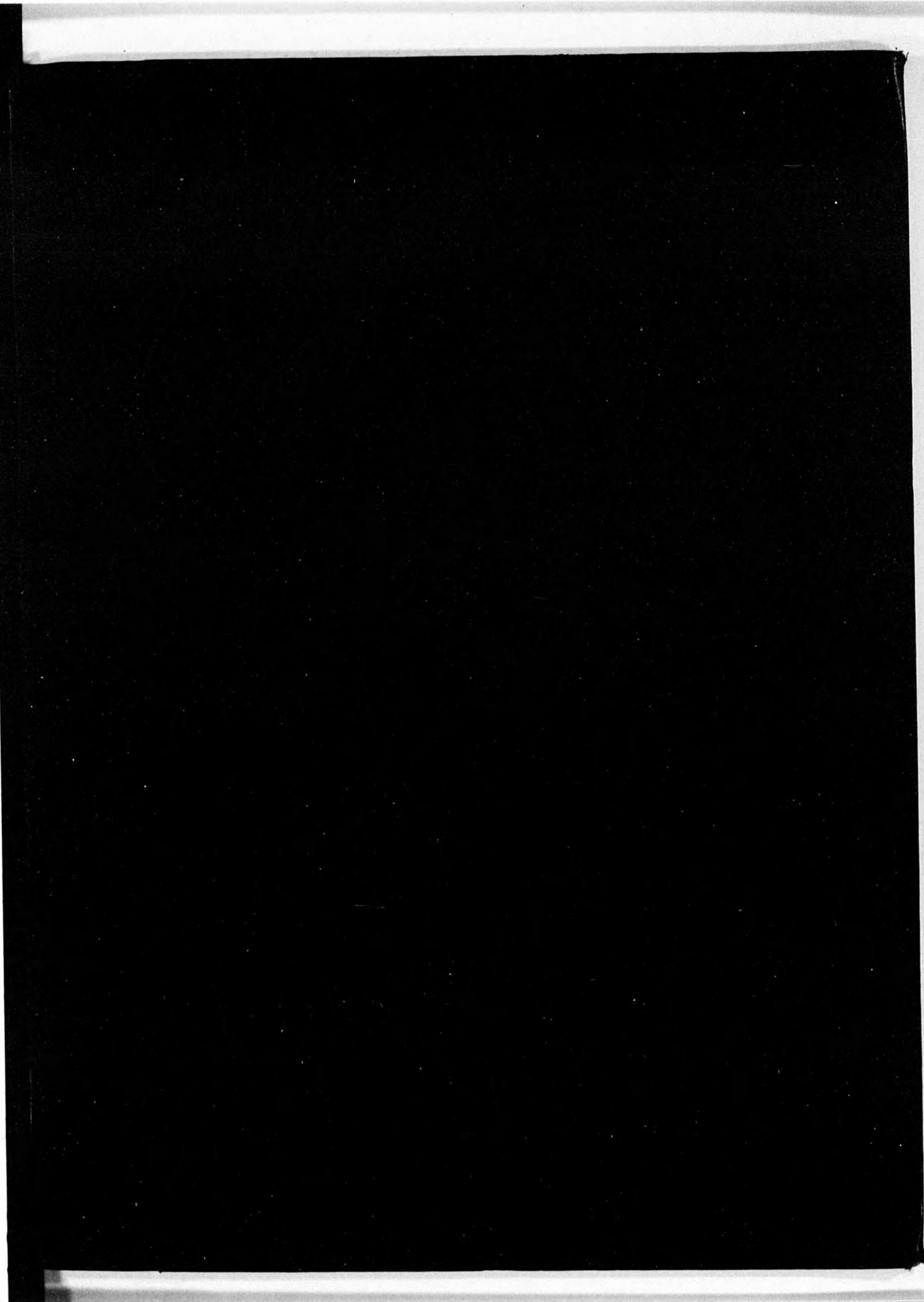




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# 朝鮮森林植物編

(第貳拾壹輯)

馬兜鈴科
木通科
小蘗科
海桐花科
錦葵科
岩高蘭科
蕁麻科

朝鮮總督府林業試驗場

**Errata**

In Contents, line 8, for *Arisolochiacæ* read *Aristolochiacæ*.  
P. 42, line 23 under *Rajania quinata* add HOUTTUYN,  
Nat. Hist. XI, 366, Pl. LXXV, fig. 1 (1779).

# Flora Sylvatica Koreana

Pars XXI.

Aristolochiaceæ  
Lardizabalaceæ  
Berberidaceæ  
Pittosporaceæ  
Malvaceæ  
Empetraceæ  
Urticaceæ

By

TAKENOSHIN NAKAI, Dr. Sci.  
Professor of Systematic Botany, Director of Botanic Gardens,  
Tokyo Imperial University.  
Government Botanist of Chosen.

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朝鮮總督府林業試驗場

14.5  
34

## 序 言

本研究ハ東京帝國大學教授理學博士中井猛之  
進ニ依囑シ完成シタルモノニシテ學術竝産業  
上參考ニ資スベキモノアルヲ信ジ之ヲ印刷ニ  
附ス

昭和十一年七月

朝鮮總督府林業試驗場長

林學博士 鏑木 徳二

## 緒 言

本編ノ骨子ハ朝鮮内ニ自生スル馬兜鈴科植物、木通科植物、小蘗科植物、海洞花科植物、錦葵科植物、岩高蘭科植物、蕁麻科植物ノ七科ノ木本植物ニ就テ詳説シタルモノデアアル。以上ノ七科ノ中小蘗科ト蕁麻科トヲ除クト何レモ朝鮮デハ種類ノ少イ科デアツテ單ニ其中ノ木本植物許リヲ解説シタノデハ餘リ簡ニ過ギル。然シ之ニ草本類ヲ加ヘルトナルト其特徴ノ變化ガ多端ニナリ其等ヲ完全ニ判ル様ニ記ス事ハ決シテ易業デハナイ。

抑モ大正4年ニ上林敬次郎氏ガ山林課長ニ就任シ筆者ノ提出シタ朝鮮森林植物編ノ價值ヲ認メテ第I、第IIノ兩編ヲ併セテ版ニ附シテカラ今日ニ至ル迄年ヲ經ル事二十有一年デアアル。此間筆者ハ輯ヲ重ネル毎ニ取調ヲ密ニシ記事ヲ詳細ニシタガ之ニハ理由ガアル。其ハ各輯ガ出版毎ニ全世界ノ植物學者、樹木學者、山林學者カラ異常ノ好評ヲ受ケ筆者ハ責任ノ一層大ナル事ヲ痛感シタカラデアアル。其故本輯ヲ草スルニ當ツテモ單ニ樹木類ヲ解説セズ之ト同科ノ草本類ヲ併セテ記スノミナラズ此等ノ科ノ樹木類ト同種ト見誤ラレテ居タ琉球、臺灣、支那等ノ樹木類ノ記相文又ハ同科植物或ハ同屬植物ト誤認サレテ居タ科ヤ屬ノ記事ヲモ加ヘ進ンデハ朝鮮又ハ内地産ノ同科植物ト類似ノモノデ歐米ノ諸學者ガ誤リ易イ種類ニ就テ筆者ガ歐米滯在中研究ヲ遂ゲタモノハ外國産ノモノ迄モ加ヘテ評論ヲ試ミタノデアアル。其故此第21輯ハ單ナル朝鮮森林植物編デハナク一面之ニ載セテ居ル七科植物ノ廣意ノ研究論文デアアル。特ニ蕁麻科植物ノからむし屬ハ最近理學士男爵佐竹義輔氏ガ東京帝國大學理學部植物學教室ニアツテ筆者指導ノ下ニ東亞産ノ種類全部ノ研究ヲ終ヘタカラ特ニ同氏ニ依頼シテ朝鮮産ノ各種(草本ヲモ含ム)ノ區別法ト記相文トヲ書イテ貰ツタ、又東京帝國大學助手理學士前川文夫氏ハ現時世界ニ於ケルかんあふひ類ノ唯一ノ專攻家デアリ挽近うすばさいしん類ヲ獨立ノ屬トスベキ意見ヲ持シ筆者モ亦之ニハ同意デアリ又朝鮮ニアルかんあふひ類ハうすばさいしん群ノモノ許リデアリ其根ハ細辛トシテ漢藥ニハ無クテナラヌモノデアリカラ特ニ前川氏ヲ煩ハシテうすばさいしん屬ト其ニ隸屬スル各種ノ詳説ヲ書イテ貰ツテ共ニ本



輯ニ加ヘタ。又濟州島ヤ鬱陵島ニアルいらくさハ内地ノいらくさと相異ル  
事モ前川氏ノ氣附タ事故是亦記相文ノ寄稿ヲ得テ本輯ニ加ヘタ。此等貴重  
ナル論說ノ寄稿ニ依リ本輯ハ更ニ其價値ヲ増シ得タ事ハ筆者ノ最モ感幸ト  
スル所デアル。

本輯ヲ完成スルニ當リ經濟學士澤田武太郎、理學士前川文夫、理學士原  
寛、靱山泰一ノ諸氏ハ其秘藏ノ圖書論文ヲ快ヨク貸與サレ又理學士百瀬靜  
男氏ハ著者ノ依頼ニ應ジテ内外ノ岩高蘭類ノ葉ト莖ノ解剖圖ヲ作成サレタ。  
茲ニ記シテ諸氏ノ好意ヲ深謝スル次第デアル。

昭和十一年六月二十日

東京帝國大學理學部植物學教室ニテ

囑託 中井 猛之進 識ス

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ウマノスズクサ  
馬兜鈴科

**Aristolochiaceæ** LINDLEY



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(2) 朝鮮産馬兜鈴科植物研究ノ歴史ト其効用竝ニ馬兜鈴科植物ノ植物自然系統上ノ位置

多クノ學者ハ馬兜鈴科ハ細辛科 *Asaraceae* ヲ加ヘルノガ常デアアルガ細辛

科ハ小草本デアリ莖ハ纏擧シタリ木本ニナツタリスルコトハナク花被ハ永存性デ馬兜鈴科植物ノ様ニ子房ニ關節スルコトハナク雄蕊ハ雌蕊カラ離レテ居ルコト(此點ハ ADANSON 氏ガ 1763 年ニ既ニ書キ遺シテ居ル)。果實ガ裂開セゼシテ腐敗スルニツレテ破レ (Fructus putrefactus) テ種子ヲ出シ馬兜鈴科植物ノ様ニ胞間裂開 (Fructus septicide dehiscens) 又ハ胞背裂開 (Fructus loculicide dehiscens) スルノトハ大ニ異ナルカラ細辛科ハ全然馬兜鈴科カラ分離スルガ正當デアアル。又馬兜鈴科ノ一族細辛族ニ屬スル一新屬トシテ記載サレタ支那産ノ *Saruma* 屬ハ兩科カラモ異ナルモノト考ヘル即チ

- 1) 葉ノ對生スルコト
- 2) 萼ハ基ノミ子房ニ附着スルコト
- 3) 花ニ明亮ナル花瓣ノアルコト
- 4) 葯ガ内開スルコト
- 5) 果實ハ蒴トナリテ腹面デ裂開スルコト

等ノ諸點デさるま科 *Sarumataceae* ヲ建テルノガ最モ正シイ分類法ト考ヘル。斯クスルト此3科ニハ次ノ各屬ガ隸屬スルコトナル。

- 1) 細辛科 *Asaraceae* LINK
  1. をながさいしん屬 *Asarum* L.
  2. かんあふひ屬 *Heterotropa* MORREN & DECAISNE
  3. ふたばあふひ屬 *Japonasarum* NAKAI (新屬)
  4. うすばかんあふひ屬 *Asiasarum* F. MAEKAWA (新屬)
- 2) 馬兜鈴科 *Aristolochiaceae* LINDLEY
  1. アバマ屬 *Apama* LAMARCK
  2. うまのすすくさ屬 *Aristolochia* L.
  3. ブラガンチア屬 *Bragantia* LOUREIRO
  4. キクロヂスクス屬 *Cyclodiscus* KLOTZSCH
  5. ユーグリファ屬 *Euglypha* CHODAT
  6. ホロステリス屬 *Holostylis* DUCHARTRE
  7. バラリストロキア屬 *Pararistolochia* HUTCHINSON & DALZIEL  
(*Aristolochia* Sect. *Polyanthera* BENTHAM & HOOKER)
  8. おほばうまのすすくさ屬 *Hocquartia* DUMORTIER  
(*Siphisia* Rafinesque)
  9. トツテア屬 *Thottea* ROTTBELL
- 3) サルマ科 *Sarumataceae* NAKAI
  1. サルマ屬 *Saruma* OLIVER

