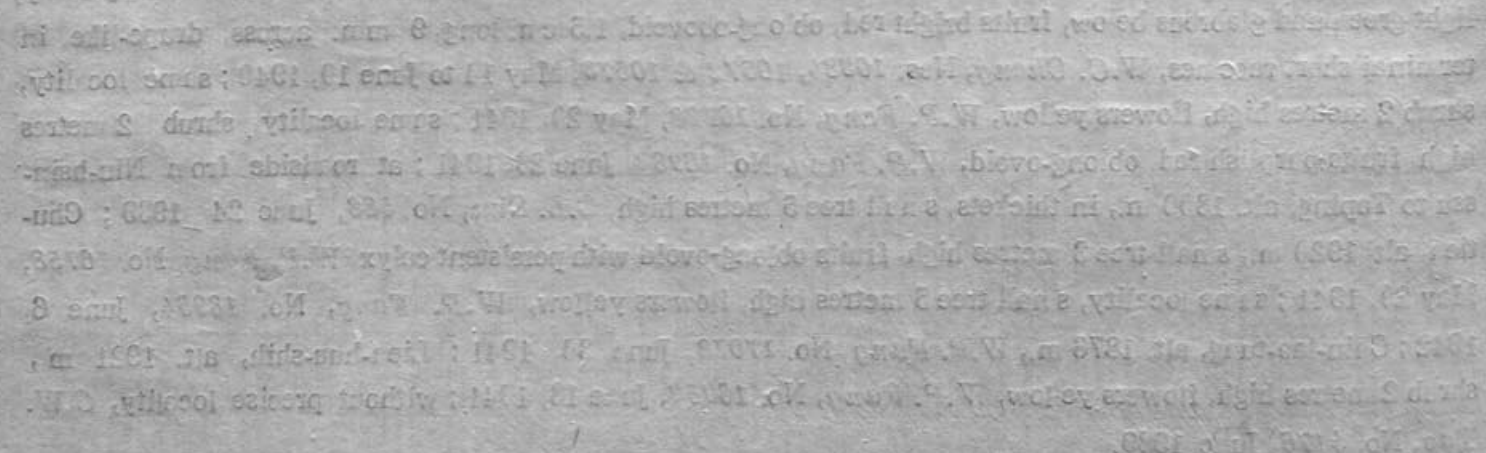
茶茱萸科 (別名：麥撒科)

灌木，罕成小喬木，通常高二公尺，間或有達五公尺者；幼枝方形，本年生者綠色，被灰色毛，皮孔卵形，甚為顯著，一年以上者灰色或灰黑色，被毛稀少或幾光滑，上有顯著皮孔。葉紙質，冬季脫落，互生或近於對生，披針形或倒披針形，長八至十一公分，闊十五至二十八公厘，先端尖尾狀，基部楔形或闊楔形，兩面光滑無毛，葉面深綠色，葉背淡綠色，中脈均顯著，側脈每側六至七對，在葉面稍凹，在葉背顯明可見；葉柄長一至二公分，上面扁形，下面圓形，被毛。花成頂生聚繖花序，花序被毛，花萼黃綠色，杯狀，長二公厘，五淺裂，外側被小毛；花瓣五枚，黃色，披針形或倒披針形，長七公厘，闊一公厘至一公厘半，基部約三分之一合生，外側被毛，內側被密生淡灰色剛毛，尤以近頂端為然；小蕊五本，與瓣互生并與之等多長，花藥黃色，內向，花絲被毛稀疏；花盤生小蕊內，杯狀，略有淺裂；大蕊長三至四公厘，子房上位，橢圓形，被淡黃色毛，花柱粗壯，光滑無毛，柱頭頭狀。果為長方倒卵形核果，長十四公厘，直徑九公厘。

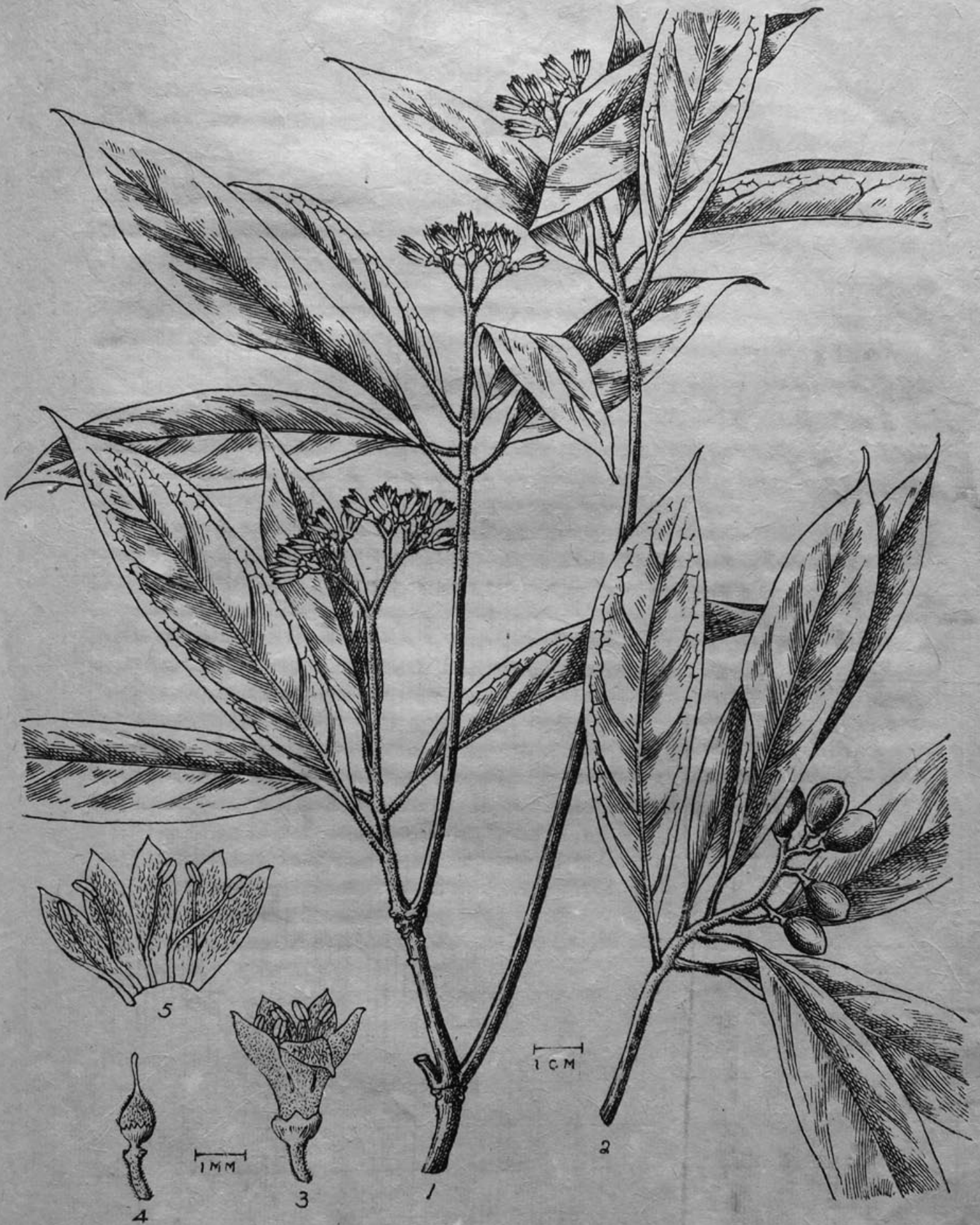
產峨眉山清音閣、洪椿坪、牛心寺、大坪、初殿、九老洞及蓮花石等處，在海拔九百至二千公尺間分佈甚廣，五六月開花，六七月果實成熟。

本種為具有觀賞價值之灌木，其紅色果實極為悅目。亨利，威爾遜及韓馬迪三氏相繼發現於鄂西，四川及湘西諸地，在峨眉此尚為首次採得。

圖解：1. 着花之枝(原大)；2. 着果之枝(原大)；3. 花(放大十倍)；4. 大蕊及花盤(放大十倍)；5. 花冠之內側及小蕊(放大十倍)。



1. A flowering branch (natural size); 2. A fruiting branch (natural size); 3. A flower (10 times enlarged); 4. A stamen with disk (10 times enlarged); 5. The inner side of the corolla and stamens (10 times enlarged).



65. *Mappia pittosporoides* Oliver



## Plate 66.

**MANGLIETIA SZECHUANICA** Hu.

## Magnoliaceae.

**Manglietia szechuanica**, Hu in Bull. Fan Mem. Inst. Biol. X (1940) 114.

Tree 12 m. high; young branchlets of the current year green, at first densely hirtellous, then the hairs falling away, leaving the branchlets glabrescent except pubescent at the node, those more than one year old grey or yellowish-grey, glabrescent, marked with many seriate of annular lines, lenticels few; lateral buds elongated, conical, enveloped in the convolute stipules, green, brownish-pubescent outside. Leaves coriaceous, oblanceolate, 20 cm. long, 35-40 mm. broad at the widest portion, acuminate or rarely sub-acuminate at the apex, cuneate at the base, deep green and glabrous above, pale green and brownish-pubescent beneath, midrib depressed and glabrous above, prominent and clothed with white long villose hairs beneath, primary veins about 13-16 pairs, tertiary veins reticulate, just showing above, slightly raised below; petioles 15-26 mm. long, concave above, white-villose on the lateral sides. Flowers solitary, terminal on the young branchlets of the current year, pinkish-purple, fragrant, 5 cm. long, 7 cm. in diameter, sepals 3, greenish at first, then becoming purplish, oblong-obovate, 5 cm. long and 3 cm. broad at the widest portion; petals 6, pinkish purple, oblanceolate, subequal, about 55 mm. long and 30 mm. broad at the widest portion; stamens over 100 (about 136), 12 mm. long, mucronate, anthers fleshy, yellowish, 1 cm. long, introrse, filaments thick and very short, about 1 mm. long, pink; gynoecium elliptic-ovoid, 25 mm. long, 15 mm. in diameter, carpels numerous, greenish-white with pellucid dots, ovary subsessile, oblong-ellipsoid, triangular, about 1 mm. long, greenish and yellowish sericeous pubescent, style reddish, 3 mm. long, ovules 4-6, Fruit immature.

**MOUNT OMEI:** Chiu-shih-chiu-tao-kuai, alt 1500 m., at roadside, open place, tree 12 m. high, bark blackish-grey, flowers pink, rare, *W.W. Ma*, No. 2388, June 16, 1940; Chiu-lao-tung, alt. 1800 m., in thickets tree 7-8 m. high, flower pink, rare, *C.L. Sun*, No. 505, June 14, 1939; Lien-hua-shih, alt. 1900 m., tree 12 m. high, leaves coriaceous, green, glabrous above, pale, shortly pubescent beneath, midrib long-villose, flower purplish, ovary brownish pubescent, style reddish, *W.P. Fang*, No. 16951, June 13, 1941; Without precise locality and date, *W.C. Cheng*, No. 10524.

This species is characterized by the long white villose-pubescence on the midrib of the under surface of the leaf as well as on the petiole, and the ferruginous-pubescent leaf-back and gynoecium. This is the first time that this genus has been recorded on Mount Omei. This handsome tree occurs in the forests of the altitude between 1500-2000 meters above the sea level. Its latent blooming period makes it a rare beauty in the summer forests.....C.Y. Cheng.

- Fig. 1. a flowering branch (natural size);  
 2. the androecium and gynoecium (3 times enlarged);  
 3. a stamen (5 times enlarged);  
 4. a carpel (5 times enlarged);  
 5. a carpel dissected to show the ovules (5 times enlarged).

## 圖版六十六

## 四川木蓮

## 木蘭科

喬木高十二公尺；本年生幼枝綠色，嫩時被濃密長毛，以後毛落，僅節上環有纖毛，一年以上者灰黃色，略有毛痕，皮孔甚少；側芽長圓錐形，包於旋捲托葉中，綠色，外側被淺棕色毛。葉革質，倒披針形，長二十公分，闊三十五至四十公厘，先端尖尾狀或短尖尾狀，基部楔形，葉面深綠色且無毛，葉背淡綠色，被淡棕色短毛，中脈在葉面下凹無毛，在葉背突起，被有白色長毛，中脈十三至十六對，小脈網狀，在葉面平坦，在葉背稍凸；葉柄長十五至二十五公厘，上面溝狀，下面圓形，兩側被白色長毛。花單生於本年生幼枝頂端，淡紫紅色，芳香，長五公厘，直徑七公厘，萼片三枚，初為淺綠，後帶紫色，長方倒卵形，長五公分，闊三公分；花瓣六枚，淡紫紅色，倒披針形，大小不甚整齊，長約五公分半，闊約三公分，小蕊多數，約一百三十六本，長十二公厘，尖頂，花藥肉質，淡黃色，長一公分，內向，花絲短厚，長僅一公厘，淡紅色；雌器橢圓卵形，長二十五公厘，直徑十五公厘，心皮多數，白綠色，上有油點，子房長方橢圓形或三角形，長約一公厘，被淡綠色或淡黃色光亮之毛，花柱淡紅色，長三公厘，胚珠四至六枚。

產峨眉山九十九道拐，九老洞及蓮花石一帶，海拔一千五百至二千公尺間，六月開花，點綴於仲夏林中頗美觀也。

本種之特性在於其葉背之中脈及葉柄被白色長毛，又其葉背及雌器均被銹色短毛；二十三年七月俞德俊先生發現於四川屏山縣。經胡步曾先生定為新種，命名四川木蓮。在峨眉此尚為初次發現，其分佈亦較稀少也。

圖解：1.着花葉之枝（原大）；2.大蕊與小蕊（放大三倍）；3.小蕊（放大五倍）；4.心皮（放大五倍）；5.一心皮解剖以示胚珠（放大五倍）。





66. *Manglietia szechuanica* Hu.

## Plate 67.

**MAGNOLIA LILIIFLORA** Desrousseau.

## Magnoliaceae.

**Magnolia liliiflora**, Desrousseau in Lamark Encycl. Meth. Bot. III. (1791) 675, ex parte, excepte synonymo: Mokkwuren flore albo Kaempfer, amoen. — Rehder et Wilson in Sargent Pl. Wilson. I. (1913), 402. Handel-Mazzetti, Symbolae Sinicae. VII (1931), 242.

*Magnolia glauca*, B. flore magno atropupureo Thunberg, Fl. Jap. (1784) 236.

*Mokkwuren* 2. Banks, Icon. Kaempfer (1791) 44.

*Magnolia obovata* Thunberg in Trans. Linn. Soc. II. (1794) 336.

*Magnolia purpurea* Curtis in Bot. Mag. XI (1797), t. 390.

*Magnolia discolor* Ventenat. Jard. Malm. (1803), t. 24.

*Magnolia gracilis* Salisbury, Parad. Lond. II (1807), t. 87.

*Yulania japonica* Spach, Hist. Veget. VII (1839), 446.

*Buergeria obovata* Siebold et Zuccarini in Abh. Akad. Munch. IV, pt. II (1843) 187 (Fl. Jap. Fam. Nat. I. 79).

*Talauma Sieboldi* Miquel in Ann. Mus. Lugd. — Bot. II. (1865-1866) 257 (Prol. Fl. Jap. 145).

*Talauma obovata* Hance (non Korthals) in Jour. Bot. XX (1882) 2.

*Magnolia denudata* Schneider (non Desrousseau) III, Handb. Laubholzk. I (1905) 330.

Deciduous shrub or small tree, 3-5 m. high; bark grey or niger-grey; young branchlets of the current year greenish, ciliate at the node, rarely sparingly pubescent at first and glabrescent afterwards, those more than one year old purplish-brown or greenish-brown, glabrous with rounded lenticels; leaf-buds narrow-cylindrical, mixed buds oblong-ovoid or cylindrical-ovoid, scales greenish or brownish, whitish villose outside. Leaves alternate, subcoriaceous, obovate, oblong-ovate or elliptic-ovate, 10-15 cm. long, 6-8 cm. broad at the widest portion, acuminate rarely acute at the apex, cuneate at the base, margin entire, very sparingly shortly ciliate, deep green above, sparingly puberulous then glabrescent, light green beneath, very sparingly puberulous or glabrescent, midrib and primary veins (8-10 at each side) impressed above, prominent below, veinlets conspicuously reticulate on both sides; petiole short, under 1 cm. long, very shallowly concave above rounded beneath, dilated and slightly decurrent at the base; stipules large, chartaceous, greenish-white, more or less pubescent outside early deciduous. Flowers appearing before leaf, solitary and terminal, rosy-pink or rosy-purple, fragrant, funnel-campanulate, 9-12 cm. in diameter, peduncle stout, 10-15 mm. long greenish, more or less pubescent when young; sepals 3, herbaceous or purplish-white, early deciduous, triangular-lanceolate, 15-20 mm. long and 8 mm. broad at the widest portion; petals 6-12 or rarely 15, oblong-obanceolate or oblanceolate, 50-75 mm. long, 25-45 mm. broad, the inner the smaller, rosy-purple outside, whitish inside with the basal portion rosy-purple; stamens numerous, anthers reddish-purple about 7 mm. long, filaments thick and dilated, 2-3 mm. long, in slightly deeper shade than anthers; gynoecium oblong-obovoid, about 1 cm. long, 6 mm. in diameter, purplish, carpels numerous, ovary linear-elliptical, about 2 mm. long glabrous style filiform, stigma small. Fruit cylindrical, 4.5 cm. long, 2 cm. in diameter.

MOUNT OMEI: Pao-ning-ssu, alt. 500 m., cultivated in the temple, shrub 4 m. high, flower pinkish-purple, W.P. Fang, No. 15885, March 19, 1941; Ching-ying-ko, alt. 900 m., cultivated in the temple, shrub, flower pinkish-purple, fragrant, perianth-lobes 6-12, white inside, W.P. Fang, No. 15929, March 27, 1941; Ta-ping, alt. 1200 m., cultivated in the temple, small tree, 2 m. high, bark blackish-grey, flower purple, W. Ma, No. 2326, June 14, 1940.



This lovely magnolia has been commonly cultivated in the temples on Mount Omei. Its large showy flower is highly appreciated by the horticulturists. It is not yet found wild in Szechuan, though it has been reported from the vicinate provinces, Hupeh and Yunnan. This plant through a long period of cultivation has developed many variable characters. The general appearance varies from a large shrub to a dwarfish umbel-shaped small tree. The number of petals is very uncertain, from 6-15, and often from 9 to 12. The pubescence on the branchlets and leaves implies still greater instability. Some individuals have puberulous branchlets and leaves; some have glabrescent ones and some even have very glabrous branchlets and leaves. C.Y. Cheng.

- Fig. 1. a flowering branch (natural size);  
 2. a leafy branch (natural size);  
 3. the follicles (natural size);  
 4. a flower having perianth removed to show the androecium and gynoecium (2 times enlarged);  
 5. a stamen (5 times enlarged);  
 6. a carpel (10 times enlarged);  
 7. a cross section of the ovary to show the ovules (10 times enlarged);  
 8. a longitudinal section of the ovary to show the ovules (10 times enlarged).

## 圖 版 六 十 七

### 辛 夷 (別名：木筆)

### 木 蘭 科

落葉灌木或小喬木，高三至五公尺，樹皮灰色或灰褐色；本年生幼枝淡綠色，節上繞以纖毛，罕為初被稀少之毛。隨後脫落，一年以上幼枝紫棕色或綠棕色，光滑無毛，有圓形皮孔；葉芽狹圓柱形，混合芽長方卵形或圓柱卵形，芽鱗淡綠色或淡棕色，外側被白色長毛。葉互生，半革質，倒卵形，長方卵形或橢圓卵形，長十至十五公分，最闊部份寬六至八公分，先端尖尾狀，罕為銳形，基部漸狹，全緣常具疎短纖毛，葉面深綠色，初被極短疏毛，隨後漸落，中脈及八至十對側脈均下凹，葉背淡綠色，被極少短毛或竟無毛，中脈及側脈突起。小脈網狀甚明顯；葉柄粗短，長不及一公分。上面淺溝狀，下面圓形，基部擴大并稍下延貼於莖上；托葉大，紙質，淡綠色。外被柔毛，多寡不定，早落。花先葉開放，單獨頂生，淡紅色或淡紫色，芳香，漏斗鐘形，直徑九至十二公分，花梗粗短，長十至十五公厘，淡綠色，幼時被毛，多寡不一，萼片三枚，綠色或紫白色，早落，三角披針形，長十六至二十公厘。最寬部分闊八公厘，花瓣六至十二，罕為十五，長方倒披針形或倒披針形，長五十至七十五公厘，闊二十五至四十五公厘，愈內之瓣愈狹小，每瓣外側淡紫紅色，內部白色，惟基部成紫紅色。小蕊多數，花藥紅紫色，長約七公厘，花絲寬厚，長二至三公厘，色較花藥之色略深；雌器長方倒卵形，長約一公分，直徑六公厘，淡紫色，心皮甚多，子房線狀橢圓形，長約二公厘，光滑無毛，花柱線形，柱頭小。果實圓柱形，長四至五公分，直徑二公分。

峨眉山各寺院如保寧寺，萬行庄，清音閣，大坪寺等較低之處均種植之，春季三四月開花，花大具微香，甚為悅目。

本種雖在滇鄂諸省報告有野生者，但在四川所見均為栽培植物，且因長期栽培之故，發生變異甚多，如樹形之或為繖形灌木，或為削瘦小喬木，花瓣由六，九以至多至十二，枝葉被毛程度之不定，均足增加辨識之難也。

圖解：1.着花之枝(原大)；2.着葉之枝(原大)；3.果實(原大)；4.花折去花被以示大小蕊(放大二倍)；5.小蕊(放大五倍)；6.心皮(放大十倍)；7.心皮橫剖以示胚珠(放大十倍)；8.心皮縱剖以示胚珠(放大十倍)。



67. *MAGNOLIA LILIFLORA* Desrouss.



## Plate 68.

**MAGNOLIA SARGENTIANA** Rehder et Wilson.

## Magnoliaceae.

**Magnolia Sargentiana**, Rehder et Wilson in Sargent, Pl. Wilson. I (1913), 398.—Handel-Mazzetti, Symbolae Sinicae, VII (1931), 242.

Tree usually 10-14 metres high; bark grey; branches opposite or alternate, young branchlets of the current year yellowish-green, glabrous or pubescent with long yellowish hairs, those more than one year old yellowish-brown or greyish-brown, sparingly lenticellate; buds ovoid or narrow-ovoid, scales yellowish, densely pubescent with yellowish soft hairs or puberulous. Leaves alternate, coriaceous, broad-obovate or oblong-obovate 9-18 cm. long, 5-10 cm. broad, emarginate or rounded with short rostrum at apex, broad-cuneate, oblique at base, margin entire, slightly convex, green glabrous above, with midrib depressed and usually puberulous, primary veins usually 10 at each side, rarely 12-14, slightly elevated, pale beneath, usually with dense yellowish-grey woolly indumentum, rarely glabrescent, midrib and primary veins prominent; petiole 1-4 usually 2-3 cm. long, pubescent. Flowers precocious, solitary, terminal on young branchlets of the current year, 20 cm. in diameter during full blooming, red (according to collector), peduncle 15 mm. long, 6-8 mm. in diameter, densely yellowish-pubescent, tepals 12-13, oblong-obovate or oblong-lanceolate, 7-11 cm. long, 3-4 cm. broad, rounded or obtuse on the apex, tapering or cuneate at the base, purplish-red, androecium 16 mm. long, stamens very numerous, 16 mm. long, anthers yellow, 11 mm. long, cells linear, connective narrow, pointed at apex, filaments 4 mm. long; gynoecium cylindrical, 18 mm. long, carpels numerous, ovary narrow-elliptical, style 2-3 mm. long, stigma decurrent, ovules 2. Fruit cylindrical, about 10 cm. long, 2.5 cm. in diameter, natural carpels few, semi-spherical or subglobose, 12 mm. long, 9-10 mm. in diameter, shortly beaked above, blackish-purple, roughed by dense small warts, peduncle stout, 1-2 cm. long, covered by yellowish long hairs or glabrescent; seeds 1 in each carpel, subnephros, laterally compressed, 12 mm. long, 11 mm. in diameter, red.

MOUNT OMEI: Yen-wang-po, alt. 2400 m., in thickets, tree 5-8 m. high, bark grey, flower red, *C. L. Sun*, No. 251, May 14, 1939; west of Mount Omei, Opien-hsien, *S.H. Hsu*, No. 53, in 1937; same locality, sha-ping, "Tsian-tsu-kou," in forests, tree 10-13m. high, bark grey, fruit green, *C.L. Sun*, No. 811, July 24, 1939; same locality, "Wu-ko-shu", in forests, tree 10-14 m. high, bark grey, fruit red, *C.L. Sun*, No. 923, August 5, 1939; without precise locality, *C.W. Yao* No. 4444, in 1939.

This species is characterized by its broad-obovate leaves, usually emarginate at apex and densely pubescent on the lower surface, by its large reddish flowers and by its rather slender cylindrical fruit.

It was first discovered by Wilson in the fruiting stage in Wa-shan of western Szechuan about 30 miles west of Mount Omei. The flowers have not been found since then. It is fairly common in the type locality and its vicinity, but is seldom seen on Mount Omei. Sun's no. 251 from Omei is a shoot with precocious flowers. This is the first instance of this splendid flower being collected. Its colour of bark and branchlets, shape of bud, and the densely yellowish hairs on the lower surface, as well as the shape of the young leaf in bud agree perfectly with those of the fruiting specimens collected from the type-locality..... C.Y. Ch'eng.

- Fig. 1. a leafy and young fruiting branch (naturalize);  
 2. a flower (natural size);  
 3. a flower having perianth removed to show the androecium and gynoecium (2 times enlarged);  
 4. a portion of leaf to show the hairs on the under-surface (10 times enlarged).

## 圖版六十八

## 余氏木蘭

(別名：凹葉木蘭)

## 木蘭科

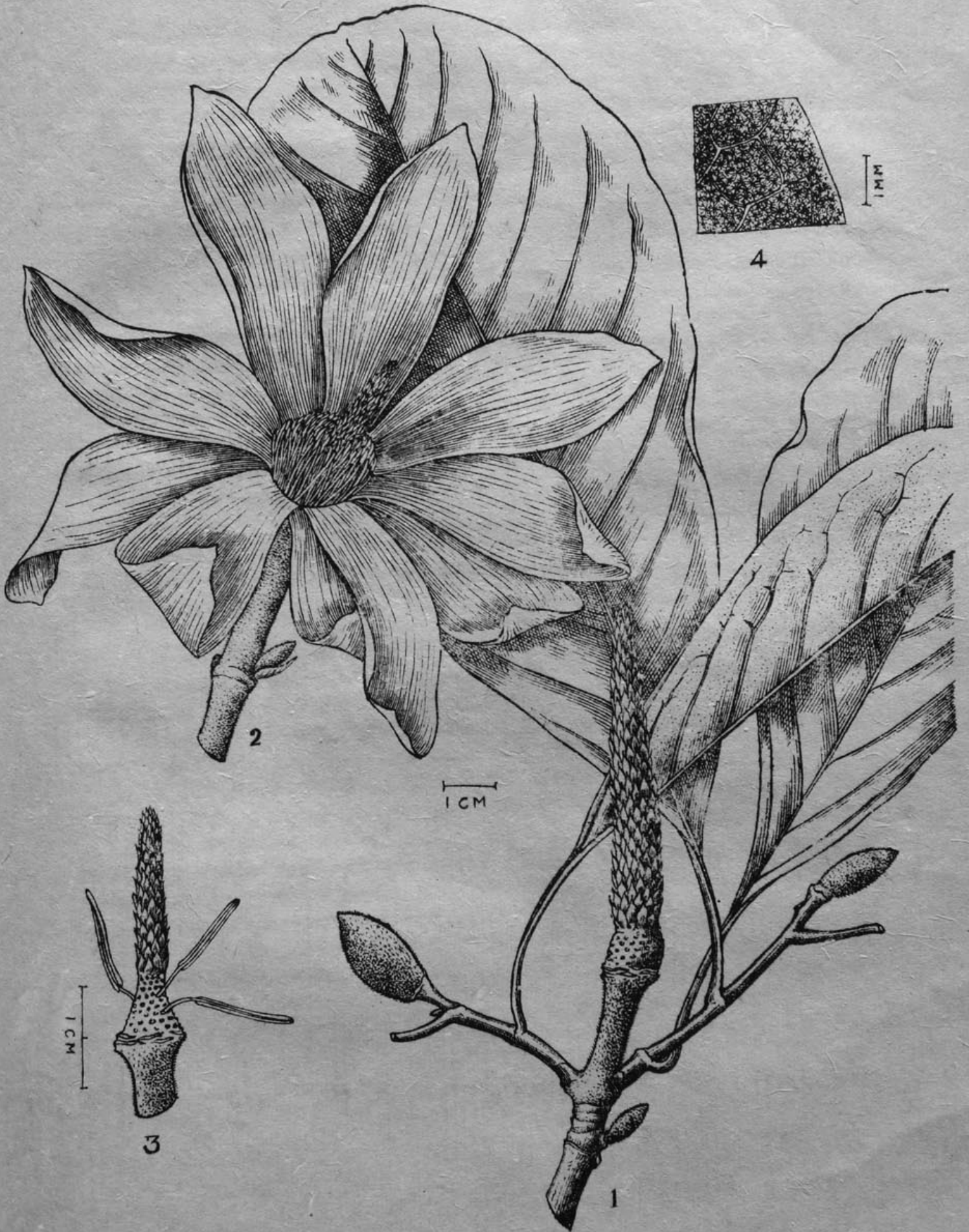
喬木，通常高十二至十四公尺；樹皮灰色；枝對生或互生，本年幼枝黃綠色，光滑或被淡黃長毛，一年以上者黃棕色或灰棕色，皮孔甚少；芽卵形或狹卵形，芽鱗淡黃色，被淡黃色濃密軟毛或較稀少之短毛。葉互生，革質，闊倒卵形或長方倒卵形，長九至十八公分，闊五至十公分，先端內凹或圓形帶短喙，基部闊楔形，全緣，邊緣稍下曲，葉面綠色，光滑無毛；中脈下凹，通常被稀短小毛，側脈多為十對，罕為十二或十四對，略微凸起，葉背色淡，常被黃灰色毛質附着物，罕光滑僅具毛痕，中脈及側脈均突起；葉柄長一至四公分，以二或三公分为常見，被毛。花先葉開放，單獨頂生於本年幼枝上，直徑盛開時達二十公厘，紅色，花梗長十五公厘，直徑六至八公厘，被淡黃色濃毛，花被十二或十三枚，長方倒卵形或長方披針形，長七至十一公分，闊三至四公分，先端圓形或鈍圓，基部漸狹或楔形，淺紫紅色，雄蕊長十八公厘，小蕊數極多，長十六公厘，花藥黃色，長十一公厘，成綫形，二室，間以窄隔，隔具尖頂，花絲長四公厘；雌器圓柱形，長十八公厘；心皮多數，子房窄橢圓形，花柱長二至三公厘，柱頭延長，胚珠二枚。果實圓柱長方形，長約十公分，直徑二十五公厘，僅少數心皮成熟，成熟心皮半圓形或近於圓形，長十二公厘，直徑九至十公厘，上部具短喙，黑紫色上有瘤狀小點，果柄粗壯，長一至二公分，被黃色長毛，或僅被毛痕；種子每心皮內一枚，近於腎形，兩側扁，長十二公厘，直徑十一公厘，紅色。

產峨眉山鬪王坡，海拔二千四百公尺處，甚為稀少，峨山向西峨邊縣一帶則較多，五月中旬開花，八月果實成熟，花大果紅，此樹極為絢麗，觀賞價值至高也。

本種之特性為其闊倒卵形之葉先端常內缺，葉背被厚毛，花大紅色，果實圓柱形頗纖細。昔威爾遜氏始於峨邊瓦山首見此樹，然僅見其果未見其花。孫祥麟氏之二五一號標本係在峨山採得之着花標本。是花之得，尚為第一次也。

圖解：1. 着葉，芽及嫩果之枝(原大)；2. 花(原大)；3. 花折去花被以示其大小蕊(放大二倍)；4. 葉背之毛(放大十倍)。





68. MAGNOLIA SARGENTIANA R. et W.

## Plate 69.

**CLERODENDRON JAPONICUM**, (Thunberg) Sweet.

## Verbenaceae.

**Clerodendron japonicum**, (Thunberg) Sweet, Hort. Brit. (1826), 322.—Makino in Tokyo Bot. Mag. XVII (1903), 91.—Matsumura, Ind. Fl. Jap. II, 2. (1912), 532.—Rehder in Sargent, Pl. Wilson. III. (1916), 377.—Chung in Mem. Sci. Soc. China, I, No. 1 (1924), 228.—Pei in Mem. Sci. Soc. China, I, No. 3 (1932), 140.

*Volkameria japonica* Thunberg, Fl. Jap. (1784), 255.

*Volkameria Kaempferi* Jacq. Icon. Pl. Rar. III. 7 (1786), t. 500 (*V. Kaempferiana* in tab.)

*Clerodendron squamatum* Vahl, Symb. II. (1791), 74.

*Volkameria coccinea* Loiseleur-Deslongchamps, Herb. Amat. VIII (1827) t. 519.

*Clerodendron dentatum*, Wallich, Cat. (1828), No. 1799 (nomen nudum).

*Clerodendron Kaempferi* Siebold Herb. ex Miquel in Ann. Mus. Lugd.—Bat. II (1866), 299 (Prol. Fl. Jap. 31).

*Clerodendron* (or *Volkameria*?) *dentate* Roxburgh, Hort. Bengal. (1814), 46 (nomen nudum).

*Clerodendron coccineum*, D. Dietrich, Syn. Pl. III (1843), 616.

Small tree usually 3 to 5 metres high; bark grey, smooth or rarely with conspicuous lenticels; young branchlets tetragonous, green or reddish green, with sparse lenticels. Leaves opposite, ovate, 19-25 cm. long, 14-17 cm. broad, acute or shortly acuminate on the apex, deeply cordate or auriculate at the base, remotely serrate on the margin with appressed crenate teeth, upper surface deep green, sparsely setulose, lower surface scaly with golden yellow or light yellow round scales; petioles 15-22 cm. long, cylindric and rather stout at the base. Flowers in scarlet, villous panicles 30 cm. in length, terminal on the main stem, bracts linear, red, calyx with 5 scarlet sepals, triangular, shortly acuminate, 12-14 mm. long, 5-7 mm. broad, corolla scarlet, with a cylindric tube about 2 cm. long, sparsely villous outside, petals 5, obovate, 8 mm. long, 3 mm. broad, stamens 4, inserted on the upper part of the corolla, exserted, filaments slender, 4-5 cm. long, slightly villous, anthers versatile, ovary superior, 4-celled, ovules numerous, pendulous, styles slender, 6-8 cm. long, glabrous, stigma minute. Fruit a drupe enclosed by the calyx which reflexed later.

OMEI-HSIEN: Wan-hsing-chuang, alt. 470 m., cultivated in the temple, shrub 3 metres high, with tetragonous branches, flowers and inflorescences scarlet, *W.P. Fang*, No. 17194, July 7, 1941.

This plant has been cultivated commonly in various gardens in western Szechuan. It is highly appreciated for its beautiful scarlet flowers and ample inflorescences as well as for its long flower-season from May to July. .... W.P. Fang.

- Fig. 1. Flowering branch ( $\frac{1}{2}$  of natural size);  
 2. a flower (natural size);  
 3. flower dissected to show the insertion of stamens (natural size);  
 4. an ovary (enlarged 5 times);  
 5. an ovary crossly dissected (enlarged 5 times);  
 6. a portion of leaf to show the scales on the lower surface (10 times enlarged).



# 圖版六十九

## 百日紅

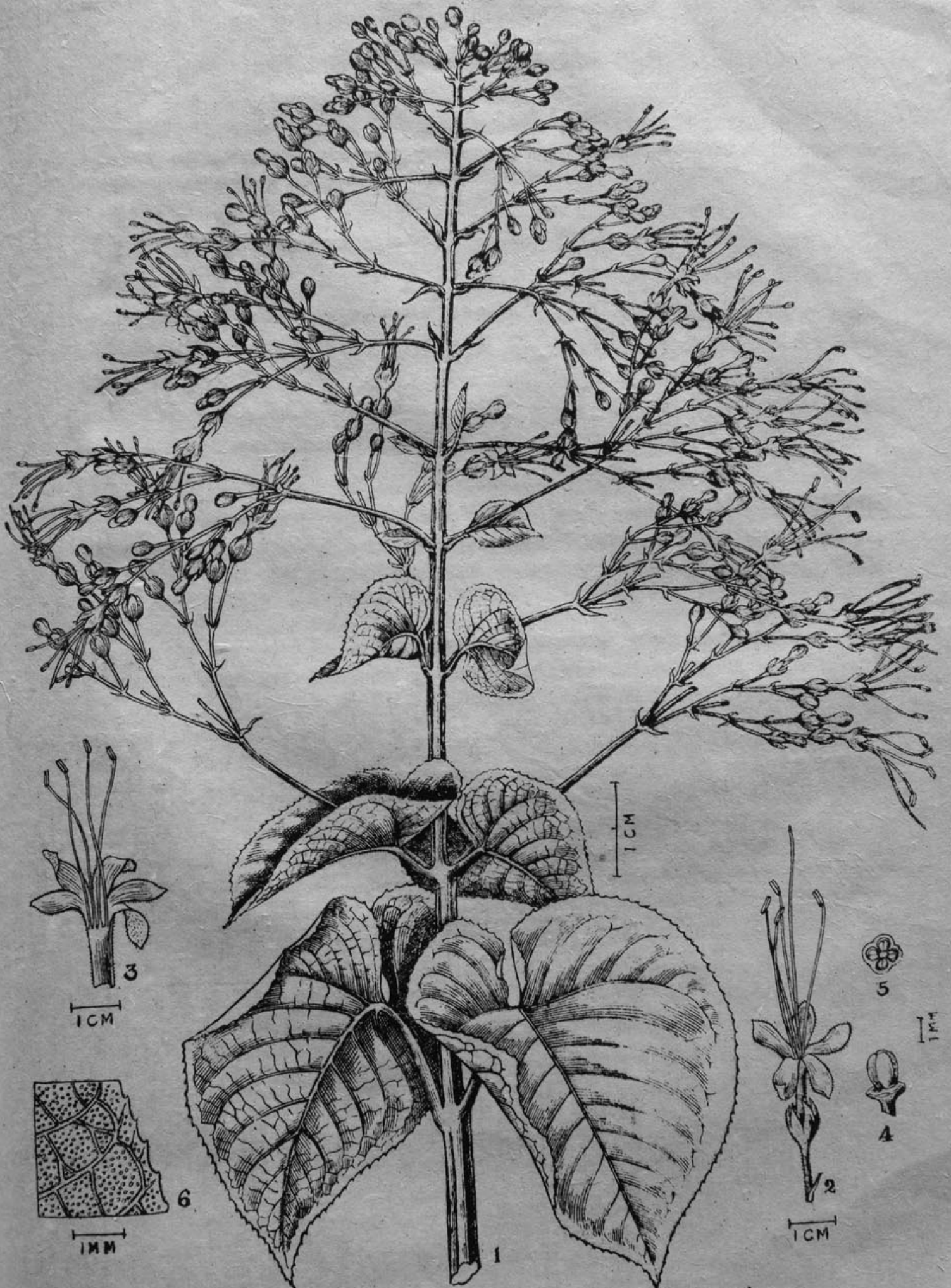
### 馬鞭草科

小喬木，通常高三至五公尺；樹幹灰色，光滑或稀具顯明之皮孔；幼枝方形，綠色或紅綠色，皮孔甚少。葉對生卵形，長十九至二十五公分，闊十四至十七公分，先端尖銳或短尖尾狀，基部深凹成心臟形或耳狀，邊緣具稀疏波紋狀，具密鈍鋸齒，葉面深綠，有少數細小剛毛，葉背有金黃色或淡黃色細小鱗斑，葉柄長十五至二十二公分，圓柱形，基部較粗壯。花序為柔軟圓錐形猩紅色花序，長三十公分，生於主莖頂端，苞片綫形，紅色，花萼五裂，三角形，先端短尖尾狀，長十二至十四公厘，闊五至七公厘，花冠猩紅色，花管圓柱形，長約二公分，外面被稀疏絨毛，五裂，卵形，長八公厘，闊三公厘，小蕊四枚，插生於花冠上部，花絲纖細，長四至五公分，被稀疏柔毛，花藥背連；子房上位，四室，胚珠多數，下垂，花柱細長，長六至八公分，光滑無毛，柱頭細小。核果，包圍於外屈之萼片中。

本種植物遍植於四川西部之各園庭中，以其猩紅美麗之花色及豐勝之花序，長久之花期（五月至七月），而被視為珍品也。

在峨眉山之萬行莊，報國寺及伏虎寺等處栽培極普遍。

圖解：1. 着花及葉之枝（縮小二分之一）；2. 花（原大）；3. 花冠解剖以示小蕊着生情形（原大）；4. 子房（放大五倍）；5. 子房橫剖面（放大五倍）；6. 葉背之一部以示其鱗斑（放大十倍）。



69. CLERODENDRON JAPONICUM (Thunberg) Sweet



## Plate 70.

**SCHIZANDRA HENRYI** Clarke.

Magnoliaceae.

**Schizandra Henryi**, Clarke in Gard. Chron. ser. 3, XXXVIII (1905), 162, fig. 55.—Schneider, III. Handb. Laubholz, II (1912), 928, fig. 58J.—Rehder et Wilson in Sargent, Pl. Wilson, I (1915), 413.—Handel-Mazzetti, Symbolae Sinicae, VII (1931), 244.

*Schizandra hypoglauca*, Leveille in Fedde Rep. Nov. Sp. IX (1911), 459.

Shrub scandent; young branchlets of the current year greenish, glaucous, 5-angulate and prominently winged, those more than one year old purplish-brown, angulate, slightly winged or wingless, lenticels brownish, prominent; bud-scales ovate, persistent at the base of branches. Leaves simple, alternate, subcoriaceous, broad ovate or suborbicular, less frequently oblong or oblong-ovate, 9-11 cm. long, 5-8 cm. wide, acuminate or short acuminate on the apex, rounded or cuneate at the base, margin remotely and minutely toothed, green and slightly glaucous above, pale and very glaucous beneath, midrib and primary veins prominent beneath, tertiary veins very reticulate; petiole red, glaucous, 25-50 mm. long, 2 mm. in diameter, concave above. Flowers unisexual, monoecious, staminate flowers solitary, axillary to leaf, on young branchlets of the current year, about 15 mm. across, peduncle long and slender, 4-5 cm. long, subtended by a small bract at the base, sepals 3, orbicular, subequal, greenish becoming greenish-yellow, petals 3, except for their pure creamy colour resembling the sepals; androecium subovoid, about 5 mm. long and 5 mm. across, capitate at the apex, stamens numerous, anthers white about 2 mm. long, introrse, connective broad and thick, yellow, filaments about 1 mm. long, yellow; pistillate flowers on longer peduncle 7-8 cm. long, sepals and petals similar to those of the staminate flower, gynoecium oblong-ovoid, 7 mm. long, 5-6 mm. in diameter, ovary glabrous, style very short. Fruit 8 cm. long, matured carpels reddish, rather loose on a slightly thickened rachis, globose, 4-5 mm. long, shortly stalked; seeds 2, yellowish-brown, somewhat semispherical in outline, peduncle slender, about 75 mm. long, reddish-brown.

MOUNT OMEI: Hung-chun-ping, alt. 1200 m., a scandent shrub climbing on tree, occasionally, *W.P. Fang*, No. 12711, July 29, 1938; same locality, *H.C. Chow*, No. 7522, June 11, 1940; same locality, scandent shrub with leaves glaucous beneath, young fruits greenish, *W.P. Fang*, No. 17017, June 23, 1941; route from Hung-chun-ping to Ta-ping, alt. 1300 m., in woods, scandent shrub, bark light brown, flowers greenish-yellow, common, *W.W. Ma*, No. 2332, June 14, 1940; route from Chio-lau-tung to Hung-chun-ping, alt. 1500 m., in thickets, a vine, flower yellowish green, *C.L. Sun*, No. 504, June 14, 1939; Hsi-hsin-so, alt. 1600 m., in thickets, a vine with flowers in buds, *C.L. Sun*, No. 342, May 24, 1939; Chiu-lao-tung, alt. 1800 m., *W.P. Fang*, No. 16853, June 4, 1941; Su-kang, scandent shrub, young branchlets 4-angulate and winged, leaves glaucous beneath, petioles red, flowers in buds, *W.P. Fang*, No. 16686, May 20, 1941; Chu-tien, alt. 1920 m., scandent shrub, young branchlets of the current year greenish, angulate and winged, leaves glaucous beneath, flowers yellow or yellowish, *W.P. Fang*, No. 16734, May 23, 1941; Hsi-hsiang-chih, alt. 2240 m., *W.P. Fang*, No. 17535, August 10, 1941; without precise locality, *W.C. Cheng*, Nos. 10274 & 10577 May to June 1940.

The most remarkable characters of this species are its young branchlets which are usually noticeably winged, its glaucous, broad, ovate leaves on red petioles and its pure, creamy, yellow flowers on long slender peduncles. It is very common at Ta-ping and less common elsewhere in this mountain. Its distribution has been reported from Hupeh, Hunan, Szechuan and Kweichow .....C.Y. Cheng.

- Fig. 1. a flowering branch of pistillate flowers (natural size);  
 2. a flowering branch of staminate flowers (natural size);  
 3. a fruiting inflorescence in dry condition (natural size);  
 4. a pistillate flower (magnified 5 times);  
 5. a gynoecium (magnified 5 times);  
 6. a pistil (magnified 5 times);  
 7. a staminate flower (magnified 10 times);  
 8. an androecium (magnified 5 times);  
 9. a stamen (magnified 10 times).

圖版七十

翼梗五味子 (別名：享利五味子)

木蘭科

五味子亞科

攀援灌木，本年生幼枝淡綠色，光滑無毛，上被白粉，五稜形，稜上具翅膜，一年以上者紫棕色，方形，具狹翅或無翅，皮孔淡棕色，顯明；芽鱗卵形，宿存於小枝基部。單葉互生，半革質，闊卵形或近於圓形，罕為長方形或長方卵形，長九至十一公分，闊五至八公分，先端尖尾狀或短尖尾狀，基部圓形或楔形，葉緣具稀疏細齒，葉面綠色，有少許白粉覆蓋，葉背淡綠，覆以濃重白粉，中脈側脈均在葉背突起，小脈成網狀；葉柄紅色，上被白粉，長廿五至五十公厘，直徑二公厘，上面溝狀。花單性，大小蕊花異株，小蕊花單生於葉腋，在本年生枝上，直徑約十五公厘，花梗細長，長四至五公分，基部有細小苞片一枚；萼片三枚，圓形，大小略等，淡綠色，花開漸久變為黃綠色；花瓣三枚，形狀與萼片同，惟顏色為酪黃色，雄器近於卵形，長約五公厘，直徑亦約五公厘，頂端盾形，小蕊多數，花藥白色，長約二公厘，內向，藥隔寬厚，黃色，花絲長約一公厘，黃色；大蕊花着生於長七至八公分之花梗上，花萼花瓣與小蕊花者相同，雌器長方形或長方卵形，長七公厘，直徑五至六公厘，子房光滑無毛，花柱極短。果實長八公分，成熟心皮紅色，着生於較粗之果軸上，圓球形，長四至五公厘，具極短小柄；種子每心皮內二枚，棕黃色，常成半圓形，果柄細小，長七至五公厘，紅棕色。

產峨眉山洪椿坪，大坪、息心所及九老洞以下各地，在海拔一千二百至一千五百公尺處，以大坪一帶為最多，五六月間開花，小蕊花先開。

圖解； 1. 着大蕊花之枝 (原大)； 2. 着小蕊之枝 (原大)； 3. 果序 (乾時情形) (原大)； 4. 大蕊花 (放大五倍)； 5. 大蕊花拆去其花被以示大蕊 (放大五倍)； 6. 心皮 (放大五倍)； 7. 小蕊花 (放大五倍)； 8. 小蕊花折去花被以示小蕊 (放大五倍)； 9. 小蕊 (放大十倍)。





70. *Schisandra Henryi* Charke

## Plate 71.

**SCHIZANDRA SPHENANTHERA** Rehder et Wilson  
var. **PUBINERVIS** Rehder et Wilson.

## Magnoliaceae.

**Schizandra sphenanthera**, Rehder et Wilson, var. **pubinervis** Rehder et Wilson in Sargent, Pl. Wilson. I (1911) 415.

Woody vine; young branchlets of the current year greenish, glabrous, those more than one year old deep purple, subangular or compressed, lenticels many, elliptical; buds small, ovoid or ellipsoid, scales imbricate triangular-ovate or orbicular, more or less ciliate. Leaves alternate, broad-ovate, elliptic-ovate or rhombic, rarely obovate, 5-10 cm. long, 3.5-6.5 cm. broad, acuminate or shortly acuminate at apex, cuneate at base, margin serrulate with small teeth, usually entire near the base, rarely wholly entire, green glabrous above with depressed midrib and lateral veins 12-15 pairs, light green beneath with elevated midrib and lateral veins which usually covered by ferruginous, short, curly hairs; petioles 1.5-2.5 cm. long, rarely to 3 cm. long, broadly and shallowly grooved above. Flowers unisexual, solitary and axillary on young branchlets of the current year, greenish, peduncle slender, 3-5 cm. long on staminate flowers 4-6 cm. in pistillate flowers; staminate flowers 1 cm. in diameter, sepals 5, suborbicular, subequal, 5-8 mm. long, 4-7 mm. broad, yellowish; stamens 15, 3 mm. long, anthers 2 mm. long, cells lateral, linear, connective broad, filaments very short, 1 mm. long, dilated, slightly connate at base; pistillate flowers 15-18 mm. in diameter, sepals 7, suborbicular, about 10 mm. long, 8-9 mm. broad; gynoecium ovoid, 7-8 mm. long, carpels numerous, ovary ovoid, style short, deciduous, stigma small, ovules 2. Fruit 6-11 cm. long, red, rhachis thick, matured carpels globose, 3-5 mm. in diameter, subsessile, peduncle 4-6 cm. long; seeds 1-2, subglobose, compressed, reddish-brown, about 3 mm. in diameter.

MOUNT OMEI: below Chiu-lao-tung, alt. 1500 m., climbing on tree, woody vine, occasionally, *W.P. Fang*, No. 12823, July 31, 1938; Lien-hua-shih, alt. 1850 m., vine, bark blackish-purple, flowers yellowish-green, common, *W.W. Ma*, No. 2508, June 20, 1940; without precise locality, *T.H. Tu*, No. 153, in 1935; west of Mt. Omei, Opieh-hsien, at roadside, *W.C. Cheng*, Nos. 5987 & 6028, July 1936; same locality, *T.H. Chao*, No. 24, in 1938.

This variety differs from the type species in its leaves with midrib and primary veins on the lower surface more or less pubescent with short, curled hairs. In the Omei plant the shape of the leaves is broad-ovate, elliptic-ovate or rhombic, rarely obovate and margin only inconspicuously toothed. It has been reported that the type species occurs commonly in Shensi, Hupeh, Hunan, Szechuan and Yunnan, but we have not seen any specimen from this mountain. . . . . C.Y. Cheng.

- Fig. 1. a flowering branch of pistillate flowers (natural size);  
 2. a flowering branch of staminate flowers (natural size);  
 3. a pistillate flower (magnified 5 times);  
 4. a carpel (10 times magnified);  
 5. a staminate flower (magnified 5 times);  
 6. a stamen (magnified 10 times);  
 7. an inflorescence of fruits (natural size);  
 8. a portion of leaf showing the pubescence on nerves of lower surface (magnified 10 times).



## 圖版七十一

## 毛脈北五味子

## 木蘭科

## 五味子亞科

木質藤木，本年生幼枝淡綠色，光滑無毛，一年以上者深紫色，略帶方形或扁平，皮孔甚多，橢圓形；芽小，卵形或長卵形，芽鱗覆瓦排列，三角卵形或圓形，週緣有纖毛。葉互生，闊卵形，橢圓卵形或稜形，罕為倒卵形，長五至十公分，闊三十至六十五公厘，先端尖尾狀或短尖尾狀，基部楔形，葉緣具淺細鋸齒，近基部處常完整無齒，罕為全緣，葉面綠色無毛，中脈及側脈（十二至十五對）下凹，葉背淺綠色，中脈及側脈凸出且常覆以銹色捲曲短毛；葉柄長十五至二十五公厘，罕有達三十公厘者，上面成淺闊溝狀。花單性，單獨腋生於本年幼枝上，黃綠色，花梗細弱，小蕊花者長三至五公分，大蕊花者長四至六公分；小蕊花直徑一分，萼片五枚，大小不等，近似圓形，長五至八公厘，闊四至七公厘；小蕊十五本，長三公厘，花藥長二公厘，二室，中有寬闊藥隔，花絲短闊，長僅一公厘，基部小部合生；大蕊花直徑十五至十八公厘，萼片七枚，近於圓形，長約十公厘，闊八至九公厘，雌器卵形，長七至八公厘，直徑六至七公厘，心皮多數，子房卵形，花柱短，早落，柱頭小，胚珠每心皮二枚。果長六至十一公分，紅色，果軸增厚，成熟心皮圓球形，直徑三至五公厘，小柄極短，果梗長四至六公分；種子每心皮內一至二枚，近於圓球形而兩側略扁，紅棕色，直徑約三公厘。

產峨眉山九老洞以下及蓮花石一帶，海拔一千五百至一千九百公尺間，六月開花。

圖解：1. 大蕊花枝（原大）；2. 小蕊花枝（原大）；3. 大蕊花（放大五倍）；4. 心皮（放大十倍）；5. 小蕊花（放大五倍）；6. 小蕊（放大十倍）；7. 果序（原大）；8. 葉之一部放大以示其背面葉脈上之毛（放大十倍）。



71. *Schisandra sphenanthera* var. *pubinervis* Rehder & Wilson



## Plate 72.

**SCHIZANDRA PUBESCENS** Hemsley et Wilson.

Magnoliaceae.

**Schizandra pubescens**, Hemsley et Wilson in Kew Bull. Misc. Inform. (1906), 150.—Rehder et Wilson in Sargent, Pl. Wilson. I (1913), 413.

*Schizandra vestita* Pax et Hoffmann in Fedde Rep. Sp. Nov. Beih. XII (1922), 381, e typo.

Woody vine; young branchlets of the current year greenish, angulate, yellowish-puberulous, those more than one year old brownish-purple, sparingly puberulous or glabrescent, angulate or terete, lenticels few. Leaves alternate, chartaceous, broad ovate, rarely suborbicular, usually 8-11 cm. long, 5-7 cm. broad, shortly acuminate at apex, rounded at base, margin remotely toothed by small teeth, usually entire near the base, sparingly ciliate, green glabrous above with grooved midrib and slightly raised lateral veins (12-15 at each side), pale green beneath, and covered by yellowish-white short curly hairs, midrib and lateral veins prominent and covered by ferruginous short curly hairs; petiole 2-4 cm. long, deeply grooved above, rounded beneath, covered by yellowish short curly hairs. Flowers unisexual, solitary, axillary to leaf on the young branchlets of the current year, yellowish, 12-15 mm. in diameter, peduncle slender, about 4 cm. long with short curly hairs; sepals 9, yellowish suborbicular, ciliate, the outer ones small, 6 mm. long, 5 mm. in diameter, the inner ones larger 8-10 mm. long, 7-8 mm. broad, androecium subovoid, 4 mm. long, 5 mm. broad, anthers 2-celled cells linear, 2-3 mm. long, separated by oblong obtuse connective, lateral-introrse, filaments very short, less than 1 mm., connate at base; gynoecium has not been found. Fruit 6.5 cm. long, rarely shorter, matured carpels numerous, on a thick yellowish-puberulous rhachis, berry subglobose, orange-red, puberulous, very shortly beaked, sessile, peduncle 5-7 cm. long, slender, puberulous; seeds 2 rarely 1, semispherical, bony yellow.

WEST OF MOUNT OMEI: Opien-hsien, alt. 1600 m., T. T. Yu, No. 844, May 23, 1932; same locality, W.C. Cheng, No. 6238, August 1936.

This species is near *S. glaucescens* Diels of Eastern Szechuan, which besides hairlessness has small, shortly acuminate, oblong leaves. From other species it is distinguished by its short, curly hairs on the lower surface of leaves, petioles and young branchlets. It was first discovered by A. Henry and E.H. Wilson in Western Hupeh where it is fairly common. In the vicinity of Mount Omei this is the first time it has been recorded, and where it was found confined to an altitude above 1200 meters. . . . . C.Y. Ch'eng.

- Fig. 1. a flowering branch (natural size);  
 2. a fruiting branch (natural size);  
 3. a staminate flower (magnified 3 times);  
 4. a stamen (5 times magnified);  
 5. a portion of leaf to show the hairs on the lower surface (10 times magnified).

## 圖版七十二

## 毛葉北五味子

## 木蘭科

## 五味子亞科

木質藤木；本年生幼枝淡綠色，被淡黃色短毛，方形，一年以上者紫棕色，疎被短毛或幾無毛，方形或圓形，皮孔甚少。葉互生，紙質，闊卵形或卵形，罕近於圓形，長八至十一公分，闊五至七公分，先端銳尖尾形，基部圓形，葉緣具甚稀之小齒，近基部處則無齒，葉緣常有稀少纖毛，葉面綠色，光滑無毛，中脈溝狀，側脈十二至十五對，常略突起，葉背淡綠色，被黃白色捲曲之毛，中脈側脈均突起并被銹色捲曲短毛；葉柄長二至四公分，上部成深溝狀，下面圓形，被淡黃色捲曲短毛。花單性，單生於本年幼枝之葉腋，淡黃色，直徑十二至十五公厘，花梗細弱，長約四公分，上有捲曲短毛；萼片九枚，淡黃色，近於圓形，週圍有纖毛，外面者較小，長約六公厘，闊約五公厘，向內者較大，長八至十公厘，闊七至八公厘，雄器近於卵形，長四公厘，直徑五公厘，花藥二室，線形，長二至三公厘，中有長方平頂藥隔，花絲極短，長不及一公厘，基部合生；大蕊花尚未採得。果長六至五公厘，罕較短，成熟心皮多數，着生於增厚之軸上，軸被淡黃色小毛，小漿果近於圓球形；橘紅色，上被極短小毛，頂端有極短之喙，花梗長五至七公分，纖細被小毛；種子每漿果內二枚，罕為一枚，半球形，骨黃色。

產峨眉山西邊之峨邊縣

本種與川東之粉葉北五味子 (*S. glaucescens* Diels) 相近，所不同者以後者之枝葉等處無毛，葉小，長方形，先端具短尖尾。與別種北五味子不同之處厥惟其枝葉具捲曲短毛，本種首次發次於湖北西部，為亨利氏及威爾遜氏先後採得，在峨眉山附近此尚為初次採到，較稀少，率生於海拔一千二百公尺以上。

圖解：1. 着花之枝（原大）；2. 着果之枝（原大）；3. 小蕊花（放大三倍）；4. 小蕊（放大五倍）；5. 葉之一部放大以示其背面之毛（放大十倍）。





72. SCHISANDRA PUBESCENS Hemsl. et Wils.

## Plate 73.

**KADSURA CHINENSIS** Hance.

## Magnoliaceae.

**Kadsura chinensis**, Hance in ex C.B. Clarke in Journ. Linn. Soc. Bot. XXV (1889), 4.—  
Handel-Mazzetti, Symbolae Sinicae, VII (1931), 245.

*Kadsura japonica*, Bentham (non Don) in Kew Journ. Bot. iii. (1851) 258.

Woody vine; young branchlets of the current year greenish, glabrous, those more than one year old grey or purplish-grey, densely lenticellate, bud-scales triangular-ovate, persistent at the base of young branchlets and peduncles. Leaves alternate, coriaceous, oblong-ovate or oblong, 12 cm. long, 4-5 cm. broad, apex acuminate or very shortly acuminate, base rounded or rarely broad cuneate, deep green above, light green with pellucid dots beneath, midrib slightly elevated on both sides, lateral nerves inconspicuous above, inconspicuous or immersed beneath; petiole greenish, shallowly grooved, above 15-25 mm. long. Flowers unisexual, monocious, solitary or 2 in a cluster, axillary at the base of the branchlets of the present year, reddish-green, about 2 cm. long, 1.5 cm. across; sepals 3, ovate, unequal, much smaller than petals, reddish-green, ciliate; petals, 6, subequal, broad-obovate or oblong-ovate, 15-20 mm. long, 8-10 mm. broad, basal portion greenish, upper portion red, succulent and ciliate; staminate flowers with peduncles slender, subangulate, straight or coiled, about 15 mm. long, greenish, androecium subovoid, mucronate, about 5 mm. long, stamens about 24, all fertile, anthers extrorse, divaricate, brownish, filaments thick, 1-2 mm. long, greenish-white; pistillate flowers with peduncles longer and stouter than those of the staminate flowers, about 3 cm. long, 2 mm. across, gynoecium triangular-ovoid, 7 mm. long, 5 mm. in diameter, ovary subovoid, greenish, glabrous, style short, stigma small. Fruit immature.

MOUNT OMEI:—Niu-hsin-ssu to Ta-ping, alt. 1200 m., in woods, vine, flowers purple, T.C. Lee, No. 2018, May 17, 1940; Su-kang, alt. 1300 m., woody vine, flower reddish, W.P. Fang, No. 16680, May 20, 1941; near Hung-chun-ping, at the side of forests, vine with reddish fruits, rare, T.C. Lee, No. 3092, July 31, 1940; without precise locality, T.H. Tu, No. 80, in 1935; without precise locality, W.C. Cheng, No. 10449, May 27, 1940.

This species is distributed from subtropical Hongkong through Hunan to temperate Szechuan. The geographical range seems ineffectual in causing any variation. . . . . C.Y. Ch'eng.

- Fig. 1. a flowering branch (natural size);  
 2. a staminate flower (magnified 3 times);  
 3. staminate flower having perianth removed to show the androecium (3 times magnified);  
 4. a stamen (10 times magnified);  
 5. a pistillate flower (3 times magnified);  
 6. a gynoecium (3 times magnified).



## 圖版七十三

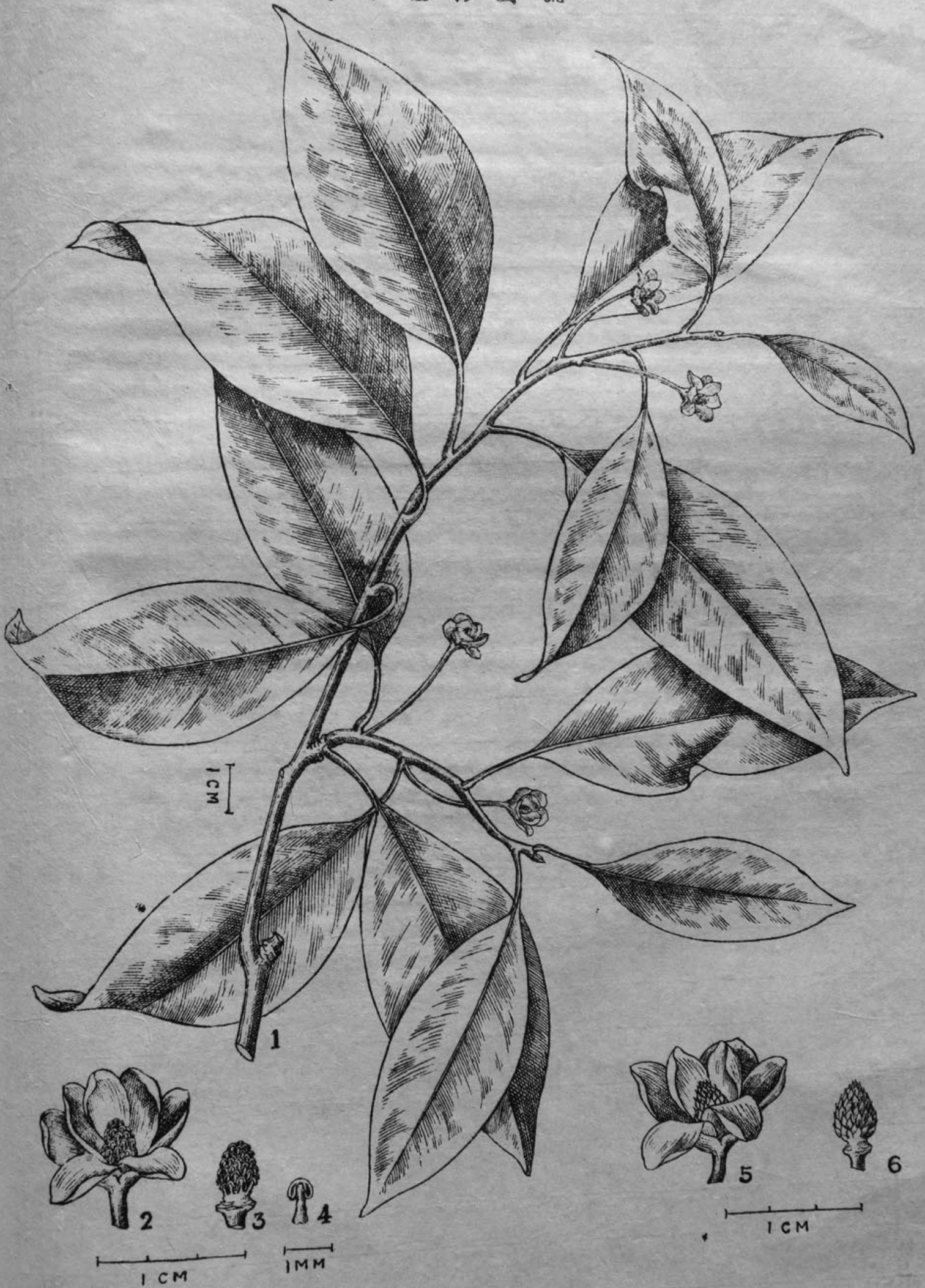
## 中國南五味子

## 木蘭科

藤本灌木；本年生幼枝淡綠色，光滑無毛，一年以上者灰色或紫灰色，上有皮孔甚多；芽鱗三角卵形，宿存於幼枝及花梗之基部。葉互生，革質，長方卵形，或長方形，長十二公分，闊四至五公分，先端尖尾狀或短尖尾狀，基部圓形，罕為闊楔形，葉面深綠，葉背淺綠，有透明油點，中脈於兩面均略凸，側脈在葉面略顯，在葉背不顯或內藏，葉柄淡綠色，上面淺凹，長十五至廿五公厘。花單性，大小蕊花同株，單生或兩朵叢生於本年幼枝之基側，紅綠色，長約二公分，直徑一公分半，萼片三枚，卵形，不等大，小於花瓣甚多，邊緣有纖毛；花瓣六枚，大小略等，闊倒披針形或長方卵形，長十五至廿公厘，闊八至十公厘，上部紅色，基部帶綠色，肉質，邊緣有纖毛，小蕊花花梗細弱，具稜，伸直或彎曲，長約十五公厘，淡綠色，雄器卵形，尖頂，長約五公厘，小蕊約廿四本，皆具花藥，花藥外向，淡棕色，花絲肥厚，長一至二公厘，綠白色；大蕊花之花梗較小蕊花者為長，長約三公分，直徑約二公厘，雌器三角卵形，長七公厘，直徑五公厘，子房近於卵形，淡綠色，光滑無毛，花柱短，柱頭極小。果實未成熟。

產峨眉山半心寺，大坪，蘇崗一帶，海拔一千二百至一千三百公尺處，五月開花。

圖解：1. 小蕊花枝（原大）；2. 小蕊花（放大三倍）；3. 小蕊（放大三倍）；4. 一小蕊（放大十倍）；5. 大蕊花（放大三倍）；6. 大蕊（放大十倍）。



73. *KADSURA CHINENSIS* Hance



## Plate 74.

**KADSURA PELTIGERA** Rehder et Wilson.

## Magnoliaceae.

**Kadsura Peltigera**, Rehder et Wilson in Sargent, Pl. Wilson, I. (1913) 410.—Handel-Mazzetti, Symbolae Sinicae, VII (1931), 245.

Woody vine; young branchlets of the current year greenish or greenish-brown, lenticellate, those more than one year old purplish-brown, densely lenticellate; buds small, ovoid, scales triangular-ovate rarely suborbicular, persistent. Leaves alternate, subcoriaceous, oblong, oblong-oblong or elliptical-oblong, 7-12 cm. long, 35-55 mm. broad, apex shortly acuminate, base cuneate or broad cuneate, rarely subrotund, margin remotely dentate with small teeth, rarely entire, green, glabrous on both sides, midrib slightly grooved above, elevated beneath, lateral veins 15-25 on each side, slightly elevated on both sides; petiole 10-30 mm. long. Flowers greenish-yellow, solitary, axillary to leaf, dioecious, staminate flowers about 15 mm. in diameter, peduncle 5 mm. long, slightly angulate, often with 3 or 4 bracteoles remotely inserted from the base to the tip, sepals 3 or 4, triangular-ovate, subequal, 3-4 mm. long, greenish-yellow, petals 9-12, broad ovate, or oblong-ovate, 8-12 mm. long, 7-10 mm. broad, the inner the smaller, yellow, often ciliate; androecium globose, 7 mm. long, 6 mm. in diameter, stamens numerous, about 1.5 mm. long, anthers 2-celled, cells separated far apart by the broad subrectangular connective, filaments very short; pistillate flowers about 2 cm. in diameter, peduncle 8-20 mm. long, sepals and petals larger than those of the staminate flowers, gynoecium subglobose, rarely ovoid, 9 mm. long, 7 mm. in diameter, carpels numerous, ovary oblong, angulate, ventral side with 2 pointed narrow-lamellate appendages near the base, stigma sessile, large and peltate, ovule 1. Fruit globose, red, about 2.5 cm. in diameter.

MOUNT OMEI: Ta-o-ssu, alt. 1000 m., W.P. Fang, No. 13743, September 14, 1941; Hung-chung-ping "Shuei-ching-wan," alt. 1200 m., in thickets, vine, flowers in buds, C.L. Sun, No. 2079, May 19, 1940; same locality, "Pao-chang-feng", alt. 1250 m., in woods, vine, flower red, young fruit grey-reddish, occasionally, T.C. Lee, No. 3160, August 2, 1940; Tien-chih-feng, alt. 1400 m., shrub 3 m. high, fruit red, globose, W.P. Fang, No. 18026, November 1941; Pao-ko, alt. 1200 m., in woods, vine, flowers in buds, T. C. Lee, No. 3004, July 25, 1940; Ta-ping, alt. 1400 m., woody vine, flower in buds, W.P. Fang, No. 17039, June 23, 1941; Lien-hua-shih, alt. 1900 m., woody vine, flower creamy-yellow, W.P. Fang, No. 16949, June 13, 1941; without precise locality, C.W. Yao, Nos. 3608 & 3888, in 1939.

This species is distinguished by its peltate stigma. The only other species with a peltate stigma is *K. discigera* Finet et Gagnepain which differs from this species in having larger flowers, ovary with triangular appendages and peduncles without bracteoles. The Omei plant agrees well with the type, except for the shorter peduncles (1-8 cm. in type). The type locality of this species is in Kuling of Lu-shan, Kiangsi. It also occurs in Hunan and Yunnan. For the first time this species is recorded from Mount Omei, C.Y. Ch'eng.