扱テ又馬兜鈴科植物 *Aristolochiaceae* ハ「ラフレツシア」科 *Rafflesiaceae* 「ヒドノラ」科 *Hydnoraceae* ト共ニ馬兜鈴目 *Aristolochiales* ヲ作ルモノトサレテ居ルガ余ノ見解デハ是亦不當デアルト思フ。即チ寄生植物デナイ馬



兜鈴科、細辛科、サルマ科ハ併セテ馬兜鈴目ヲナシ寄生植物ナル「ラフレツシア」目トハ全ク區別シテ次ノ各群ニスルノガ正當デアル。

Ordo *Aristolochiales* 馬兜鈴目

- 1. *Asaraceae* 細辛科
- 2. *Sarumataceae* サルマ科
- 3. *Aristolochiaceae* 馬兜鈴科

Ordo *Rafflesiales* ラフレツシア目

- 1. *Apodanthaceae* VAN TIEGHEM アポダンテス科
- 2. *Cytinaceae* LINDLEY キチヌス科
- 3. *Hydnoraceae* SOLMS-LAUBACH ヒドノラ科
- 4. *Mitrastemonaceae* MAKINO やつこさう科
- 5. *Rafflesiaceae* DUMORTIER ラフレツシア科

此等目又ハ科ノ區分ヲ如何ニスベキカハ朝鮮森林植物編トハ餘リ關係ナキコト故邦文欄ニテハ特ニ論及セズ對外ノ意味又ハ廣ク學界ニ學說ヲ發表スル意味ニ於テ歐文欄ニ詳説シ置ク故進デ其區分法ヲ知ラントスル人ハ歐文欄ヲ参照サレタイ。

以上ノ様ニ馬兜鈴科ヲ限定スルト朝鮮ノ同科植物ヲ始メテ世ニ出シタノハ露國ノ VLADIMIR KOMAROV 教授デアツテ 1903 年ニ Acta Horti Petropolitani 第 22 卷ニまるばうまのすずくさ *Aristolochia contorta* BUNGE トきだちうまのすずくさ *Aristolochia manshuriensis* KOMAROV (新種) トガ北朝鮮ニ産スルコトヲ記シテ居ル。

1911 年版ノ拙著 Flora Koreana 第 2 卷ニモ同様ノ 2 種ヲ載セ。1918 年版ノ拙著金剛山植物調査報告書ニモ同様 2 種ヲ載セ。1922 年森爲三氏ノ著朝鮮植物名彙ニモ之ヲ轉載シテ居ルニ過ギナイ。

本科植物ニハ藥用トナルモノ多ク例令バ合衆國南部ニアル *Aristolochia Serpentaria* ハ「ガラガラ」蛇ニ蛟マレタ時又ハ狂犬ニ蛟マレタ時ニ之ヲ治スルニ用キラレ、*Aristolochia longa*, *A. rotunda*, *A. Clematitis* 等ハ通經、墮胎等ニ其根ヲ用キ、漢法ニテハ廣クうまのすずくさ屬植物ノ根ヲ肺病、欬嗽、痔瘻等ヲ治スルニ用キ又蛇毒、虫毒ヲ去リ、食當リニ飲マセテ之ヲ吐カシメルナド其用途ハ相當廣イ、唯遺憾ナ事ニハ未ダ其主成分ガ各種ニツイテ研究シテナイノデ依然數百年來ノ用法ヲ其儘用ヒテ居ルニ過ギナイノデアル。

(3) 朝鮮産馬兜鈴科植物ノ分類

馬兜鈴科

多年生ノ草本又ハ灌木又ハ小喬木狀多クハ卷纏ス、葉ハ互生一年生又ハ

二年生、有柄、單葉全縁又ハ 3—7 裂片ヲ有ス、花ハ葉腋ニ 1 個宛又ハ數個宛又ハ集束シ又ハ總狀花序ヲナス、花梗ニ苞アルモノトナキモノトアリ、花被ハ合萼 1 列幅狀相稱又ハ左右相稱子房ニ對シテ上位萼筒ハ屢々屈曲シ基部ハ子房ト關節ス、萼片ハ兩唇トナリ又ハ 3 裂シ又ハ 3 個ノ尾狀ニ伸長ス、雄蕊ハ 6 (4—多數) 個花柱ノ癒合シテ柱狀ヲナス部分ノ外側ニ 1 列ニ竝ビテ花柱ニ癒着ス、葯ハ 2 室外ニ開キ裂口ハ縱ナリ、子房下位 6 (4 又ハ 5) 室往々不完全ナル室ヲ有スル事アリ、胎坐ハ側壁ニアルカ又ハ中軸ニアリ多數ノ縱ニ 2 列ニ竝ブ卵子ヲツク、果實ハ蒴、基ヨリカ又ハ先ヨリ胞間又ハ胞背裂開スルカ又ハ胎坐ノ所ニテ裂開ス、種子ハ多數、種皮ニ光澤アルモノ皺アルモノナドアリ多肉ノ胚乳ヲ有ス、胚ハ極メテ小サク臍ノ附近ニ位置ス。

熱帶、溫帶ニ亘リ 9 屬 250 餘種アリ、朝鮮ニハ 2 屬 2 種ヲ産ス。

- 花柱ハ 3 又ス、雄蕊ハ 2 個宛對ヲナシテ相接シ花柱ノ分枝ニ對生ス、蒴ハ先ヨリ胞背裂開ス。……………おほばうまのすずくさ屬
- 花柱ハ 6 又ス、雄蕊ハ 6 個共等距離ニ位置シ蒴ハ基ヨリ胞間竝ニ胞背裂開ス。……………うまのすずくさ屬

(第 I 屬) うまのすずくさ屬 *Aristolochia* L.

本屬ニハ朝鮮産トシテ草本植物ナルまるばのうまのすずくさ *Aristolochia contorta* Bunge アリ、咸北、濟州島ヲ除キ北ハ平北ヨリ南ハ全南ニ至ル各地ニ分布ス、草本植物故本編ニハ圖解セズ。

(第 II 屬) おほばうまのすずくさ屬 *Hocquartia* DUMORTIER

根ハ多年生又ハ匍枝ヲ有シ木質トナルアリ、地上莖ハ草本ナルキハ概ネ一年生ナルガ木本トナレバ太キ蔓トナルモノアリ、木本莖ノ老成セルモノニテハ皮ハ多ク木栓質ニ富ム、葉ニ托葉ナク葉柄アリ、1—2 年生單葉又ハ 3—7 又ス、花ハ葉腋ニ出デ單生ヨリ總狀花序迄種々アリ、苞ハナキカ又ハ各花梗ニ 1 個宛アリ。花被ハ子房ノ上ニツキ子房ト關節ス、萼筒ハ或ハ曲リ萼片ハ 3 又、2 又又ハ長ク 3 裂ス、雄蕊ハ 6 個ニシテ 2 個宛對ヲナシテ花柱ノ裂片ト對生ス、葯ハ外裂、花柱ハ 3 又ス、子房下位 3 室、胎坐ハ中軸、卵子ハ 2 列ニ縱ニ各胎坐ニツキ水平ニ出デ倒生、珠孔ハ内側ニ向ク、蒴ハ圓柱狀又ハ橢圓形先ヨリ胞背裂開ス。種子ハ扁平、種皮ハ堅ク胚乳多シ、胚ハ極メテ小サク臍ニ近ク位置ス。

約 20 種溫帶又ハ熱帶ニ産シ其中 1 種ハ朝鮮ニアリ。

きだちうまのすずくさ

トシチヨコ トシテヤルモツク  
(朝鮮名) 通草、通脱木

(第 I 圖)

莖ハ木質ニシテ高く他ノ木ニカラミ太キ部分ハ直徑 1-3 cm. トナル、樹皮ハ淡褐色又ハ灰褐色木栓質發達シ縦ニ溝アリ、芽ニハ絹毛アリ、葉ハ 1 年生、葉柄ハ屈曲シ又ハ卷キテ卷鬚ノ用ヲナシ長サ 5-13 cm. 幅 3-5 mm. アリ殆ンド無毛多數ノ小サキ皮目ノ點アリ、葉身ハ丸キ心臟形長サ 6-17 cm. 幅 6-16 cm. 全縁、基ハ深サ 1-3 cm. 程彎入ス、先端ハ或ハ丸ク或ハ尖リ、表面ハ綠色無毛裏面ハ始メ絹毛アレドモ後微毛ノミアリ。花ハ芽ノ基部ノ鱗片葉ニ腋生シ各枝ニ 1-2 個ヨリ出デス、花梗ハ細ク絲狀長サ 13-32 mm. 無毛中央ニ 1 個ノ苞アリ彎曲シテ垂ル、苞ハ無柄心臟形葉質ニシテ長サ 10-18 mm. 子房ハ下位長サ 7-9 mm. 萼ハ帶黄白色ニシテ紫色ノ脈ヲ有シ萼筒ハ長サ 22-25 mm. 許ニテ急ニ立チ更ニ 20-25 mm. 程直立セル部分ハ幅 10-12 mm. アリ萼孔ハ丸ク紫色ノ輪狀帶アリ、萼片ハ 3 個其中 2 個ハ上部ノ兩側ニ位置シ 1 個ハ下部中央ニアリ 3 裂片共殆ンド同大ニシテ丸ク縁ト内側トニ微毛アリ、花柱ハ圓柱狀ニシテ長サ 5 mm. 幅 2.5 mm. 先ハ 3 叉ス、雄蕊ハ 6 個花柱ト癒合シ 2 個宛對ヲナシテ相寄りテ 3 對ノ雄蕊群トナリ花柱ノ裂片ノ下ニ位置ス、藥ハ廣針形 2 室縦孔ニ依リテ外側ニ開ク、子房ハ 3 室、卵子ハ多數アリテ 2 列ニ竝ビテ中軸胎坐ニツク、蒴ハ長橢圓形ニシテ下垂シ長サ 7.5-9 cm. 徑 23-30 mm. 長サ 4 cm. 徑 3 mm. 許ノ花梗上ニツク、成熟スレバ先ヨリ胞背裂開ス、種子ハ多數水平ニ相重ナリ扁タク長サ 10 mm. 幅 8 mm. 許。

咸北、咸南、平南、江原ノ諸道ニ分布シ朝鮮ノ特産ナリ。

**Aristolochiaceae** LINDLEY, Nat. Syst. Bot. 205 (1836); MEISSNER, Pl. Vasc. Gen. I 333 (1836); DUCHARTRE in ALP. DE CANDOLLE, Prodr. XVI. pt. 1, 421 (1844); LINDLEY, Veget. Kingd. ed. 1, 792 (1846); KLOTSCH in Monatbericht König. Akad. Wiss. Berlin (1859) 582, excl. *Asarineae*; MASTERS in MARTIUS, Fl. Brasil. IV, pt. 2, 77 (1878); BENTHAM & HOOKER, Gen. Pl. III, 121 (1880); HOOKER, Fl. Brit. Ind. V, 72 (1886); SOLEREDER in ENGLER & PRANTL, Nat. Pflanzenfam. III, Abt. 1, 264 (1889); TRIMEN, Handb. Ceyl. III, 421 (1895); KOORDERS, Excurs. Jav. II, 177 (1912); RIDLEY, Fl. Malay Penins. III, 14 (1924).

Syn. *Aristolochia* [MATTIOLI, Med. Senen. Comment. 312 (1554); ed.

2, 348 (1558)]; ADANSON, Fam. Pl. II, 71 (1763); DURANDE, Not. Elém. Bot. 259 (1781); JUSSIEU, Gen. Pl. 72 (1789); DESFONTAINES, Elém. Bot. 31 (1800); J. ST. HILAIRE, Expos. Fam. Pl. I, 172 (1805); LAMARCK & DC. Syn. Fl. Gall. 188 (1806); R. BROWN, Prodr. Fl. Nov. Holland. 349 (1810); DU MONT DE COUREST, Bot. Cult. II 373 (1811); MIRBEL, Elém. 872 (1815); DUMORTIER, Comm. Bot. 55 (1822); EDWARDS in Bot. Regist. VIII t. 689 (1823); LINDLEY, Intr. Bot. 72 (1830); ENDLICHER, Gen. Pl. 344 (1836); AGARDH, Theor. Syst. Pl. 63 (1858).

*Sarmentaceae* LINNÆUS, Phil. Bot. ed. 1, 32 (1751), pro parte; Prælect. Ord. Nat. Pl. ed. GISEKE 294 (1791), pro parte.

*Asaroidae* VENTENAT, Tab. Règn. Végét. II, 226 (1799), excl. *Asarum* & *Cytinus*.

*Asarineae* AGARDH, Aphoris. Bot. 244 (1817).

*Aristolochinae* LINK, Enum. Pl. Hort. Berol. II, 373 (1822), nom.

*Pistolochinae* LINK, Handb. I, 367 (1829), excl. subord. *Cytineae* & *Nepenthinae*.