- Fig. 1. a flowering branch (natural size);  
 2. an androecium (5 times enlarged);  
 3. a dissection of androecium (5 times enlarged);  
 4. a stamen (magnified 10 times);  
 5. a gynoecium (magnified 5 times);  
 6. a carpel (10 times magnified).

# 圖版七十四 盾頭南五味子

## 木蘭科

### 五味子亞科

木質藤本；本年幼枝淡綠色，或棕綠色，上具皮孔，一年以上者紫棕色，皮孔甚多；芽小，卵形，芽鱗三角卵形，窄近於圓形，宿存。葉互生，半革質，長方形，長方倒披針形或長方橢圓形，長七至十二公分，闊三十五至五十五公厘，先端短尖尾狀，基部楔形或闊楔形，窄為近於圓形，葉緣稀疏淺齒裂，窄為全緣，兩面綠色，無毛，中脈在葉面成淺溝狀，在葉背突起，側脈十五至二十五對，在兩面均略凸；葉柄長十至三十公厘。花黃綠色，單生於葉腋，大小蕊花異株；小蕊花直徑約十五公厘，花梗長五公厘，略成方形，常具有距離疏遠之小苞片三至四枚；萼片三至四枚，三角卵形，不等大，長三至四公厘，黃綠色；花瓣九至十二枚，闊卵形或長方卵形，長八至十二公厘，闊七至十公厘，愈在內者愈小，黃色，週緣常有纖毛；雄器圓球形，長七公厘，直徑六公厘，小蕊多數，長約一公厘半，花藥二室，中有寬闊長方形藥隔，花絲極短；大蕊花直徑約二公分，花梗長八至二十公厘，萼片及花瓣與小蕊花者相似，但較大，雌器近於圓球形，窄為卵形，長九公厘，直徑七公厘，心皮多數，子房長方形，腹面之基部有尖窄旗狀附屬物二枚，柱頭生於子房上，形大成盾狀，綠白色，胚珠一枚。果實圓球形，直徑約三公分，長如之，小漿果紅色，柱頭宿存。

產峨眉山大峨寺，洪椿坪，大坪及蓮花石等處，自海就一千公尺至一千九百公尺間均產之，但不甚普遍。七月開花，八九月間果實成熟，紅色圓球狀，甚為美觀。

本種特性端在其盾形柱頭，其親緣最近之種，常為盤頭南五味子 *Kadsura discigera* 但後者子房腹面之附屬物為三角形，且其花梗上無小苞片。峨眉所採之標本與原種之記載甚為符合，僅花梗較短，因原記載中花梗可達八公分長也(長一至八公分)。本種之原產地在江西牯嶺，嗣後在滇鄂均曾發現，在峨眉此尚為首次見到也。

圖解； 1. 着花之枝(原大)； 2. 雄器(放大五倍)； 3. 雄器之縱裂面(放大五倍)； 4. 小蕊(放大十倍)； 5. 雌器(放大五倍)； 6. 心皮(放大十倍)。

Fig. 1. A flower branch (natural size).  
2. An androecium (5 times enlarged).  
3. A dissection of androecium (5 times enlarged).  
4. A stamen (magnified 10 times).  
5. A gynoecium (magnified 5 times).  
6. A carpel (10 times magnified).





74. *KADSURA PELTIGERA* Rehder et Wilson

## Plate 75.

**CARRIEREA CALYCINA** Franchet.

## Flacourtiaceae.

**Carrieria calycina**, Franchet in Rev. Hort. (1895), 497, fig. 170.—Diels in Engler, Bot. Jahrb. XXIX (1900), 478.—Bean in Kew Bull. Misc. Inform. XXII (1909), 353.—Wilson in Sargent, Pl. Wilson. I (1913), 284.

Small tree usually 12 to 16 metres high; bark grey or brownish grey, fissured; branchlets slender, wide-spreading usually forming a flat crown, purplish or greenish grey, glabrous, with conspicuous leaf-scars and with numerous ovate lenticels; winter-buds conical, with 3 pairs of small obtuse scales pubescent on the outer surface. Leaves coriaceous, deciduous, alternate, oblong-ovate or oblong-obovate, 9-14 cm. long, 4.5-6 cm. broad, acuminate on the apex, rounded or broadly cuneate at the base, remotely serrate with appressed teeth on the margin, the apex of the teeth being glandular-tipped, upper surface deep green, glabrous, lower surface pale green, glabrous except puberulous on the nerves, midrib just showing above, prominent below, one pair of lateral nerves from the base of leaf and 4 or 5 pairs at each side from the midrib; petioles 3-7 cm. long, slightly grooved above, rounded below, puberulous while young, then glabrescent when matured. Flowers white, polygamous, in pubescent panicles 5 cm. long; bracts 2, opposite, ovate; sepals 5, rarely 4, ovate, 15-18 mm. long, 10-12 mm. broad; stamens numerous, anthers 2-celled, filaments glabrous, ovary ellipsoid, superior, pubescent, with radiating styles. Fruit a yellowish-pubescent woody capsule 4-5 cm. long, 1-1.5 cm. broad, on a stout pedicel 2-3 cm. long; seeds encircled by a membranous wing.

**MOUNT OMEI:** at roadside from Hung-chun-ping to Chiu-lao-tung, alt. 1300 m., small tree 8-9 metres high, leaves green above, pale green below, fruits grey, *T.C. Lee*, No. 3753, October 8, 1940; Hou-tze-po, alt. 1300 m., small tree 10 metres high, young branchlets of the present year reddish, flowers in buds, *W.P. Fang*, No. 14342, May 10, 1940; same locality, in woods, small tree 8 metres high, bark light green, colloquially known as "Shan-ting-mo 山丁木," *C.L. Sun*, No. 2020, May 19, 1940; Hsi-hsin-so, alt. 1620 m., small tree 16 metres high, leaves green above, light green below, fruits green, usually whitish pubescent, *C.L. Chow*, No. 6428, July 28, 1942; west of Mount Omei, Opien-hsien, *W.C. Cheng*, Nos. 6606 & 6821, July 1936.

This species is a very handsome tree and has been found very commonly on the lower part of Mount Omei. It usually attains its best growth along the edge of a forest. .... W.P. Fang.

- Fig. 1. a flowering branch (natural size);  
 2. a fruiting branch (natural size);  
 3. a staminate flower (3 times enlarged);  
 4. a perfect flower (3 times enlarged).



# 圖版七十五

## 嘉麗樹 (俗名：山丁木)

### 椅 科

小喬木，通常高十二至十六公尺；樹皮灰色或灰棕色，上有裂紋；幼枝纖細，四向放射成一扁圓樹冠，紫灰色或綠灰色，無毛，上具顯明葉痕及許多卵形皮孔；冬芽圓錐形，外被小鈍形外側被毛之芽鱗三對。葉革質，冬季落葉，互生，長方卵形或長方倒卵形，長九至十四公分，闊四十五至六十公厘，先端尖尾形，基部圓形或闊楔形，邊緣具稀疏小齒，齒尖具腺體，葉面深綠，無毛，葉背淡綠，脈上被細毛，中脈在葉面微現，在葉背突起，側脈一對基生，四至五對旁生；葉柄長三至七公分，上面淺溝狀，下面圓形，幼時被細毛，長成則脫落。花白色，雜性，成圓錐花序，花序被毛，長五公分，苞片二枚，對生，卵形；萼片五枚，罕為四枚，卵形，長十五至十八公厘，闊十至十二公厘；小蕊多數，花藥二室，花絲光滑無毛；子房上位，橢圓形，被毛，花柱成放射狀排列。果為木質蒴果，被淡黃色毛，長四至五公分，闊十至十五公厘，果梗粗壯，長二至三公分；種子週圍繞以膜質之翅。

本種盛產峨眉山洪椿坪，猴子坡及息心所一帶，海拔一千三百至一千六百公尺間，五六月間開花，十月果成熟，樹形美觀，以森林邊畔為最優良適宜之生長地。

圖解：1. 着花之枝(原大)；2. 着果之枝(原大)；3. 小蕊花(放大三倍)；4. 兩性花(放大三倍)。

Fig. 1. A flowering branch (natural size).  
 Fig. 2. A fruiting branch (natural size).  
 Fig. 3. A staminate flower (3 times enlarged).  
 Fig. 4. A pistillate flower (3 times enlarged).



75. *CARRIEREA CALYCINA* Franchet



## Plate 76.

**ITOA ORIENTALIS** Hemsley.

## Flacourtiaceae.

**Itoa orientalis** Hemsley in Hooker Icon. Pl. XXVII (1901), t. 2688.—Wilson in Sargent, Pl. Wilson. I (1913), 286.

Small tree usually about 8 metres high; bark grey or light grey, smooth; branchlets slender, light grey, with conspicuous lenticels, those of the current year sparsely pubescent, those of more than one year old glabrescent. Leaves alternate, coriaceous, oblong, oblong-ovate or oblong-obovate, 13-40 cm long, 3.5-15 cm. broad, acuminate or shortly acuminate on the apex, rounded or subrotund at the base, remotely serrate with appressed teeth on the margin, deep green and glabrous above, except puberulous on the nerves, pubescent below, midrib slightly impressed above, prominent below, lateral nerves 15-26 on each side, just showing above, slightly prominent below; petioles 1.5-4.5 cm. long, flattened or slightly grooved above, rounded below, pubescent. Flowers polygamous, apetalous, in a pubescent panicle 4 cm. long, terminal on a leafy branchlet; buds globose, 1.5-2 cm. in diameter; the perfect flower usually terminal on the inflorescence and the staminate flowers below the perfect ones; sepals usually 4 rarely 5, triangular-ovate, 1.5-2 cm. long, 1 cm. broad, 2-3 mm. thick, convex; stamens numerous, anthers yellow, ellipsoid, 2-celled, filaments slender, glabrous; ovary superior, globose, with a short style, usually absent from the staminate flowers. Fruit a pubescent, woody, obellipsoid capsule, 7 cm. long, 4 cm. in diameter; seeds numerous, flat, surrounded by a membranous wing.

MOUNT OMEI: Lung-men-tung, alt. 546 m, along roadside small tree 6-7 metres high, *T.C. Lee*, No. 4574, October 27, 1940; same locality, small tree 8 metres high, *W.P. Fang*, No. 15608, December 2, 1940; same locality, *C.L. Chow*, Nos. 4972 & 4977, November 6, 1941; same locality, small tree 7 metres high, flowers green, *C.L. Chow*, No. 5994, May 15, 1942.

This species is a very beautiful tree and is very rare at the base of Mount Omei.....*W.P. Fang*.

- Fig. 1. a fruiting branch ( $\frac{1}{2}$  of natural size);  
 2. an inflorescence (natural size);  
 3. a flower (2 times enlarged);  
 4. a fruit (natural size);  
 5. a seed (natural size);  
 6. a cross section of seed (natural size);  
 7. a portion of the leaf to show the hairs on the under surface (10 times enlarged).

# 圖版七十六

## 伊 桐

### 椅 科

小喬木，通常高約八公尺；樹皮灰色或淺灰色，光滑，幼枝纖細，淡灰色，皮孔明顯，本年生者被毛疏少，一年以上者近於無毛。葉互生，革質，長方形，長方卵形或長方倒卵形，長十三至四十公分，闊三十五至一百五十公厘，先端尖尾狀或短尖尾狀，基部圓形或近似圓形，葉緣具稀疏細齒，葉面深綠，光滑僅脈上被小毛，葉背被毛，中脈在葉面稍凹，在葉背突起，側脈每側十五至廿六，在葉面平坦，在葉背稍凸；葉柄長十五至四十五公厘，上面扁平或成淺溝狀，下面圓形，被毛。花雜性，無瓣，成被毛圓錐花序，長四公分，頂生於帶葉幼枝之上；花芽圓球形，直徑十五至廿公厘，花序頂端常生一完全花，其下則率為小蕊花；萼片通常四枚，罕為五枚，三角卵形，長十五至二十公厘，闊十公厘，厚二至三公厘，內彎；小蕊多數，花藥黃色，橢圓形，二室，花絲纖細，無毛；子房上位，圓球形，花柱短。果為木質被毛倒橢圓形蒴果，長七公分，直徑四公分；種子多數，扁形，週圍有膜質翅形附屬物。

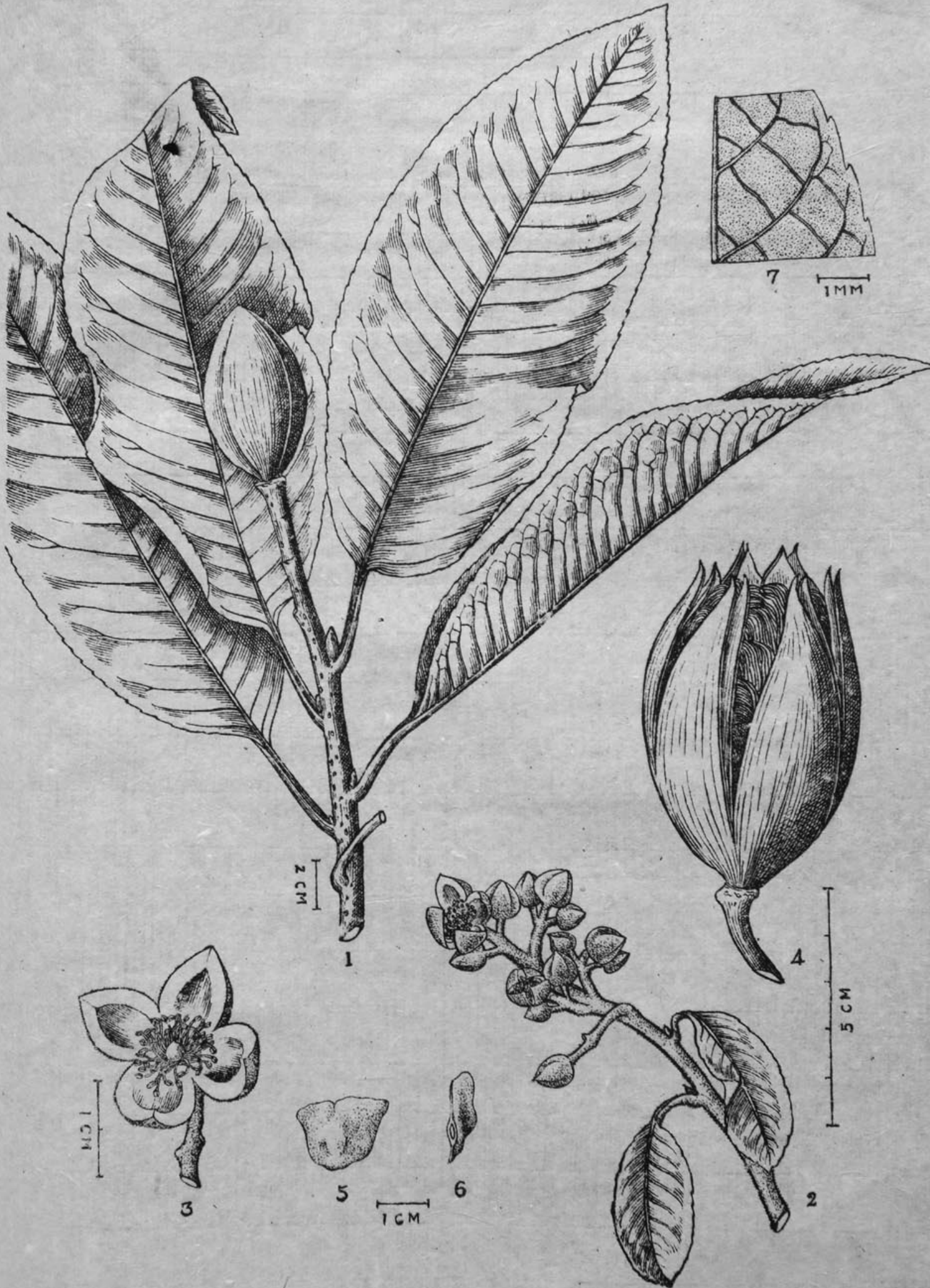
產峨眉山龍門洞一帶，海拔五六百公尺間，五月開花，十月初果始成熟。

本種係一美觀小喬木，威爾遜氏稱此樹在峨眉山山麓頗多，但今已稀少。

圖解：1. 着果之枝（縮小二分之一）； 2. 花序（原大）； 3. 花（放大二倍）； 4. 果實（原大）； 5. 種子（原大）； 6. 種子橫切面（原大）； 7. 葉背之一部示被毛情形（放大十倍）。

Fig. 1. A fruiting branch (1/2 natural size);  
 2. An inflorescence (natural size);  
 3. A flower (2 times enlarged);  
 4. A fruit (natural size);  
 5. A seed (natural size);  
 6. A cross section of seed (natural size);  
 7. A portion of the leaf to show the hairs on the under surface (10 times enlarged).





76. *ITOA ORIENTALIS* Hemsley

## Plate 77.

**IDESIA POLYCARPA** Maximowicz.

## Flacourtiaceae.

**Idesia polycarpa** Maximowicz in Bull. Acad. Sci. St.-Petersbourg, ser. 3, X (1866), 485; in Mel. Biol. VI (1866), 19.—Carriere in Rev. Hort. (1872), 174, fig. 19 & 20.—Ito, Fig. Descr. Pl. Koishik. Bot. Gard. II (1883), t. 11A & 11B.—Lavalley in Icon. Arb. Segrez. (1885), 41, t. 13.—Hooker f. in Bot. Mag. CXI (1885), t. 6794.—Shirasawa, Icon. Ess. For. Jap. I (1900), t. 76.—Diels in Engler, Bot. Jahrb. XXIX (1900), 478.—Wilson in Sargent, Pl. Wilson. I (1913), 284.—Rehder, Manual Cult. Trees & Shrubs (1927), 640.—Handel-Mazzetti, Symbolae Sinicae, VII (1931), 383.

Tree usually 8 rarely up to 15 metres high; bark grey or brownish grey, smooth; branchlets slender, widely spreading, forming a broad rounded crown, those of the current year purplish green, sparsely yellowish pubescent, those more than one year old, brown or yellowish brown, with conspicuous lenticels and conspicuous leaf-scars; winter-buds glabrous, with several acute scales. Leaves alternate, coriaceous, caducous, ovate or rarely oblong-ovate, 13-16 rarely to 20 cm. long, 12-15 cm. broad, acute or shortly acuminate on the apex, cordate or subcordate at the base, remotely crenate-serrate on the margin, deep green and glabrous above, glaucous beneath and with pubescence on the nerves as well as with tufted hairs in the axils; petioles 6-12 cm. long, cylindrical, glabrous, with two purple glands at the apex. Flowers greenish yellow, fragrant, polygamous or dioecious, apetalous, in pendulous yellowish-pubescent terminal panicles 20-25 cm. long; staminate flowers 12 mm. in diameter, sepals 4-6 usually 5, imbricate, ovate-oblong, 6 mm. long, 3 mm. broad, greenish yellow, pubescent, stamens numerous, filaments filiform, pubescent, anthers elliptical, ovary rudimentary; pistillate flowers 8 mm. in diameter, sepals 4-6, ovate, 5 mm. long, densely greenish-yellow pubescent on the outer surface, less pubescent on the inner surfaces, staminodes present or absent, ovary superior, subglobose, glabrous, styles 5, spreading, stigma obovate; pedicels 5-10 mm. long, pubescent. Fruit a red, globose, berry 6-8 mm. in diameter, on slender pedicel 10-12 mm. long.

MOUNT OMEI: Ching-yin-ko, alt. 900 m., small tree 5-6 metres high, bark blackish purple, leaves green above, light green below, smooth, young fruits green, common, *C.L. Sun*, No. 2314, June 13, 1940; near and above Ching-yin-ko, alt. 1000 m., small tree 6 metres high, leaves green above, grey below, *T.C. Lee*, No. 3013, July 25, 1940; Feng-hsiang-ai, alt. 1200 m., small tree, leaves glaucous beneath, *W.P. Fang*, No. 15022, October 11, 1940; wan-nien-ssu, alt. 1041 m., tree 12 metres high, *W.P. Fang*, No. 18834, May 26, 1942; Ta-ping, alt. 1400 m., small tree 8 metres high, leaves glaucous beneath, *W.P. Fang*, No. 15234, November 8, 1940; Hsi-hsin-so, alt. 1600 m., small tree 7 metres high, *W.P. Fang*, No. 14801, May 20, 1940; Second Mount Omei, small tree 4-5 metres high, leaves green above, greenish white below, fruit light green, rare, *T.C. Lee*, No. 4749, August 30, 1940; west of Mount Omei, Opian-hsien, *W.C. Cheng*, No. 5967, June 15, 1936; without precise locality, *C.W. Yao*, No. 3674, in 1939.

This species is of a very pretty tree with very showy red fruits. It could be cultivated effectively in the parks and along high-ways.....W.P. Fang.

- Fig. 2. an inflorescence (natural size);  
 3. a pistillate flower (5 times enlarged).  
 4. a staminate flower 5 times enlarged;  
 5. a stamen (10 times enlarged);

**IDESIA POLYCARPA** Maximowicz, var. **VESTITA** Diels in Engler, Bot. Jahrb. XXIX (1900), 478.—Wilson in Sargent, pl. Wilson. I (1913), 285.—Handel-Mazzetti, Symbolae Sinicae, VII (1931), 383.

MOUNT OMEI: Taping, alt. 1400 m., small tree 10 metres high, flowers brownish green, *W.P. Fang*, No. 16665, May 20, 1941; Kuan-hsin-po, alt. 1400 m., in woods, small tree 10 metres high, flowers reddish, *C.L. Sun*, No. 2249, May 31, 1940; west of Mount Omei, Opian-hsien, Yen-ching-ki, *W.C. Cheng*, No. 6494, in 1936, Opian-hsien, Shaping, in forests, tree 12-15 metres high, lower surface of leaves greyish tomentose, young fruits green, rare, *C.L. Sun*, No. 696, July 16, 1939; without precise locality, *T.H. Tu*, No. 77, in 1935; without precise locality, *C.W. Yao*, No. 74, in 1939; without precise locality, *W.C. Cheng*, No. 6600, October 1936.

This variety differs from the type species in having leaves that are densely pubescent on the lower surface. On Mount Omei it occurs usually at a higher altitude than the type species.....W.P. Fang.

- Fig. 1. a fruiting branch (natural size);



## 圖版七十七

## 椅 樹 (俗名：椅桐或水冬瓜)

## 椅 科

喬木高八公尺，罕達十五公尺；樹皮灰色或棕灰色，光滑；幼枝纖細，向外平伸，形成闊圓樹冠，本  
 年生者紫綠色，被稀疏淡黃色毛，一年以上者棕色或黃棕色，上有顯明之皮孔及葉痕；冬芽光滑無毛，被  
 有數張銳形鱗片。葉互生，革質，早落，卵形，罕為長方卵形，長十三至十六公分，罕達廿公分，闊十  
 二至十五公分，先端銳形或短尖尾形，基部心形或近似心形，葉緣細齒裂，葉面深綠，光滑無毛，葉背被  
 白粉，脈上被毛，主脈上有叢毛；葉柄長六至十二公分，圓柱形，光滑無毛，頂端有紫色腺體一對。花  
 黃綠色，芳香，雜性或大小蕊花異株，花無瓣，成頂生下垂黃綠色被毛圓錐花序；小蕊花直徑十二公厘，  
 萼片四至六枚，以六枚為常見，覆瓦排列，長方卵形，長六公厘，闊三公厘，黃綠色，被毛；小蕊多數，  
 花絲綫形，被毛，花藥橢圓形，子房退化僅餘殘跡；大蕊花直徑八公厘，萼片四至六，卵形，長五公厘，  
 外側被密厚黃綠色毛，內側被毛較疏，退化小蕊有無不定，子房上位，近於圓球形，光滑無毛，花柱五  
 枚，向外平伸，柱頭倒卵圓形；小花梗長五至十公厘，被毛。果實為紅色球形漿果，直徑六至八公分，  
 果梗纖細，長十至十二公厘。

產峨眉山清音閣及其附近之大坪及萬年寺等處，此外二峨山及西南行之峨邊均盛產之，五月開花。

本種樹容美麗，其猩紅色果實尤為悅目，頗合於園庭及公路兩側之栽培。

圖解：2. 花序（原大）；3. 大蕊花（放大五倍）；4. 小蕊花（放大五倍）；5. 小蕊（放大十  
 倍）。

## 毛 葉 椅 樹 (變種)

本變種與原種之別在其葉背被濃密之毛，產於本山大坪，觀心坡等處，在海拔一千四百公尺左右，通  
 常較原種之產地略高，峨邊之鹽井溪，沙坪亦嘗見之。

圖解：1. 着果之枝（原大）。



77. *IDESIA POLYCARPA* Maximowicz



## Plate 78.

**ZANTHOXYLUM ALATUM** Roxburgh, var. **PLANISPINUM** Rehder et  
Wilson, form **FERRUGINEUM** Rehder et Wilson.

Rutaceae.

**Zanthoxylum alatum** Roxburgh, var. **planispinum** Rehder et Wilson, f. **ferrugineum**,  
Rehder et Wilson in Sargent, Pl. Wilson, II (1914), 125.

Shrub 3-5 metres high; bark greyish-brown, strongly prickly, prickles needle-like, dilated into rounded or elliptical corky base; young branchlets of the current year green and tinged purple or reddish-purple, white puberulent, those more than one year old deep purple or purplish-brown, covered by very short ferruginous hairs, spines few and slender or rudimentary on young branchlets. Leaves alternate, 3-5-7 foliolate, leaflets subcoriaceous, opposite, shortly stalked or sessile, lanceolate or oblong-lanceolate, less frequently ovate, 6-10 cm. long, 25-28 mm. broad, acute or acuminate at apex, cuneate or rounded at base, margin remotely and faintly glandular-serrate, dull green above, light green and punctate beneath, midrib depressed above, prominent and more or less puberulous beneath, primary veins 12-18 at each side almost perpendicular to midrib, depressed above, and slightly prominent beneath; petiole broadly winged, 3-5 cm. long, usually ferruginous-puberulous; petiolules very short 1-3 mm. long. Flowers unisexual, in axillary cymose-panicles, ferruginous-puberulous, staminate panicles 2-3 cm. long, 15-20 mm. broad, peduncle short, 5-8 mm. long, with a pair of small greenish bracts at the base, pedicels about 3 mm. long, subtended by a small greenish bracteole at the base, staminate flowers greenish-yellow, perianth simple, 6-8 cleft, lobes triangular-lanceolate, about 1 mm. long, stamens 6-8, exserted, extramarginal to disc, anthers greenish-yellow, 2-celled, longitudinally dehiscent, filaments 2 mm. long, disc large, rounded, thick and fleshy, greenish, rudimentary ovary very small; pistillate panicles 15 mm. long, whitish, puberulous, flowers green, very small, hardly reaching to 1 mm. long, pedicels short, subtended by a small greenish bract at the base, perianth 6-lobed, greenish, lobes triangular-lanceolate, densely punctate, disc thick fleshy, circular, ovary subglobose, densely punctate, style very short, stigma small, capitate. Fruits in panicle 4-5 cm. long, capsules globose, with small slender beak, pericarp densely glandulous, reddish-brown, pedicels about 3 mm. long; seeds subglobose, lustrous black.

MOUNT OMEI: Omei-hsien, alt. 475 m., at roadside, shrub 3 m. high, flower greenish, small, occasionally, *W.P. Fang*, No. 13877, March 4, 1940; Pao-ning-ssu, alt. 500 m., shrub 3 m. high, flower small, greenish, *W.P. Fang*, No. 13975, April 3, 1940; same locality, in thickets, spiny shrub 3 m. high, fruits green, globose, *W.P. Fang*, No. 14545, June 15, 1940; Wan-hsing-chuang, alt. 500 m., *H.C. Chow*, No. 8049, September 24, 1938; Hung-tsu-shan, alt. 600 m., *W.P. Fang*, No. 17462, August 1, 1941; Fu-hu-ssu, alt. 650 m., shrub, flower yellow, small, in panicles, *W.P. Fang*, No. 13931, March 23, 1940; same locality, shrub 3 m. high, flower yellowish, *W.P. Fang*, No. 14105, April 14, 1940; same locality, *T.C. Lee*, No. 3329, August 15, 1940; same locality, in thickets, shrub, fruit subglobose, *W.P. Fang*, No. 14425, May 29, 1940; same locality, in thickets, shrub 1½ m. high, young fruits greenish, *W.P. Fang*, No. 14838, July 2, 1940; same locality, at the margin of thickets, scandent shrub, about 5 m. high, young shoots and inflorescence ferruginous-pubescent, pistillate flowers green, *W.P. Fang*, No. 18307, April 1, 1942; Ta-o-ssu, alt. 1000 m., *W.P. Fang*, No. 15871, March 11, 1941; Hung-chun-ping, alt. 1200 m., side of shady ravine, shrub 2½ m. high, flower yellow, *S.S. Chien*, No. 5565, May 6, 1936; same locality, on slope, shrub 2-4 m. high, fruits greenish, occasionally, *T.C. Lee*, No. 2751, July 8, 1940; same locality, scandent shrub 5 m. high, staminate flowers greenish-yellow, *W.P. Fang*, No. 18286, April 1, 1942; near Chiu-lao-tung, Ti-tu-ai, alt. 1700 m., scandent shrub, rhachis and midrib of leaf pubescent, young fruit greenish, *W.P. Fang*, No. 16833, June 4, 1941; without precise locality, *C.W. Yao*, No. 3718, in 1939, west of Mt. Omei, Opien-hsien, alt. 1500 m., in forests, shrub, *W.C. Cheng*, No. 6109, July 3, 1936.

This form differs from the type species, *Z. alatum* Roxburgh, as assured by Rehder and Wilson (l.c.) in having 3-5 foliolate leaves, and from the typical *Z. alatum* var. *planispinum* R. et W. in having branchlets, petioles and rhachis of the inflorescence covered by short ferruginous hairs. A study of the Omei plant shows that the number of the leaflets is of great variation. Some plants bear mainly 5-7 foliolate leaves, yet occasionally 3-foliate ones are found, and *vice versa*. Hence the writer considers that the distinction of the var. *planispinum* is quite questionable. The pubescence also varies to some extent, but at least the pubescence on the rhachis of the inflorescence is constant. The young shoots are either

# 圖版七十八

## 翅葉花椒 別名：野花椒

### 芸香科

densely pubescent or glabrescent; the petiole often glabrous on adult leaves and the midrib of the leaf occasionally found densely pubescent beneath. The size of leaflets reaches a maximum of 20 cm. in length and 5 cm. in width while the smallest ones are only 6 cm. long and 3 cm. broad; the average ones about 10 cm. long and 4 cm. broad. On Mount Omei this is a common shrub of this genus. It grows well at the altitude of 470-1800 metres above sea-level. The colloquial name of this shrub is "Yeh-hua-chiao" and it is sometimes cultivated under special treatment by the natives for its fruits which are used as a condiment. Its wood is excellent for tooth-pick making.

The distribution of the type species is limited only from India eastwards to Sikang, Yunnan and Kweichow, but its variety *planispinum* is widely distributed in the provinces along the Yangtze River. This form has so far been reported only from Mount Omei and other districts of Western Szechuan. C.Y. Ch'eng.

- Fig. 1. a flowering branch of staminate flowers (natural size);  
 2. a flowering branch of pistillate flowers (natural size);  
 3. a staminate flower (magnified 20 times);  
 4. a pistillate flower (magnified 20 times);  
 5. a fruiting inflorescence (natural size).

灌木，高三至五公尺；樹皮灰棕色，上具大型針狀之硬刺，其基部擴大成圓形，本年生幼枝綠色，常帶有紫色或紅紫色渲染，被微細白毛，一年以上者深紫色或紫棕色，被極短之銹色毛，無刺或具細弱小刺。葉互生，小葉片三枚、五枚或七枚，半革質，對生，具短柄或無柄，披針形或長方披針形，間或成卵形，長六至十公厘，闊廿五至廿八公厘，先端銳形或尖尾狀，基部楔形或圓形，葉緣具稀疏帶腺體之淺鋸齒，葉面暗綠，葉背淡綠并有油點，中脈在葉面下凹，在葉背稍凸；葉柄常具闊翅，長三至五公分，常被銹色毛，小葉柄極短，長一至三公厘。花單性，成腋生三出圓錐花序，被銹色短毛；小蕊花序長二至三公分，闊十五至二十公厘，花梗甚短，長僅五至八公分，基部具細小淡綠苞片一對，小花梗長約三公厘，具淡綠色小苞片一對；小蕊花黃綠色，花被一重，六至八裂，裂片三角披針形，長約一公厘，小蕊六至八本，伸出花被之外，着生花盤之外緣，花藥黃綠色，二室，縱裂，花絲長二公厘，花盤肥大，圓形，肉質，淡綠色，子房殘跡甚小；大蕊花序長十五公厘，被微細白毛，大蕊花綠色，極小，長幾不及一公厘，小花梗亦短，基部具細小綠色苞片一枚，花被六裂，淡綠色，裂片三角披針形，被濃密油點，花盤肥厚，成圓環形，子房近於圓球形，具油點甚密，花柱極短，柱頭小，頭狀。圓錐果序長四至五公分，蒴果球形，尖頂，外皮被濃密油點，紅棕色，小柄長約三公分；種子近於圓球形，亮黑色。

產峨眉山，山麓至半山，由峨眉縣經大峨寺、洪椿坪至九老洞附近，海拔四百五十至一千七百公尺處，均生長旺盛，峨眉向西，峨邊亦產之，三月下旬至五月均為花期，果實九月成熟。

本種以葉柄及葉軸具闊翅甚易識別，峨山產者係短葉變種之一型，與原種不同之處在於每葉僅具三至五小葉片，原種則為五至七枚，與原變種之不同在於其幼枝，葉柄及花軸被有銹色短毛。經詳細檢查峨山所生此樹，見三葉片、五葉片及七葉片之葉，幾每樹皆具，故短葉變種 *Var. Planispinum* 以作者意度實與原種相同。又此樹被毛情形亦多變異，但花軸被毛之特性則固定不移。又葉片之大小亦因樹而異，通常為長約十公分，闊約四公分，但最大時可大至長廿公分，寬五公分，而最小時則長僅六公分，闊僅三公分，在峨山本種為常見之花椒樹，居民稱之野花椒，常移植為食用花椒。又其木為製牙籤之良好原料。

圖解：1. 小蕊花枝（原大）；2. 大蕊花枝（原大）；3. 小蕊花（放大二十倍）；4. 大蕊花（放大二十倍）；蒴果實生於果序之情形（原大）。





78. *Zanthoxylum alatum* var. *planispinum* f. *ferrugineum* Rehder & Wilson.

**ZANTHOXYLUM DISSITUM** Hemsley.

Rutaceae.

**Zanthoxylum dissitum**, Hemsley in Journ. Linn. Soc. XXIII (1886) 106.—Rehder et Wilson in Sargent, Pl. Wilson. II (1914), 128.

*Fagara dissita*, Engler in Engler & Prantl. Nat. Pflanzenfam. III. Abt. IV (1896) 118.

—Pritzl in Engler Bot. Jahrb. XXIX (1900) 422.—Pampanini in Nuov. Giorn. Bot. Ital. n. ser. XVIII (1911) 125. —Handel-Mazzetti, Symb. Sin. VII. (1933), 625.

Shrub scandent, bark greyish-brown, young branchlets of the current year green, subterete, 5 mm. in diameter with feeble yellowish spines, those of the current year provided with brownish or purplish-brown straight and pointed prickles spreading horizontally or slightly downwards; those of more than one year old deep green or reddish-brown, with brownish or reddish-brown stout and straight or somewhat hooked arms. Leaves eve green, alternate, pinnate-compound, 40-50 cm. long, rhachis terete, covered by hooked prickles with vertically dilated base; leaflets 7-9, coriaceous, subopposite or alternate, distantly installed, 4-6 cm. apart, oblanceolate, oblong-oblanceolate or oblong-ovate, 11-14 cm long, 4-6 cm. rarely 3.5-6.5 cm. broad, deep green above, light green and punctate beneath, acuminate or long-acuminate, rarely acute at apex, cuneate at base, margin entire, slightly undulate, midrib depressed and smooth above, prominent often with 3-5 hooked prickles beneath; primary veins subopposite, prominent beneath, tertiary veins reticulate; petiole prickly; petiolule short, 3-4 mm. long, grooved above. Flowers dioecious, staminate flowers in terminal and lateral cymes, usually 5-flowered, sepals 4, greenish, imbricate, triangular-ovate, 1 mm. long, 1 mm. broad; petals 4, greenish-white, oblong-ovate, or oblong-lanceolate, 5 mm. long, 2 mm. broad, covered by dense oil-dots; stamens 4, long extruded, anthers greenish or greenish-yellow, oblong, 2-celled, dorsifixed, longitudinally dehiscent, filaments 5-7 mm. long, glabrous, slightly dilated near the base, alternate with petals, rudimentary ovary conoid, glabrous, disc annular inconspicuously 4-lobed; pistillate flowers in racemose-cymes, lateral on young branchlets of the last year, 8-10 cm. long, subtended by a small bracteole; sepals 4, greenish, 1 mm. long, 1 mm. broad, petals 4, greenish-white, oblong-ovate, 3 mm. long, 2 mm. broad; carpels 4 connate at the base, ovary ovoid, about 2 mm. long, 1-2 mm. in diameter, style 1 mm. long, stigmas united, capitate. Fruits in densely branching cymes, 8-10 cm. long, 3-5 cm. broad; matured carpels 2-4, rarely 1, yellowish-brown or reddish-brown, subrotund, with short slender beak, 10-12 mm. long, 11-12 mm. in diameter; seeds 1 in each carpel, lustrous-black, oblong-ovoid or elliptical-oblong, 7 mm. long, 5 mm. in diameter.

MOUNT OMEI: Wan-kan, alt. 470 m., shrub, young capsules green, *W.P. Fang*, No. 14553, June 15, 1940; Hsiao-hung-chun-ping, alt. 1200 m., scandent shrub, *W.P. Fang*, No. 15293, November 13, 1940; Hsiao-hsa-ling, alt. 1200 m., spiny vine, staminate flowers purplish-green, 4 stamens long extruded foetid, *W.P. Fang*, No. 15779, February 25, 1941; Pien-tan-ai, alt. 1400 m., scandent shrub about 5 m. high, staminate flowers purplish-green, *W.P. Fang*, No. 18230, March 23, 1942; from Chu-tien to Hsi-hsin-so, along roadside and in forests, vine-like, fruit green, common, *C.L. Sun*, No. 355, May 27, 1939; in front of Chu-tien, in forests, woody vine, fruit a capsule, *W.P. Fang*, No. 16608, May 12, 1941; without precise locality, shrub, side of ravine, *S.S. Chien*, No. 5566, May 5, 1936; without precise locality, in young fruits, *W.C. Cheng*, No. 10198, April 23, 1940.

This distinct species is characterized by its large leaves with 7-9 oblong-lanceolate leaflets distantly installed on a long stout rhachis and by the fact that the branchlets of the last year are usually covered with very dense slender prickles.

It was first discovered by A. Henry in western Hupeh and since then has been reported from Szechuan and Yunnan provinces..... C.Y. Cheng.

- Fig. 1. a flowering branch of staminate flowers (natural size);  
 2. & 3, staminate flowers (20 times enlarged);  
 3. an inflorescence of fruits (natural size).



# 圖版七十九

## 大葉花椒

### 芸香科

藤本灌木，樹皮灰棕色，有皮孔，上具縱直細微縱紋，刺直而尖，棕色或紫棕色；本年生幼枝綠色，近於圓形，直徑約五公厘，上生黃色細刺，一年以上者深綠色或紅棕色，常具密生之棕色或紅棕色粗壯之刺。葉常綠，革質，互生，羽狀複葉，長四十至五十公分，小葉片七至九枚，近於對生或顯明互生，倒披針形，長方披針形或長方卵形，長十一至十四公分，闊四至六公分，罕為三十五至六十五公厘，葉面深綠，葉背淺綠并具油點，先端尖尾形，罕為銳形，基部楔形，全緣微成波紋狀，中脈在葉面下凹，無刺，在葉背凸起，常具三至五枚鈎狀之刺，側脈近於對生，在葉面凸起，小脈網狀；葉柄具刺，小葉柄甚短，長三至四公厘，上面成溝狀。花單性，大小蕊花異株，小蕊花成頂生或腋生聚繖花序，通常每序五花；萼片四枚，淡綠色，覆瓦排列，三角卵形，長一公厘，闊一公厘，花瓣四枚，白綠色，長方卵形或長方披針形，長五公厘，闊二公厘，上有油點甚多；小蕊四本，長而伸出花瓣甚多，花藥淡綠色或黃綠色，長方形，二室，背聯於花絲，縱裂，花絲長五至七公厘，光滑無毛，基部微寬；子房殘跡圓錐形，光滑無毛，花盤環形，微現四裂；大蕊花成總狀聚繖花序，生於上年枝之腋，長八至十公分，闊約五公分，花軸具細刺，被細毛；花淡綠色，小花梗長二至三公厘，下有小苞片，萼片四枚，淡綠色，長一公厘，闊一公厘，花瓣四枚，白綠色，長方卵形，長三公厘，闊二公厘；心皮四枚，基部合生，子房卵形，長約二公厘，直徑一至二公厘，花柱長一公厘，柱頭連合成頭狀。聚繖果序，分枝甚密，長八至十公分，闊三至五公分，成熟心皮二至四，罕僅一枚成熟，果皮革質，黃棕色或紅棕色，近於圓形，先端有細短之喙，喙長十至十二公厘，直徑十一至十二公厘；每心皮內有種子一枚，亮黑色，長方卵形或橢圓長方形，長七公厘，直徑五公厘。

產峨眉山洪椿坪，息心所及初殿一帶，海拔一千二百至一千四百公尺間，二三月開花。

本種藤本甚長。具大葉，每葉有小葉片七至九枚，小葉片間距離甚遠，上年幼枝常被細長密聚之刺，極易辨別。

圖解：1. 小蕊花枝（原大）；2. 及3. 小蕊花（放大廿倍）；4. 果序（原大）。



79. *Zanthoxylum dissitum* Hemsley



**ZANTHOXYLUM STENOPHYLLUM, Hemsley.**

Rutaceae.

**Zanthoxylum stenophyllum**, Hemsley in Ann. Bot. IX (1895), 147.—Rehder et Wilson in Sargent, Pl. Wilson. II. (1914), 127.

*Fagara Stenophyllum*, Engler in Engler et. Prantl, Nat. Pflanzenfam. III, Abt. IV (1896), 118.—Pritzel in Engler, Bot. Jahrb. XXIX (1900), 422.—Handel-Mazzetti, Symb. Sinicae, VII (1933), 625.

Scandent shrub usually 2 metres high, punctate throughout; young branchlets of the current year terete, greenish or purplish-greenish, glaucous or only slightly so, armed with faint slender recurved prickles, those more than one year old terete, purple or purplish-brown, slightly glaucous. Leaves alternate, 12-21 cm. long, imparipinnate, leaflets 7-9, rachis armed with single or rarely paired prickles, flattened above, rounded beneath, leaflets lanceolate, elliptic-lanceolate or occasionally oblong-ovate, 85-95 mm. long, 25-35 mm. broad, acuminate or long acute at apex, cuneate or sub-rotund at base, margin finely glandular-serrate, midrib slightly prominent or just showing above, very prominent beneath, primary veins conspicuous on both sides, tertiary veins reticulate; petiole 45-55 mm. long, armed, swollen at base, flattened above, rounded beneath. Flowers monocious or polygamous, in loose corymbose-cymes, terminal on branchlets, rarely axillary, inflorescence 6 cm. long, 7 cm. broad, peduncles slender, 2-3 cm. long, greenish, pedicels 4-7 mm. long, usually longer in pistillate flower, purplish, bracteoles minute, filiform, usually a pair beneath the cymule; staminate flowers yellowish-greenish, about 3 mm. long, 5-6 mm. in diameter, sepals 4-5, slightly connate at base, oblong or triangular-ovate, under 1 mm. in length, about 1 mm. broad, purplish; petals 4-5, greenish-yellow, lanceolate or ovate-lanceolate, about 3 mm. long, 1½ mm. broad; stamens 4-5, subequal, exserted, filaments 3-5 mm. long, dilated at base, extramarginal to the disc, anthers oblong-ovoid, dorsifixed, rudimentary ovary with 3-branched white styles, disc fleshy, faintly 4-lobed; pistillate flowers greenish, 2 mm. long and 2 mm. in diameter; pedicels 10-13 mm. long, sepals 4, petals 4, both of the same size as those in the staminate flowers, carpels 4, connate at base, green, densely glandular, styles 4, 1½ mm. long, stigma capitate, indistinctly 4-lobed, disc rounded, ovules 2 in each carpel, on a parietal placentation. Mature carpels 2-4, rarely 1, cocci reddish-brown or sooty-brown, subglobose or subovoid, oblique, about 5 mm. long, 4 mm. in diameter, densely punctate, beak slender, curved, about 1 mm. long; seeds elliptic-ovoid, oblique at base, lustrous black.

MOUNT OMEI: Fu-hu-ssu, alt 650 m., spiny shrub, flower greenish with extruded yellow anthers, *W.P. Fang*, No. 13954, March 25, 1940; same locality, spiny shrub, flower greenish-white, *W.P. Fang*, No. 13954, March 25, 1940; same locality, spiny shrub, flower greenish-white, *W.P. Fang*, No. 14103, April 24, 1940; same locality scandent shrub, flower light yellow, *C.L. Sun*, No. 1929, April 24, 1940; Pai-lung-tung, Tai-ping-chiao, alt. 950 m., spiny shrub 3-4 m. high, bark light grey, fruit green, *C.L. Sun*, No. 64, May 4, 1940; Hung-chun-ping, alt 1200 m., spiny shrub, capsules crimson, *W.P. Fang*, No. 14984, October 7, 1940; same locality, shrub, *W.P. Fang*, No. 17706, September 14, 1941; route from Hang-chun-ping to Ta-ping, in woods, shrub 2-3 m. high, fruit green, common, *W.W. Ma*, No. 2322, June 14, 1940; near Niu-hsin-ssu, Shu-kang, alt. 1200 m., scandent, spiny shrub, young fruits greenish, shortly beaked, *W.P. Fang*, No. 16688, May 20, 1941; en route from Hsi-hsin-so to Kan-hsin-po, alt. 450 m., scandent shrub 4 m. high, bark brown, fruit green, *C.L. Sun*, No. 2259, May 31, 1940; Chiu-shih-chiu-tao-kuai, alt. 1500 m., in thickets, vine, flower verdure coloured; *C.L. Sun*, No. 169, May 11, 1939; Pao-chang-feng, alt. 1400 m., scandent shrub, fruit purplish-brown, *W.P. Fang*, No. 15414, November 18, 1940; Hsin-kai-ssu, alt. 1600 m., shrub, young fruit greenish, *W.P. Fang*, No. 15414, November 18, 1940; same locality, shrub, young fruit greenish, *W.P. Fang*, No. 16502, May 8, 1941; Chang-lao-ping, alt. 1600 m., vine, flower greenish-white, *C.L. Sun*, No. 1879, May 7, 1940; same locality vine, fruit greenish or red, occasionally, *T.C. Lee*, No. 3613, October 1, 1940; near Chiu-lao-tung, Cha pong-tzu, alt. 1700 m., shrub 3 m. high, *C.L. Sun*, No. 2195, May 26, 1940; Chiu-lao-tung, alt. 1800 m., shrub 3 m. high, *W.P. Fang*, No. 17106, June 30, 1941; west of Mt. Omei, Opian-hsien, sha-ping, in forests, shrub 3-7 m. high, bark brown, fruit green, *C.L. Sun* No. 558, July 14, 1939.

This species is distinguished from other species by its 7-9 subcoriaceous medium-sized leaflets, terminal inflorescence and small reddish-brown cocci on long slender pedicels in a large loose cyme. It is the commonest *Zanthoxylum* on this mountain, and its occurrence has been reported only from Hupeh, Szechuan and Sikang.....C.Y. Ch'eng.

- Fig. 1. a flowering branch of pistillate flowers (natural size);  
 2. a flowering branch of staminate flowers (natural size);  
 3. front view of the pistillate flower (magnified 20 times);  
 4. back view of the pistillate flower (magnified 20 times);  
 5. a staminate flower (magnified 20 times);  
 6. a portion of the fruiting inflorescences (natural size).

圖版八十

狹葉花椒

芸香科

藤本灌木，通常高二公尺，全體被透明油點；本年生幼枝圓形，綠色或紫綠色，常被白粉，并具細弱略彎之刺，一年以上之枝亦為圓形，色則紫或紫棕，被少量白粉。葉互生，長十二至廿一公分，具七至九枚小葉片，葉軸具單生或成對之刺，刺端扁形，基部圓形，小葉片披針形，橢圓披針形或間有長方卵形者，長八十五至九十五公厘，闊廿五至卅五公厘，先端尖尾狀或長銳形，基部楔形或略成圓形，葉緣細齒狀，齒緣有油點，中脈在葉面略凸或平坦，在葉下則突起極顯，側脈兩面明顯，小脈網狀；葉柄長四十五至五十五公厘，具刺，基部擴大，上面扁平，下面圓形。花單性或雜性，成疏狀聚繖花序；多頂生於小枝之端，罕腋生，花序長六公分，闊七公分，花梗細長，長二至三公公分，淡綠色，小花梗長四至七公厘（在大蕊花時常較長），淡紫色，每小花序之下恆具綫形小苞片一對；小蕊花黃綠色，長約三公厘，直徑五至六公厘，萼片四至五枚，基部略貼合，長方形或三角狀卵形，長度在一公厘以下，闊一公厘，淡紫色；花瓣四至五，黃綠色，披針形或卵狀披針形，長約三公厘，闊約一公厘半；小蕊四至五本，不等長，伸出花瓣之外，生於花盤邊緣，花藥長方卵圓形，背聯，花絲長三至五公厘，基部擴大，子房殘跡上具白色花柱分枝三枚，花盤肉質，極淺四裂；大蕊花淡綠色，長二公厘，直徑如之，小花梗長十至十三公厘，花萼四枚，花瓣四枚，大小與小蕊花者相等，心皮四枚，基部連合，綠色，具濃密腺體，花柱四枚，長一公厘半，柱頭頭狀，微現四裂，花盤圓形，胚珠每心皮內二枚，着生於側膜胎座。成熟心皮二至四枚，罕僅一枚成熟，蒴果紅棕色或褐棕色，近於圓形或近於卵形，長約五公厘，直徑四公厘，被油點甚多，前端具微彎細喙，喙長一公厘，種子橢圓卵形，基部斜生，亮黑色。

產峨眉山山麓至半山之伏虎寺，白龍洞，洪椿坪，蘇崗，息心所，觀心坡，九十九道拐，及九老洞等處，海拔六百五十至一千八百公尺間，均甚習見，三四月開花，小蕊花較大蕊花稍早。

本種別於其他諸種之處為其具有七至九枚之中型半革質小葉片，頂生花序；及紅棕色小蒴果具細長果柄而成一疏鬆聚繖果序。

圖解：1. 着大蕊花之枝（原大）；2. 着小蕊花之枝（原大）；3. 大蕊花之對面觀（放大廿倍）；4. 大蕊花之背面觀（放大廿倍）；5. 小蕊花（放大廿倍）；6. 果序之一部分（原大）。





80. *Zanthoxylum stenophyllum* Hemsley

Plate 81.

**ENKIANTHUS DEFLEXUS** (Griffith) Schneider.

Ericaceae.

**Enkianthus deflexus**, (Griffith) Schneider, III. Handb. Laubholz. II (1911), 521, fig. 340 c-e and 341 i-n. — Rehder et Wilson in Sargent, Pl. Wils. I (1913), 550; III (1917), 445. — Fang in Contrib. Biol. Lab. Sci. Soc. China, Bot. Ser. X (1935), 19.

*Rhodora deflexa* Griffith, Posth. Papers (Itin. Notes). II (1848), 148, 187, No. 969.

*Enkianthus himalaicus* Hooker f. & Thomson in Hooker, Kew Journ. Bot. VII (1835), 125, t. 3.

Shrub 2 to 3 rarely up to 5 metres high; branchlets slender, grey or greenish grey, pubescent while young, then glabrescent. Leaves chartaceous, elliptical or elliptical-oblong, rarely obovate, 3.5 cm. long, 1-2.5 cm. broad, acute or obtuse at the apex, cuneate or broadly cuneate at the base, crenate-serrate on the margin, upper surface deep green and glabrous, lower surface light green, puberulous, usually strigose on the middle rib and sometimes strigose on the primary nerves, primary nerves 5 to 7, inconspicuous above, conspicuous below; petioles slender, 6-8 mm. long. Flowers numerous, in umbel-like racemes, 5-7 cm. long, puberulous while young, then glabrous; sepals 5, greenish, triangular-ovate, acuminate, 2 mm. long, 1 mm. broad, puberulous outside, corolla campanulate, 8 mm. long, 5 mm. in diameter, red or purplish-red with darker veins, 5-lobed near the apex, lobes 5, broadly obtuse; stamens 10, about 3 mm. long, anthers yellow with two awns near the apex; filaments puberulous; ovary superior, glabrous; style 5 mm. long, puberulous at the lower part; stigma capitate; pedicels 2-3 cm. long, slender, pubescent. Fruit a globose capsule, 5 mm. long, 5 mm. in diameter, 5-valved; seeds angled.

MOUNT OMEI: Ta-cheng-ssu, Loh-han-po, alt. 2200 m., shrub 3 metres high, common, *W.W. Ma*, No. 2590, June 23, 1940; above and near Ta-cheng-ssu, Yen-wang-po, alt. 2400 m., shrub 3 metres high, *C. L. Sun*, No. 2232, September 1940; Kung-pei-shan, alt. 2400 m., *T.C. Lee*, No. 3287, August 12, 1940; Pai-yun-ssu, alt. 2556 m., *H.C. Chow*, No. 7910, July 20, 1938; Chieh-yin-tie, alt. 2539 m., shrub 4 metres high, *T.C. Lee*, No. 3499, September 10, 1940; Chin-ting, alt. 3150 m., *W.P. Fang*, No. 17326, July 14, 1941; southwest of Mount Omei, Opie-hsien, *C.L. Sun*, No. 690, July 15, 1939; without precise locality, *T.H. Tu*, No. 291, in 1935; without precise locality, *C.W. Yao*, No. 3880, September 1939.

This species is a very beautiful shrub, commonly growing on Mount Omei at an altitude of 2300 to 2500 metres. From its closely allied but less common species in this region, *Enkianthus chinensis* Franchet, it differs in having a strigose middle rib on the lower surface of the leaves and smaller fruits. Its distribution is from the Himalayas eastward to Sikang, Szechuan and Yunnan.

- Fig. 1. a flowering branch (natural size);  
 2. a flower dissected to show the stamens and pistil (5 times enlarged);  
 3. a capsule (5 times enlarged).

**Enkianthus chinensis**, Franchet in Morot, Journ. de Bot. IX (1895), 371. — Fang in Contrib. Biol. Lab. Sci. Soc. China, Bot. Ser. X (1935), 24.

MOUNT OMEI: Ta-cheng-ssu, alt. 2300 m., shrub 3 metres high, *W.P. Fang*, No. 17148, July 5, 1941. This specimen is the typical one. Its petioles and lower surface of the leaves are subglabrous.

**Enkianthus serrulatus**, (Wilson) Schneider, III. Handb. Laubholz. II (1911), 519, fig. 340 h. — Fang in Contrib. Biol. Lab. Sci. Soc. China, Bot. Ser. X (1935), 17.

*Enkianthus quinqueflorus* Loureiro, var. *serrulatus* Wilson in Gard. Chron. ser. 3, XLI (1907), 344; in Fedde Repert. Spec. Nov. VII (1909), 235.

MOUNT OMEI: Near Chiu-lao-tung, alt. 1876 m., in thickets, small tree 5-6 metres high, leaves subcoriaceous, purplish green, common, *T.C. Lee*, No. 3791, October 10, 1940.

This is the first record of discovering the interesting species on Mount Omei, which has been only reported from western Hupeh, eastern Szechuan, northern Kweichow northern Korangsi and southern Yunnan,

..... W.P. Fang.



## 圖版八十一

## 毛葉弔鐘花 (俗名：小丁木)

## 石南科

灌木高二至三公尺，罕達五公尺；小枝纖細，灰色或青灰色，幼時被毛，老後光滑。葉紙質，橢圓或橢圓長方形，罕為倒卵形，長三至五公分，闊十至二十五公厘，先端銳利或鈍圓，基部楔形或闊楔形，葉緣細裂成鈍齒，葉面深綠無毛，葉背淺綠并被細小柔毛，其中脈通常被剛毛，側脈有時亦然，側脈五至七對，在葉面不顯，在葉背清晰；葉柄細長，長六至八公厘。花多數，成近似繖形之總狀花序，長五至七公分，幼時被細柔小毛，長後脫落；萼片五枚，淡綠色，三角卵形，具尖尾，長二公厘，闊一公厘，外側被細小柔毛；花冠鐘形，長八公厘，直徑五公厘，紅色或紫紅色，具深色脈紋，近頂端裂為五片，寬闊鈍圓形；小蕊十枚，長約三公厘，花藥黃色，頂端具兩距，花絲被細毛；子房上位，無毛，花柱長五公厘，基部具細小柔毛，柱頭頭狀；花梗長二至三公分，細長，被毛。果實為圓球形蒴果，長五公厘，直徑如之，五瓣裂開，種子具稜角。

產峨眉山羅漢坡，大乘寺，闍王坡，弓背山，白雲寺，接引殿，金頂等處，高度在海拔二千三百至三千一百五十公尺間。

此種美觀灌木普遍生於峨眉山海拔二千三百至二千五百公尺處，本種與中國弔鐘花之不同處在於其葉背有被剛毛之主脈及較小之蒴果，該種亦產於峨眉山大乘寺，俗名燈籠樹。前僅知齒葉弔鐘花產於湖北西部，貴州北部，四川東部，雲南南部及廣西北部，近亦於峨眉山九老洞後面叢林中發現，現知峨眉山共有三種弔鐘花矣。

圖解：1. 着花之枝（原大）；2. 花之切面示大小蕊（放大五倍）；3. 果實（放大五倍）。



81. ENKIANTHUS DEFLEXUS (Griffith) Schneider



## Plate 82.

**CASSIOPE SELAGINOIDES** Hooker f. et Thomson.

## Ericaceae.

**Cassiope selaginoides.** Hooker f. et Thomson in Hooker Kew Journ. Bot. VII (1855), 126, t. 4.—Clarke in Hooker f. Fl. Brit. Ind. III (1882), 460.—Forbes et Hemsley in Journ. Linn. Soc. XXVI (1839) 16.—Rehder et Wilson in Sargent, Pl. Wilson, I (1913), 55.—Handel-Mazzetti, Symbolae Sinicae, VII (1936), 786.

Shrub usually about 10 cm. high, erect or rarely prostrate; branchlets slender, fastigiate. Leaves green, small, scale-like, ovate, 3 mm. long, 1 mm. broad, thickened on the back, ciliate on the margin, closely imbricate and appressed into 4 rows. Flowers axillary, solitary; calyx green or purplish-green, 5-lobed, lobes triangular-ovate, 4 mm. long, 2 mm. broad, glabrous on both sides; corolla white, campanulate, 7 mm. long, 5 mm. in diameter, 5-lobed near the apex and slightly recurved; stamens 10, short and included in the corolla: filaments glabrous; anthers purple, with two awns recurved on the back; ovary superior, glabrous; style 3 mm. long, glabrous; stigma minute; pedicels slender, 1.8-2 cm. long, puberulous, recurved near the apex. Fruit a globose capsule 3 mm. in diameter, with persistent calyx and style.

MOUNT OMEI: the summit of this mountain, *E. Faber*, (in Kew); same locality, *T.H. Tu* and *C.S. Liu*, No. 945, July 1933.

This is a beautiful shrub, commonly grown on the summit of Mount Omei. It is known colloquially as "Hsieh-ling-tze." ..... W.P. Fang.

- Fig. 1. a flowering plant (2 times enlarged);  
 2. a flower dissected to show the stamens and pistil (20 times enlarged);  
 3. a fruit (10 times enlarged);  
 4. a stamen (10 times enlarged);  
 5. the inner surface of the leaf (10 times enlarged);  
 6. the outer surface of the leaf (10 times enlarged).

## 圖版八十二

## 長梗巖鬚

## 石南科

小灌木高約十公分，直立，罕為匍匐；小枝細長，與主幹平行。葉綠色，細小卵形密集如鱗片狀，長三公厘，闊一公厘，葉背肥厚，葉緣有纖毛，覆瓦排列，密貼莖上成四行。花單獨生於葉腋不成花序；花萼綠色或帶紫綠色，五裂，裂片三角卵形，長四公厘，闊二公厘，兩面光滑無毛；花冠白色，鐘形，長七公厘，直徑五公厘，頂端分為五枚略向外曲之裂片；小蕊十枚，甚短，藏於花冠之內，藥絲光滑，花藥紫色，背部具二外曲而成錐形之芒；子房上位，無毛；花柱長三公厘，無毛，柱頭極小；花梗細長，長十八至二十公厘，被細小柔毛，頂端外曲。果實為球形蒴果，直徑三公厘，花萼及花柱宿存其上。

峨眉山金頂極多此種植物，俗稱雪靈芝，為一種極美麗之小灌木。西康康定縣及雲南麗江縣亦產之，高度在海拔四千公尺以上，其花期約在六月至八月間。

圖解：着花之株（放大二倍）；2 花之切面示大小蕊（放大二十倍）；3. 果實（放大十倍）；4. 小蕊（放大十倍）；5. 葉之內側（放大十倍）；6. 葉之外側（放大十倍）。



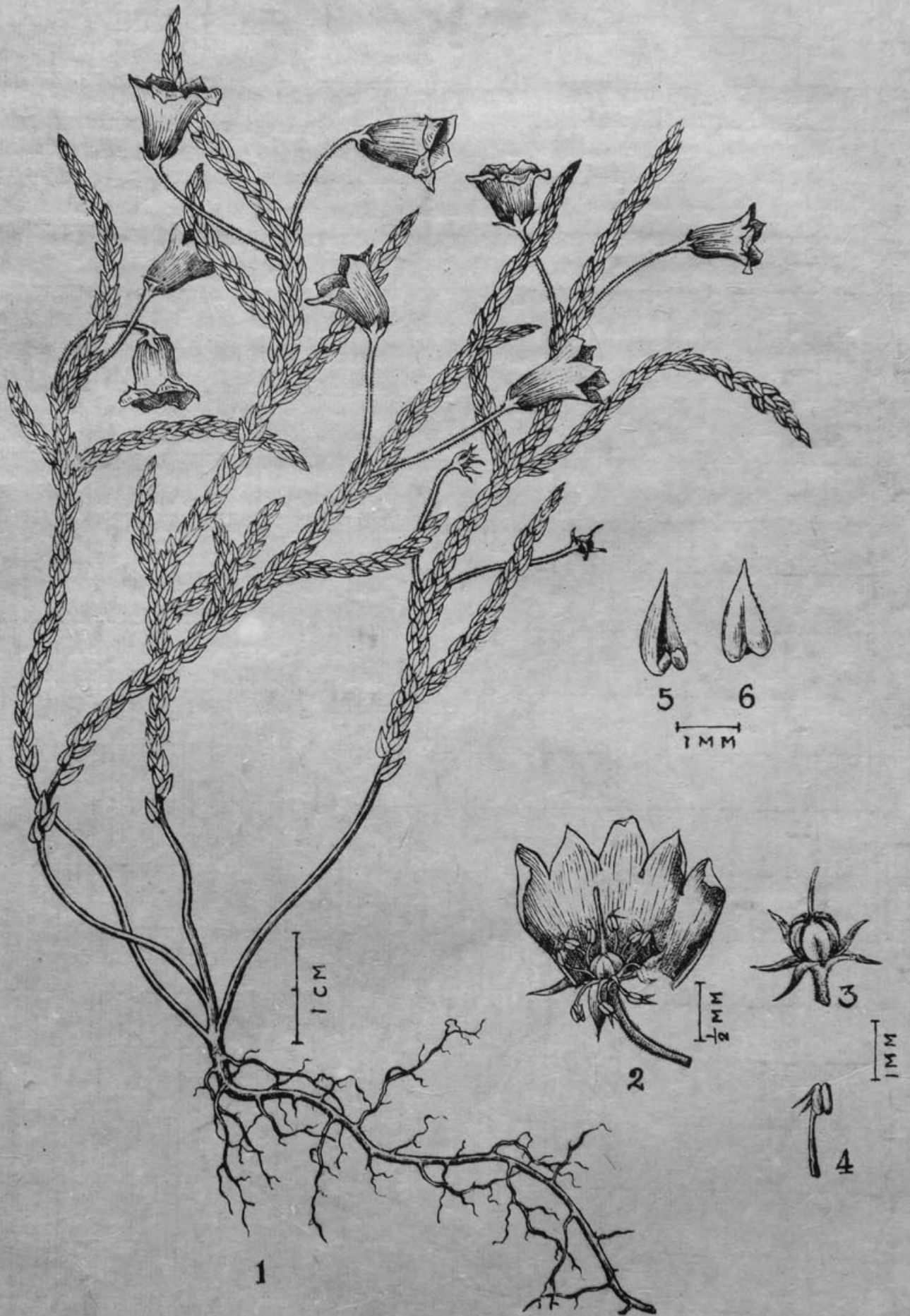


Plate 83.

**LYONIA OVALIFOLIA** (Wallich) Drude var. **ELLIPTICA** (Sieb. et Zucc.) Handel-Mazzetti.

Ericaceae.

**Lyonia ovalifolia** (Wallich) Drude in Engler et Prantl, Nat. Pflanzenfamilien, IV, pt. 1 (1889) 44.

*Andromeda ovalifolia* Wallich in As. Research. XIII (1823), 391, with fig; Cat. No. 763 (1828).

*Pieris ovalifolia* D. Don in Edinburgh Phil. Journ. XVII (1834), 159.

*Xolisma ovalifolia* Rehder in Journ. Arn. Arb. V (1924), 52.

This species is very rare in Szechuan and has not been found on Mount Omei.

**Lyonia ovalifolia** (Wallich), Drude, var. **olliptica**, (Sieb. et Zucc.) Handel-Mazzetti, Synb. Sin. VII. Lieferung 4 (1936), 788.

*Andromeda elliptica* Sieb. et Zucc. Fl. Jap. Fam. Nat. II (1845), 126.

*Pieris ovalifolia* var. *elliptica* (Sieb. et Zucc.) Rehder et Wilson in Sargent, Pl. Wilson I (1913), 55<sup>2</sup>.

Small tree or shrub usually 3 to 5 metres high; bark grey or yellowish grey, smooth; branchlets slender, purplish or yellowish-purple, glabrous; winter-buds axillary, conical, scales 8, outer ones glabrous, inner ones puberulous outside. Leaves alternate, chartaceous or rarely sub-coriaceous, oblong or ovate-oblong, rarely lanceolate, 8-12 cm. long, 2-4 cm. rarely 1 cm. broad, rounded at base, acuminate or narrowly acute at the apex, the margin entire and slightly revolute, upper surface deep green, glabrous, lower surface light green, sparsely yellowish pubescent, then glabrescent, primary nerves 13 to 15 pairs, conspicuous above, prominent below; petioles 3-5 mm. long, puberulous. Flowers in terminal or lateral racemes about 10 cm. long, from leafy branchlets; calyx deeply 5-lobed, lobes purple, triangular-ovate, 2-3 mm. long, puberulous; corolla white or yellowish-white, oblong-urceolate, 1 cm. long, 4 mm. in diameter, shortly 5-lobed near the apex, pubescent; stamens 10, included in the corolla, filaments slender, usually curved, puberulous, with two awns near the apex, anthers yellow, 2-celled, opening by apical pores, ovary subglobose, puberulous; style cylindrical 7 mm. long, glabrescent; pedicels slender, 3 mm. long, puberulous. Fruit a 5-valved capsule 3 mm. in diameter, with persistent calyx.

MOUNT OMEI: Pai-lung-tung, alt. 950 m., small tree 4-5 metres high, T.C. Lee, No. 3643, October 3, 1940; Hsi-hsin-so, alt. 1600 m., in forests, small tree 10 metres high, flowers white, C.L. Sun, No. 2261, May 31, 1940; same locality, small tree 3-4 metres high, flowers dark red, T.C. Lee, No. 2772, July 24, 1940; Ta-cheng-ssu, alt. 2300 m., shrub 2 metres high, flowers yellowish-white, W.P. Fang, No. 17203, July 5, 1941; Lei-tung-ping, alt. 2500 m., shrub 2 metres high, flowers in buds, W.P. Fang, No. 16932, June 13, 1941; northwest of Mount Omei, C.L. Sun, Nos. 1257 & 1353, September 1939; southwest of Mount Omei, Opien-hsien, Shaping, C.L. Sun, Nos. 668, & 943, July to August 1939; without precise locality, T.C. Lee, No. 4697, October 1940; without precise locality, C.W. Yao, Nos. 2877, 3582 & 4448, in 1939.

This variety is easily distinguished from the type species by its smaller fruits and thinner leaves. In distribution on Mount Omei, this variety is usually found very commonly growing at about 1000 to 1600 metres above sea level. .... W.P. Fang.

- Fig. 1. a flowering branch (natural size);
- 2. a flower dissected to show the stamens and pistil (10 times enlarge);
- 3. a capsule (10 times enlarged).



圖版八十三

小果卵葉椴木 (變種)(別名: 小果南燭)

石南科

小喬木或灌木，通常高三至五公尺；樹幹灰色或黃灰色，平滑；幼枝細長，帶紫色或黃紫色，無毛；冬芽腋生，圓錐形，鱗片八枚，在外者無毛，在內者外側被細柔之毛。葉互生，紙質，稀為半革質，長八至十二公分；闊二至四公分，罕為一公分，先端尖尾狀或狹尖銳形，基部圓形，全緣，邊緣略向外捲，葉面深綠，無毛，葉背淺綠，初被稀少黃毛，後則光滑無毛，側脈十三至十五對，在葉面清晰可見，在葉背突起；葉柄長三至五公厘，被柔毛。花成頂生或腋生之總狀花序，長約十公分，着生於有葉之枝；花萼深裂為五片，裂片紫色，三角卵形，長二至三公厘，被柔毛；花冠白色或黃白色，長方壺形，長一公分，直徑四公厘，近頂端處裂為五短片，被毛；小蕊十枚，包於花冠之內，花絲細長，常彎曲，被柔毛，頂端有二錐形之芒，花藥黃色，二室，頂端孔裂；子房亞球形，被細小柔毛，花柱圓錐形，長七公厘，無毛；花梗細長，長三公厘，被小毛。果為五瓣縱裂果，直徑三公厘，花萼宿存其下。

產峨眉山白龍洞，息心所等處，由海拔九百五十至一千六百公尺處均有之，此為本變種之產地，而其卵葉椴木之正種則不生於峨眉山。

圖解；1. 着花之枝 (原大)；2. 花之切面示小蕊及大蕊 (放大十倍)；3. 果實 (放大十倍)。

MOUNT OMEI: ...  
 1941: ...  
 1942: ...  
 1943: ...  
 1944: ...  
 1945: ...  
 1946: ...  
 1947: ...  
 1948: ...  
 1949: ...  
 1950: ...  
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 1994: ...  
 1995: ...  
 1996: ...  
 1997: ...  
 1998: ...  
 1999: ...  
 2000: ...