*Aristolochieae* REICHENBACH, Fl. Gern. Excurs. I, 182 (1830); EICHLER, Blütendiagr. II, 529 (1878).

*Aristolochieae* BARTLING, Ord. Nat. Pl. 78 & 79 (1830); SPACH, Hist. Végét. X, 544 (1841).

*Aristolochieae* JUSSIEU apud KOCH, Syn. Fl. Gern. & Helv. ed. 1, 624 (1837); GRENIER & GODRON, Fl. Franc. III, 71 (1855).

*Aristolochiaceae* JUSSIEU apud REICHENBACH, Icon. Germ. & Helv. XII, 14 (1850).

Herbae perennes vel frutices vel arborescentes vulgo volubiles. Folia alterna annua vel biennia, petiolata, simplicia, integra vel 3-5 lobata. Flores axillares, solitarii vel gemini vel fasciculati vel racemosi. Pedunculi bracteati vel ebracteati. Perianthium 1-seriale gamosepalum actinomorphum vel zygomorphum superum tubo saepe curvato basi cum ovario articulato, limbo labiato vel trilobato vel tricaudato. Stamina 6 (4-∞), circum columnam stylosum uniserialia et columnae adnata. Antherae biloculares extrorsae rima longitudinali apertae. Ovarium inferum 6 (4 v. 5)-loculare, interdum imperfecte loculare. Placenta centralia vel parietalia cum ovulis ∞, 2-serialibus. Capsula

ex basi vel ex apice septicide vel loculicide vel placenticide dehiscentia. Semina numerosa lævia vel rugosa carnosio-albuminosa. Embryo minimus circa hilum positus.

Genera 9 species 250 per regiones temperatas et tropicas late distributa. In Korea genera 2 et species 2 sunt indigenæ.

- Styli apice trilobi. Stamina 6 in 3 paria sub lobis stylorum posita.
- Capsula loculicide ab apice dehiscens. ....Hocquartia.
- Styli apice 6-lobi. Stamina 6 æquidistantia. Capsula ex basi septicide et placenticide dehiscens. ....Aristolochia.

Recent botanists regard *Aristolochiaceæ* and *Asaraceæ* as the same family. However, the plants of *Asaraceæ* are small herbs with never twining stems, the perianth are persistent destitute of articulation between the ovary, stamens free from ovary (this fact is observed by ADANSON in 1763), fruits are not dehiscent and lay the seeds when the fruits are rotten. These remarkable characteristics of *Asaraceæ* are enough to distinguish itself from *Aristolochiaceæ*. *Saruma* was described by OLIVER<sup>(1)</sup> as a new genus of the Tribe *Asarineæ*, but it is also distinct from both *Aristolochiaceæ* and *Asaraceæ* with opposite leaves, flowers provided with distinct petals (this can not be compared with the rudimental petals of *Asarum*), introrse stamens, and follicles bursting at the ventral suture. So, I regard it as a separate family *Sarumataceæ*. These three families make the real *Aristolochiales* and the natural position of this order is between *Balanophorales* and *Rafflesiales*, a new order. The genera belonging to *Aristolochiales* are the followings.

I. *Aristolochiales*.

1. *Asaraceæ* LINK.

- 1. *Asarum* L.
- 2. *Heterotropa* MORREN & DECAISNE.
- 3. *Japonasarum* NAKAI, gen. nov.<sup>(2)</sup> (type *Japonasarum caulescens* vel *Asarum caulescens* MAXIMOWICZ).

(1) *Saruma Henryi* OLIVER in HOOKER, Icones Plantarum XIX, Pl. 1895 (1889).

(2) *Japonasarum* NAKAI, gen. nov.

Rhizoma repens. Folia in apice caulis opposita; lamina æstivatione conduplicata. Pedunculus terminalis uniflorus pilis multicellularibus hirtellus. Ovarium inferum 6-angulare et 6-loculare. Sepala 3 in alabastro valvata, infra medium connata et sub anthesin lobi tenues perfecte reflexi tubum et partem superiorem ovarii arcte obtegentes; tubus intus planus sub lente papillosus in fructu sæpe

- 4. *Asiasarum* F. MAEKAWA, gn. nov.<sup>(3)</sup> (type *Asiasarum Sieboldii* vel *Asarum Sieboldii* MIQUEL).
- 2. *Aristolochiaceæ* LINDLEY.
  - 1. *Apama* LAMARCK.
  - 2. *Aristolochia* L.
  - 3. *Bragantia* LOUREIRO.
  - 4. *Cyclodiscus* KLOTZSCH.
  - 5. *Euglypha* CHODAT.
  - 6. *Hocquartia* DUMORTIER (*Siphisia* RAFINESQUE).
  - 7. *Holostylis* DUCHARTRE.
  - 8. *Pararistolochia* HUTCHINSON & DALZIEL (*Aristolochia* Sect. *Polyanthera* BENTHAM & HOOKER).
  - 9. *Thottea* ROTTBCELL.
- 3. *Sarumataceæ* NAKAI, nov. fam.
  - 1. *Saruma* OLIVER.

partim liber. Stamina 12 basi tubi perianthii affixa et supra discum adhærentia et in basi columnæ stylorum libera et erecta, fere stylis æqualta; filamenta subulata; antheræ binæ sublaterali-extrorsæ; connectivum productum sed inappendiculatum. Stylus erectus anguste fistulosus apice 6-lobus, lobis brevibus recurvis intus sulcatis et apice triangulari-stigmatosis. Ovula in quoque ovarii loculo biserialia anatropa horizontali placentis axillaribus affixa, micropyllo infero. Testa seminum fusca nitida. Funiculus in fructu carnosus et sulcum ventralem seminum occupat.

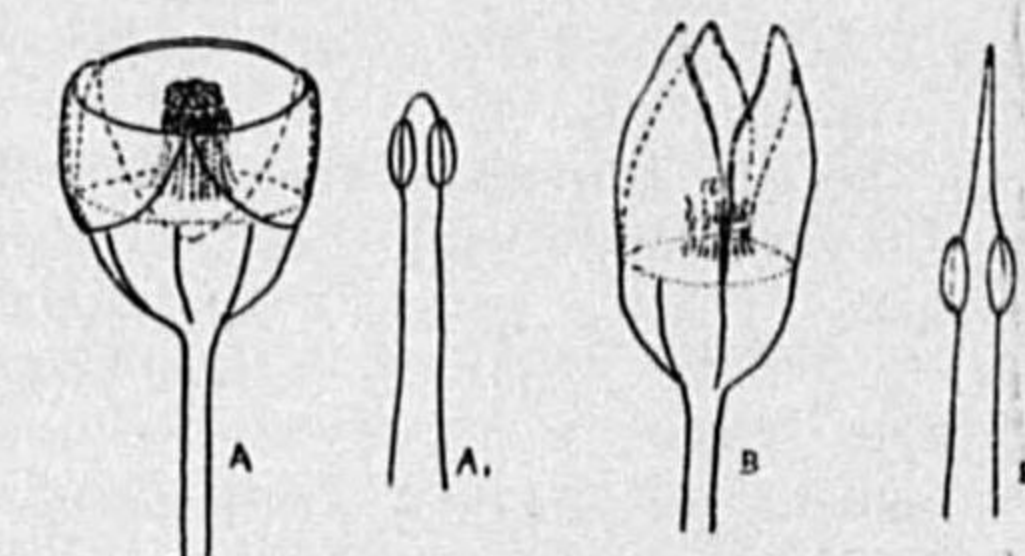
Genus monotypicum. Typus: *Japonasarum caulescens*. (*Asarum caulescens* MAXIMOWICZ).

This genus is closely allied to *Asarum*, but in the latter, lobes of perianth are free from the beginning upright and thick, stamens has long appendages, and column of styles is solid. In the genus *Heterotropa*, ovary is semisuperior, the perianth makes a distinct tube whose inner surface is elevated netway and make a oral ring at the mouth, style are nearly free, and stigma is situated at the outer side of style.

(3) *Asiasarum* F. MAEKAWA gen. nov.<sup>1)</sup>

Perennis. Rhizoma repens, internodiis abbreviatis. Squamæ 2-3. Folia 2 alterna sed valde approximata petiolata annua herbacea vel crassiuscula in gemmâ

1) *Asiasarum* auctore FUMIO MAEKAWA.



Expl. Fig. I.

- A. Flower of *Japonasarum*.
- A<sub>1</sub>. Stamen of *Japonasarum*.
- B. Flower of *Asarum europæum*.
- B<sub>1</sub>. Stamen of *Asarum europæum*.

All of them were sketched from the living materials, but are shown more or less diagrammatically.

duplicato-corrugata. Flos unicus terminalis pedicellatus, trimerus. Calyx carnosus inferne tubulosus superne trilobatus; tubus urceolatus extus glaber intus longitudinaliter multi-costatus fauce angustatus saepe constrictus sed nunquam annulatus. Calycis lobi valvati ovati patentes vel erecto-patentes. Petala nulla. Stamina 12 vel 6, ad faciem ovarii supernam inserta homomorpha. Filamentum antherâ 1-2-plo longius complanatum, antherâ parvâ, oculis parallelis extrorsis, connectivo crassiusculo inappendiculato. Ovarium semi-superum, inferne obconicum superne conicoideo elevatum 6-loculare, quoque loculo ovula biserialia in placentâ basilari-axiale disposita, seriis cum 3-4 ovulis constitutis. Ovula recta anatropa; raphe ventrale. Styli 6 raro 3 breves ventrale canaliculati prope apicem stigmatem ovoideo vel globoso ornati apice bilobulati. Capsula carnosae cum calyce persistente obtegeta putrefacta sed secus suturas ventrales simul loculicide dehiscens. Semina crustacea glabra ventre cum funiculo carnosae obtegentia.

Typus generis: *Asiasarum Sieboldii* (MIQUEL) F. MAEKAWA.

This new genus has closer affinity with *Heterotropa* than with *Asarum*, having the calyx tube, separate and not columnous styles and perfectly six-celled ovary. But it can be clearly distinguished from the latter by its long-stalked stamens (filaments are at least 1-2 times longer than anther cells), non-existence of ring in the mouth of calyx tube and annual leaves folded in bud. In the Far Eastern region of Asia, there are 4 species belonging to this genus, which are separable each other by the following key:

- 1) Folia in primo hiemis etiam persistentia crassiuscula supra atro-viridia atque albo-maculato-variegata. Calycis lobi planati acuti. Filamenta antheris aequilonga. .... *Asiasarum maculatum* (NAKAI) F. MAEKAWA.
- 2) Folia in auctumno jam emarcida textu herbaceo membranacea viridia nunquam variegata. Filamenta antheris 1.5-3-plo longiora. ....
- 3) Styli 3. Stamina 6. Folia minora 4-5 cm. longa ambitu pentagono-ovato cordata atro-viridia. Calycis lobi ovato-cuspidati apice distincte recurvato-recti. .... *Asiasarum dimidiatum* (F. MAEKAWA) F. MAEKAWA.
- 4) Styli 6. Stamina 12. Folia majora nunquam atro-viridia ovato-cordata vel semireniformia. ....
- 5) Calycis lobi ovati apice acuminati rectim reflexi primo erecto-patentes in fructu horizontali patentes. Folia saepe acuminata glabra vel subtus ad venas sparse ciliolata, petiolo absque margine canaliculi glabro. .... *Asiasarum Sieboldii* (MIQUEL) F. MAEKAWA.
- 6) Calycis lobi ex basi recurvati, late ovati vel ovato-reniformes apice acuti vel obtusiusculi deplanati crassi. Folia acuta vel obtusa. ....
- 7) Calycis lobi apice saepe obtusi. Folia saepe cordato-reniformia apice acuti-uscula vel obtusa, subtus glabra vel sparse ciliolata. .... *Asiasarum heterotropoides* (FR. SCHMIDT) F. MAEKAWA.
- 8) Calycis lobi apice acuti. Folia ovato-cordata apice acuta, subtus dense hirsuta vel glabriuscula. ....
- 9) Folia utrinque molliter hirsuta. Petioli scabro-pubescentes. .... *Asiasarum heterotropoides* var. *seoulense* (NAKAI) F. MAEKAWA.
- 10) Folia saepe glabriuscula. Petioli saepe glabri. .... *Asiasarum heterotropoides* var. *mandshuricum* (MAXIMOWICZ) F. MAEKAWA.

1) *Asiasarum maculatum* F. MAEKAWA comb. nov.  
Syn. *Asarum maculatum* NAKAI in FEDDE, Repert. Sp. Nov. Regn. Veget. XIII, p. 267 (1914), in Bot. Mag. Tokyo XXVIII, p. (519) (1914), Veg. Isl. Quelpaert p.

40 no. 538 (1914), Report Veg. Isl. Wangtô p. 6 (1914)-MATSUMURA, Shokubutsu-Mei-I, rev. et enlarg. ed., II p. 48 (1916)-MORI, Enum. Korean Pl. p. 128 (1922).