Fig. 1. A flowering branch (natural size);  
 2. A flower dissected to show the stamens and pistil (10 times enlarged);  
 3. A fruit (10 times enlarged).



83. LYONIA OVALIFOLIA Drude var. ELLIPTICA (Siebold et Zuccarini)  
Handel-Mazzetti



## Plate 84.

**LYONIA VILLOSA** (Wallich) Handel-Mazzetti.

## Ericaceae.

**Lyonia villosa** (Wallich), Handel-Mazzetti, Symbolae Sinicae, VII (1936), 789.

*Andromeda villosa*, Wallich Cat. (1823), No. 762 (nomen nudum).

*Pieris villosa*, Hooker f. apud Clarke in Hooker f. Fl. Brit. Ind. III (1882), 461. —Dunn in Journ. Linn. Soc. XXXIX (1911), 476. —Rehder et Wilson in Sargent, Pl. Wilson. I (1913), 553.

*Xolisma villosa*, Rehder in Journ. Arn. Arb. V (1924), 53.

Shrub 2 to 3 metres high, bark grey or dark grey, usually peeling off in thin flakes; branches slender; those more than one year old greyish-yellow or greyish-brown, glabrescent those current year ones greyish-pubescent. Leaves alternate chartaceous or subcoriaceous, elliptical or obovate rarely ovate 4-7.5 cm. long, 2.3-4.8 cm. broad, obtuse and abruptly pointed at the apex, broadly cuneate or subcordate and slightly cordate at the base, entire and slightly revolute on the margin, upper surface deep green, glabrous except sparsely puberulous on the nerves, lower surface pale green, sparsely grey-pubescent especially on the nerves, midrib grooved above, prominent below, primary nerves 6-9, slightly depressed above or less prominent below; petioles 4-10 mm. long, grooved above, rounded below, villose. Flowers 12 to 15 (rarely to 18) in densely grey or yellowish-pubescent loose racemes 4.5 cm. rarely to 7 cm. in length, usually with 2 or 3 leaves at the lower part; calyx deeply 5-lobed sepals triangular-lanceolate, 2 mm. long, pubescent on both inner and outer surfaces; corolla yellow or yellowish-white, urceolate 4-5 mm. long, sparsely grey-pubescent on the outer surface, shallowly 5-lobed near the apex, lobes acute; stamens 10, inserted near the base of corolla, 4 mm. long, filaments slender, incurved grey-villose especially towards the base, anthers oblong, yellow, 2-celled, opening by apical pores; pistil as long as the corolla or slightly longer than and slightly exserted from the corolla, ovary superior, 5-angular sparsely grey-pubescent or rarely glabrescent, style stout, glabrous, stigma small; pedicels slender, 4-5 mm. long, greyish or yellowish-pubescent. Fruit a subglobose capsule 2 mm. long, 3 mm. in diameter, sparsely pubescent, with persistent sepals, on pedicels 5-7 mm. long.

MOUNT OMEI: Near Chiu-lao-tung, alt. 1800 m., shrub, S.S. Chien, No. 6085, July 12, 1937, Ta-cheng-ssu, alt. 2386 m., T.C. Lee, No. 3897A, October 10, 1940; same locality, small tree 5 metres high, flowers yellowish-white, W.P. Fang, No. 17592, August 20, 1941; Lei-tung ping, alt. 2500 m., shrub 2 metres high, flowers white, W.P. Fang, No. 16935, June 13, 1941; Chieh-yin-tien, alt. 2539 m., shrub 2 metres high, flowers whitish, W.P. Fang, No. 16916, June 13, 1941; same locality, shrub 3 metres high, flowers whitish, W.P. Fang, No. 17348, July 14, 1941; Chinting, alt. 3135 m., shrub 3 metres high, flowers white, W.P. Fang, No. 17298, July 14, 1941; without precise locality, C.W. Yao, No. 5866, in 1939.

SIKANG: Tien-chuan-hsien, F.C. Tai & C.M. Teng, No. 5032, July 84, 1939; Kang-ting-hs'ien, C. S. Liv, No. 494, in 1934.

This species is distributed from the Himalayas eastward through Sikang and Yunnan to Szechuan, but this is the first time recorded it on Mount Omei. The specimens cited above have awnless anthers but their inflorescences are pubescent and the ovary is sparsely pubescent. .... W.P. Fang.

- Fig. 1. a flowering branch (natural size);  
 2. a fruiting branch (natural size);  
 3. a portion of inflorescence with 2 flowers (5 times enlarged);  
 4. a flower having perianth removed to show the stamens and pistil (5 times enlarged);  
 5. the pistil with calyx (5 times enlarged);  
 6. stamen (5 times enlarged);  
 7. a fruit 8 times enlarged);  
 8. a portion of leaf to show the hairs on the lower surface (10 times enlarged).

## 圖版八十四

## 西域椴木

## 石南科

灌木高二至三公尺；樹皮灰色或深灰色，常成薄片脫落，枝細小，一年以上者灰黃色或灰褐色，近於光滑，當年生之枝被淡灰毛細色。葉互生，紙質或近於革質，橢圓形或倒卵形，稀爲卵形，長四十至七十五公厘，闊二十三至四十八公厘，先端鈍形驟尖具極尖之頂端，基部闊楔形或近於圓形並略成心臟形，全緣且略反捲，表面深綠色而光滑惟葉脈上疎具細毛，背面淡綠色，疎被灰色細毛，葉脈上尤多，中脈在葉面下凹，在葉背凸出，側脈六至九對，在葉面微凹，在葉背微顯；葉柄長四至十公厘，上面溝狀，下面圓形，被細毛。花十二至十五枚，稀至十八枚，着生於密被灰色或黃色細毛之疎散總狀花序，長四至五公分，稀達七公分，花序之基部常具葉二至三枚；花萼深裂成五萼片，萼片三角披針形，長二公厘，內外兩面均被細毛，花冠黃色或黃白色，壺狀，長四至五公厘，外面疎被灰色細毛，頂端五淺裂，裂成之花瓣尖形；小蕊十本，着生於花冠之基部，長四公厘，花絲纖細，彎曲，被灰色長毛，近基部處尤多，花藥長形，黃色，兩室，頂端孔裂，大蕊與花冠等長，或較之略長且凸出於其外，子房上位，疎被灰色細毛，稀近於光滑，花柱粗狀，光滑無毛，柱頭細小；花梗纖細，長四至五公厘，被淡灰色或淡黃色細毛。果實爲近於圓球之蒴果，長二公厘，直徑三公厘，疎被細毛，具宿存之萼片，果柄長五至七公厘。

產峨眉山之九老洞，大乘寺，雷洞坪，接引殿及金頂等處。約在海拔一千八百至三千一百三十五公尺間。七八月開花。十月果始成熟。

本種自喜馬拉亞山東向分佈，經西康及雲南以達於四川。在峨眉山尚爲首次發現。峨眉山產者花藥無芒，但其被毛之花序及疎被細毛之子房，均與原產喜馬拉亞者不同也。

圖解：1. 着花之枝(原大)；2. 着果之枝(原大)；3. 花序之一部並具二花放大以示其毛(放大五倍)；4. 一花折去花被以示其大小蕊(放大五倍)；5. 大蕊及花萼(放大五倍)；6. 小蕊(放大五倍)；7. 果實(放大八倍)；葉之一部放大以示其背面之毛(放大十倍)。





84. LYONIA VILLOSA (Wallich) Handel-Mazzetti

## Plate 85.

**MELLIODENDRON WANGIANUM** Hu.

Styracaceae.

**Meliiodendron Wangianum**, Hu in Bull. Fan Mem. Inst. Biol. V (1934) 314; in Hu et Chun, Icon. Pl. Sin. IV (1935), 48, pl. 198.

Small tree usually about 5 metres high, rarely up to 9 metres high; old branchlets terete, brown or dark brown, glabrescent, with numerous conspicuous ovate lenticels; young branchlets quadrangular, purplish-brown or yellowish-brown, fasciate-pilose; buds ovate, 5 mm. long, with 2 pairs of ovate scales, pubescent on the outer surface, glabrous on the inner surface. Leaves oblanceolate or obovate, acuminate on the apex, cuneate at the base, serrulate on the margin, 12-14 cm. long, 4-6 cm. broad, deep green above, light green below, sparsely stellate-puberulous; petioles 8-12 mm. long, stellate-puberulous. Flowers solitary, usually appearing before the developing of leaves from the axillary buds; calyx turbinate, 4-5 mm. long, whitish-pubescent outside, truncate or obsolete 5-toothed; corolla white, pink flushed outside especially near the base, 20-24 mm. long, base of the corolla united as a tube 4-5 mm. long; petals 5, conduplicate in buds, ovate or ovate-oblong, acute or obtuse, 19-22 mm. long, 8-10 mm. broad, sparingly villous on both surfaces; stamens 10 uniseriate, 20-22 mm. long, inserted on the calyx just inside the base of corolla, filaments dilated about 10 mm. long from the base and united into a tube, white-villous inside, anthers yellow, linear, introrse, 2-celled; ovary purplish, half or two-third inferior, 5- or 6-celled; 4-6 ovules in each cell, style greenish, stout, glabrous, 10-13 mm. long, stigma indistinct. Fruit woody, obovoid-pyriform, 3 cm. long, 1.8-2 cm. in diameter, contracted at the base, stellate-pubescent; peduncle erect, 1 cm. long, stellate-pilose.

**MOUNT OMEI:** Below and near Peh-lung-tung, alt. 800 m., small tree 5 metres high, flowers white and precocious to leaves, occasionally, *W.P. Fang*, No. 15818, March 5, 1941.

The type-specimen which was collected by Mr. P.T. Wang from Mapien-hsien, about 50 miles southwest of Mount Omei, is in fruit only. I had great pleasure in discovering the species at Mount Omei in the flowering stage and completing the description ..... *W.P. Fang*.

Dr. H.H. Hu's original description of this species runs as follows:

**"Meliiodendron Wangianum** Hu, sp. nov.

Arbor 9 m. alta; ramuli brunnei glabri. Folia obovato-acuminata, basi cuneata, supra nitida-viridia, ad costam stellato-puberula, cetera glabra, subtus pallide viridia ad costam elevatum sparse stellato-puberula, margine minute mucronato-serrulate, 10-12.5 cm. longa, 4-5 cm. lata; petioli stellato-puberuli, 8-10 mm. longi. Flores ignota. Fructus solitarii, pedunculo erecto stellato-piloso 1 cm. longo sustentus, obovoideo-pyriformis, 3 cm. longus, 1.8 cm. diam., basi contractus stellato-pubescentes; exocarpiis spongiosis; semina matura ignota.

Szechuan: Ma-pien Hsien, Lan-chi-tzu, F.T. Wang, no. 23597 (type), Aug. 26, 1931.

Allied to *M.*, *xylocarpum* Hand-Mazz., differing in much smaller-sized fruits and shorter-petioled leaves."

- Fig. 1. a flowering branch (natural size);  
 2. a fruiting and leafy branch (natural size);  
 3. the corolla (natural size);  
 4. the stamens (2 times enlarged);  
 5. the pistil (2 times enlarged);  
 6. a cross section of the ovary (6 times enlarged);  
 7. a longitudinal section of the ovary (6 times enlarged);  
 8. a cross section of the fruit (natural size);  
 9. a longitudinal section of the fruit (natural size);  
 10. a seed (natural size);  
 11. a portion of leaf to show the stellate hairs on the lower surface (10 times enlarged).



## 圖版八十五

## 汪氏 椴 木

## 安息香科

小喬木約高五公尺，稀達九公尺；老枝圓形，褐色或深褐色，近於光滑無毛，具卵形皮孔甚多。嫩枝方形，紫褐色或黃褐色，具叢生之剛毛；冬芽卵圓形，長五公厘，具兩對卵形之鱗片，表面被細毛，裏面光滑無毛。葉倒披針形有或倒卵形，先端銳尖，基部楔形，邊緣具細鋸齒，長十二至十四公分，闊四至六公分，表面深綠色，背面淡綠色，疏具星狀細毛；葉柄長八至十二公厘，被星狀細毛。花單生，常於發葉之前開放，其芽均生於前年之葉腋；花萼回旋狀，長四至五公厘，表面被白色細毛，截形或具發育不全之五齒狀；花冠白色，表面具紫色條紋，近基部尤多，長二十至二十四公厘，其基部約四五公厘連合成管狀，花瓣五枚，在花芽中時成摺狀，卵形或卵狀長橢圓形，先端尖形或鈍形，長十九至二十二公厘，闊八至十公厘，兩面均疏被細毛；小蕊十本，排列成一輪，長二十至二十二公厘，着生於花蕾上，其位置適在花冠基部之內，花絲基部約長十公厘之一段常膨大且彼此延結成管狀，裏面被白色絨毛，花藥黃色，綫形，內向，二室；子房紫色，半下位或三分之二下位，五或六室，每室具四至六胚珠，花柱淡綠色，粗壯，光滑無毛，長十至十三公厘，柱頭細小不顯。果實木質，倒卵圓狀梨形，長三公分，直徑十八至二十公厘，基部較小，被星狀細毛；果梗直立，長一公分，被星狀細毛。

產峨眉山白龍洞附近，海拔高八百公尺處，三月開花。

此種初由汪發績君發現於馬邊縣，然僅得果實標本。近於峨眉山始見其盛開之花，因得增補其說明，至有價值也。

圖解； 1. 着花之枝(原大)； 2. 着果與葉之枝(原大)； 3. 花冠(原大)； 4. 小蕊(放大二倍)； 5. 大蕊(放大二倍)； 6. 子房之橫切面(放大六倍)； 7. 子房之縱切面(放大六倍)； 8. 果實之橫切面(原大)； 9. 果實之縱切面(原大)； 10. 種子(原大)； 11. 葉之一部以示其葉背星狀之毛(放大十倍)。



85. MELLIODENDRON WANGIANUM Hu



## Plate 86.

**CYNANCHUM AURICULATUM** Royle ex Wight.

## Asclepiadaceae.

**Cynanchum auriculatum**, Royle ex Wight, Contr. Bot. Ind. (1834), 58. — Hooker f. Fl. Brit. Ind. IV (1833), 25. — Dunn et Tutchet in Kew Bull. Misc. Inf. a.s. X (1912), 171. — Schlechter in Leveille, Fl. Kouy-Tcheou (1914), 49. — Schneider in Sargent, Pl. Wilson. III (1916), 346. — Courtois in Mem. Hist. Nat. Emp. Chin. VI (1920), 78. — Chung in Mem. Sci. Soc. China I (1914), 222. — Courtois in Mus. Heude Not. Bot. Chin. II (1933), 84. — Handel-Mazzetti, Symb. Sin. VII Lief. 4 (1936), 996. — Tsiang in Sunyatsenia, VI (1939), 1-8.

*Endotropis auriculata*, Decaisne in Dc. Prodr. VIII (1884), 541.

Twining puberulous suffrutex, stem terete, 3 mm. in diameter. Leaves opposite, usually large, membranaceous, broadly ovate to ovate-lanceolate, apex shortly acuminate, base cordate, basal lobes mostly decurved, sometimes incurved, rarely meeting or overlapping, puberulous above, 16-18 cm. long, 4.5-10 cm. wide; lateral veins about 8 pairs, glands in a group above the petioles; petiole 3-5 cm. long. Cymes subglabrous, corymbose, to 30-flowered; pedicels 1.5 cm. long. Flowers white, to 1 cm. long, 5 mm. across; calyx pubescent, segments ovate-oblong, acute, margin ciliate, basal glands numerous; corolla rotate, tube short, lobes manifestly reflexed after anthesis, oblong, obtuse, pilose within; corona shallowly acutiform, lacinia oblong, fleshy, tip obtusish, ligulate scale triangular at the middle of each lobe inside; anthers quadrate, terminal connective rotundate; pollinia oblong, pendulous stigma conical, tip bifid. Follicles about 8 cm. long, 1 cm. thick, lanceolate, acuminate, dilated at the middle, epicarp yellowish, endocarp coriaceous; seeds ovate-oblong, tip comose.

MOUNT OMEI: Ta-o-ssu, alt. 1103 m., W.P. Fang, No. 17746, September 14, 1941; Ching-yin-ko, alt. 900 m., T.C. Lee, No. 3448, September 1940; Niu-hsin-ssu, alt. 1014 m., W.P. Fang, No. 17638, August 31, 1941; Hung-chun-ping, alt. 1200 m., H.C. Chow, No. 8188, August 20, 1938; same locality, T.C. Lee, No. 3361, August 19, 1940; northwest of Mount Omei, Yun-king-hsien, C.L. Sun, No. 1313, September 14, 1939; without precise locality, C.W. Yao, No. 5001, in 1939.

Distribution: Himalayas; India; China. — Kiangsu, Chekiang, Kiangsi, Hupeh, Szechuan, Kweichow, Yunnan, Fukien and Kwangtung.

This species is very similar to *Cynanchum caudatum* (Miquel) Maximowicz from which it is distinguished by the puberulous not glabrescent leaves, by the pseudo-corymbose, not densely flowered umbellate inflorescence, and by the larger flowers with reflexed corolla-lobes which are less hirtellous within. . . . . Y. Tsiang.

- Fig. 1. a flowering branch (natural size);  
 2. an open flower (7 times enlarged);  
 3. the staminal corona (7 times enlarged);  
 4. calyx expanded to show the basal glands (6 times enlarged);  
 5. a lobe of central column seen dorsally to show the gynostegium, the anther and the attached corona (7 times enlarged);  
 6. a portion of staminal column seen dorsally with the corona removed (10 times enlarged);  
 7. the same seen ventrally with the attached corona (7 times enlarged);  
 8. the pollinia (20 times enlarged);  
 9. a pistil (10 times enlarged).

圖版八十六

牛皮消

蘿藦科

蔓性攀援亞灌木，莖圓形，直徑三公厘。葉對生，通常大形，膜質，闊卵圓形至卵圓刺刀形，先端短漸尖，基部心臟形，基部兩側之耳片通常下垂，有時內曲，稀相逢或互相覆蓋，表面有微毛，長六至十八公分，寬四至五公分至十公分；側脈約八對；葉柄之頂端有成叢之小腺點；葉柄長三至五公分。聚繖花序亞禿淨，繖束狀\*，着花多至三十枚；花柄長十五公厘。花白色，最大者達一公分，直徑五公厘；花萼外面被柔毛，萼片卵圓長橢圓形，銳尖，有短毛，內有小腺點甚多；花冠輪狀，筒短，花瓣於開花後反曲，橢圓形，鈍頭，內被長柔毛；副花冠淺杯狀，其裂片橢圓形，肉質，鈍頭，在每裂片內面之中部有三角形之舌狀鱗片；花約四方形，藥隔頂生，圓形；花粉團橢圓形，下垂；柱頭圓錐形，端部二裂。蓇葖約長八公分，厚一公分，刺刀形，具長漸尖頭，中部膨大，外果皮帶黃色，內果皮革質；種子卵圓狀橢圓形，先端具種毛。

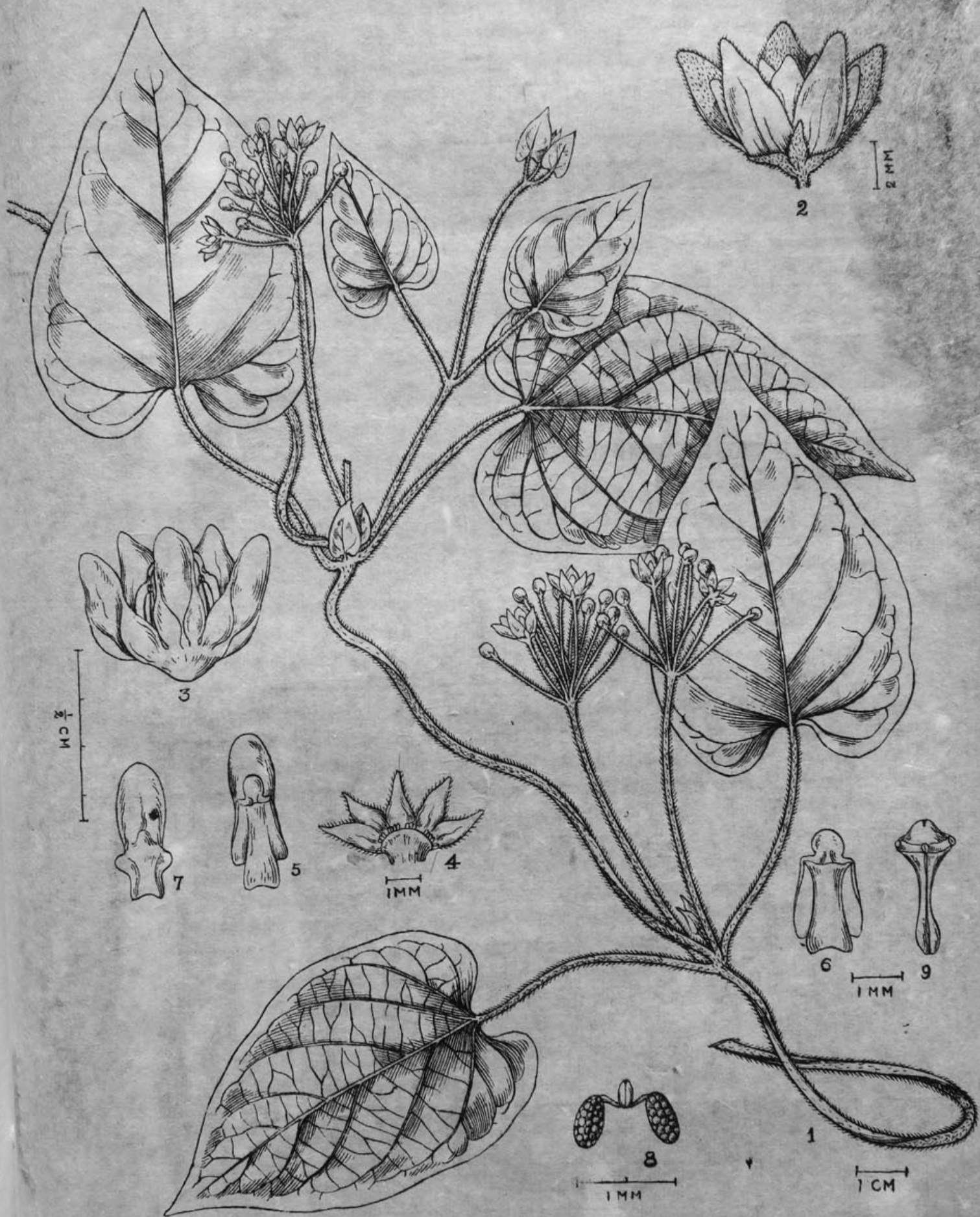
產於峨眉山之大峨寺，清音閣，牛心寺及洪椿坪等處，七八月開花。

分佈：喜馬拉亞山；印度；中國：— 江蘇、浙江、江西、湖北、四川、貴州、雲南、福建及廣東。

圖解：1 着花之枝(原大)；2 開放之花(放大五倍)；3. 小蕊着生之副花冠(放大七倍)；4. 花萼顯示其基部小腺點(放大六倍)；5. 中心柱之一片由腹面觀之見小蕊之連筒，花藥及連生之副花冠(放大七倍)；6. 小蕊柱之一部由腹面觀之副花冠已除去(放大十倍)；7. 同上由背面觀之具有連生之副花冠(放大七倍)；8. 花粉團(放大二十倍)；9. 大蕊(放大十倍)。

\* Corymb 前譯為繖房花序，現譯為繖束花序。





86. CYNANCHUM AURICULATUM Royle ex Wight

## Plate 87.

**SINDECHITES HENRYI** Oliver.

## Apocynaceae.

**Sindechites Henryi**, Oliver in Hooker, Ic. Pl. XVIII (1888), pl. 1772. —Hemsley in Journ. Linn. Soc. XXVI (1889), 100. —K. Schumann in Engler et Prantl, Naturl. Pflanzenfam. IV, Abt. 2 (1895), 173. —Schneider in Sargent, Pl. Wilson. III (1916), 342. —Diels in Engler, Bot. Jahrb. XXIX (1900), 540. —Chung in Mem. Sci. Soc. China, I (1924) 220. —Tsiang in Sunyatsenia, III (1936), 151.

*Parameria Esquirolii*, Leveille in Fedde, Rep. Spec. Nov. IX (1911), 325; Fl. Kouy-Tcheou, (1914), 30. —Chung in Mem. Sci. Soc. China, I (1934), 220.

*Sindechites Henryi* Oliver, var. *parvifolia*, Tsiang in Sinensia, III (1932), 159.

*Sindechites Esquirolii* Woodson in Journ. Arn. Arb. XV (1934) 316.

Glabrous scandent shrub. Leaves oblong- or ovate-lanceolate, 7-10 cm. long, 2.5-3.5 cm. wide; lateral veins about 16 pairs, ascending, anastomosing before the margin; inter- and intra-petiolar glands of common character; petiole about 5 mm. long. Inflorescence terminal and subterminal and axillary, paniculate-cymose. Flowers white, about 12 mm. long; anthers inserted above the middle of the tube, cells extrorsely divergent at the base, pilose at the apex; disc obscurely 5-lobed, shorter than the ovary; carpels 2 distinct, pilose at the apex, style filiform, stigma 2-lobed at the apex. Fructiferous peduncle 4.5 cm. long, 1 mm. in diameter. Follicles generally unequal, glabrous, cylindrical, acuminate, widely divaricate, 6.5-13 cm. long, 2-3 mm. thick; epicarp pale grey, smooth, very finely and longitudinally striate, endocarp yellowish, glossy, thin; seeds young, dark brown, glabrous, oblong, base rounded, apex truncate, 2 mm. long, 0.5 mm. broad; coma white-silky, 2.5 cm. long.

MOUNT OMEI: near Ta-ping, alt. 1400 m., in thickets shrub 2 metres high, flowers purplish-white, rare, C.L. Sun, No. 547, June 18, 1939; Chiu-lao-tung, alt. 1800 m., scandent shrub, flowers yellowish-white, W.P. Fang, No. 16866, June 4, 1941.

Distribution: Chekiang, Hupeh, Szechuan and Kweichow.

I am now of the opinion that the differences drawn up by Woodson and Tsiang for the separation of *S. Esquirolii* and *S. Henryi* var. *parvifolia* from *S. Henryi* are too minute to be of significance as specific or even varietal criteria. In publishing the variety *parvifolia*, I only compared my specimen with the plate in Icones Plantarum. A good photograph of the type of *S. Henryi* which consists of two branches (one of which has the leaves of the same dimension as the variety *parvifolia*), clearly shows that *S. Henryi* and *S. Esquirolii* are conspecific. All other characters seem to be only relative and should not be regarded as reliable differentia. . . . . Y. Tsiang.

- Fig. 1, a flowering branch (natural size);  
 2, a flower-bud (8 times enlarged);  
 3, a calyx-lobe with the basal calycular glands (20 times enlarged);  
 4, corolla expanded to show the insertion of stamens (20 times enlarged);  
 5, & 6, anthers with the apical hairs (120 times enlarged);  
 7, an ovary with the lobed disk (120 times enlarged);  
 8, a pistil (120 times enlarged);  
 9, an ovary in cross section (150 times enlarged);  
 10, follicles (natural size).



圖版八十七

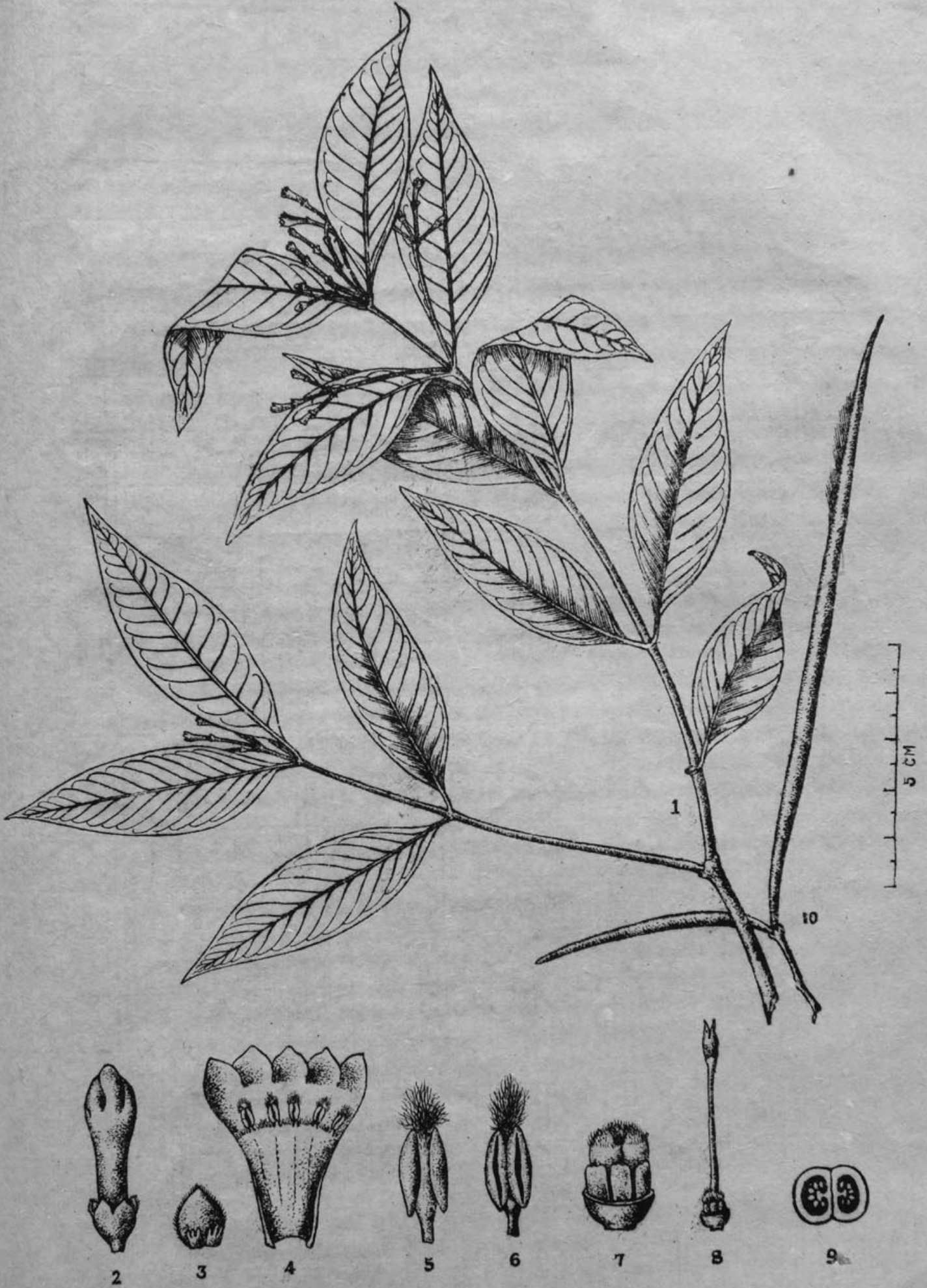
毛藥藤

夾竹桃科

禿淨之攀援灌木，葉長圓形或卵圓刺刀形，長七至十公分，寬二十五至三十五公厘；側脈約十六對，上昇，達葉緣前互相連結；葉柄間及葉柄內腺點與本科特徵相似；葉柄約長五公厘。花序為頂生或亞頂生及腋生之總狀聚繖花序。花白色，長約十二公厘；花藥着生於冠筒中部之上，藥室向外開展，端部有長絲毛；花盤為不明顯之五裂片，比子房為短；心皮二枚，離生，端部有長絲毛。果柄長四十五公厘。萼葉一長一短，禿淨，圓柱形，漸尖，開展甚廣，長六十五至一百三十公厘，厚二至三公厘；外果皮灰褐色，光亮，有細縱紋，內果皮黃色，光亮，質簿；種子所見者尚未成熟，暗褐色，禿淨，長圓形，基部圓形，端部截頭形，長二公厘，寬半公厘；種毛白絲狀，長二十五公厘。

產於峨眉山之大坪及九老洞等處。

圖解：1. 着花之枝；2. 花芽；3. 萼片一枚及其萼腺；4. 花冠展開顯示小蕊着生之處；5及6. 花藥及其頂毛；7. 子房及其具裂片之花盤；8. 大蕊；9. 子房橫切面；10. 萼葉（解剖圖均經放大）



87. SINDECHITES HENRYI Oliver



## Plate 88.

**MELODINUS HEMSLEYANUS** Diels.

## Apocynaceae.

**Melodinus Hemsleyanus**, Diels in Engler, Bot. Jahrb. XXIX (1900), 539.—Schneider in Sargent, Pl. Wilson. III (1916), 331.—Chung in Mem. Sci. Soc. China, (1924), 219.—Tsiang in Sunyatsenia, IV (1936), 130.

*Melodinus?* sp. nov., Hemsley in Journ. Linn. Soc. XXVI (1889), 94.

*Trachelospermum Esquirolii*, Leveille, Fl. Kony-Tcheou, (1914), 33.

*Melodinus monogynus*, Schneider (non Roxburgh) in Sargent, Pl. Wilson. III (1916), 336, in nota.

*Melodinus khasianus*, Woodson (non Hooker f.) in Journ. Arn. Arb. XV (1934), 313.

Scandent shrub, 5-6 m. tall, branches glabrate at length; branchlets shortly pubescent, bark olivaceous. Leaves subcoriaceous, ovate or elliptic-oblong, base subacute or rarely rotundate, acuminate with obtuse apex, lustrous and glabrous above, pilosulous towards the nerves beneath, 7-15 cm. long, 4-5 cm. wide; lateral nerves 10-15 pairs, conspicuous on both surfaces, slightly prominent below; petioles 4-5 mm. long. Inflorescence at the apex of axillary branchlets forming brown-velutinous-pubescent cymes; bracteoles subovate, pedicels 2.5 mm. long; calyx-segments sublibrate, thick, imbricate, densely pubescent without, ovate-oblong, acuminate, 7 mm. long, 6 mm. wide; corolla puberulous, lobes oblong-lanceolate or lanceolate, 1.5 cm. long, 0.7 cm. wide; faucal corona minute, unequal; stamens at the middle of the tube, filaments short, anthers lanceolate, apex acute 2-2.5 mm. long; style not equal to the stamens, 4 mm. long, apex slightly thickened. Fruit baccate, subellipsoid, 7.5 cm. long 2.7 cm. in diameter.

MOUNT OMEI: Niu-hsin-ssu, alt. 1014 m., on slope, climbing shrub with white flowers, common, T.C. Lee, No. 2675, July 6, 1930; same locality, W.P. Fang, No. 17240, July 28, 1941; Shih-sun-ku, alt. 1000 m., on slope, climbing shrub, flowers white, T.C. Lee, No. 3012, July 25, 1940; Hung-chung-ping, alt. 1147 m., in thickets, shrub 3 metres high, fruits brown, W.P. Fang, No. 13825, February 26, 1940; same locality, shrub with oblong-ovoid fruits, W.P. Fang, Nos. 14952 & 14985, October 7, 1940; same locality, climbing shrub, fruits orange-yellow, ellipsoid, W.P. Fang, No. 15174, November 3, 1940; same locality, climbing shrub, flowers white, W.P. Fang, No. 15292, November 13, 1940; same locality, climbing shrub with white flowers, W.P. Fang, No. 17397, July 28, 1941; Ta-ping, alt. 1400 m. climbing shrub, fruits orange yellow, spindle shaped, W.P. Fang, No. 15214, November 8, 1940; Hsi-hsin-so, alt. 1400 m., climbing shrub, flowers white, W.P. Fang, No. 17060, June 23, 1941; San-tou-ho, alt. 1400 m., W.P. Fang, No. 17258, July 10, 1941; Chiu-lao-tung, alt. 1876 m., W.P. Fang, No. 17494, August 9, 1941; without precise locality, C.W. Yao, No. 5016, in 1939.

This is characterized by its stem, petiole, and the under surface of the leaves being long-pubescent, by its oblong-elliptic, rarely ovate-elliptic, leaves, up to 15 cm. long and 5 cm. wide, which are lustrous above, sometimes unequal-sided, or rarely somewhat falcate in outline, and by its mostly ascending, oblong-lanceolate, corolla-lobes, broader below the middle. The berries are subellipsoid, to 6 cm. long, 2.7 cm. in diameter. ....Y. Tsiang.

- Fig. 1, a flowering branch (natural size);  
 2, a flower-bud (4 times enlarged);  
 3, an open flower (5 times enlarged);  
 4, corolla expanded to show the insertion of stamens and the faucal corona (5 times enlarged);  
 5 & 6, stamens (10 times enlarged);  
 7, a portion of calyx to show the quincuncial aestivation and the pistil (7 times enlarged);  
 8, an ovary in cross section (15 times enlarged);  
 9, a berry (natural size).

# 圖版八十八 川山橙

## 夾竹桃科

攀援灌木，高五至六公尺，老枝禿淨；小枝被短柔毛，皮橄欖綠色。葉革質，卵圓形或長橢圓形，端部漸尖具鈍頭，基部亞銳尖或稀圓形，葉面亮綠色而禿淨，葉背灰綠色，脈上有微長毛，長七至十五公分，寬四至五公分；側脈十至十五對，兩面均明顯，在葉背略凸起；葉柄長四至五公厘。聚繖花序着生於側枝之頂端，被褐色之絨毛；小苞片亞卵圓形；花柄長二至五公厘；萼片近於離生，質厚，覆瓦狀排列，外面被濃柔毛，長卵圓形，漸尖，長七公厘，寬六公厘；花冠有微毛，冠片(花瓣)長圓刺刀形或刺刀形，長十五公厘，寬七公厘；花喉副花冠微小，不整齊，小蕊着生於花筒內部之中間，小蕊柄短，花藥刺刀形，端部銳尖，長二至二公厘半；花柱不與小蕊等長，長四公厘，端部略厚。果實漿果狀，亞橢圓形，長至七十五公厘，直徑至二十七公厘。

產峨眉山之牛心寺，石筍溝，寶掌峯，大坪，息心所，三道河及九老洞等處。

圖解：1. 着花之枝；2. 花芽；3. 開放之花；4. 花冠展開顯示花喉副花冠及小蕊；5 及 6. 小蕊；7. 大蕊及花萼；8. 子房橫切面；9. 果實（解剖圖均經放大）。

Fig. 1. A flowering branch (natural size);

2. A flower-bud (4 times enlarged);

3. An open flower (5 times enlarged);

4. Corolla expanded to show the insertion of stamens and the loculi (6 times enlarged);

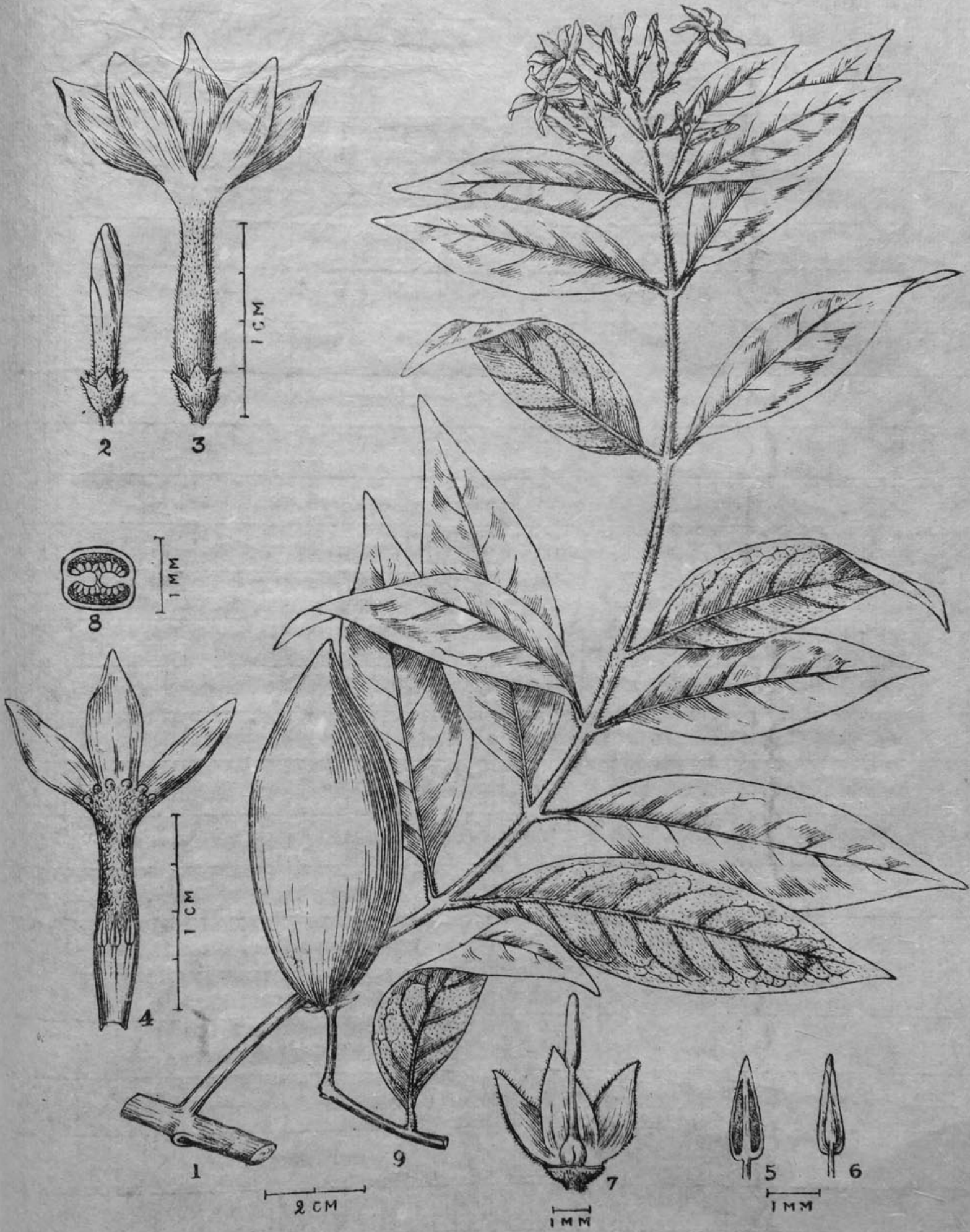
5 & 6. Stamens (10 times enlarged);

7. A portion of calyx to show the point of attachment of the ovary (7 times enlarged);

8. A transverse section of the ovary (10 times enlarged);

9. A fruit (10 times enlarged).





88. MELODINUS HEMSLEYANUS Diels

## Plate 89.

**TRACHELOSPERMUM JASMINOIDES** (Lindley) Lemaire.

## Apocynaceae.

**Trachelospermum jasminoides**, (Lindley) Lemaire in Gard. Fleur. I (1851), t.61. — Wallich in Gard. chron. n. ser. VII (1877), 116, t. 19. — Franchet, Pl. David. I (1884), 206. — Bean, Trees & Shrubs, Brit. Isl. ed. 1, II (1914), 599; ed. 4, II (1925), 599. — Dunn et Tutcher in Kew Bull. Misc. Inform. Add. Ser. X (1912), 169. — Schneider in Sargent, Pl. Wilson. III (1916), 334. — Chung in Mem. Sci. Soc. China, I (1914), 220. — Merrill in Lingn. Sci. Journ V (1927), 150. — Rehder, Man Cult. Trees & Shrubs N. Amer. (1927), 770. — Miller in Bailey, Cycl. Hort. III (1927), 3361, f. 3826. — Tsiang in Sunyatsenia II (1934), 143; III (1936), 145. — Woodson in Sunyatsenia, III (1936), 74.

*Rhynchospermum jasminoides*, Lindley in Journ. Hort. Soc. London, I (1846), 74.

*Parechites adnascens*, Hance in Journ. Bot. VI (1868), 299.

*Trachelospermum divaricatum*, K. Schumann in Engler et Prantl, Naturl. Pflanzenfam., IV, Abt. 2 (1895), 173 (excl. f. 58 i-j).

Tall scandent shrub; stem brownish, lenticellate; branchlets ferruginous-pubescent, glabrate at length. Inter- and intra-petiole glands dark purple, linear-subulate, 1 mm. long. Leaves opposite, subcoriaceous, elliptic or ovate-elliptic or broadly obovate, apex acute to acuminate or obtuse, sometimes emarginate or mucronate, base acute to obtuse, glabrous above, but often pubescent on veins, generally pubescent on veins beneath, glabrate at length, 2-6 cm. long, 1.5-2.5 cm. wide (rarely 12 X 4 cm.); lateral veins 5-8 pairs, arcuate-ascending; petioles 2-5 mm. long. Cymes dichasial, terminal and axillary, 9-15-flowered, equalling to or higher than the subtending leaves; bracts and bracteoles linear-lanceolate, 2-5 mm. long; buds subacute; pedicels 2-5 mm. long; calyx-lobes linear-lanceolate, acute, apex manifestly reflexed, pilosulose without, 2-5 mm. long; intra-calycular glands 10, denticulate; corolla white, fragrant, hypocrateriform: tube cylindrical, inflated at the insertion of stamens, about 10 mm. high, orifice puberulent within; lobes dextrorsely overlapping and sinistrorsely contorted, obliquely oblong-obovate, about 10 mm. long and wide at the broadest apex; stamens inserted about the middle of the corolla-tube within; anthers sagitate, base spurred, included from the orifice; disk 5-lobed, as high as the ovary; pistil 2-carpellate, ovary glabrous, oblong-ovoid ovules many-seriate, borne on the inner parietal germinate placentas; style filiform, stigms subcapitate. Follicles glabrous, continuous, terete, cylindrical-lanceolate, attenuate toward the apex, divergent from 80°-180°, 10-15 cm. long, 5-10 mm. in diameter; seeds grooved at the middle, 1.5-2 cm. long, coma white-sericeous, to 4 cm. long.

MOUNT OMEI: Wan hsing-chuang, alt. 470 m., climbing shrub 2 metres high, flowers white, fragrant, W.P. Fang, No. 13397, May 29, 1939.

SZECHUAN: Chengtu, S.S. Chien, No. 5269, April 26, 1936; same locality, S.S. Chien, No. 5924, April 19, 1937.

Distribution: Hopeh, Shensi, Shantung, Kiangsu, Anhwei, Hupeh, Szechuan, Chekiang, Kiangsi, Hunan, Fukien, Kwangtung and Hainan.

This plant is widely distributed throughout southern and eastern China, and has been introduced generally into cultivation in green-house and gardens in the northern provinces and in foreign countries. The leaves are very variable, from 1 cm. to 8 cm. long. The apex of the leaves is sometimes emarginate especially on the first pair from the branch, but the same form sometimes is found persistent on adult leaves. In some cases, the apex of the leaves is mucronate. The divergences of the follicles vary from 80°, 120°, 140°, 150°, and to 180°. Regarding pubescence, the leaves are glabrous or quite as often, hairs occur on the midrib of the upper surface and on the whole of the under-surface, more especially along the veins. .... Y. Tsiang.

- Fig 1, a flowering branch (natural size);  
 2, a flower-bud (3 times enlarged);  
 3, an open flower (5 times enlarged);  
 4, a portion of corolla-tube expanded to show the insertion of stamens (20 times enlarged);  
 5 & 6, anthers (40 times enlarged);  
 6, calyx expanded to show the denticulate calycular glands, the disk and the pistil (40 times enlarged);  
 7, an ovary in cross section (100 times enlarged);  
 8, follicles (natural size);  
 9, seed (natural size),



第九十八版圖

絡石

(俗名：白花藤)

桃竹夾

高攀援灌木；莖帶褐色，有皮孔；小枝被黃色柔毛，老時漸禿淨。葉柄間及葉柄內之線點狹針形，長一公厘。葉對生，亞革質，橢圓形或卵圓形或寬倒卵形，端部銳尖至漸尖或鈍頭，有時微凹或有一小凸尖，基部銳尖至鈍形，背面禿淨，但通常脈上被有柔毛，葉背通常在脈上被有柔毛，老漸禿淨，長二至六公分，寬十五至二十五公厘(稀長十二公分及寬四公分)；側脈五至八對，弧形上昇；葉柄長二至五公厘。二至聚繖花序，二出，頂生及腋生，着花九至十五枚，比葉等長或較長；苞片及小苞片狹刺刀形，長五公厘；花芽亞銳尖；花柄長二至五公厘；萼片狹刺刀形，銳尖，先端反曲甚強，外面微有長柔毛，長二至五公厘；內面基部具腺點十枚，有細齒；花冠白色，芳香，高盆狀；花冠筒部圓柱形，於著生小蕊之部膨大，高約十公厘，冠喉內面有微毛；冠片向右扭向左轉，斜長圓倒卵形，長約十公厘，端部寬約十公厘；小蕊着生於冠筒內面之中間；花藥箭頭形，基部有距，隱藏於花喉內；花盤五片與子房等長；大蕊具二個心皮，子房禿淨，長卵圓形，胚珠幾排，生於二個並生側膜胚座之內角；花柱圓線形，柱頭亞頭狀。萼筒禿淨，連續圓形，圓柱刺刀形，向先端部漸尖，分裂自八十至一百八十度，長十至十五公分，直徑五至十五公厘；種子中間陷凹，長十五至二十公厘；種毛白絲狀，長至四公分。

產於峨眉山麓之萬行庄。

圖解：1. 着花之枝；2. 花芽；3. 開放之花；4. 冠筒之一部展開顯示小蕊着生之處；5及6. 小蕊；7. 花萼展開以示具有小齒之萼喉，花盤及大蕊；8. 子房橫切面；9. 萼筒；10. 種子(原大)(解剖圖均經放大)。

ST. CHUAN: Chengde, S. China, No. 258, April 26, 1936; same locality, S. S. China, No. 434, April 13, 1937.

Distribution: Honan, Shensi, Shantung, Kiangsu, Anhwei, Hopei, Szechuan, Chekiang, Kiangsi, Hunan, Hubei, Kwangtung and Hainan.

The plant is widely distributed throughout southern and eastern China and has been introduced to many parts of the world in green-house and gardens in the northern provinces and in foreign countries. The leaves are very variable, from 1 cent to 8 cent long. The apex of the leaves is sometimes emarginate especially at the first joint from the branch, but the same form sometimes is found persistent on adult leaves. In some cases the apex of the leaves is mucronate. The divergences of the foliols vary from 80°-120°-150° and to 180°. Regarding pubescence, the leaves are glabrous or quite as often hairs occur on the midrib of the upper surface and on the whole of the under-surface, more especially along the veins. ... Y. Tsiang.

Fig. 1. A flowering branch (natural size);  
Fig. 2. A flower bud (3 times enlarged);





## Plate 90.

**TRACHELOSPERMUM AXILLARE** Hooker f.

## Apocynaceae.

**Trachelospermum axillare**, Hooker f. Fl. Brit. Ind. III (1882), 668.—Diels in Engler, Bot. Jahrb. XXIX (1900), 540.—Brandis, Ind. Trees, (1906), 464.—Leveille, Fl. Kouy-Tcheou, (1914), 31.—Schneider in Sargent, Pl. Wilson. III (1916), 335.—Chung in Mem. Sci. Soc. China. I (1924), 220.—Chun in Sunyatsenia, I (1934), 298.—Tsiang in Sunyatsenia, II (1934), 148; III (1936), 145.—Woodson in Sunyatsenia, III (1936), 99.

*Melodinus Chaffanjeni*, Leveille in Fedde Rep. Spec. Nov. II (1906), 114.

*Maesa scandens*, Leveille in Fedde Rep. Spec. Nov. X (1912), 375.

*Periploca astacus*, Leveille, Fl. Kouy-Tcheou (1914), 43.

*Trachelosperm cathayanum*, Merrill (non Schneider), in Lingn. Sci. Journ VII (1929), 32.

Stout woody climber, glabrous or pilosulose when young. Stem thick, 1 cm. in diameter, densely lenticellate. Leaves subcoriaceous, oblanceolate, obovate or elliptic-oblong, apex abruptly caudate-acuminate or acute, base cuneate to acute, rarely rotundate, 8-15 cm. long 3-4.5 cm. wide; lateral veins to 15 pairs, conspicuous beneath; petioles 3-5 mm. long. Cymes subumbellate, axillary or sometimes subterminal, 1-3 cm. long; flowers purplish, buds obtuse; pedicels 3-8 mm. long; calyx-lobes adpressed to the corolla-tube, ovate-obtuse, ciliate, intracalycular glands about 10; corolla hypocrateriform, tube about 5 mm. high and 2 mm. in diameter at the base, lobes obovate-oblong, 5-7 mm. long; stamens inserted near the base of the tube; anthers wholly included from the puberulent orifice; ovary ovoid, style filiform, stigma subcapitate; disk lobed, about as long as the ovary. Follicles stout, cylindrical-oblong, parallel, narrowing toward the apex, somewhat falcate in outline, usually coherent at the apex, slightly divaricate at length, 10-15 cm. long, 1-1.5 cm. in diameter; epicarp glabrous, finely striolate; seeds dark purple, obovate-oblong or broad ovate, obtuse toward the apex, about 15 mm. long, 7 mm. wide, apex about 2.5 mm. wide; coma white-sericeous, to 5 cm. long.

MOUNT OMEI: Ta-o-ssu, alt. 1103 m., shrub 4 metres high, *W.P. Fang*, No. 17751, September 14, 1941; Hung-chun-ping, alt. 1200 m., flowers red, *S.S. Chien*, No. 6074, July 11, 1937; same locality, *H.C. Chow*, No. 7538, June 12, 1938; same locality, *W.W. Ma*, No. 2711, July 8, 1940; same locality, *T.C. Lee*, No. 3714, October 7, 1940; Chiu-lao-tung, alt. 1800 m., *W.P. Fang*, No. 17109, June 20, 1941; Chu-tien, alt. 1920 m., *W.P. Fang*, No. 15528, November 25, 1940; same locality, *W.P. Fang*, No. 16756, May 28, 1941; Ta-cheng-ssu, alt. 2386 m., *W.P. Fang*, No. 1721, May 28, 1941; without precise locality, *C.W. Yao*, No. 591, in 1939; southwest of Mount Omei, Opien-hsien, *C.L. Sun*, No. 717, July 17, 1939.

Distribution: India, Indo-china, China—Hupeh, Szechuan, Hunan, Kweichow, Yunnan, Chekiang, Fukien, Kwangtung and Kwangsi.

Among the specimens in my possession some have both flowers and fruits on the same branch, with glabrous ovaries and follicles. The follicles are not strictly cylindrical, but narrowly elliptical-cylindrical and somewhat curved gradually tapering towards the apex and usually broadest near the middle. The seeds are dark brown, compressed ellipsoid, shortly contracted at the apex, about 13 or 15 mm. long, and 7 mm. wide, the coma is about 3 times the length of the seed. .... Y. Tsiang.

- Fig. 1, a flowering branch (natural size);  
 2, a flower-bud (2.5 times enlarged);  
 3, an open flower (3 times enlarged);  
 4, calyx expanded to show the calycular glands at the base (5 times enlarged);  
 5, corona expanded to show the insertion of stamens (3 times enlarged);  
 6, disk glands and pistil (7 times enlarged);  
 7, ovary in cross section (10 times enlarged);  
 8, ovary in longitudinal section (10 times enlarged);  
 9, follicles (natural size);  
 10, seed (natural size).

圖版九十

紫花絡石

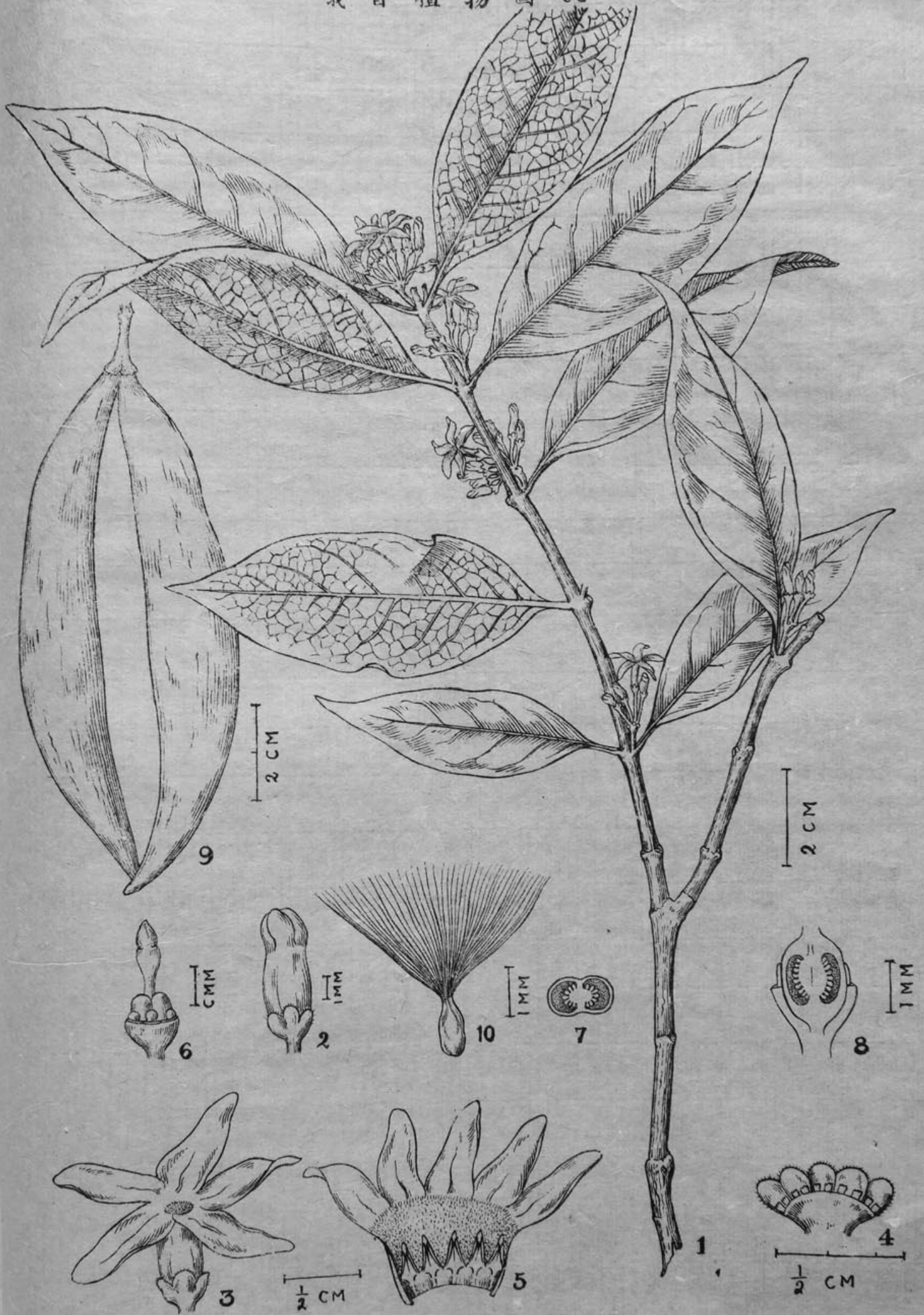
夾竹桃科

壯大之木質藤本，禿淨或幼時微具長毛。莖厚，直徑一公分，具多數之皮孔。葉革質，倒披針形，倒卵形，或長橢圓形，先端尖尾狀，漸尖或銳尖，基部楔形或銳尖，稀圓形，長八至十五公分，寬三十至四十五公厘；側脈多至十五對，在葉背顯明；葉柄長三至五公厘。聚繖花序近於繖形，腋生或有時近於頂生，長一至三公分；花紫色，芽鈍尖形；花柄長三至八公厘，萼片緊貼於花冠之圓筒，卵圓形，鈍尖，微具睫毛，內面萼腺約十枚；花冠高盆狀，筒約高五公厘，基部直徑二公厘，花冠之裂片倒卵長圓形，長五至七公厘；小蕊着生冠筒之基部；花藥完全隱藏於有毛之花喉內；子房卵圓形，花柱線形，柱頭亞頭狀；花盤有裂片，約與子房等長。柱頭壯大，圓柱長圓形，平行，向先端部漸狹，略似鐮刀狀，通常先端部連生，老時略展開，長十至十五公分，直徑十至十五公厘；外果皮禿淨，具細縱紋；種子暗紫色，倒卵長圓形或寬卵圓形，向端部漸鈍，長約十五公厘，寬七公厘，端部寬約二公厘半；種毛白絲狀，長約五公分。

產峨眉山之大峨寺，洪椿坪，九老洞，初殿及大乘寺等處。

圖解：1. 着花之枝(原大)；2. 花芽；3. 盛開之花；4. 花萼展開以示萼腺；5. 花冠內小蕊；6. 大蕊及具裂片之花盤；7. 子房之橫剖面；8. 子房之縱剖面；9. 果實；10. 種子及種毛(解剖圖均經放大)。





90. TRACHELOSPERMUM AXILLARE Hooker f.

## Plate 91.

**PLECTRANTHUS FANGII** Sun.

## Labiatae.

**Plectranthus Fangii** Sun, sp. nov.

Herba annua. Caulis erectus, 15-40 cm. altus, acute quadrangulus, in parte inferiore dense strigosus et frondosus, in parte superiore sparso-pilosus, ramosus. Folia late ovalia ad ovata, 1.5-3.8 cm. longa, 1.3 cm. lata, basi cordata ad rotundata, apice acuta, saepe crenata, rare dentata, supra viridia et dense strigosea, subtus piloso-tomentosa et pallidiora, petiolis 0.5-2 cm. longis, dense pilosis; inferiora longe petiolata, distincte cordata, superiora majora; superiora fere sessilia, angustiora et parviora. Bractae lanceolatae, 1 cm. longae, acutae, pilosae. Verticillastri terminales, 2 cymas 3-7-florum compositi, laxe paniculati. Calyx campanulatus, 1.6 mm. longus, extus pubescens, inaequaliter 5-dentatus, labio superiore brevior, 3-dentato, dentibus triangulari-ovatis, dente medio minore; labio inferiore longiore, 2-dentato; tubo 0.9 mm. longo, 10-nervato, intus glabro; fructifer tubulatus, recurvatus. Corolla tubulata, 5.2 mm. longa, 5-lobata, extus subglabra, labio superiore aequaliter, 4-lobato, 1.5 mm. longo lobis oblongis, aequalibus, reflexis; labio inferiore rhombico, 1.7 mm. longo, concavo, basi contracto, integro; tubo cylindrico, recto, intus glabro, 3.5 mm. longo. Stamina 4, declinata, exserta, 2 inferioribus superiora supranatis, parte inferiore connatis, 2 superioribus longioribus, parte inferiore pilosis. Stylus stamina aequalis, apice bifidus, glaber. Ovarii lobi apice rotundati et glabri. Nuculae fuscae, oblongae, 1 mm. longae, glabrae.

Annual herb. Stem erect, 15-40 cm. high, sharply 4-angled, densely strigose and leafy on the lower part, sparsely pilous on the upper part, branched. Leaves broadly oval to ovate, 1.5-3.8 cm. long, 1-3 cm. broad, cordate to rounded at base acute at apex, mostly crenate, rarely dentate, green and densely strigose above, pilous-tomentose and paler beneath petioles 0.5-2 cm. long, densely pilous; the lower ones long petioled, distinctly cordate, larger than the upper ones; the upper ones nearly sessile, narrower and smaller. Bracts lanceolate, 1 mm. long acute, pilous. Floral whorls terminal, composed of two 3-7-flowered cymes, forming a loose panicle. Calyx campanulate, 1.6 mm. long, hairy outside, unequally 5-toothed, upper lip shorter, 3-toothed, teeth triangular-ovate, the middle tooth smaller; lower lip longer, 2-toothed; tube 0.9 mm. long, 10-nerved glabrous inside; fruiting calyx tubular, recurved. Corolla tubular, 5.2 mm. long, 5-lobed, subglabrous outside, upper lip equally 4-lobed, 1.5 mm. long, lobes equal, oblong reflexed; lower lip rhombic, 1.7 mm. long concave, contracted at base, entire; tube cylindrical, straight, glabrous inside, 3.5 mm. long. Stamens 4, declinate, exserted, lower pair exceeding the upper, connate at the lower part, upper pair longer, pilous on the lower part. Style equalling to the stamens in length, bifid at apex, glabrous. Ovary-lobes rounded and glabrous at apex. Nutlets brown, oblong 1 mm. long, glabrous.

MOUNT OMEI: Pao-ning-ssu, alt. 480 m., herb 50 cm. high, pubescent throughout, flowers white, corolla purple-dotted inside, occasionally, *W.P. Fang*, No. 14903, October 1, 1940; without precise locality, *W.P. Fang*, Nos. 5013, 6777, 9186, 9376 & 9528, in 1930.

The present species is closely allied to *Plectranthus striatus* Benthham but differs in having pilous stem as well as petioled and pilous leaves.

This new species is named in honour of Dr. Wen-pei Fang, the editor of this Icones, who discovered these interesting new plants..... Y. Z. Sun.

- Fig. 1, a flowering plant (natural size);  
 2, a flower (20 times enlarged);  
 3, a dissection of the calyx (30 times enlarged);  
 4, a dissection of the corolla-tube (20 times enlarged);  
 5, a pistil (20 times enlarged);  
 6, a leaf enlarged to show the hairs (3 times enlarged);  
 7, a fruit with calyx (30 times enlarged);  
 8, a nutlet (20 times enlarged).



圖版九十一

方氏香茶菜 新種

唇形科

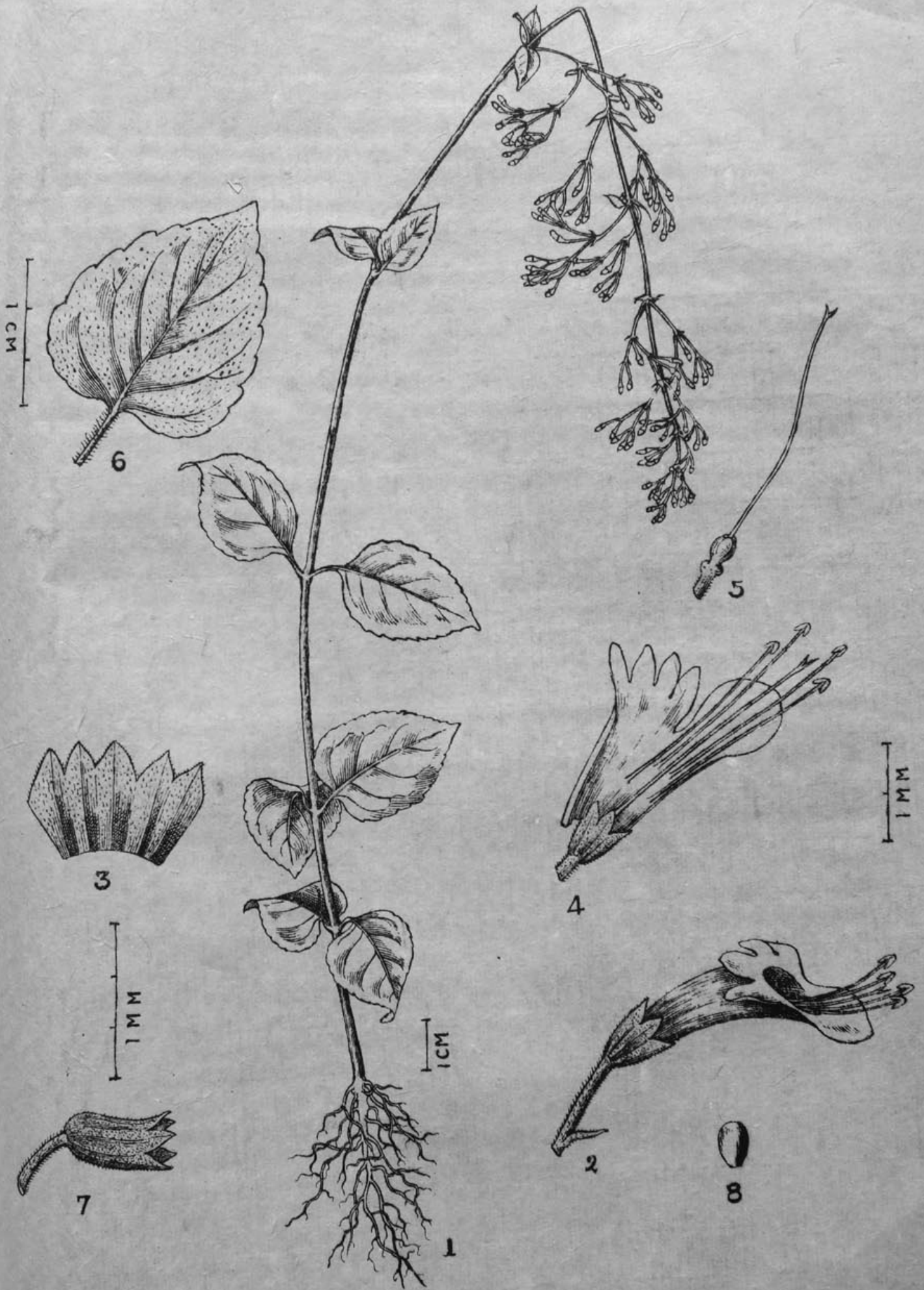
一年生草本。莖直立，高十五至四十公分，具四銳稜，基部密被長毛而多葉，上部毛少而分枝。葉闊卵圓形至卵形，長十五至二十八公厘，闊一至三公分，基部心臟形至圓形，先端尖形。葉緣多着新月形之鈍鋸齒，稀為齒狀。表面綠色而多長毛。背面具長髯毛而色淡。葉柄長五至二十公厘，具長毛，葉基部之葉具長柄，顯呈心臟形。較上部者為長；莖上部之葉近于無柄，狹而小。苞片披針形，長一公厘，尖而多毛。花序輪生頂端，由兩個三至七花之聚繖花序合成，集聚為疏鬆之圓錐花序。花鐘形，長一公厘半，外面多毛，邊緣裂為不等之五齒，上唇較短，裂成三齒，齒三角狀卵形，中齒較小；下唇較長，具二齒；管長約為一公厘，具十脈，內面無毛，結果之花筒形反捲。花冠筒形，長五公厘，裂為五片，表面無毛，上唇等裂為四片，長一公厘半，裂片大小相等，長方形，向後反拆；下唇菱形，長一公厘七，中凹，全緣，基部狹窄，管呈直筒形，長三公厘半，內面無毛，小蕊四本，下傾，超出花冠之外，下面一對小蕊伸出，超過於上面一對之外，其花絲基部相連合，上面一對小蕊較長，其花絲基部具長毛，頂端二裂，無毛；子房之裂片頂圓無毛。小堅果棕色，圓柱形，長一公厘，無毛。

產於峨眉縣保寧寺附近。

此種與 *Plectranthus striatus* Bentham 相近，惟莖有長毛，葉下有長髯毛及葉基心臟形為異耳。

此新種之種名係從峨眉植物圖誌主編方文培先生之姓，因此種係彼於民國十九年及二十九年所先後發現者也。

圖解：1. 着花之植物（原大）；2. 花（放大二十倍）；3. 花之解剖（放大二十五倍）；4. 花冠之解剖（放大二十倍）；5. 大蕊（放大二十倍）；6. 葉放大以示其毛（放大三倍）；7. 果實及花萼（放大三十倍）；8. 小堅果（放大二十倍）。



91. PLECTRANTHUS FANGII Sun, sp. nov.



## Plate 92.

**ALBIZZIA KALKORA** Prain.

Leguminosae—Mimosoideae.