Rhizoma ascendens crassiusculum purpurascens, internodiis 1-10 mm. longis 1-5 mm. latis, radicibus numerosis gracilibus albis-instructum. Squamæ 2 vel 3 submembranaceae valde duplicatae sub anthesi persistentes, extima minima angusta, intima amplissima late ovata 5-15 mm. longa atro-purpurea. Folia 2, in primo hiemis etiam persistentia sed in medio jam emarcida longe petiolata, petiolo 2.5-16 cm. longo gracile purpurascens glabro; lamina late ovato-cordata vel subauriculato-cordata 4-8.5 cm. longa et lata apice acuta vel breviter acuminata basi profunde cordata vel subauriculata, lobis basalibus magnis globosis vel subglobosis ca. laminâ 3-plo brevioribus vel minoribus inter se haud imbricatis, crassiuscula supra laevissima viridissima inter costam et margines albido-maculato-variegata, ad venas primarias minute ciliolata secus et ad marginem sub lente sparsissime ciliolata cetera glaberrima, subtus pallidior glabra. Flos inter folia hornotina terminalis erectiusculus floret in Maio, pedunculo ca. 2 cm. longo gracile; tubus calycis 7-8 mm. longus 10-13 mm. latus globoso-urceolatus, apice constrictus basi obtusus extus glaber atro-purpureus intus purpureus glaberrimus longitudine lamellato-costatus, lamellis ca. 21, atherimis medio altissimis utrinque sensim decrescentibus; limbus trisectus, lobis tubo brevioribus 6 mm. longis latissime deltoideo-ovatis apice breviter acuminatis atro-purpureis patenti-recurvatis glaberrimis. Ovarium semi-superum, parte inferiore hemi-globosâ ca. 3 mm. longâ, parte superiore conicoideo-globosâ glaberrimâ tubi 2/3 aequilongâ; styli 6, brevissimi ca. 1 mm. longi crassi aperti apice obtusissimi atque emarginati exteriorem stigma parvum globosum sed bilobulatum producti. Stamina 12, homomorpha ca. 2 mm. longa, antheris oblongis, filamentis complanatis glabris antheram aequilongo, connectivo elliptico obtusissimo apice inappendiculato. Fructus ca. 2 cm. longus latusque longe pedunculatus (4.5 cm. longus).

Nom. Jap. *Atsuba-Kan-aoi* (T. NAKAI, 1916).

Hab. Corea Australis: prov. Zennan, Insula Wang-tô (T. NAKAI, Jun. 20, 1913-no. 821-Typicorum speciminum pars in Herb. Imp. Univ. Tokyo.), Quelpaert, Mt. Hallaisan (T. NAKAI, Maio 10, 1913-Typicorum speciminum pars in Herb. Imp. Univ. Tokyo.), Mt. Hallaisan, Soppa 1000 M. (T. NAKAI, Jun. 12, 1913-Typicorum speciminum pars), parte australi (T. NAKAI, Nov. 1 et 4, 1917-no. 6168), ibid. (S. SEGI, Aug. 23, 1933).

prov. Keinan, Insula Nankai-tô, in monte templi Ryûmonzi (T. NAKAI, Maio 16, 1928-no. 11110).

2) *Asiasarum heterotropoides* F. MAEKAWA comb. nov.

Syn. *Asarum heterotropoides* FR. SCHMIDT in Memoires l'Acad. Imp. Sci. St. Pétersb. VII-sér., XII-2, p. 171 (1868) (Reisen Amurl. u. Insel Sachalin)-HERDER in Acta Hort. Petrop. XI-11, p. 349 (1891) (Pl. Radd. Apetalæ, III)-HARA in Bot. Mag. Tokyo, XLVIII, p. 889 (1934).

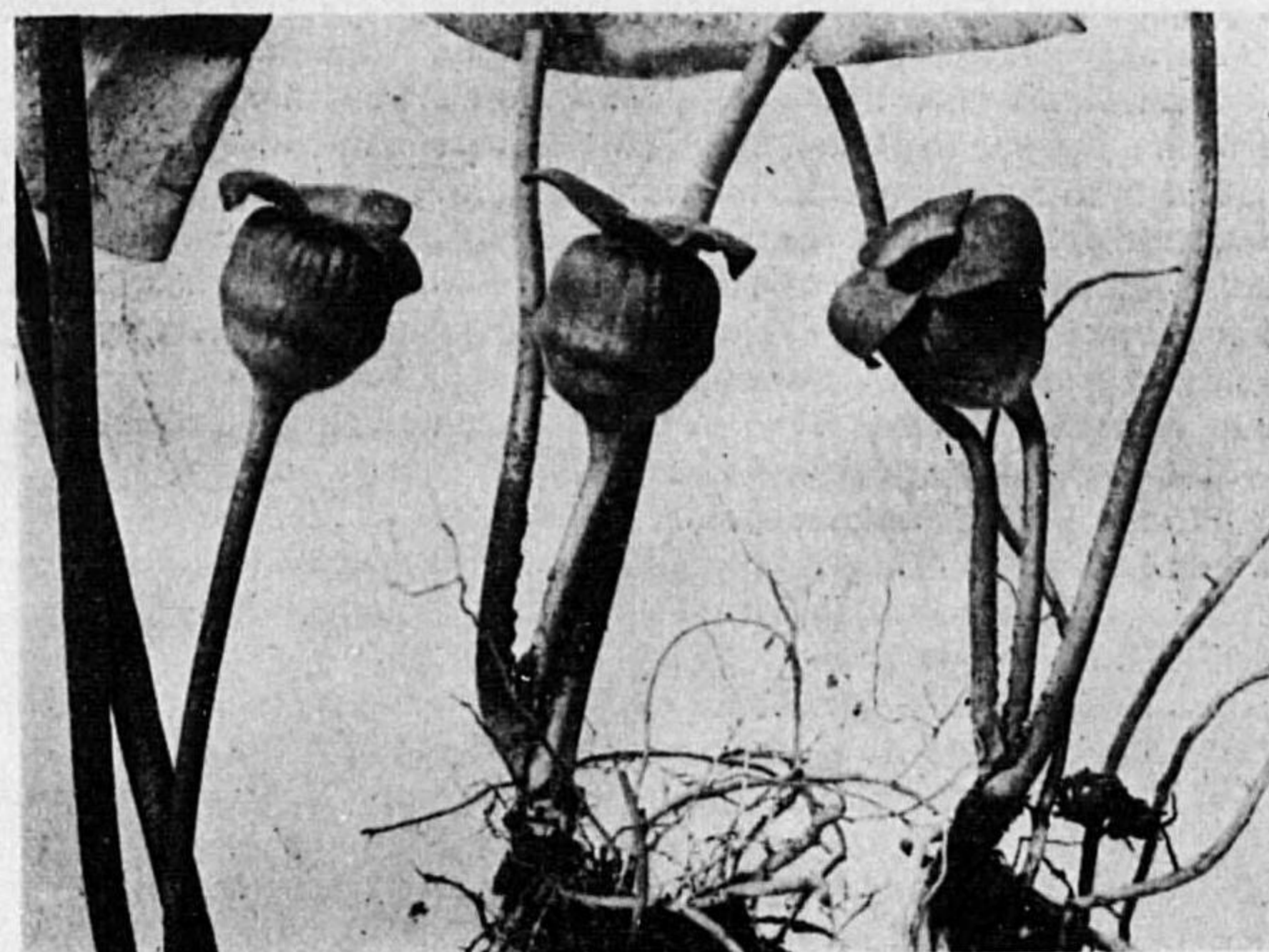
*Asarum Sieboldii* (non MIQUEL), KOIDZUMI in Journ. Coll. Sci. Imp. Univ. Tokyo, XXVII-13, p. 52 (1910) (Pl. Sachalin. Nakaharanæ)-MATSUMURA, Index Pl. Jap. II-2, p. 53 (1912) pro parte-MIYABE et MIYAKE, Fl. Saghalin, p. 399 (1915)-KUDO in Journ. Facult. Agricult. Hokkaido Imp. Univ. Sapporo XII-1, p. 32 (1923) Contribut. Knowledge Fl. North. Saghal., Report Veget. North. Saghal., p. 108 (1924)-KOMAROV et K. ALISOVA, Key Plants Far East. Reg. USSR I. p. 453 (1931)-MIYABE et KUDO in Journ. Facult. Agricult. Hokk. Imp. Univ. Sapporo XXVI-4, p. 493 (1934) (Fl. Hokk. Saghal. IV)

*Asarum Sieboldii* var. *sachalinensis* MAXIMOWICZ in Mém. Biol. VIII, p. 399 (1871),

in Bull. Acad. Sci. St. Pétersb, XVII, p. 164 (1872) in observatione.  
Nom. Jap. *Okuyezo-Saishin* (F. MAEKAWA ex HARA 1934),  
Hab. Sachalin et Yezo.

2-a) ***Asiasarum heterotropoides* var. *seoulense* F. MAEKAWA comb. nov.**  
Syn. *Asarum Sieboldi* var. *seoulense* NAKAI in FEDDE, Repert. Sp. Nov. Regn. Veget. XIII, p. 267 (1914), in Bot. Mag. Tokyo XXVIII, p. (519) (1914)—MORI, Enum. Korean Pl. p. 128 (1922)—NAKAI, Kōryōshikenrin no Ippan p. 31 (1932).

*Asarum Sieboldi* (non MIQUEL), FORBES et HEMSLEY in Journ. Linn. Soc. London, XXVI, p. 360 (1891) (quoad pl. ex Seoul Mountain)—PALIBIN in Acta Horti Petrop. XVIII-2, p. 185 (1900) (Cospect. Fl. Kor. II, p. 39) (Quoad pl. ex montes prope Seoul), lc. XIX p. 149 (1901) (Cospect. Fl. Kor. III, p. 49)—NAKAI in Journ. Coll. Sci. Imp. Univ. Tokyo, XXXI, p. 175 (1911) (Fl. Kor. II).



Flowers of *Asiasarum heterotropoides* var. *seoulense*.  
Notice that the lobes of perianth reflexed remarkably.  
Photograph was taken from the living specimens sent  
by Mr. To-Hō-Syō from Keizyō (or Seoul).

Rhizoma ascendens, internodiis 1-5 mm. longis 2-4 mm. latis, carnosum viridulum vel purpurascens. Squamæ 2 vel 3, intima maxima latissima ovata vel rotundato-ovata apice sæpe obtusissima vel truncata purpurascens herbacea 7-10 mm. longa. Folia bina approximata erecta vel erecto-patentia; petiolus elongatus longitudine laminam superans 12-20 cm. longus toto vel prope basin atque apicem scabro-pubescent viridis vel sordide purpurascens. Lamina ovato-cordata vel cordato-auriculata 5.5-12 cm. longa 7-13 cm. lata apice acuta vel subacuminata basi profunde cordata, lobis basalibus apertis semiglobosis 2-3.5 cm. longis, supra viridis vel luteo-viridis opaca per totam paginam vel ad venas tantum brevissime denseque ciliolata, subtus paulum pallidior dense raro subaxe molliter crispato-hirsuta. Flos inter folia terminalis pedunculatus, 12-19 mm. latus erectus vel subdeclinatus viridi-purpureus vel purpurascens. Pedunculus erectus gracilis viridis sæpe ciliolatus. Calycis tubus trapezoideo-urceolatus extus glaber intus costatus, costis 18-

21, fauce constrictus planus exannulatus. Lobi ex basi patentes ovato-cordati vel late ovati 9-15 mm. longi 11-15 mm. lati apice acuti crassi planati atro-purpurei intus dense papilloso. Ovarium semi-superum, in fructu semiglobosum. Styli 6, breves ca. 1 mm. longi apice exteriorem stigmatosi. Stamina 12, homomorpha 3 mm. longa, filamenta antherâ 1.5 plo longiore. Fructus putrefactus. Semina 3-3.5 mm. longa ovato-conicoidea acutissima basi obtuso-truncata glaberrima crustacea, funiculo semine longitudine superante.

Nom. Jap. *Usuge-Saishin* (T. NAKAI ex MORI 1922).

Hab. Corea. prov. Keiki: Mt. Hokkanzan, Keizyō (N. OKADA, Apr. 28, 1912—pars speciminum typicorum in Herb. Imp. Univ. Tokyo, ibid. (N. OKADA, Maio 5, 1912—pars speciminum typicorum), ibid. (T. MORI, Maio 16, 1910—no. 87), ibid. (T. UCHIYAMA, Jul. 28, 1902), Nanzan, Keizyō (T. UCHIYAMA, Jul. 16, 1902), prope Keizyō (To-Hō-SHō, Jun. 5, 1936), Insula Kōka-tō (To-Hō-SHō, Jun. 5, 1936), Kōryō (T. NAKAI, Apr. 26, 1913).

prov. Kōgen: Mt. Kongōsan (T. UCHIYAMA, Aug. 20, 1902).

prov. Kanhoku: Kyōzyōgun, Shuotsuon-men, Hozyōdō (T. NAKAI, Jul. 17, 1918—no. 6940).