**Albizzia kalkora**, (Roxburgh) Prain in Journ. As. Soc. Bengal, LXVI (1897), 551; Novic. Ind. (1905), 345.—Gagnepain in Lecomte, Fl. Gen. Indo-Chine, II (1913), 92.—Rehder et Wilson in Sargent, Pl. Wilson, III (1917), 446.

*Mimosa kalkora* Roxburgh, Hort. Beng. (1814), 40 (nomen nudum); Fl. Ind. ed. 2, II (1832), 457, fide Prain.

*Acacia macrophylla*, Bunge in Mem. Sav. Etr. Acad. Sci. St. Petersb. II (1833), 135. (Enum. Pl. Chin. Bor. 61).

*Albizzia lebbek*, Hemsley (non Benth) in Journ. Linn. soc. XXI (1897), 216, exclud. synonym, pro parte.—Harms in Engler, Bot. Jahrb. XXIX (1900), 408.

Small tree or shrub usually 5 metres high, rarely to 15 metres high, bark dark brown or greyish brown; rough; branchlets of the current year green, subangular, pubescent, those of more than one year old dark brown, pubescent, with conspicuous lenticels. Leaves bipinnate, 16-22 cm. long, with 4-8 pinnae, each pinna 8-15 cm. long, with 6-10 rarely 12 leaflets, leaflets oblong or ovate-oblong, usually oblique, 18-28 mm. long, 7-11 mm. broad, truncate or broadly cuneate at base, obtuse or subrotund at the apex, veins inconspicuous on the upper surface, midrib prominent and lateral veins more or less conspicuous at the lower surface, upper surface deep green, puberulous, lower surface pale green, pubescent, rachis cylindrical or subangular, usually dilated at the base, petiolules 5-15 mm. long, pubescent. Flowers white and changed to yellow, in terminal or lateral heads; calyx tubular, 2 mm. long, green-pubescent, shortly 5-toothed; corolla green, 6 mm. long, tubular at base, lobes lanceolate, pubescent on the outer surface; stamens numerous, 2.5-3.5 cm. long, exserted, filaments slender, glabrous,  $1/6 - 1/4$  of their lower part connate, anthers greenish-yellow, subglobose; ovary superior, style slender, filaments filiform, stigma minute; pedicels 2 mm. long, slender, pubescent; peduncles 3.5-4 cm. long, cylindrical, pubescent. Fruit a thin strap-shaped pod, 15-18 cm. long, 3-3.5 cm. broad, on a peduncle 5 cm. long.

MOUNT OMEI: Pao-ning-ssu, alt. 450 m., small tree 8 metres high, flowers greenish-white, stamens exserted, W.P. Fang, No. 16384, August 1, 1941; same locality, small tree 8 metres high, branches pubescent, leaves pubescent beneath, flowers yellowish-white, occasionally, W.P. Fang, no. 18636, May 6, 1942; Pao-kuo-ssu, alt. 500 m., on grassy slopes, small tree 5 metres high, W.P. Fang, No. 15676, September 30, 1939; same locality, small tree 10 metres high, T.C. Lee, No. 3327, August 15, 1940; same locality, S.N. Hsu, No. 2, August 1935, Fu-hu-ssu, alt. 610 m., small tree 15 metres high, W.P. Fang, No. 17645, August 31, 1941.

SZECHUAN: Chengtu, near Wang-kiang-lau, at roadside, small tree 12 metres high, flowers white, occasionally, W.P. Fang, No. 12348, May 13, 1933, same locality, W.P. Fang, No. 19251, May 10, 1943.

The plants of Mount Omei have leaves usually with four to six pinnae and each pinna has ten rarely eight leaflets. The flowers are white in colour when just open but they changed to golden yellow afterwards so as to make the tree very attractive. .... W.P. Fang, May 1943.

- Fig. 1, a flowering branch (natural size);  
 2, a flower (2 times enlarged);  
 3, the pistil (2 times enlarged);  
 4, the stamens (2 times enlarged);  
 5, the fruit (natural size);  
 6, a leaflet (2 times enlarged).

# 圖 版 九 十 二

## 山 合 歡 (別名：白合歡)

### 豆 科

小喬木或灌木通常高五公尺，罕達十五公尺，樹皮暗褐色或灰褐色，粗糙；當年生之枝綠色，略近於方形，被細毛，一年以上之枝暗褐色，被細毛並具顯著皮孔。葉為二回羽狀複葉，長十六至二十二公分，具四至八枚小羽狀複葉，每小羽狀複葉長八至十五公分，具小葉片六至十枚，鮮達十二枚，小葉片長方形或長方卵形，略呈斜形，長十八至二十八公厘，寬七至十一公厘，基部楔形或闊楔形，先端鈍形或近於圓形，葉脈在葉面不顯，在葉背則主脈凸出，側脈微顯，葉面深綠色，微被細毛，葉背淡綠色，密被細毛，葉軸圓形或近於方形，基部膨大，葉柄長五至十五公厘，被細毛。花初開放時白色，久則變黃色，花萼管狀，長二公厘，被綠毛，具五齒狀淺裂之萼片，花冠小形綠色，長六公厘，基部成管狀，花瓣披針形，表面被毛，小蕊多數，長二十五至三十五公厘，伸出花外，花絲纖細，光滑無毛，其基部約至六分之一二分之一部分彼此連合成圓筒形，花藥黃綠色，近於圓球形；子房上位，花柱纖細，柱頭甚小，小花梗長二公厘，纖細，被細毛；花梗長三十五至四十公厘，圓柱形，被細毛。果實為帶狀莢果，長十五至十八公分，闊三十至三十五公厘，果梗長八公分。

產於峨眉保寧寺，報國寺及伏虎寺附近路旁或森林中，在成都近郊亦尚普遍。

峨眉山產者常為四至六小羽狀複葉所成之二回羽狀複葉。花初開時白色，繼變金黃色，使此樹異常美觀，堪移植庭園，作觀賞樹木之用。

圖解：1. 着花之枝（原大）；2. 花（放大二倍）；3. 大蕊（放大二倍）；4. 小蕊（放大二倍）；5. 果實（原大）；6. 小葉片（放大二倍）。





92. ALBIZZIA KALKORA Prain

## Plate 93.

**CAESALPINIA SEPIARIA** Roxburgh.

Leguminosae—Caesalpinioideae.

**Caesalpinia sepiaria**, Roxburgh, Hort. Beng. (1814); Fl. Ind. II (1824), 360.—Walper, Rep. Bot. System I (1842), 810.—J.G. Baker in Hooker, f. Fl. Brit. Ind. II (1878), 256.—Hance in Journ. Bot. XX (1882), 5.—Maximowicz, in Bull. Soc. Nat. Moscou, LIV (1879), 5 (Fl. As Or. Fragm.)—Hemsley in Journ. Soc. XX III (1887), 206.—Craib in Sargent Pl. Wilson, II (1914), 92.

*Caesalpinia japonica* Siebold & Zuccarini, Fl. Jap. (1826), 9.

*Caesalpinia crista* Thunberg, (non Linn.) Fl. Jap. (1784), 170.

Scandent shrub usually about 3 metres high, branches slender, slightly pubescent, green or purplish green, with recurved prickles. Leaves bipinnate, 12-30 cm. long, with 13 to 21 pinnae, rachis subangular, prickly, each pinna with 12 to 24 leaflets 6-8 cm. long, leaflets membranous, oblong or obovate-oblong, 1.8-2 cm. long, 6-8 mm. broad, deep green, glabrous above, glaucescent and pubescent below, sessile or very shortly petioled, rachilla subterete. Flowers numerous in racemes about 25 cm. long; calyx 5-lobed, lobes obovate, 6-8 mm. long, 5 mm. broad, membranous; petals 5, bright yellow, nearly equal, slightly orbicular, 1.5 cm. long, 1.5-1.8 cm. broad, clawed at the base; stamens 10, with filaments densely woolly at the lower part, anthers versatile, oblong; ovary superior, sessile, 1-celled and with few ovules, style slender, stigma terminal, small; pedicels slender, 2.5-4 cm. long. Fruit an oblong legume, 9 cm. long, 2.5 cm. broad, on a stout pedicel 4 cm. long.

MOUNT OMEI: Fu-hu-ssu, alt. 650 m., scandent shrub, flowers in buds, *W.P. Fang*, No. 14110, April 14, 1940; en route from Fu-hu-ssu to Ta-o-ssu, alt. 1000 m., shrub 2.5 metres high, on side of ravine, *S.S. Chien*, No. 5473, May 4, 1936; Pai-lung-tung, alt. 950 m., in thickets, scandent shrub with yellow flowers, *C.L. Sun*, No. 1933, May 8, 1940; west of Opian-hsien, *T.T. Yu*, No. 724, May 13, 1932; same locality, *W.C. Cheng*, No. 6081, June 30, 1936.

SZETCHUAN: North-eastern Szechuan, *K.L. Chu*, No. 1772, July 1935; Nanchuan-hsien, *Y.C. Young*, No. 3012, May 1939; Chien-yang-hsien, *S.S. Chien*, No. 5227, April 20, 1936; Chengtu, near a village, shrub 3 metres high, scandent shrub 3 metres high, flowers yellow, *W.P. Fang*, No. 13393, May 29, 1939.

This is the most widely distributed species of *Caesalpinia* in China as far as has been reported in the northern and southern provinces. It has been known colloquially as "Yun-shih" (雲實) and has been used for a long time as a kind of medicine. Its habit is very showy—a scandent shrub with bright yellow flowers. It differs from *Caesalpinia sappan* Linnaeus, colloquially known as "Su-fang" (蘇方), of southern China in having membranous leaves, while the leaves of that species are usually coriaceous or subcoriaceous.

.....W.P. Fang.

- Fig. 1, a flowering branch (natural size);  
 2, a fruiting branch (natural size);  
 3, a front view of a flower (natural size);  
 4, a back view of a flower (natural size);  
 5, a pistil (2 times enlarged);  
 6, a stamen (2 times enlarged);  
 7, a seed (natural size).



# 圖版九十三

## 雲 實

豆科，雲實副科。

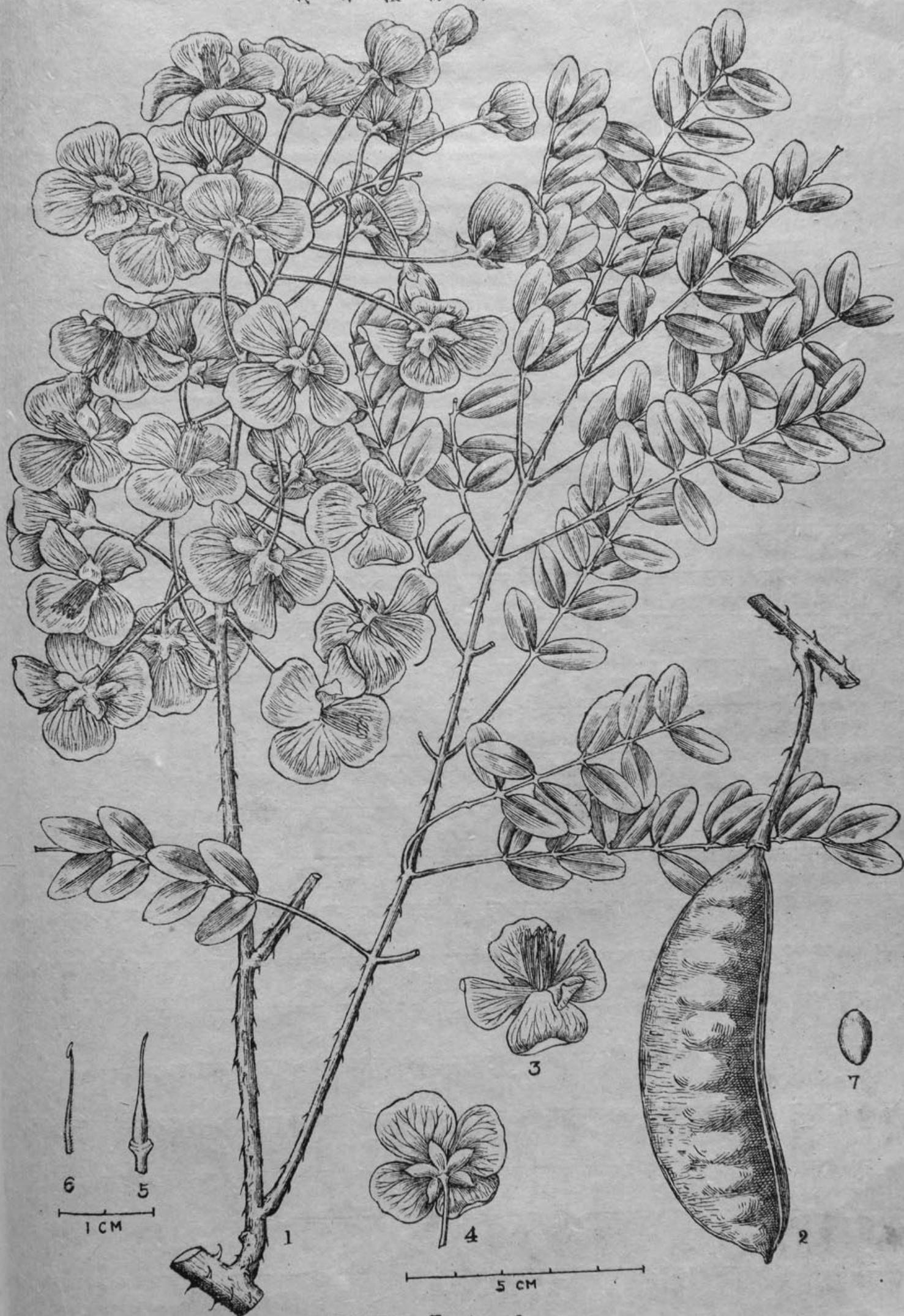
攀援灌木高約三公尺，枝細長，微被細毛，綠色或紫綠色，具反捲之刺。葉為奇數二回羽狀複葉，長十二至三十公分，為十三至二十一個小羽複狀葉所組成，葉軸近於方形，有刺，每一羽狀複葉具小葉片十二至二十四枚，長六至八公分，小葉薄膜質，長方形或倒卵長方形，長十八至二十公厘，寬六至八公厘，表面深綠色，無毛，背面微具白粉及細毛，無柄或具短柄，其着生之軸近於圓形。花繁多成總狀花序，長約二十五公分，花具倒卵形之萼片五枚，長六至八公厘，寬五公厘，膜質；花瓣五枚，鮮黃色，大小幾相等，近於圓形，長十五公厘，闊十五至十八公厘，基部成爪狀；小蕊十本，花絲基部密被細毛，花藥長方形，着生成丁字狀；子房上位，無柄，一室，具胚珠數枚，花柱纖細，柱頭形小；花梗細小，長二十五至四十公厘。果實為長方形之莢果，長九公分，寬二十五公厘，果梗粗壯，長四公分。

產峨眉山伏虎寺，大峨寺及白龍洞附近之路旁溪畔或叢林中。四川之南川，簡陽及成都等縣亦曾發現。五月開花。

雲實分佈甚廣，南北諸省均產之，且已作藥用。常為攀援灌木而具鮮艷之黃花，其外觀至為美麗。雲實與華南之蘇方為同屬而習性極相近之種類，但雲實具膜質之葉，而蘇方之葉則為革質或近於革質，故區別甚易也。

圖解：1. 着花之枝(原大)； 2. 着果之枝(原大)； 3. 花之正面(原大)； 4. 花之背面(原大)； 5. 大蕊(放大二倍)； 6. 小蕊(放大二倍)； 7. 種子(原大)。

Fig. 1. A flowering branch (natural size);  
 2. A fruiting branch (natural size);  
 3. A front view of a flower (natural size);  
 4. A back view of a flower (natural size);  
 5. A pistil (2 times enlarged);  
 6. A stamen (2 times enlarged);  
 7. A seed (natural size).



93. CAESALPINIA SEPIARIA Roxburgh



## Plate 94.

**CAESALPINIA SZECHUENENSIS** Craib.

Leguminosae—Caesalpinioideae.

**Caesalpinia szechuenensis**, Craib. in Sargent, Pl. Wilson. II (1914). 92.

Shrub usually climbing, about 3 metres high; rarely to 5 metres high; branchlets slender, cylindrical, purplish green or greyish green, current year branchlets purple-puberulous, those more than one year old, glabrous, prickly with recurved spines. Leaves alternate, bipinnate, 15-30 cm. long, rachis cylindrical, puberulous and usually prickly, petioles puberulous, stipules deciduous, pinnae 2-5, usually 8-12 cm. long, petiolules 1-1.5 cm. long, cylindrical, puberulous, usually prickly; leaflets 4-5, opposite, ovate or obovate, rarely ovate-oblong, terminal ones usually oblanceolate, rounded or obtuse on the apex, cuneate or broadly cuneate rarely rounded at base, 2.5-5.5 cm. long, 1-2.5 cm. broad, upper surface shining green, glabrous, reticulate, lower surface greyish-puberulous, lateral nerves slightly prominent on both surfaces petiolules 2 mm. long, puberulous. Flowers in terminal panicles up to 24 cm. long; calyx tubular, 2 mm. long, 5-lobed, lobes oblong, 5-7 mm. long, pale yellow; petals 5, obovate or oblanceolate, 8-14 mm. long, clawed, golden yellow; stamens 10, as long as the petals, filaments pilose at base, anthers subovoid, yellow; ovary flat, oblique, shortly stipitate, slightly pilose, style slender, glabrous, 1.5 cm. long, stigma capitate, pedicels slender, 8 mm. long. Legume purple or brownish purple, reticulate, subrotund, compressed, 2.5 cm. long, 2 cm. broad, on a short pedicels 1-1.2 cm. long.

MOUNT OMEI: Near Lung-men-tung, alt. 600 m., on roadside, scandent shrub 3 metres high, *W.C. Cheng*, No. 5935, June 13, 1936; same locality, *T.H. Tu*, without number, in 1935; same locality, a scandent shrub with yellow flowers, *C.L. Chow*, No. 5997, May 15, 1942; Ching-yin-ko, alt. 900 m., in woods, shrub 2-3 metres high, flowers yellow, young fruits green, common, *W.W. Ma*, No 2294, June 12, 1940; Hei-lung-kiang, alt. 900 m., in forests, shrub 1-2 metres high, flowers yellow, *C.L. Sun*, No 1978, April 15, 1940; Hung-chung-ping, alt. 1200 m. in woods, climbing shrub with flat legume, *W.P. Fang*, No. 12653, July 28, 1938; same locality, scandent shrub, young fruits greenish, *W.P. Fang*, Nos. 15235 & 15273, November 13, 1940; en route from Hung-chung-ping to Ta-ping, alt. 1300 m., scandent shrub with yellow flowers, *C.L. Sun*, No. 523, June 16, 1939; Sukang, alt. 1500 m., scandent shrub with yellow flowers, *W.P. Fang*, No. 16681, May 20, 1941; Chang-lao-ping, alt. 1600 m., spiny shrub with yellow flowers, *W.P. Fang*, No. 18943, June 6, 1942; Chiu-hsih-chiu-tao-kwei, alt. 1600 m., scandent shrub with yellow flowers, *W.P. Fang*, No. 16827, June 4, 1941; San-tau-ho, alt. 1800 m., at roadside, scandent shrub, *T.C. Lee*, No. 2674, July 6, 1940.

This species was discovered by the late Dr. E.H. Wilson in 1908 at Kia-ting-fu (Lo-shan-hsien), about 20 miles northeast of Mount Omei. Though it is very limited in distribution, we have found it to be very common on the lower part of Mount Omei. From other Chinese species it differs in its reticulate legume and coriaceous leaves. .... W.P. Fang, June, 1943.

- Fig. 1, a flowering branch (natural size);  
 2, a leafy and fruiting branch (natural size);  
 3, a flower (10 times enlarged).

# 圖版九十四

## 川雲實

豆科，雲實副科。

常為攀援灌木，高約三公尺，稀至五公尺；枝細小，圓形，紫綠色或灰綠色，生長一年之小枝具紫色細毛，一年以上者，光滑無毛，均具反捲之刺。葉互生，二回羽狀複葉，長十五至三十公分，其軸圓形，具細毛及刺；葉柄被細毛；托葉早落，羽狀複葉二至五個，長八至十二公分，其柄長十至十五公厘，圓形，被細毛，常具刺；小葉四至五枚，對生，卵形或倒卵形，稀為長方卵形，着生於頂端之小葉常為倒披針形，先端圓形或鈍形，基部楔形或闊楔形，稀為圓形，長二十五至五十五公厘，闊十至二十五公厘，表面亮綠色，光滑無毛，具顯著之網狀脈，背面被淡灰色細毛，側脈在葉之兩面均微凸出，小葉柄長二公厘，被細毛。花着生於頂生之圓錐花序，長達二十四公分；花基部成管狀，長二公厘，上部裂成長方形之萼片五枚，長五至七公厘，淡黃色；花瓣五枚，倒卵形或倒披針形，長八至十四公厘，具爪，金黃色；小蕊十本，與花瓣等長，花絲基部具較粗之毛，花藥近於卵圓形，黃色；子房扁形，斜生，具短柄，微被粗毛，花柱纖細，光滑無毛，長十五公厘，柱頭圓頭形，花梗纖細，長八公厘。莢果紫色或紫褐色，具顯著網狀脈紋，形略圓而扁，長二十五公厘，闊二十公厘，果梗長十至十二公厘。

產峨眉山之龍門洞，清音閣，黑龍江，洪椿坪，大坪，蘇崗，長老坪，九十九倒拐及三道河等處。五六月開花，八月果可成熟。

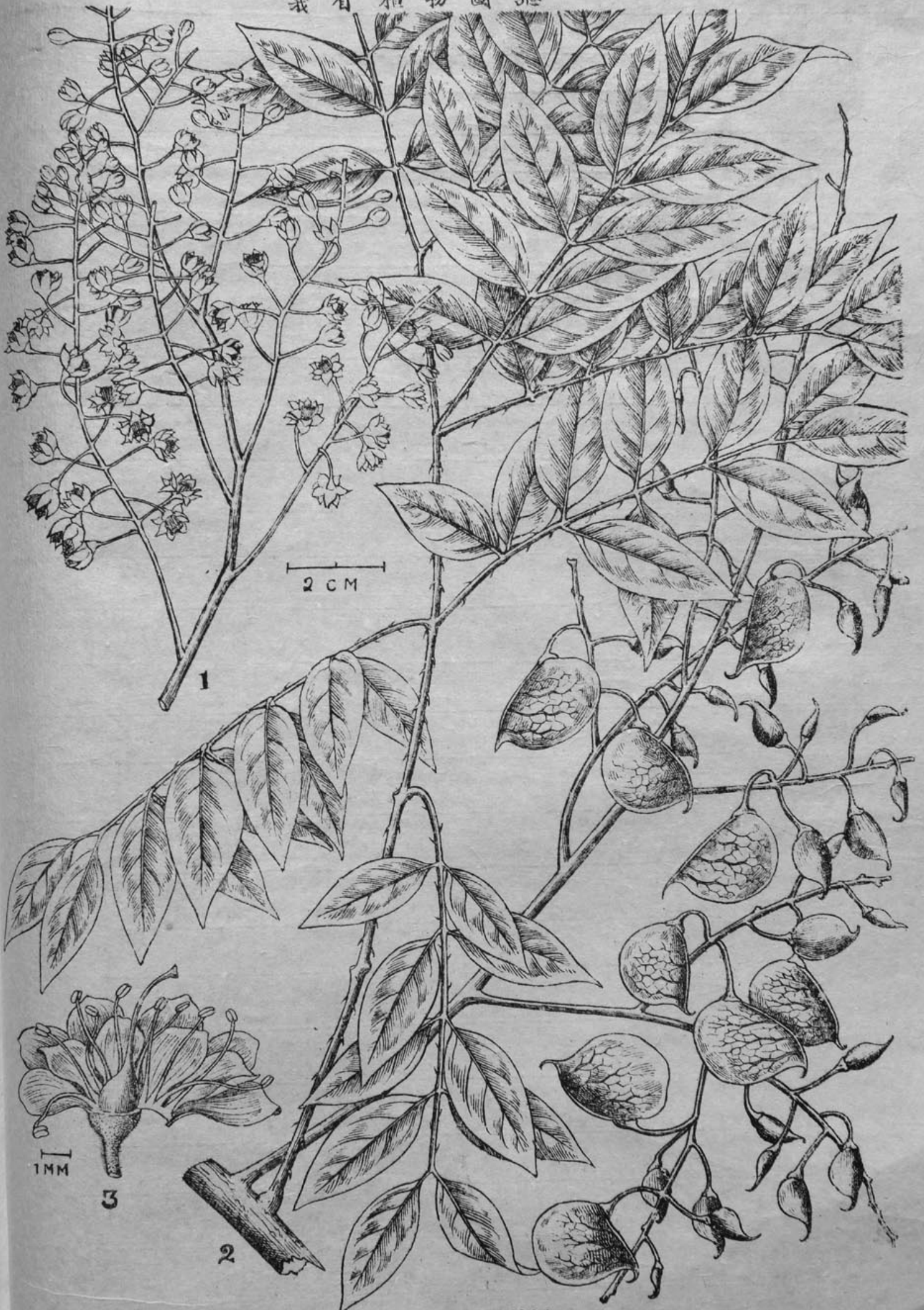
川雲實係威爾遜氏於前清光緒三十二年發現於峨眉山東北之樂山縣。其分佈限於此區。在峨眉山之下半部甚普遍。此種之圓形莢果，具顯著之網狀脈紋及革質之葉，極易與別種辨別。

圖解：1. 着花之枝（原大）； 2. 着果之枝（原大）； 3. 花（放大十倍）。

This species was discovered by the late Dr. E. H. Wilson in 1908 at Kiao-shan (Lao-shan-shan), about 20 miles northeast of Chengde, China. Though its distribution is very limited, we have found it to be very common on the lower part of Kiao-shan. From other Chinese species it differs in its reticulate leaf-veins and flattened leaves.

Fig. 1. A flowering branch (natural size).  
 2. A leafy and fruiting branch (natural size).  
 3. A flower (10 times enlarged).





94. CAESALPINIA SZECHUENENSIS Craib.

## Plate 95.

**ORMOSIA HOSIEI** Hemsley et Wilson.

## Leguminosae—Papilionatae.

**Ormosia Hosiei** Hemsley et Wilson in Kew Bull. Misc. Inform. (1906), 156.— Craib in Sargent, Pl. Wilson. II (1914), 94.

Tree 15 metres high rarely up to 25 metres high, bark grey, smooth; branches slender, slightly pendulous, green, sparsely pubescent, branchlets green, yellow pubescent; winter-buds small, pubescent. Leaves evergreen, alternate, odd-pinnate, usually with 5-leaflets, leaflets coriaceous, ovate or oblong-ovate, 5-7 cm long, 2.5-3.5 cm. broad, rounded or broadly cuneate at base, shortly acuminate or acute on the apex, deep green above, pale green below, sparsely pubescent while young, glabrescent when matured; petiolule 3-7 mm. long, yellow pubescent, petiole 2.5-3 cm. long, yellow-pubescent while young, then glabrescent. Flowers fragrant, in pendulous, terminal or axillary panicles 15 to 20 cm. long; calyx greenish purple, campanulate, 7 mm. long, pubescent on the outer surface, 5-lobed near the apex, lobes triangular or triangular-ovate, the upper lobe usually shorter and broader; corolla papilionaceous, white or purplish white, petals all with short claws, standard obovate, 1.8-2 cm. long, wings oblong, keels not connate, oblong; stamens 10, free, glabrous, as long as the petals, usually incurved, anthers yellow, oblong, versatile; ovary superior, shortly stipitate, glabrous, style purple, filiform, incurved, stigma oblique. Pods sub-rotund, woody, turgid, seeds 1-2 in each pod, usually sub-rotund, with bright scarlet testa.

MOUNT OMEI: Fu-hu-ssu, in forests, tree 15 metres high, flowers white or purplish white, in panicles W.P. Fang, No. 19242, May 5, 1943.

SZETCHUAN: Chengtu, Nanchiao-chang cultivated in the College of Science, tree 10 metres high, S.S. Chien, No. 5001, October 23, 1935, No. 5933, April 23, 1937.

This species has long been appreciated not only by the horticulturist but also by the cabinet-maker—by the former, for its well-shaped tree crown, beautiful flowers, and bright scarlet seeds, and by the latter, for its brownish, small-grained wood. It is colloquilly known as "Hung-tou-shu" (紅豆樹) in southwestern China, Hupeh and Szechuan. Another species, *Ormosia semicastrata* Hance, of southern China is also colloquilly named "Hung-tou-shu" or as "Hsiang-hsi-tze" (相思子), but this species differs from that one in having glabrous leaves and woody pods. .... W.P. Fang

- Fig. 1, a flowering branch (natural size);  
 2, a fruiting branch (natural size);  
 3, the outer surface of calyx (natural size);  
 4, a flower dissected to show the stamens and pistil (natural size);  
 5, the petals (1.5 times enlarged);  
 6, a fruit dissected to show the seed (natural size);  
 7, a seed (natural size).



## 圖版九十五

## 紅豆樹

(別名：荷時紅豆樹)

## 豆科，蝶形花副科。

喬木高十五公尺稀至二十五公尺，樹皮灰色，光滑；枝纖細，略向下垂，綠色，略被細毛；小枝綠色，被黃色細毛；多芽細小，被細毛。葉爲常綠互生之奇數羽狀複葉，通常具五小葉片，革質，卵或長方卵形，長五至七公分，寬二十五至三十五公厘，基部圓形或闊楔形，先端短銳尖形或尖形，表面深綠色，背面淡綠色，幼嫩時疎被細毛，長成時則毛落而光滑；小葉柄長三至七公厘，被黃色細毛；葉柄長二十五至三十公厘，幼嫩時被黃色細毛，長成後則近於光滑無毛。花具芳香，着生於下垂頂生或腋生之圓錐花序，長十五至二十公分；花紫綠色，鐘形，長七公厘，表面被細毛，頂端裂爲五裂片，各裂片均成三角形或三角卵形，上側之萼片常較短而闊；花冠蝶形，白色或紫白色，各花瓣均具有爪，旗瓣倒卵形，長十八至二十公厘，翼瓣長橢圓形，二龍骨瓣不相連接，亦成長橢圓形；小蕊十本，分立，光滑無毛，其長與花瓣相等，常彎曲，花藥丁字形，黃色，長方橢圓形；子房上位，具短柄，光滑無毛，花柱紫色，綫狀，彎曲，柱頭斜生。果實爲近於圓形之木質莢果，外形肥大，每果實具種子一至二枚，形略圓，色深紅。

產峨眉山伏虎寺附近森林中，四川大學理學院生物系花園中，亦有栽培。四五月開花，十月間果可成熟，其原種標本係威爾遜氏採於四川之成都及湖北之長陽。

此種紅豆樹園藝學家及木工均極重視之，蓋其偉大之樹冠，美麗之花，及鮮艷之深紅色種子，固園藝學家視爲極佳之觀賞樹也。而其褐色之木材具細密之紋理又係木工所視爲製造家具之珍品也。此種在湖北及四川兩省均通稱爲紅豆樹。在華南則 *Ormosia semicastrata* Hance 通常名爲紅豆樹或相思子，但華西之紅豆樹具光滑之葉與木質之莢果，當易於區別也。

圖解：1. 着花之枝（原大）；2. 着果之枝（原大）；3. 花萼（原大）；4. 小蕊及大蕊（原大）；5. 花瓣（放大一倍半）；6. 果實剖開以示種子（原大）；7. 種子（原大）。



95. *ORMOSIA* *HOSIEI* Hemsley et Wilson



## Plate 96.

**BAUHINIA HUPEHANA** Craib.

Leguminosae — Caesalpinioideae

**Bauhinia hupehana** Craib in Sargent, P1. Wilson. II (1914), 89.

Scandent shrub, usually about 5 metres high; branchlets slender, brown or purplish-brown, ferruginous, puberulous, then glabrescent; circinate tendrils 6 cm. long. Leaves chartaceous, simple, subrotund in outline, 5-6 cm. long, 5-8 cm. broad, cordate at the base and cleft at the tip, lobes rounded on the apex, deep green and pubescent above, glabrescent or glaucous and pubescent at the base of nerves below, nerves 6 to 9 reaching usually to the margin, conspicuous above and prominent below; petioles 2-5 cm. long, slender, puberulous. Flowers in terminal corymbose inflorescence 4 to 5 cm. long, rhachis ferruginous-pubescent; calyx with cylindrical tube 1-1.5 cm. long, sulcate, densely ferruginous-pubescent outside, lobes 5, ovate or ovate-oblong, 5-7 mm. long, 3 mm. broad, acute or shortly acuminate on the apex; petals 5, pinkish or rose-red, obovate, 15 mm. long, 6 mm. broad, abruptly narrowed at base into a distinct claw, puberulous on both sides; stamens 10, usually only 3 fertile and with filaments 13-15 mm. long; ovary superior, glabrous, on stipes 5 mm. long, style glabrous, stigma capitate; pedicels slender, 5-30 mm. long, ferruginous-pubescent. Fruit an indehiscent, oblong, flat legume 12-15 cm. long, 3.5-4 cm. broad, glabrous, dark red,

NOUNT OMEI: Ching-yin-ko, alt. 900 m., in woods, a climber 4-5 metres high, flowers pink, fragrant, *W.W. Ma*, No. 2295, June 12, 1940; near wan-nien-ssu, alt. 1100 m., a woody climber, flowers pinkish, *W.P. Fang*, No. 16956, June 13, 1941; Hung-chun-ping, alt. 1200 m., in forests, a climber with pink flowers, *C.L. Sun*, No. 509, June 15, 1939; same locality, a climber with light red flowers and dark red fruits, *W.W. Ma*, No. 2713, July 8, 1940; same locality, *T.C. Lee*, No. 3093, July 31, 1940; without precise locality, *C.Y. Yao*, Nos. 3907 & 4919, in 1939.

This species was discovered by the late Mr. E. H. Wilson from western Hupeh and Mount Omei. The specimens cited above differs from the type in having corymbose inflorescence, but other characters agree exactly. .... W.P. Fang.

- Fig. 1, a flowering branch (natural size);  
 2, a flower (2 times enlarged);  
 3, a flower dissected to show stamens and pistil (2 times enlarged);  
 4, a fruit (natural size).