Manchoukuo, prov. Chien-tao: ad fluvium Sungari (K. HATTA), occidental., Tasha-hê-k'ou-tzū (legitor?, Jun. 1908).

prov. An-fung: Fêng-huang-shan (M. KITAGAWA, Maio 20, 1932).

Prof. NAKAI noticed that his *Asarum Sieboldii* var. *seoulense* is conspecific with *Asarum heterotropoides* FR. SCHMIDT when he looked upon the co-type specimens at the herbarium of the Paris Natural History Museum in 1924. Of this he told me when I began my study on the Japanese *Asaraceæ*. However, he still claims that *A. heterotropoides* and *A. Sieboldii* make the different variety of the same species. *A. heterotropoides* has more obtuse leaves and more reflexed lobes of perianth than *A. Sieboldii*, and hairy variety *seoulense* and glabrescent variety *mandshuricum* make the two extremities of the hairiness of *Asarum heterotropoides*.

2-b) ***Asiasarum heterotropoides* var. *mandshuricum* F. MAEKAWA comb. nov.**

Syn. *Asarum Sieboldi* var. *mandshurica* MAXIMOWICZ in Mém. Biol. VIII, p. 399 (1871) in observatione, in Bull. Acad. Sci. St. Pétersb. XVII, p. 164 (1872).

*Asarum Sieboldi* (non MIQUEL), BAKER et MOORE in Journ. Linn. Soc. XVII, 386 (1879)—KOMAROV in Acta Horti Petrop. XXII, p. 110 (1903) (Fl. Mansh. II)—NAKAI, Report Veg. Quelpært p. 40 (1914), Report Veget. Mt. Chiisan p. 30 (1915), Report Veget. Diamond Mts., Corea p. 170 (1918)—MORI, Enum. Korean Pl. p. 128 (1922).

Folia supra ad venas tantum sub lente ciliolata, subtus glabriuscula vel glabra, petiolo glabro vel raro basi pubescente. Cetera cum var. *seoulense* sat similia.

Nom. Jap. *Keirin-Saishin* (nom. nov.)

Nom. Cor. *Choripul* vel *Sesin*.

Hab. Corea, prov. Zennan: in sylvis Insl. Quelpært (E. TAQUET, Maio 1911—no. 5941), ibid. 1500 m. alt. (T. ISHIDOYA, Aug. 14, 1912—no. 83), ibid. Hallasan (T. NAKAI, Maio 17, 1913—no. 1330), ibid. (T. NAKAI, Maio 10, 1913), Insl. Wang-tō (T. NAKAI, Maio 30, 1928—no. 11108), Insl. Baikwa-tō (T. ISHIDOYA et TEI-DAI-GEN, Aug. 29, 1919—no. 3452).

prov. Keinan: Mt. Chiisan (T. MORI, Aug. 1912—no. 106), ibid. (T. NAKAI, Jul. 2, 1913), Mt. Mirokusan, Tōei (T. NAKAI, Maio 13, 1928—no. 11109), Insl. Kyosai-tō, Mt. Gyokuzyo-hō (T. NAKAI, Maio 5, 1928—no. 11111).

prov. Kōgen: Mt. Kongōsan, Gunsenkyō (T. NAKAI, Jul. 31, 1916—no. 5373), ibid. Utikongō (M. KOBAYASHI, Aug. 2, 1932—no. 28), Heikō-gun, Shasōri (T.

By this chance, I should like to make the distinction of families belonging to the order *Rafflesiales* more clearly. Whether the number of integments of ovules are one or two are not the characteristics available only in classifying the *Rafflesiales*. One must take many other remarkable characteristics jointly.

**Rafflesiales**, ordo nov.

Parasiticæ in radicibus vel in ramis plantarum lignarum. Radix haustorioides. Caulis abbreviatus squamosus vel nudus. Flores terminales solitarii vel breve racemosi hermaphroditi vel monœici vel dioici. Ovarium inferum vel superum. Stamina 1) circum columnam stylosum uniseriale conniventia et apice poro rotundato aperta, 2) in basi columnæ stylosum annulari collocata et apice poro rotundato

NAKAI, Aug. 18, 1930-no. 14076).  
prov. Keiki: Hô-tô (Y. Hanabusa).  
prov. Kôkai: Tyôzankan (T. NAKAI, Jul. 26, 1929-no. 13181).  
prov. Heinan: Rôransan (legitor?, Jul. 22, 1916).  
prov. Heihoku: Unzan-gun, Mt. Hakuhokizan (T. ISHIDOYA, Maio 19, 1912-no. 79).  
prov. Kannan: Sanbô (TO-HÔ-SHÔ, Maio 1936).  
prov. Kanhoku: Fluvium Tumingan, Districtus Musang, circa Encaui (V. KOMAROV, Jul. 15, 1897).

3) **Asiasarum Sieboldii** F. MAEKAWA comb. nov.  
Syn. *Asarum Sieboldii* MIGUEL in Ann. Mus. Bot. Lugd. Batav. II, p. 134 (1865). (Prol. Fl. Jap., p. 66)-MAXIMOWICZ in Mém. Biol. VIII, p. 397 (1871) pro majoribus partibus, in Bull. Acad. Sci. St.-Pétersb. XVII, p. 163 (1872)-FRANCHET et SAVATIER, Enum. Pl. Jap. I, p. 417 (1874)-MATSUMURA, Index Pl. Jap. II-2, p. 53 (1912) pro parte-MAKINO et NEMOTO, Fl. Jap. ed. 2, p. 250 (1931)-MIYABE et KUDO in Journ. Facult. Agricult. Hokk. Imp. Univ. Sapporo, XXVI-4, p. 493 (1934) (Fl. Hokk. Saghal. IV) pro parte.

*Asarum Sieboldii* var. *japonica* MAXIMOWICZ in Mém. Biol. VIII, p. 399 (1871), Bull. Acad. Sci. St.-Pétersb. XVII, p. 164 (1872) in observatione.  
Nom. Jap. *Usuba-Saishin*.  
Hab. Yezo, Hondo borealis et media, et Tsushima.

4) **Asiasarum dimidiatum** F. MAEKAWA comb. nov.  
Syn. *Asarum dimidiatum* F. MAEKAWA in ASAHINA Journ. Jap. Bot. XII, p. 30, fig. 58-60 (1936).

*Asarum Sieboldii* var. *sikokianum* NAKAI schedl. in Herb. Imp. Univ. Tokyo.  
Nom. Jap. *Kurofune-Saishin* (F. MAEKAWA 1936).  
Hab. Japonia, Kiusiu: prov. Hizen, Nagasaki (F. C. GREATREX-Typus in Herb. Imp. Univ. Tokyo), Mt. Unzen (F. C. GREATREX, Apr. 1931-no. 13/31).  
Shikoku: prov. Awa, Oe-gun, Mt. Kôtsu (J. NIKAI, Maio 14, 1905-no 1519), prov. Tosa, Oppido Nanokawa (T. MAKINO, Apr. 17, 1890), Nagaoka-gun, Kazigamori K. Itô, Jun. 22, 1930).  
Hondo: prov. Yamato, Mt. Sanzyogatake (M. TSUZIBE, Aug. 1935).

aperta, 3) cum floribus dioicis vel monoëicis synangia cylindrica formantia et anthera 1-3 seriales longitudine vel horizontali-dehiscentes, 4) cum antheris in apice annulorum medio perianthii congestim collocatis, 5) circum ovarium superum cylindrum formantia et apice loculos antherarum multiseriatos instructa et anthera poro rotundato aperta. Ovaria unilocularia septis incompletis multis parietalibus instructa. Ovula ∞ in tota facie interiore ovarii dispersa, anatropa, cum integumentis 1 vel 2. Fructus carnosus baccatus. Semina albuminosa. Embryo parvus rotundus vel ovatus.

Familia quinque huc ducentæ in sequenti modo inter sese distinguendæ.

- 1 { Ovarium superum. Flores hermaphroditi terminales. Caulis cum squamis imbricatis obtectus. Perianthium unicum urceolatum apice truncatum. Filamenta tubulosim connata et ovarium amplexentia. Anthera in apice tubi filamentorum oligoseriales et saccas numerosas urceolatas formantes et poris rotundatis aperta.
- 1 { Ovarium 1-loculare parietale incomplete ∞-septatum, intus toto facie ovulatum. Integumentum 1. Parasiticæ in radicibus *Castanopsisidis*. ..... *Mitrastemonaceæ* MAKINO.
- 1 { Ovarium inferum. Perianthium 2-9 lobatum, lobis imbricatis vel valvatis. .... 2
- 2 { Ovarium irregulari-∞-locellatum. Caulis esquamosus. Rhizoma caret. Flos hermaphroditus in apice caulis solitarius. Perianthii lobi imbricati vel valvati. Anthera rotundata circum basin stylosum ∞, apice poro rotundato aperta. Integumenta 1-2. In radicibus *Vitacearum* parasiticæ. .... *Rafflesiacæ* ENDLICHER.
- 3 { Ovarium 1-loculare. .... 3
- 3 { Caulis esquamosus ex rhizomate repente monopodialis. Rhizomata ex hosta radiata. Flos terminalis solitarius. Perianthium 3-4 lobatum, lobis valvatis margine involutis, carnosum et intus medio annulari productum sed annulus lobos perianthii oppositum sinuatus. Margo annuli toto antheris angustis uniseriali-congestis longitudine dehiscentibus instructa. Placenta ab apice ovarii pendula vel parietali 3-4 lamellata. Integumentum 1. In radici-

- bus *Mimosacearum* parasiticæ. .... *Hydnoraceæ* SOLMS.
- Caulis squamosus erizomatus. Perianthii lobi imbricati. .... 4
- Dioicæ. Flos terminali-solitarius. Ovarium intus integrum. Antheræ circum androphorum annulari 2-3 seriales horizontali apertæ. Integumenta 2. Perianthii lobi 2-6 imbricati. In ramis *Fabacearum* et *Flacourtiacearum* parasiticæ. .... *Apodanthaceæ* VAN TIEGHEM. (*Rafflesiaceæ*-Tib. *Apodantheæ*).
- 4 Monœicæ raro dioicæ. Flores breve racemosi. Antheræ in apice androphori 1-seriales longitudine apertæ. Integumentum 1. Perianthii lobi 4-9 imbricati. Ovarium cum placentis parietalibus ramosis. In radicibus *Cistacearum*, *Asteracearum* et *Hamamelidacearum* parasiticæ. .... *Cytinaceæ* DC (partim).

Gn. 1. **Aristolochia** [PLINIUS, liber XXV, caput VIII (1469); DIOSCORIDES, liber III Caput V, fol. 157 (1518); BRUNFELS, Herb. I, 29 (1532); FUCHS, Hist. 89 (1542); MATTHIOLI, Medic. Senen. Comm. 311 (1554); DODOENS, Niew Herb. 312 (1578); DALECHAMPS, Hist. I, 976 (1587); BAUHINUS, Pinax 307 (1632); Malpigi, Anat. Pl. Idea 58 t. XXIV f. 135, 62 t. XXIX f. 172 (1687); MORISON, Hist. III, 508 (1699); TOURNEFORT, Institut. 162 t. 71 (1700); LINNÆUS, Gen. Pl. ed. 1, 275 (1737); LUDWIG, Definit. Gen. Pl. 81 n. 283 (1747)]; LINNÆUS, Gen. Pl. ed. 5, 410 (1754), Syst. Nat. ed. auct. 133 (1756); Hill, Brit. Herb. 129 (1756); ADANSON, Fam. Pl. II 75 (1763); GLEDITCH, Syst. Pl. 285 (1764); LINNÆUS, Gen. Pl. ed. 6, 467 (1764), Gen. Pl. ed. noviss. 467 (1767), Syst. Nat. ed. 13, 600 (1770); MURRAY, Syst. Veg. ed. 13, 686 (1774); POLLICH, Hist. Pl. Palatin. II, 546 (1777); LAMARCK, Encyclop. I, 251 (1783); GILIBERT, Syst. Pl. Europ. IV, 452, 476 (1785); ALLIONI, Fl. Pedemont. II, 362 (1785); SCHRANK, Baier. Fl. II, 651 (1789); GÆRTNER, Fruct. Sem. Pl. I, 45 t. 14, f. 4 (1788); JUSSIEU, Gen. Pl. 73 (1789); SCHREBER, Gen. Pl. 608 (1789); NECKER, Elem. Bot. III, 110 (1790); LOUREIRO, Fl. Cochinch. II, 528 (1790); GMELIN, Syst. Nat. II, pt. 1, 528 (1791); MOENCH, Method. 718 (1794); LEERS, Fl. Herborn. 196 (1798); DESFONTAINES, Fl. Atlant. II, 323 (1798); VENTENAT, Tab. Règn. Végét. II, 226 (1799);