## 圖版九十六

## 川鄂羊蹄葉

豆科，雲實副科。

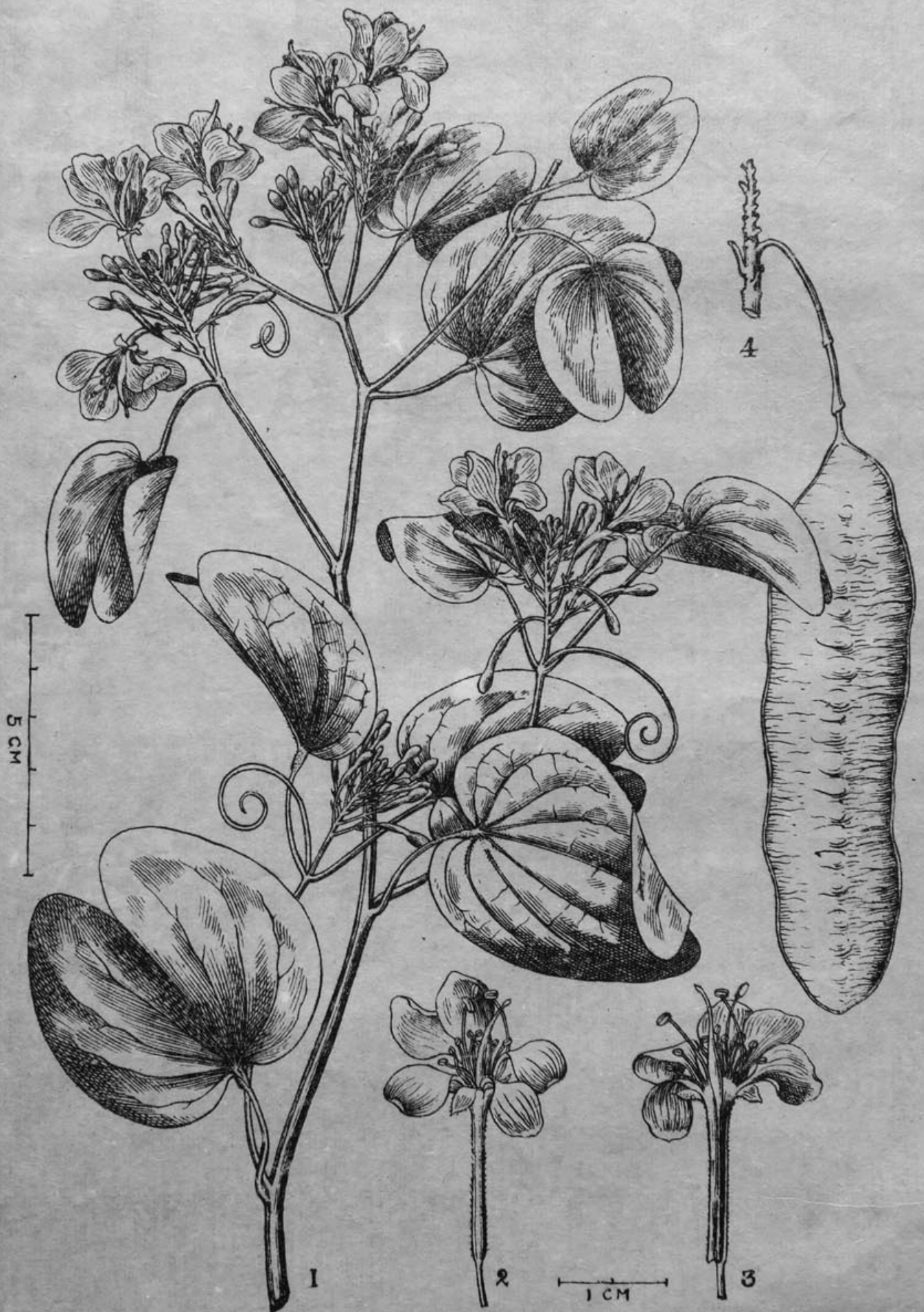
攀援灌木，通常高約五公尺；幼枝細長，棕色或紫棕色，被紅褐色細小柔毛，漸大毛落光滑；捲鬚盤曲，長六公分。葉紙質，單葉，亞圓形，長五至六公分，闊五至八公分，基部心形，先端裂開成二圓形裂片，葉面深綠被毛，葉背光滑或於葉脈基部有粉狀物及毛，側脈七至九對，直抵葉緣，在葉面清晰可見，在葉背凸起；葉柄長二至五公分，纖細，被細小柔毛。花成頂生繖房花序，長四至五公分，花軸被紅褐色毛；花萼管狀，長十至十五公厘，有溝紋，外側被濃厚紅褐色毛，裂片五枚，卵形或卵狀長方形，長五至七公厘，闊三公厘，先端銳形或短尖尾形；花瓣五枚，淡紅色或玫瑰紅色，倒卵形，長十五公厘，闊六公厘，基部突狹形成明顯爪狀，兩面被細小柔毛；小蕊十枚，通長僅三枚具藥，花絲長十三至十五公厘；子房上位，無毛，着生於五公厘長之柄上，花柱光滑無毛，柱頭頭狀；花梗纖細，長五至三十公厘，被紅褐色毛。果實為不裂長方扁形莢果，長十二至十五公分，闊三至五至四公厘，無毛，暗紅色。

產峨眉山清音閣，萬年寺及洪椿坪一帶，在海拔九百公尺至一千二百公尺間，六七月間開花。

此種原係威爾遜氏發現於湖北西部之長樂，長陽，宜昌，巴東等縣及四川之峨眉山。近年在峨眉山採得之標本具繖房花序與原種標本之具總狀花序略為不同耳。

圖解：1. 着花之枝（原大）；2. 花（放大二倍）；3. 花之切面示小蕊及大蕊（放大二倍）；4. 果實（原大）。





## Plate 97.

**STACHYURUS SALICIFOLIUS** Franchet.

## Stachyuraceae.

**Stachyurus salicifolius**, Franchet in Journ. de Bot. XII (1898), 253.

Shrub 2 or 3 metres high, erect or rarely procumbent; branchlets slender, glabrous, those of the current year green or yellowish-green, those of more than one year old brown or dark brown. Leaves alternate, deciduous, chartaceous or subcoriaceous, glabrous, linear-lanceolate or narrow-lanceolate, 6-13 cm. long, 8-12 mm. broad, caudate-acuminate at the apex, subrotund or broadly cuneate at the base, serrulate with appressed teeth on the margin, deep green above, pale purplish green below, midrib conspicuous above, prominent below, lateral nerves inconspicuous above, raised below; petioles slender, 3-5 mm. long. Flowers greenish-yellow sessile or subsessile, usually in pendulous racemes, 5 to 7 cm. long, from the axilla of leaves of the current year or from the second year old branchlets whose leaves having fallen away; bracts acute, persistent; sepals 4, ovate or oblong-ovate, 3-4 mm. long, sparsely pubescent inside and slightly ciliate on the margin; petals 4, obovate, 7 mm. long, 4 mm. broad; stamens 8, as long as the petals, anthers yellow, 2-celled, filaments glabrous; pistil as long as stamens, slightly pubescent; ovary superior, style stout, stigma slightly 4-lobed. Fruit berry-like, subglobose, 7 mm. in diameter, on a slender pedicel usually 2 mm. long.

MOUNT OMEI: Hsi-hsin-so, alt. 1600 m., in thickets, shrub 2 metres high, flowers light green, colloquially known as "*Tieh-pou-tung*, (鐵炮桐), *C.L.Sun*, No. 1477, April 11, 1940; Chiu-shih-chiu-tauki, alt. 1600 m., in forests, shrub 2 metres high, fruit light green, rare, *T. C. Lee*, No. 3118, July 31, 1940; Chiu-lao-tung, alt. 1800 m. on shaded slopes, shrub 2 metres high, leaves linear, flowers greenish in pendulous racemes, *S. S. Chien*, No. 5520, May 5, 1936; same locality *C.L.Sun*, No. 214, May 12, 1939; Hua-yen-ting, alt. 2096 m., in thickets, shrub 3 metres high, occasionally, *W.P. Fang*, No. 12890, August 3, 1938; same locality, *W.P. Fang*, No. 14828, May 21, 1940; same locality, in woods, shrub 1 metre high, bark brownish purple, leaves green above and light purple below, fruits green, occasionally *W.W. Ma* No. 2541, June 22, 1940; without precise locality, *C.W. Yao*, No. 4875, in 1939.

This is a rare species which hitherto has been known only from Yunnan and Kweichow. This is the first time of discovering it on Mount Omei through our extensive explorations of recent years. ...  
..... W. P. Fang.

- Fig. 1, a flowering branch (natural size);  
2, a fruiting branch (natural size);  
3, a flower (10 times enlarged).



## 圖版九十七

## 柳葉旌節花

## 旌節花科

灌木，高二至三公尺，直立或罕為匍匐地上；幼枝纖細，光滑無毛，本年生者綠色或黃綠色，一年以上者棕色或深棕色。葉互生，冬季脫落，紙質或半革質，光滑無毛，線狀披針形或窄披針形，長六至十三公分，闊八至十二公分，先端尖尾狀，基部近於圓形或闊楔形，葉緣具細齒，葉面深綠，葉背淡綠或紫綠，中脈在葉面顯著，在葉背突起，側脈在葉面不顯，在葉背突起，葉柄纖細，長三至五公厘。花黃綠色，無梗或梗極短，成下垂總狀花序，長五至七公分，着生於本年枝之葉腋或無葉之去年枝上；萼片銳形，宿存；萼片四枚，卵形或長方卵形，長三至四公厘，內側被疏毛，邊緣有少許纖毛；花瓣四枚，倒卵形，長七公厘，闊四公厘；小蕊八本，與瓣等長，花藥黃色，二室，花絲光滑無毛，大蕊與小蕊等長，略被毛，子房上位，花柱粗壯，柱頭四淺裂。果實漿果狀，近於圓球形，直徑七公厘，果柄纖細，通常長二公厘。

產峨眉山息心所，九十九道拐，九老洞及華嚴頂，海拔一千六百至二千公尺處，俗稱鉄泡桐，四五月開花。

本種之產地原限於雲南及貴州兩省，且甚為稀少，在峨眉山此尚為初次發現。

圖解：1. 着花之枝(原大)；2. 着果之枝(原大)；3. 花(放大十倍)。



97. STACHYURUS SALICIFOLIUS Franchet



## Plate 98.

**STACHYURUS YUNNANENSIS** Franchet

## Stachyuraceae.

**Stachyurus yunnanensis**, Franchet in Journ. de Bot. XII (1898), 253.-Rehder in Sargent, Pl. Wilson. I (1913), 283.-Handel-Mazzetti, Symbolae Sinicae, VII (1931), 383.

Shrub 2 or 3 rarely to 4, metres high; bark grey, smooth; branchlets slender, glabrous, those of the current year green or rarely purplish-green, those more than one year old brown, or purplish-brown, rarely greenish-grey. Leaves alternate, coriaceous, glabrous, lanceolate or oblong-lanceolate, rarely oblanceolate, 9-13 cm. long, 2.5-4 cm. broad, acuminate or caudate-acuminate at the apex, cuneate or broadly cuneate at base, dentate with appressed acute teeth on the margin, deep green above, pale green below, midrib slightly impressed above, prominent below, lateral nerves indistinct above, just showing below; petioles 1.5-2.5 cm. long, glabrous. Flowers greenish-yellow, sessile or subsessile, in usually pendulous racemes, 3-5 rarely to 7, cm. long; bracts 2, triangular, purple or purplish gray; sepals 4, ovate, green, 2-3 mm. long; petals 4, obovate, 5 mm. long, 3 mm. broad, greenish white; stamens 8, anthers yellow, subglabrous, 2-celled, filaments slender, glabrous; pistil as long as the stamens, ovary superior, subglobose, glabrous, 4-celled, ovules numerous, style slender, stigma slightly lobed. Fruit a subglobose berry, 7 mm. in diameter, on a slender pedicel 4 mm. in length.

MOUNT OMEI: Lei-yin-ssu, alt 800 m., *C.L. Chow*, No. 5609, March 24, 1942; Pai-lung-tang, alt. 950 m., by a stream, shrub 2 metres high, flowers greenish white, *C.L. Sun*, No. 1458, April 10, 1940; along roadside from Ching-yin-ko to Hung-chun-ping, alt. 1000 m., in forests, shrub 2 metres high, flowers light verdant, *C.L. Sun*, No. 1427, March 19, 1940; same locality, small tree 5 metres high, flowers yellowish green, *W.P. Fang*, No. 15822, March 5, 1941; near Hung-chun-ping, alt. 1300 m., shrub 3.5 metres high, leaves evergreen, *S.S. Chien*, No. 5538, May 5, 1936; same locality, *H.C. Chow*, Nos. 7501, June 12, 1938, same locality, in forests, shrub 2 metres high, flowers greenish white, *W.P. Fang*, 13828 & 13834, February 26, 1940; same locality, on slopes, shrub 2 metres high, flowers greenish white, *T.C. Lee*, No. 4398, March 29, 1940; same locality, in woods, shrub 5 metres high, *W.W. Ma*, No. 2331, June 14, 1940; same locality, in forests, shrub 3 metres high, *T.C. Lee*, No. 3685, October 7, 1940; same locality, *W.P. Fang*, Nos. 14990, 15097 & 15297, November 1940; same locality, shrub 4 metres high, flowers greenish white, *W.P. Fang*, No. 15937, March 28, 1941; same locality, small tree 4 metres high, flowers green, *W.P. Fang*, No. 16335, April 26, 1941; same locality, shrub 2 metres high, young fruits greenish, subglobose, *W.P. Fang*, No. 17019, June 23, 1941; Pao-chang-fung, alt. 1500 m., shrub 3 metres high, *W.P. Fang*, No. 17399, July 24, 1941; near Niu-hsin-ssu, alt. 1300 m., on slopes, shrub 3 metres high, young fruits green, rare, *T.C. Lee*, Nos. 3029 & 3035, July 29, 1940; Hou-tze-po, alt. 1400 m., in woods, shrub 2 metres high, young fruits light green, *C.L. Sun*, No. 2002, May 17, 1940; Pien-dan-ai, alt. 1400 m., in forests, shrub 2 metres high, flowers greenish white, *C.L. Sun*, No. 1619, April 20, 1940; Shet-ao-tue, alt. 1400 m., in woods, small tree 5 metres high, young fruits green, *C.L. Sun*, No. 2331, June 4, 1940; Hsi-hsin-so, alt. 1620 m., shrub 2 metres high, *T.C. Lee*, No. 3618, October 1, 1940; Chang-lao-ping, alt. 1700 m., in woods, shrub 3 metres high, flowers greenish white, *T.C. Lee*, No. 4472, April 1, 1940; same locality, in forests, shrub 2 to 4 metres high, flowers white, *C.L. Sun*, No. 1568, April 11, 1940; Chau-tien, alt. 1800 m., in forests, shrub 2 metres high, flowers light yellow, *C.L. Sun*, No. 1389, March 13, 1940; same locality, in forests, shrub 3 metres high, flowers greenish white, *C.L. Sun*, Nos. 1485 & 1568, April 11, 1940; near Chiu-lao-tung, alt. 1800 m., in open woods, small tree 5 metres high, leaves evergreen, *S.S. Chien*, No. 5515, May 5, 1936; same locality, in forests, small tree 4 metres high, *W.P. Fang*, No. 14675, May 19, 1940; same locality, shrub 2 metres high, flowers greenish white, *W.P. Fang*, No. 15919, March 19, 1941; same locality, shrub 3 metres high, young fruits green, *W.P. Fang*, No. 16871, June 4, 1941; without precise locality, *T.H. Tu*, Nos. 398, 527, 565 & 593, in 1935; without precise locality, *W.C. Cheng*, Nos. 6611 & 6810, October 1936.

This species hitherto has been known only from Yunnan and Kweichow. This is the first time of discovering it on Mount Omei. It is fairly common on this mountain at an altitude of from 900 to 1800 metres above sea level. W. P. Fang.

- Fig. 1, a flowering branch (natural size);  
 2, a fruiting branch (natural size);  
 3, a flower (7 times enlarged);  
 4, a pistil (7 times enlarged);  
 5, a longitudinal section of the ovary to show the cells and ovules (7 times enlarged);  
 6, a cross section of the ovary to show the cells and ovules (7 times enlarged);  
 7, a fruit (2 times enlarged).

圖版九十八

雲南旌節花

旌節花科

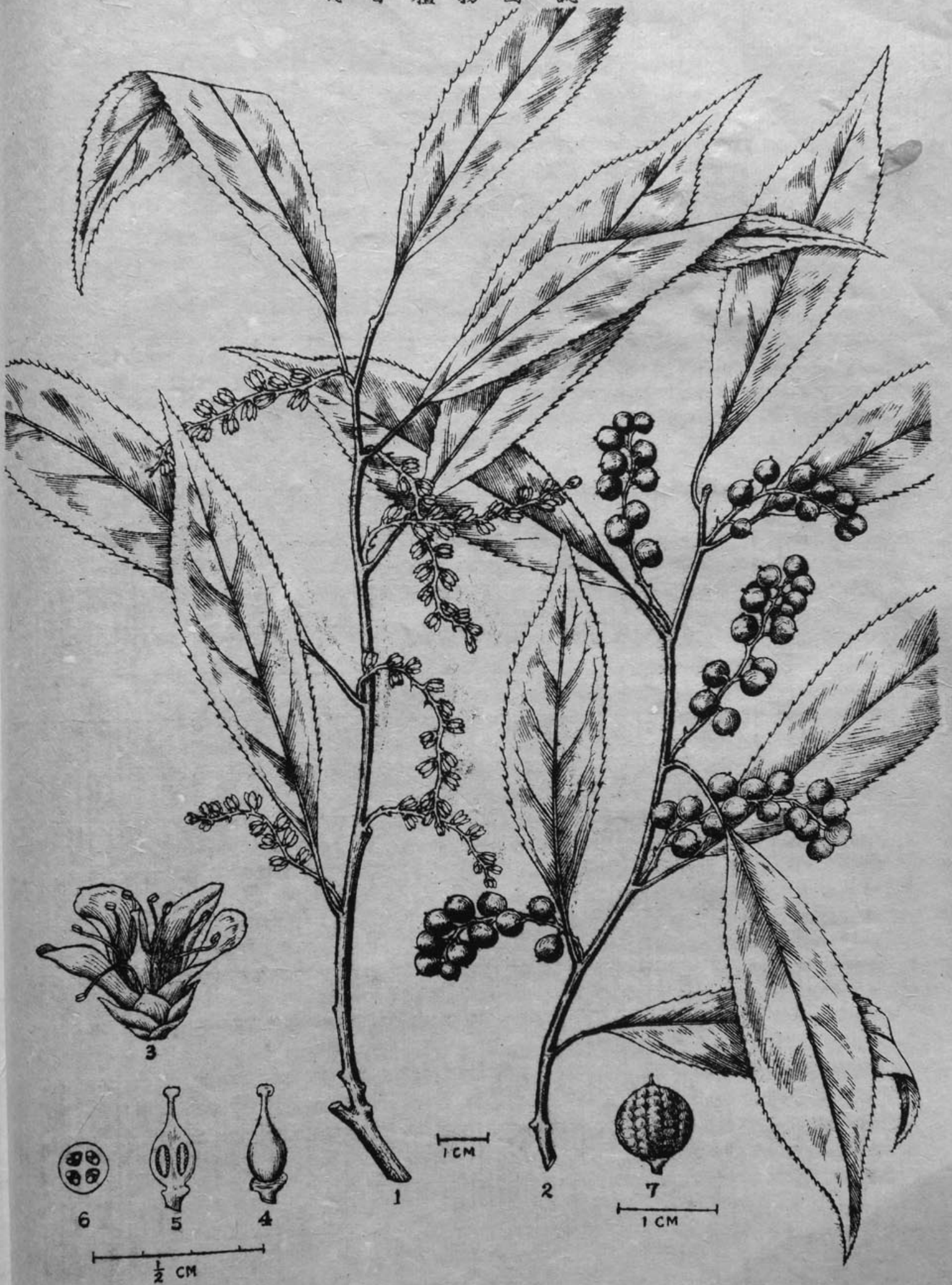
灌木，高二至三公尺，罕達四公尺；樹皮灰色，平滑；幼枝纖細，光滑無毛，本年生者綠色，罕為紫綠色，一年以上者棕色或紫棕色罕為灰綠色。葉互生，革質，兩面光滑無毛，披針形或長方披針形，罕為倒披針形，長九至十三公分，闊廿五至四十公厘，先端尖尾狀，基部楔形或闊楔形，葉緣細齒裂，葉面綠深，葉背淡綠，中脈在葉面稍下凹，在葉背突起，側脈在葉面不顯，在葉背平坦；葉柄長十五至二十公厘，無毛。花黃綠色，無梗或有極短之小梗，成下垂總狀花序，花序長三至五公分，罕達七公分；苞片二枚，三角形，紫色或紫灰色；萼片四枚，卵形，綠色，長二至三公厘，花瓣四枚，倒卵形，長五公厘，闊三公厘，綠白色；小蕊八本，花藥黃色，略被毛痕，二室，花絲纖細，無毛，大蕊與小蕊等長，子房上位，近於圓球形，無毛，四室，胚珠多數，花柱纖細，柱頭淺裂。果為似球形漿果，直徑七公厘，果柄長四公厘，纖細。

產峨眉山白龍洞，清音閣，洪椿坪附近，牛心寺及大坪等處，海拔一千至一千八百公尺處均習見之，三四月開花。

本種之產地原僅知為雲南貴州二省，在峨眉山此尚為初次採得也。

圖解：1. 着花之枝(原大)；2. 着果之枝(原大)；3. 花(放大七倍)；4. 大蕊(放大七倍)；5. 子房之縱剖面(放大七倍)；6. 子房之橫剖面(放大七倍)；7. 果實(放大二倍)。





98. STACHYURUS YUNNANENSIS Franchet

## Plate 99.

**STACHYURUS OBOVATA** (Rehder) Cheng.

## Stachyuraceae

**Stachyurus obovata**, (Rehder) Cheng, n. sp.*Stachyurus yunnanensis*, Franchet, var. *obovata*, Rehder in Journ. Arn. Arb. XI (1930), 165.—Handel—Mazzetti, Symbolae Sinicae, VII (1931), 383.

Shrub 2 or 3 metres high; bark grey or brownish grey, smooth; branchlets slender, glabrous, those of the current year green or purplish green, those more than one year old, yellowish-green or brownish-grey, with conspicuous linear lenticels. Leaves alternate, evergreen, coriaceous, obovate or rarely oblanceolate, 7-9 cm. long, 1.8-3 cm broad, acute with a caudate acumen at the apex, cuneate at base, serrate on the margin with appressed, acute teeth except near the base which is nearly entire, the acumen entire or scarcely serrulate near its base, upper surface deep green with slightly impressed midrib and obsolete lateral nerves, lower surface pale green, with prominent midrib and lateral nerves just showing; petioles slender, 5-10 cm. long, slightly grooved above, rounded below. Flowers greenish-yellow, sessile, usually 4-7 in a compact raceme usually 15-20 mm. long; bracts 2, triangular, persistent; sepals 4, ovate, 2 mm. long, greenish-yellow; petals 4 or 5, obovate, 5 mm. long, greenish-white to greenish-yellow; stamens 8, about 4 mm. long, anthers subglobose, 2-celled, filaments slender, glabrous; pistil as long as or slightly longer than the stamens, ovary superior, ellipsoid rough, stigma capitate. Fruit a subglobose berry, 6 mm. in diameter, on a pedicel 2-3 mm. long.

**MOUNT OMEI:** at roadside from Fu-hu-ssu to Ta-o-ssu, alt. 1000 m., *S.S. Chien*, No. 6011, July 10, 1937; Lung-men-tung, alt. 546 m., shrub 4 metres high, *C.L. Chow*, No. 5548, March 19, 1942; Ta-o-ssu, alt. 1000 m., small tree 4 metres high, flowers greenish white, *W.P. Fang*, No. 15870, March 11, 1941; Shun-yang-tien, alt. 1095 m., shrub 5 metres high, *C.L. Chow*, No. 5733, April 3, 1942; Hung-chun-ping, alt. 1200 m., *H.C. Chow*, No. 8044, August 9, 1933; same locality, under forests, shrub 2 metres high, flowers bright green, *C.L. Sun*, No. 1423, March 19, 1940; same locality, in thickets, shrub 3 metres high, flowers greenish-white, *C.L. Sun*, No. 1698, April 24, 1940; same locality, in thickets, shrub 2 metres high, flowers green, *C.L. Sun*, No. 1618, April 20, 1940; same locality, in woods, shrub 2 metres high, fruits green, common, *T.C. Lee*, No. 3175, August 4, 1940; same locality, in forests, small tree 2 metres high, flowers greenish, *W.P. Fang*, No. 16043, April 2, 1941; Kuan-hsin-po, alt. 1378 m., in forests small tree 3 metres high, flowers yellowish green, rare, *W.P. Fang* No. 13871, February 29, 1940; Hsi-hsin-so, alt. 1620 m., small tree 5 metres high, flowers in buds, *W.P. Fang*, No. 15795 March 5, 1941; Chang-lao-ping, alt. 1773 m., small tree 4.5 metres high, flowers greenish-yellow, *W.P. Fang*, No. 16135, April 12, 1941; Ching-lung-chang, *W.P. Fang*, No. 15036, October 13, 1940.

**SZECHUAN:** Kuan-hsien, Mt. Tsing-cheng, alt. 1075 m., in woods, tree 4 metres high, *W.P. Fang*, No. 2000, (type of var. *obovata*), July 4, 1923; Kuan-hsien, Mt. Tsing-cheng, near Tien-sze-tung, alt. 1000 m., shrub 2 metres high, *S.S. Chien*, No. 5156, April 4, 1936; same locality, *S.S. Chien*, No. 5385, April 10, 1937; same locality, in forests, shrub with evergreen leaves, dark green above and pale green below, fruits obovoid in racemes, *S.S. Chien*, No. 5642, May 24, 1936; same locality, under forests, shrub 1 to 2 metres high, leaves obovate, acuminate, 3-5 flowers in a short raceme, common, *W.P. Fang*, No. 12156, April 9, 1938; Nanchuan-hsien, *K.L. Chu*, Nos. 1170 & 1653, in 1935.

The type specimen, of *Stachyurus yunnanensis* var. *obovata* collected by the author at Kuan-hsien is in fruit only. The flowering specimens gathered from the same locality verify the fact that it is really a distinct species. The specimens gathered from Mount Omei with both flowers and fruits agree with those from the type locality. It differs *S. yunnanensis* in the obovate leaves and short inflorescence with few flowers. On Mount Omei it is fairly common in thickets and forests at altitude from 500 to 1600 metres above sea level. .... W.P. Fang

- Fig 1, a flowering branch (natural size);  
 4, a fruiting branch (natural size);  
 3, a flower (5 times enlarged);  
 4, a flower having perianth removed to show the stamens and pistil (5 times enlarged).



# 圖版九十九

## 卵葉旌節花新種

### 旌節花科

灌木高二至三公尺；樹皮灰色或灰棕色，平滑；幼枝纖細，無毛，本年生者綠色或紫綠色，一年以上者黃綠色或灰棕色，具明顯綫形皮孔。葉互生，常綠，革質，倒卵形，罕為倒披針形，長七至九公分，闊十八至三十公厘，先端銳形具一尾狀尖頭，基部楔形，葉緣細齒裂，僅近基部處完整不裂，鋸齒銳形，先端之尖頭全緣，有時亦或細齒裂，葉面深綠，中脈稍下凹，側脈不顯，葉背淡綠色，中脈突起，側脈可見；葉柄纖細無毛，長五至十公分，上面淺溝狀，下面圓形。花黃綠色，無梗，通常四至七枚成一密集總狀花序，花序長十五至廿公厘；苞片二枚，三角形，宿存；萼片四枚，卵形，長二公厘，黃綠色；花瓣四枚或五枚，倒卵形，長五公厘，白色帶綠，或黃綠色；小蕊八本，長約四公厘，花藥近於球形，花絲纖細，無毛；大蕊與小蕊等長或稍長，子房上位，橢圓形，柱頭頭狀。果為近於球狀之漿果，直徑六公厘，果柄長二至三公厘。

產峨眉山伏虎寺、大峨寺、洪椿坪、觀心坡、息心所迄長老坪，海拔五百至一千七百公尺間，以山麓為多，向上較少，三四月間開花，多見於林莽之中。

卵葉雲南旌節花(變種)之原種標本最初採自灌縣時僅係果實標本，後復於該縣採得開花標本，其花之特性示出其為一可靠新種。峨山所得之多數花果標本悉與灌縣者相符，證明原名卵葉雲南旌節花之變種應為獨立之種，名為卵葉旌節花。

圖解：1.着花之枝(原大)；2.着果之枝(原大)；3.花(放大五倍)；4.去瓣之花以示大小蕊(放大五倍)。



99. STACHYURUS OBOVATA (Rehder) Cheng



**STACHYURUS HIMALAICUS** Hooker f. et Thomson.

## Stachyuraceae.

**Stachyurus himalaicus**, Hooker f. et Thomson apud Benth in Journ. Linn. Soc. V. (1861), 55. — Thise'ton-Dyer in Hooker f., Fl. Brit. Ind. I (1875), 288. — Rehder in Sargent, Pl. Wilson. I (1913), 287. — Handel-Mazzetti, Symbolae Sinicae, VII (1931), 383.

Small tree or shrub 2 or 3, rarely to 5, metres high; bark smooth, brown or dark brown; branchlets slender, glabrous, greenish-purple or greenish-brown. Leaves developing after the opening of flowers, alternate, chataceous, ovate or oblong ovate, 7-12 cm. long, 4-7 cm. broad, acuminate at apex, subrotund or broadly cuneate at the base, serrulate on the margin with appressed sharp teeth, upper surface bright green, midrib and 6-8 pairs of lateral nerves slightly impressed. Lower surface pale green, with prominent midrib and slightly raised lateral nerves; petioles 1.5-2 cm. long, slender, glabrous. Flowers numerous (about 30) in pendulous racemes 8-11 cm. long, from the axilla of leafless branchlets; bracts 2, triangular; sepals 4, greenish-yellow, ovate, 2 mm. long; petals 4, yellow, obovate, 7 mm. long, 5 mm. broad; stamens 8, slender, 3 mm. long, anthers yellow, 2-celled; pistil slightly longer than the petals and usually exserted, ovary superior, ovoid, style glabrous, stigma capitate or slightly lobed. Fruit a globose berry, 8 mm. in diameter, on a pedicel 3 mm. long.

MOUNT OMEI: Kao-chiao, small tree with green young fruit, *W.P. Fang*, No. 13991, April 5, 1940; Fu-hu-ssu, alt. 600 m., small tree 2 metres high, flowers greenish, precocious to leaves, *W.P. Fang*, No. 13895, March 9, 1940; same locality, in thickets, shrub 2 metres high, fruits green, ovoid, *W.P. Fang*, No. 16408, May 3, 1941; Lei-yin-ssu, alt. 800 m., *C.L. Chow*, No. 5600, March 24, 1942; Ta-o-ssu, alt. 1103 m., shrub 2 metres high, flowers greenish, *W.P. Fang*, No. 15861, March 11, 1941; Tsing-yin-ko, alt. 900 m., in thickets, shrub 2 metres high, leaves evergreen, fruits green, *C.L. Sun*, No. 1949, May 14, 1940; same locality, *W.P. Fang*, No. 15113, November 2, 1940; Hei-lung-kiang, alt. 900 m., in thickets, shrub 2 metres high, flowers verdant, *C.L. Sun*, No. 1370, March 10, 1940; same locality, shrub 2 metres high, flowers greenish, *W.P. Fang*, No. 15773, February 15, 1941; Hou-tzu-po, alt. 1000 m., shrub 2 metres high, fruits light green, common, *T.C. Lee*, No. 2794, July 12, 1940; Taping, alt. 1400 m., small tree 5 metres high, young fruits green, ovoid, *W.P. Fang*, No. 17033, June 23, 1941; Hung-chun-ping, alt. 1200 m., *H.C. Chow*, No. 7505, June 12, 1938; same locality, shrub 4 metres high, fruits subglobose, *W.P. Fang*, No. 12635, July 28, 1938; same locality, in thickets, shrub 2 metres high, flowers greenish- or yellowish-white, *W.P. Fang*, No. 13808, February 26, 1940; same locality, on slopes shrub 2 metres high, flowers greenish-yellow, *T.C. Lee*, No. 4397, March 29, 1940; same locality, in thickets, shrub 2 metres high, young fruits green, *C.L. Sun*, No. 1658, April 22, 1940; same locality, shrub 2 metres high, fruits light green, occasionally, *T.C. Lee*, Nos. 2709, 3098 & 3671, July to October 1940; same locality, small tree 4 metres high, *W.P. Fang*, No. 15299, November 13, 1940; Chiu-sze-chiu-tao-kui, alt. 1600 m., shrub 4 metres high, flowers in buds, *W.P. Fang*, No. 15923, March 19, 1941; Chiu-lao-tung, alt. 1800 m., in forests, small tree 5 metres high, occasionally, *W.P. Fang*, No. 12826, July 31, 1938; same locality, shrub 3 metres high, flowers in buds, *T.C. Lee*, No. 4454, March 1940; same locality, in thickets, shrub 2 metres high, young fruits globose, occasionally, *W.P. Fang*, No. 16516, May 6, 1941; on roadside from Chiu-lao-tung to Yu-hsien-ssu, alt. 1800 m., in thickets, shrub 3 metres high, flowers yellow, *C.L. Sun*, No. 1403, March 14, 1940; Hsi-hsin-so, alt. 1620 m., in thickets, shrub 2 metres high, young fruits green with persistent style, occasionally, *W.P. Fang*, No. 15974, March 30, 1941; Ti-tze-ai, alt. 1500 m., small tree 4 metres high, *W.P. Fang*, No. 16831, June 4, 1941; on roadside from Hsi-hsin-so to Chu-tien, alt. 1700 m., in thickets, shrub 3 metres high, flowers light yellow, *C.L. Sun*, No. 1483, April 11, 1940; Hua-yen-ting, alt. 2096 m., in forests, shrub 2 metres high, bark greyish brown, leaves green above, and light green below, fruits green, common, *C.L. Sun*, No. 2550, June 22, 1940; same locality, tree 7 metres high, *C.L. Chow*, No. 5741, April 3, 1942; Hsi-hsiang-chi, alt. 2100 m., shrub 2 metres high, *W.P. Fang*, No. 14794, May 21, 1940; same locality, in thickets, small tree 5 metres high, flowers yellow, very common, *W.P. Fang*, No. 16007, April 1, 1941; west of Mount Omei, Opien-hsien, Shaping, in thickets, shrub 2 metres high, *C.L. Sun*, No. 795, July 25, 1939; without precise locality, *C.W. Yao*, Nos. 2847, 3559, 4728 & 4824, from 1938 to 1939; without precise locality, *H.C. Chow*, No. 9547, in 1938.

This species is distributed from the Eastern Himalayas eastwards to Szechuan, Yunnan and Hupeh provinces. It is very common at the lower part of Mount Omei. As the original description of this species made by Hooker and Thomson is too brief, which runs as follows: "*Stachyurus japonicae* similimus, differt foliis brevius petiolatis longioribus longe acuminatis, baccis subsessilibus subglobosis obtusis."

A full description seems desirable. .... W.P. Fang.

Fig. 1, a fruiting branch (natural size);

2, a flowering branch (natural size);

3, a flower (5 times enlarged);

4, the pistil and stamens (5 times enlarged);

5, a fruit (3 times enlarged).

### 版圖一百

## 西域旌節花

### 旌節花科

小喬木或灌木，高二至三公尺，罕達五公尺；樹皮平滑，棕色或深棕色；幼枝纖細無毛，青紫色或青棕色。葉於開花後始發出，互生，紙質，卵形或長方卵形，長七至十二公分，闊四至七公分，先端銳形具尾狀尖頭；基部近於圓形或闊楔形，葉緣具細小圓齒，葉面亮綠，中脈及六至八對側脈稍形下陷，葉背淡綠，中脈突起，側脈略凸；葉柄長十五至廿公厘，纖細無毛。花多數集成下垂總狀花序，長八至十一公分，着生於無葉幼枝之腋；苞片二枚，三角形；萼片四枚，黃綠色，卵形，長二公厘；花瓣四枚，黃色，倒卵形，長七公厘，寬五公厘，小蕊八本，纖細，長六公厘，花藥黃色，二室；大蕊較花瓣略長，常伸出瓣外，子房上位，卵形，花柱光滑無毛，柱頭頭狀或淺裂。果為圓球形漿果，直徑八公厘，果柄長三公厘。產峨眉山之高橋、伏虎寺、大峨寺、清音閣、黑龍江、大坪、寶溝、洪椿坪、息心所、九十九道拐、九老洞、遇仙寺及華嚴頂各地，海拔五百至二千公尺處均習見之，三四月開花。

此為中國西南部習見之一種旌節花，係由喜馬拉亞山東向分布，以達四川雲南湖北三省。

圖解：1. 着果之枝（原大）；2. 着花之枝（原大）；3. 花（放大五倍）；4. 花折去花被以示大小蕊（放大五倍）；5. 果實（放大三倍）。





100. STACHYURUS HIMALAICUS Hooker f. et Thomson