DESFONTAINES, Elém. Bot. 32 (1800); SMITH, Fl. Brit. III, 947 (1804); WILLDENOW, Sp. Pl. IV, pt. 1, 151 (1805); J. ST. HILAIRE, Exposit. I, 172 t. 27 (1805); LAMARCK & DC, Syn. Fl. Gall. 188 (1806); PERSOON, Syn. Pl. II, 526 (1807); R. BROWN, Prodr. Fl. Nov. Holland. 349 (1810); DU MONT DU COURSET, Bot. Cult. II, 273 (1811); LINK, Handb. I, 370 (1829); EDWARDS, Bot. Regist. VIII, sub t. 689 (1823); REICHENBACH, Fl. Germ. Excurs. I, 182 (1830); ENDLICHER, Gen. Pl. I, 345 (1836); PAXTON, Magaz. Bot. III, sub t. 2 (1837); DUCHARTRE in ALP. DC. Prodr. XV, pt. 1, 432 (1844); REICHENBACH, Icon. Fl. Germ. & Helv. XII, 15 (1850); BERTELONI, Fl. Ital. IX, 640 (1853); GRENIER & GODRON, Fl. Franc. III, 72 (1855); KLOTZSCH in Monatsbericht. Berl. (1859) 593; WILLKOMM & LANGE, Fl. Hisp. I, 303 (1870); BOISSIER, Fl. Orient. IV, 1074 (1879); BENTHAM & HOOKER, Gen. Pl. III, 123 (1880); MASTERS in MARTIUS, Fl. Brasil. IV, pt. 2, 82 (1878); HOOKER, Fl. Brit. Ind. V, 74 (1886); BAILLON, Hist. Pl. IX, 22 (1888); SOLEREDER in ENGLER & PRANTL, Nat. Pflanzenfam. III, Abt. 1, 272 (1889); TRIMEN, Handb. Ceylon Pl. III, 422 (1895); SMALL, Fl. Southeast. U.S. 1132 (1903); RIDLEY, Fl. Malay. Penins. III, 17, (1924).

Syn. *Endodeca* RAFINESQUE, Fl. Thellur. IV, 98 (1836); KLOTZSCH in Monatsbericht Berl. (1859) 605.

*Howardia* KLOTZSCH l. c. 607.

*Glossula* (non LINDLEY) REICHENBACH, Handb. Pflanzensyst. 173 (1837).

*Niphus* RAFINESQUE ex STEUDEL, Nomencl. ed. 2, I, 133 (1840).

*Pistolochia* (non BERNHARDI 1800) RAFINESQUE, Fl. Thellur. IV, 98 (1836).

Rhizoma hypogæum vel repens, vel radix lignosa. Caulis herbaceus annuus vel lignoso-perennis, fruticosus vel arborescens. Cortex sæpe suberosus. Folia exstipullata petiolata, annua vel biennia simplicia integra vel 3-7 lobata. Flores axillares solitarii vel gemini vel fasciculati vel racemosi. Bractea 0 vel in quoque pedicello 1. Perigonium superum cum ovario articulatum, tubo recto vel deflexo et reflexo, limbo labiato vel 3-lobato. Stamina 6 (4-10) circum stylos 1-serialia, antheris extrorsis 2-ocularibus. Ovarium inferum 1- vel 3-loculare. Styli columnam formantes apice 6 (4-10) lobulati. Placenta parietalia vel axillaria. Ovula ∞ longitudine 2-serialia placento horizontali

affixa anatropa, micropyllo interiore. Capsula globosa vel elliptica ex basi septicide atque loculicide dehiscentia, loculis sæpe lamellato-septatis. Semina compressa, testa crustacea vel indurata, albumine copioso. Embryo minimus circa hilum positus.

Species circ. 200 in regionibus temperatis vel tropicis late expansa. In Korea species unica herbacea indigena est, quæ in sectione *Euaristolochia*<sup>(1)</sup> est.

1) **Aristolochia contorta** BUNGE.

*Aristolochia contorta* BUNGE,<sup>(2)</sup> Enum. Pl. Chin. bor. 58, separat. (1831), in Mém. Sav. Etrang. l'Acad. Sci. St. Pétersb. II, 58 n. 328 (1833); NAKAI, Fl. Kor. II 176 (1911).

Nom. Jap. *Maruba-no-umano-suzukusa*.

Hav.

Prov. Zennan: in monte Reisyuzan oppidi Sanzitu, distr. Reisui (T. NAKAI no. 11112); in silvis oppidi Kagen distr. Kainan (T. NAKAI no. 9614).

Prov. Keiki: in monte Nankanzan (T. UCHIYAMA); Syôteiri (T. UCHIYAMA); Kôryô (T. MORI no. 190).

Prov. Kôgen: in dumosis basi montium Kongosan (T. NAKAI no. 5372).

Prov. Kôkai: in insula Sekitô (T. NAKAI no. 12685).

Prov. Heinan: in monte Katudjiturei (T. MORI).

Prov. Heihoku: Syodjinri oppidi Nanmen distr. Unzan (T. ISHIDOYA).

Distr. Hondo, Korea, Manshuria, Amur, Jehol, China bor.

Gn. 2. **Hocquartia** DUMORTIER, Comm. Bot. 20 (1822).

Syn. *Siphisia* RAFINESQUE, Medic. Fl. I, 62 (1828); KLOTZSCH in Monat-

(1) Sect. *Euaristolochia* KLOTZSCH in Monatsbericht der Akademien der Wissenschaften zu Berlin, (1859) 593.

(2) According to P. DUCHARTRE'S note mentioning of the paper of BUNGE under *Aristolochia contorta* in ALP. DE CANDOLLE: Prodr. Systematis Naturalis Regni Vegetabilis XV pt. 1, 488, which read

'In Act. Acad. Sci. Petrop. 1831, seorsum impress. p. 58', the paper of BUNGE entitled 'Enumeratio Plantarum quas in China boreali collegit' had been published separately in 1831 as is impressed in its title page. The publication of the entire volume of the second volume Mémoires des savants étrangers de l'Académie des sciences de St. Pétersbourg ended in 1835; however, the part containing the paper of BUNGE was published either in 1832 or 1833.

bericht Berl. (1859) 601, t. 2 fig. 10, a-b, fig. 11, a-b, fig. 12, a-b, excl. *Siphisia sericea* et *Brachycalyx*.

*Aristolochia*, pro parte, auct. plur.

*Aristolochia* sect. *Siphisia* DUCHARTRE in Ann. Sci. Nat. ser. 4, II, 29 t. 5 f. 6 (1854), in ALP. DE CANDOLLE, Prodr. XV, pt. 1, 435 (1864).

Genus ab *Aristolochia* distinctum in sequenti modo separatum.

*Hocquartia* (type *H. Siphio* & *H. tomentosa*).

Columna stylorum trilobata. Stamina in paria lobos columnæ opposita. Capsula ab apice dehiscentia. Species circ. 20.

*Aristolochia*.

Columna stylorum 6-lobata. Stamina æquidistantia; Capsula a basi dehiscentia. Species circ. 200.

Radix lignosa. Caulis lignoso-perennis. Folia simplicia petiolata integra vel 3-lobata. Flores axillari-solitarii. Bractea in quoque pedicello 1. Perigonium deflexum, limbo 3-lobato. Stamina 6 in 3 paria lobos stylorum opposita, antheris extrorsis. Styli columnam apice 3-lobatam formantes. Ovarium 3-loculare. Placenta axillaria. Ovula ∞ longitudine 2-serialia placento horizontali affixa anatropa. Capsula cylindrica ab apice loculicide dehiscentia. Semina compressa, albumine copioso. Embryo minimus circa hilum positus.

Species circ. 20 quarum unica in Korea endemica.

2) **Hocquartia manshuriensis** NAKAI.

(Tab I).

*Hocquartia manshuriensis* (KOMAROV) NAKAI, comb. nov.

Syn. *Aristolochia manshuriensis* KOMAROV in Acta Horti Petrop. XXII, 112 (1900), Fl. Mansh. II, 112 (1904); NAKAI, Fl. Kor. II, 176 (1911), Veget. Diamond Mts. 170 (1918); MORI, Enum. Cor. Pl. 138 (1922); O. C. SCHMIDT in ENGLER, Pflanzenfam. 2 Aufl. 16 b, 237 (1935).

*Aristolochia mandshuriensis* KOMAROV apud BONSTEDT in PAREYS Blumengärtn. I, 506 (1931).

Caulis lignosus alte scandentes ultra 1 cm. latus. Cortex fuscescens vel cinereo-fuscus suberosus longitudine varie fissus. Gemmæ velutinæ. Folia annua; petioli flexuosi vel volubiles 5-13 cm. longi sub-



teretes 3-5 mm. lati fere glabri lenticellis minutis creberrime punctulati; lamina rotundato-cordata integerrima 6-7 cm. longa 6-16 cm, lata, basi 1-3 cm. longa sinuata 2.5-6 cm. aperta, apice rotundata vel acutiuscula, supra viridis glabra infra primo sericea demum pilosa. Flores 1-2 ex gemmis annotinis in basi innovationis in squamis axillares. Pedunculi filiformes 13-32 mm. longi glabri medio 1-bracteati arcuato-dependentes. Bractea sessilis cordata 10-18 mm. longa foliacea. Ovarium 7-9 mm. longum inferum. Perianthium ochroleucum purpureo-venosum ovario articulatum tubo ex apice partis dependentis 22-25 mm. longæ subito erecto circ. 20-25 mm. alto 10-12 mm. lato, ore rotundato annulato-atro-purpureo, lobis 3 quorum 2 superiores laterales, omnibus subrotundatis, margine et intus pilosellus. Columna stylium cylindrica 5 mm. longa 2.5 mm. lata apice breve 3-lobata. Stamina 6 columnam affixa in paria 3 approximata et lobos opposita. Antheræ subulatæ 2-loculares extrorsæ. Ovarium 3-loculare ovulis ∞ longitudine 2-serialibus. Capsula oblonga pendula 7.5-9 cm. longa 23-30 mm. lata basi in pedunculos circ. 4 cm. longos 3 mm. latos attenuata ab apice loculicide dehiscentia. Semina ∞ horizontali affixa compressa fere obtriangularia 10 mm. longa 8 mm. lata.

Nom. Jap. *Kidati-Umano-Suzukusa*.

Nom. Kor. *Tongchô* 通草, *Tong Thal Mok* 通脱木.

Hab.

Kanhoku: in dumosis inter Kamenkôkô & Mosan (T. NAKAI no. 1971, 16 Aug. 1914); in silvis inter Nodjidô et Sankamen (T. NAKAI no. 1970, 14 Aug. 1914); Sankamen (T. ISHIDOYA no. 2932, 2 Jun. 1918).

Kannan: in silvis montis Risôrei (T. NAKAI no. 1969, 23 Jul. 1914).

Heinan: in silvis Yôtoku (T. NAKAI no. 12404, 15 Jun. 1928).

Kôgen: in Mte. Kongosan (T. UCHIYAMA, 15 Aug. 1902); ibidem (T. NAKAI no. 5370, 31 Jul. 1916; no. 5371, 15 Aug. 1916); in montibus Setugakusan (T. NAKAI no. 17365, Jul. 1936).

Planta endemica.

ア ケ ビ  
木 通 科

**Lardizabalaceæ** LINDLEY

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HAYATA, B. (17) *Stauntonia*, in Icones Plantarum Formosana-rum VIII, 1-6 Pl. 1 (1918).

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## (2) 朝鮮産木通科植物研究ノ歴史ト其効用

1886年5月 松村任三氏ハ帝國大學理科大學植物標品目錄ヲ著ハシ、其第3部ニ朝鮮植物ヲ記セシ中ニあけび *Akebia quinata* DECAISNE ヲ記ス、同年同月 英國ノ W. B. HEMSLEY 氏ハ 1859年ニ CHARLES WILFORD 氏ガ巨文島ニテ採集シタルむべ *Stauntonia hexaphylla* DECAISNE ト W.

CARLES 氏ガ其後 (正確ノ年代不明) = 仁川デ採ツタあけびト R. OLDHAM 氏ガ 1863 年 = 巨文島デ採ツタあけびト The Journal of the Linnaean Society XXIII, 423 = 記ス。

1887 年 伊藤篤太郎氏ハあけびトむべト The Journal of the Linnaean Society XXII = 朝鮮ニモ産スル事ヲ記ス。

1888 年 獨乙ノ K. PRANTL 氏ハ ENGLER 氏トノ共著 Die Pflanzenfamilien III, Abt. 2 = むべガ朝鮮ニ産スル事ヲ記ス。

1898 年 露國ノ J. PALIBIN 氏ハ Acta horti Petropolitani XVIII = あけびトむべトガ朝鮮ニアル事ヲ記ス。

1904 年 奥土利ノ C. K. SCHNEIDER 氏ハ其著 Illustriertes Handbuch der Laubholzkunde I = あけびガ朝鮮ニ産スル事ヲ記ス。

1909 年 中井猛之進ハ Flora Koreana I = あけびトむべトヲ記ス。

1914 年 3 月 中井猛之進ハ朝鮮植物第 I 卷ヲ著シあけびトむべトヲ記ス。

1914 年 4 月 中井猛之進著 朝鮮總督府出版ノ濟州島並莞島植物調査報告ニハあけびトむべトヲ記ス。

1915 年 中井猛之進著 朝鮮總督府出版ノ智異山植物調査書ニハあけびト記ス。

1919 年 中井猛之進著 朝鮮總督府出版ノ鬱陵島植物調査書ニハあけびト記ス。

1922 年 森爲三氏著 朝鮮總督府出版ノ朝鮮植物名彙ニハむべトあけびトヲ記ス。

1932 年 中井猛之進ハ 朝鮮總督府林業試験場出版ノ光陵試験林一班中ニあけびト記ス。

朝鮮ニテハあけびハ中部以南ニ産スレドモ其産額多カラザル故果實ヲ柚人又ハ小兒ガ時々採リテ食フ外殆ンド何ノ用ニモナラス。從テ内地ニアツテみづばあけびノ蔓デ籠ヲ作ルナド云フ様ナ事ハナイ。藥用ニモ別ニ用キテ居ラス。恐ラクむべ同様ニ厄介ナ蔓物位ニヨリ思ハレテ居ナイ。然シ之ヲ利用スレバ生牆ニモナリ、日蔭棚ニモナリ、花モ優雅デアリ果實ハ食ベラレルカラ用ヒ様ニ依ツテハ相當効果アル蔓植物デアル。

又むべハ全南、慶南ノ南部俗ニ云フ朝鮮多島海ノ島々ト濟州島トニアルガ是亦何等住人ニ利用サレテ居ラス。むべノ果實ハ相當美味デアリ鹿兒島デハ品種改良迄シテ果物ノ一ニナツテ居ル程デアルカラ南朝鮮ノ様ナ所デハ此常緑ノ葉ヲ利用シテ生牆ニシタリスレバ果實ト相俟ツテ重寶ガラレルモノニスル事ガ出来ヤウ。

### (3) 朝鮮産木通科植物ノ分類

#### 木 通 科

木本、直立ノ灌木又ハ卷纏性、雌雄異株又ハ同株、葉ハ互生一年生又ハ二年生、掌狀複葉又ハ 1-3 回三出、又ハ羽狀、小葉ハ全縁又ハ缺刻アリ。花序ハ總狀又ハ繖房狀腋生、萼片 3 個鑷合、花瓣ハナキカ又ハ 3 個狭長キモノト幅廣キモノトアリ。偽雄蕊ハ無キカ又ハ 6 個アリ。アル場合ハ雄蕊ト對生シ屢々花瓣様ナレドモ小型ナリ。雄蕊ハ 6 個離生又ハ花絲ガ相癒合シテ筒ヲナス。葯ハ 2 室外開、葯室ハ突出スルモノトセザルモノトアリ、雌花ニテハ雄蕊ハ無性又ハ痕跡ニスギズ。心皮ハ 3 個又ハ多數各 1 室但シ雄花ニテハ退化シテ小サシ、卵子ハ 1 個又ハ多數ガ 2-12 列ニ側壁ニツキ直生、2 珠皮ヲ有シ胎坐ヨリ生ゼルモ毛ニテ包マル。果實ハ肉質成熟スレバ縱ニ裂開シテ廣ク開孔スルモノト全然開カヌモノトアリ。胎坐ハ成熟シテ軟カキ肉質又ハ膠質トナリ往々食シ得、種皮ハ殼質、胚乳ハ多量、胚ハ直立又ハ屈曲シ幼根ハ下向。

9 屬ニ屬スル 20 餘種アリテ主トシテ東亞細亞ノ産、少數ハ南米ニ産ス。其中朝鮮ニハ唯 2 屬 2 種 1 變種アルノミ。屬ノ區別ハ次ノ如シ。

- 葉ハ 2 年生常緑、花瓣ハ狭長シ、花絲ハ筒狀ニ相癒合シ葯間ハ通例長ク突出ス。心皮ハ 3 個、果實ハ成熟スルモ裂開セズ。  
.....むべ屬
- 葉ハ主トシテ 1 年生、花瓣ハ無キカ又ハ幅廣シ、雄蕊ハ離生、葯間ニ附屬物ナシ、心皮ハ 6 個、成熟スレバ縱ニ腹面ニテ開孔ス。  
.....あけび屬

#### (第 I 屬) む べ 屬

木本植物外物ニ卷キ附ク刺ナシ、葉ハ互生有柄 2 年生掌狀ニ 3-9 小葉ヲツク小葉ハ葉柄ト關節シ全縁ニシテ質アツシ。花ハ雌雄異花又ハ雌雄異株總狀又ハ繖房様總狀、花序ハ若枝ノ基部ニ 1-數個ツク、苞ハ小型、花梗ニ毛ナシ、萼片ハ 3 個鑷合狀、花瓣ハ 3 個萼片ト互生シ狭長ク開花時ハ通例外ニ反ル。偽雄蕊ナシ。雄蕊ハ雄花ニアリテハ 6 個花絲ハ相癒合シテ柱狀トナリ葯間ハ長ク突出スルモノトセザルモノトアリ。雌花ノ雄蕊ハ退化シテ痕跡ニスギズ。心皮ハ雄花ニアリテハ痕跡ノミナルモ雌花ニテハ 3 個直立シ各 1 室、卵子ハ側膜ニ多列ニツク、果實ハ多肉ニシテ裂開セズ。胎坐ハ種子ヲ包ミテ膠質トナリ食シ得。種子ニ胚乳多ク種皮ハ堅シ。

東亞ノ産ニシテ15種アリ。東印度、印度支那、支那、臺灣、琉球、本州、四國、九州、朝鮮ノ南部ニ分布ス。

**むべ 一名 ときはあけび**

(朝鮮名) モーグクル、ム、メウング (濟州島)

モーソルチユル (莞島)

モンノツクブル (外羅老島)

(第 II 圖)

木本植物朝鮮ニアリテハ未ダ幹ノ直徑 5 cm. 以上ノモノヲ見ズ。樹皮ハ灰色、枝ハ長ク外物ニ卷キ附キ若キ時ハ綠色光澤アリ。髓ハ白色充實ス。葉ハ2年生互生、葉柄ハ長サ 3-14 cm. 基部太ク、無毛、小葉ハ掌狀ニ3-7個アリ。各長サ 1-4 cm. ノ小葉柄ヲ有ス。葉身ハ長橢圓形乃至廣卵橢圓形長サ 2.5-15 cm. 幅 1-8.5 cm. 厚ク表面ハ光澤ニ富ミ裏面ハ淡綠色、基ハ心臟形又ハ尖リ先ハ尖ル。花ハ雌雄同株ニシテ若枝ノ基部ニ腋生シ花梗及ビ小花梗ハ無毛苞ナシ。小花梗ハ花梗ト關節シ直又ハ曲ル。雄花ハ無毛、萼片3個長橢圓形又ハ披針狀長橢圓形長サ 15-17 mm. 幅 6-7 mm. 淡綠色内面ハ半以下ニ濃紫色ノ斑アリ先端ハ外ニ反リ蕾ニテハ鑷合狀、花瓣ハ白色狭長ク長サ 12-14 cm. 外ニ反ル。雄蕊ハ6個花絲ハ筒狀ニ相癒合シ葯間ハ長ク尾狀ニ突出シ幅廣ク外面ノ兩側ニ各1個ノ葯室アリ。葯ハ縦ニ裂開ス。3個ノ子房ノ痕跡アリ。雌花ハ雄花ト同形ナレドモ別個ノ花序ヲナシ雄蕊ハ6個アレドモ退化シテ極メテ小サクナル子房ハ3個反對ニ大キク綠色長橢圓形先端ニ無柄ノ柱頭アリ。各1室中ニ多數ノ卵子ガ8-12列ニツク、果實ハ未ダ朝鮮ニテハ見ザレドモ内地ニテハ橢圓形ノ淡紫色ノモノヲ結ビ裂開セズ。

(全南) 濟州島、莞島、珠島、大黒山島、所安島、佐治島、珍島、外羅老島、突山島、巨文島、甫吉島、智島、梅加島、海南大菴山、(慶南) 巨濟島、麥島、(忠南) 外烟島等ニ産ス。

(分布) 本州、四國、九州、對馬、琉球。

(第 II 屬) **あけび屬**

木本植物、莖ハ外物ニ卷キ附ク、葉ハ互生有柄一年生ナレドモ暖地ニテハ一部分2年生トナル。掌狀ニツク3-9個ノ小葉ヲ有シ稀ニ鳥趾狀ヲナシ全縁又ハ粗鋸齒アリ。花序ハ總狀、葉腋ニ獨生、花ハ花序ノ基ノモノ1-2個ガ雌花ニシテ他ハ皆雄花(稀ニ全部ガ雄花)ナリ。雌花ハ花序ノ基ニツキ長キ小花梗ヲ有シ、萼片3個幅廣ク蕾ニテハ鑷合狀、花後凋落ス。花瓣ハ

ナキカ又ハ3個(ほながあけび)、雄蕊ハ全クナキカ又ハ6個痕跡狀、子房ハ6個(退化シテ4-5個トナル)開出シ圓筒狀、柱頭ハ無柄、胎坐ハ側膜多列、卵子ハ多數直生、雄花ハ多數特ニたいわんあけびニテハ多シ、小花梗ヲ有ス。萼片3個蕾ニテハ鑷合狀、花瓣ハナキカ又ハ3個(ほながあけび)、雄蕊6個離生、花絲ハ短ク葯間ハ幅廣ク外側ニ2個ノ葯室アリ。葯室ハ縦裂ス。心皮ハ6個アレドモ痕跡ノミ。果實ハ長橢圓形ニシテ各果梗ニ1-5個宛放射狀ニツキ成熟スレバ腹面ガ縦ニ開孔ス。胎坐ハ膠質ニシテ甘シ種子多ク種皮ハ光澤アリ。胚乳多ク胚ハ小サク臍ニ近クアリ。

北海道南部、本州、四國、九州、對馬、朝鮮中部以南、臺灣、支那ニ亘リ6種ヲ産ス。其中朝鮮ニ1種1變種アリ。

**あけび**

(朝鮮名) ユルン、ノトン、チヨルゲンイ、ユールムノンチユル (濟州島)、ウクロムヨンチユル (莞島)、オールム (長城)、ウフルムノギユル (東醫寶鑑)、オルムナム (字釋)

(第 III 圖)

木本植物外物ニ卷キ附キ幹ハ朝鮮産ニテハ直徑 10 mm. ニ達ス。皮ハ帯灰褐色小サク皮目アリ。葉ハ朝鮮ニテハ1年生互生又ハ短枝ニテハ集束ス。葉柄ハ長サ 1-10 cm. 直徑 0.5-1 mm. 基脚ハ太ク全體ニ毛ナシ、小葉ハ掌狀ニ3-5個長サ 2-16 mm. ノ小葉柄ヲ具ヘ葉身ハ無毛長橢圓形又ハ倒卵圓形長サ 1-7.5 cm. 幅 5-40 mm. 全縁表面ハ深綠色裏面ハ淡綠色、基ハ楔形、又ハ丸ク先ハ丸キカ又ハ凹入ス。花序ハ短枝ヨリ出ヅルヲ常トス。花梗ハ長サ 15-90 mm. 直徑僅ニ 1 mm. 花ハ雌雄異花ニシテ同一花序ニツキ繖房花序ヲナス。基ノ1-2個ハ雌花ニシテ残りハ先迄雄花ナリ。雌花ハ長サ 40-50 mm. ノ小花梗ヲ具ヘ蕾ニテハ丸シ、萼片ハ紫色、帶綠紫色又ハ濃紫色長サ 10-20 mm. 幅 8-15 mm. 花瓣ナシ、雄蕊ナキカ又ハ退化シテ小サクモノ6個アリ。心皮ハ6個又ハ減數シテ3-5個ホボ圓筒狀ニシテ先ハ截形柱頭トナル。雄花ハ雌花ヨリモ小サク、長サ 13-20 mm. ノ小花梗ヲ有シ萼片ハ長サ 6-10 mm. 幅 4-6 mm. 紫色又ハ淡紫色、雄蕊ハ6個内ニ曲リ長サ 4-5 mm. 花絲ハ長サ 1-1.5 mm. 葯ハ外ニ開キ、子房ハ痕跡ノミナレドモ3-6個アリ。果梗ハ下垂シ直徑 2-4 mm. 果實ハ橢圓形又ハ長橢圓形各果梗ニ1-5個宛ツキ長サ 5-8 cm. 幅 3-4 cm. 成熟スレバ紫色トナリ腹面ガ縦ニ裂開ス。種子ハ光澤ニ富ム。

(全南) 濟州島、莞島、智島、木浦露積山、智異山、青山島、外羅老島、巨文島、甫吉島、海南大菴山、長城白羊山、(全北) 蘆嶺、裡里、(慶南)



巨濟島、東萊郡竹島、鎮海、(慶北) 達城解顔面、蔚陵島、(忠南) 雞龍山、(忠北) 俗離山、清州、(京畿) 仁川、豐島、江華島、鞍峴山、光陵、龍門山、(黃海) 長山串、椒島、白鶴島、滅惡山、首陽山、大青島、長壽山、殷栗、瑞興、等ニ産ス。

(分布) 本州、四國、九州、對馬、支那。

一種葉ハ通例 6-8 (減數シテ 4-5 個ヲ交フ) 個ノ小葉ヲ有スルモノアリ。之ヲやつてあけびト新稱ス。全北俗離山、信川ニ産ス。

**Lardizabalaceæ** LINDLEY, Veget. Kingd. ed. 1, 303 (1846); EICHLER, Blüthendigr. II, 143 (1878); PRANTL in ENGLER & PRANTL, Nat. Pflanzenfam. III, Abt. 2, 66 (1888); SCHNEIDER, Illus. Handb. Laubholz. I, 294 (1904); LOTSY, Stammesgesch. III, 594 (1911).

Syn. *Menispermoidæ* VENTENAT, Tab. Régn Végét. III, 78 (1799), pro parte.

*Menispermæ* J. ST. HILAIRE, Exposit. Fam. Nat. II, 82 (1805), pro parte.

*Menispermæ Veræ* § I.A.P. DE CANDOLLE, Syst. Veg. I, 510 (1818), excl. *Burasaia*.

*Menispermaceæ* trib. 1 *Lardizabaleæ* A. P. DE CANDOLLE, Prodr. I, 95 (1824), excl. *Burasaia*; G. DON, Gen. Hist. I, 102, 103 (1831), pro parte; MEISNER, Pl. Vasc. Gen. I, 5 (1836), pro parte, II, 7 (1843), pro parte; SPACH, Hist. Végét. VIII, 25 (1839).

*Menispermæ*—A. *Lardizabalea* BARTLING, Ord. Nat. Pl. 243 (1830).

*Menispermaceæ* Subord.? *Lardizabaleæ* LINDLEY, Nat. Syst. Bot. 216 (1836).

*Menispermaceæ* Subord. *Lardizabaleæ* ENDLICHER, Gen. Pl. 828 (1840).

*Lardizabaleæ* DECAISNE in Arch. Mus. Nat. Hist. I, 185 (1839); HOOKER & THOMSON, Fl. Ind. I, 211 (1855); AGARDH, Theor. Syst. Pl. 71 (1858).

*Berberidaceæ* Trib. I. *Lardizabaleæ* BENTHAM & HOOKER, Gen. Pl. I, pt. 1, 40 (1862).

*Berberidaceæ* Unterfam. *Lardizabaleæ* KOCH, Dendrol. I, 390 (1869).

*Berberidacées* 1 *Lardizabaleæ* BAILLON, Hist. Pl. III, 71 (1872).

*Lardizabaliaceæ* WEHRHAHN in PAREYS, Blumengärtn. I, 615 (1931).

Planta lignosa, fruticosa erecta vel alte scandens. Folia alterna annua vel biennia, composita, alia digitata, alia 1-3 ternata, alia pin-nata; foliola integra vel lobulata. Inflorescentia racemosa vel corym-bosa axillaris. Sepala 3 valvata. Petala 0 vel 3 angusta vel dilatata tum sepalis conformia. Stamina 0 vel 6 staminibus opposita sæpe petaloidea sed parva. Stamina 6 libera vel filamentis tubum forman-tibus, antheris bilocularibus extrorsis, connectivo producto vel haud producto, in floribus fæmineis sterilia vel abortiva. Carpella 3 vel plura unilocularia sed in floribus masculis abortiva. Ovula solitaria vel plura 2-12 serialia fere sparsa orthotropa dichlamydea pilo ob-vallata. Fructus carnosus maturitate clausus vel hians. Placenta pul-posa vel gelatinosa, interdum edulia. Testa seminum crustacea. Al-bumen copiosum. Embryo rectus vel curvatus, radícula infera.

Genera 9 species ultra 20, maxime in Asia orientali, paucae in America australi incola. In Korea tantum 2 species 1 varietas generum 2 indigenae sunt.

{	Folia biennia. Petala angusta. Filamenta columnali-connata. Connectivum sæpe appendiculatum. Carpella 3. Fructus maturi-tate indehiscens. .... <i>Stauntonia</i> .
	Folia maxime annua. Petala 0 vel dilatata. Stamina libera inflexa. Connectivum exappendiculatum. Carpella 6. Fructus maturitate ventrali-hians. .... <i>Akebia</i> .

Gn. 1. **Stauntonia** A. P. DE CANDOLLE, Syst. Veg. I, 513 (1818); Prodr. I, 96 (1824); ENDLICHER, Gen. Pl. II, 828 (1836); DECAISNE in Arch. Mus. Hist. Nat. I, 191 t. 13 fig. A—B. (1839); BENTHAM & HOOKER, Gen. Pl. I, pt. 1, 42 (1862); BAILLON, Hist. Pl. III, 72 (1872); PRANTL in ENGLER & PRANTL, Nat. Pflanzenfam. III, Abt. 2, 69 (1888).

Syn. *Rajania* (non L.) MURRAY, Syst. Veg. ed. 14, 888 (1784), etc.

Plantæ lignosæ volubiles vel scandentes inermes. Folia alterna petiolata biennia digitatim 3-9 foliolata, foliolis cum petiolulis et petiolis articulatis integerrimis coriaceis. Flores monœci vel dioici, racemosi vel corymboso-racemosi. Inflorescentia ad basin innovationis solitaria vel gemina. Bracteæ minimæ. Pedicelli glabri. Sepala 3 æstivatione

valvata. Petala 3 sepalis alterna angusta sub anthesin vulgo reflexa. Nectaria nulla. Stamina florum masculorum 6, filamentis columnali connatis, antheris bilocularibus rima longitudinali extrorsim apertis, connectivo longe producto vel haud producto. Stamina florum foemineorum abortiva. Carpella florum masculorum abortiva, florum foemineorum 3 erecta unilocularia. Ovula  $\infty$  placento parietali pluriserialia. Fructus carnosus indehiscens! Pulpa gelatinosa edulis. Semina in pulpa immersa, testa crustacea, albuminosa.

Species 15 in Hondo, Sikoku, Kiusiu, Corea austr., Liukiu, Taiwan, China, Indo-China, et India orient. incola.

**Stauntonia hexaphylla** DECAISNE

(Tab. II)

*Stauntonia hexaphylla* (THUNBERG) DECAISNE in Arch. Mus. Nat. Hist. I, 192 Pl. XIC (1839); STEUDEL, Nomencl. ed. 2, II, 634 (1841); SIEBOLD & ZUCCARINI, Fl. Jap. I, 140 t. 76 (1841) figura fructus mala; in Abh. Muench. Akad. IV, 3, 189 no. 194 (1845); A. GRAY, PERRY'S Exped. 307 (1857); MIQUEL in Ann. Mus. Bot. Lugd. Bat. III, 9 (1867); Prol. II, 197 (1867); FRANCHET & SAVATIER, Enum. Pl. Jap. I, 21 (1874); anonymus in Gard. Chron. V, 597 (1876); K. ITO, Catal. Pl. Koishikawa Bot. Gard. 6 (1877); K. ITO & KAKU, Koishikawa Shokubutuen Somoku Dzusetu II, Pl. 3 (1884); MATSUMURA, Nippon Shokubutu Meii 186 (1884); MAXIMOWICZ in ENGLER, Bot. Jahrb. VI, 58 (1885); MATSUMURA, Catal. Pl. Herb. Coll. Sci. Imp. Univ. 9 (1886); FORBES & HEMSLEY in Journ. Linn. Soc. XXIII, 30 (1887); OKUBO, Catal. Pl. Bot. Gard. Imp. Univ. 11 (1887); T. ITO in Journ. Linn. Soc. XXII, 423 (1887); NICHOLSON, Illus. Dict. III, 493 (1888); PRANTL in ENGLER & PRANTL, Nat. Pflanzenfam. III, 2, 69 (1888); MATSUMURA, Shokubutu Meii 283 (1895); PALIBIN in Acta Hort. Petrop. XVIII, 21 (1899); ITO & MATSUMURA in Journ. Coll. Sci. Tokyo XII, 289 (1899); BARCLEY & NEHRLING in BAILEY, Encycl. Americ. Hort. IV, 1720 f. 2395 (1902); SCHNEIDER, Illus. Handb. Laubholzk. I, 295 (1905); NAKAI in Journ. Coll. Sci. Tokyo XXVI, art. 1, 40 (1909); MATSUMURA, Ind. Pl. Jap. II, 2, 127 (1912); BEAN, Trees & Shrubs, Brit. II, 550 (1914); NAKAI, Veget. Quelpaert Isl. 47 (1914), Veget. Wangto 7 (1914), Chosen Shokubutu I, 85 fig. 79

(1914); BARCLEY in BAILEY, Stand. Cyclop. VI 3233 f. 3685 (1917); MAKINO & NEMOTO, Fl. Jap. 951 (1925); WEHRHAHN in PAREYS Blumengärtn. I, 616 (1931); MAKINO & NEMOTO, Fl. Jap. ed. 2, 344 (1931).

Syn. *Rajania hexaphylla* THUNBERG, Jap. mspt. ex MURRAY, Syst. Veget. ed. 14, 888 (1784); VITMAN, Summa Pl. V, 423 (1791); GMELIN, Syst. Nat. II, pt. 1, 581 (1791); POIRET in LAMARCK, Encyclop. VI, 60 (1804); PERSOON, Syn. Pl. II, pt. 2, 620 (1807); DIETRICH, Vollständ. Lexic. Gärtn. & Bot. VIII, 43 (1808); SPRENGEL, Syst. Veget. II 154 (1825).

*Raiania hexaphylla* THUNBERG, Fl. Jap. 149 (1784); PERSOON, Syst. Veget. ed. 15, 930 (1797).

Caulis lignosus, in Korea truncus usque ad 5 cm. latus. Cortex trunci cinereus. Rami elongati flexuosi vel voluliles virides glaberrimi lucidi cum medulla solida alba. Folia biennia alterna; petioli 3-14 cm. longi recti basi tumidi glaberrimi teretes; foliola 3-7 digitata, petiolulis 1-4 cm. longis; lamina oblonga—late ovato-oblonga 2.5-15 cm. longa 1-8.5 cm. lata coriacea lucida subtus albescentia basi cordata vel acuta apice acuta vel acutiuscula. Flores monœci racemosi parte basale innovationis axillares. Pedunculi et pedicelli glaberrimi ebracteati. Pedicelli cum pedunculo articulati recti vel arcuati. Flores masculi glaberrimi; sepala 3 oblonga vel lanceolato-oblonga 15-17 mm. longa 6-7 mm. lata ochroleuca intus infra medium atro-purpureo-maculata apice reflexa, æstivatione valvata; petala alba linearia vel subulata 12-14 mm. longa reflexa. Stamina 6 cum filamentis tubuloso-connatis; connectivum oblongum extus loculis antherarum binis instructum apice caudato-appendiculatum; antheræ rima longitudinali apertæ; rudimenta carpellorum 3. Flores foeminei masculis conformes sed vulgo in racemis distinctis evoluti; stamina 6 abortiva minima; carpella viridia oblonga conniventia apice stigmatibus sessilibus terminantia unilocularia pluri-ovulata; ovula longitudine 8-12 serialia. Fructus in speciminibus Koreanis ignotus sed in Japonicis ellipticus indehiscens; pulpa edulis. Semina castanea nitida.

Nom. Jap. *Mube*, *Tokiwa-Akebi*.

Nom. Kor. *Mông-Kul*, *Mu*, *Meung* (Quelpaert), *Môngvolchul* (Wangtô); *Mounokpul* (Gairarôtô).

Hab. in

Quelpaert: in dumosis (U. FAURIE n. 1671, Jul. 1907); in silvis (E. TAQUET no. 168, Jul. 1907; no. 547, Apr. 1908); Hallasan (T. ISHIDOYA n. 215, 1553, Aug. 1912); in silvis 700 m. (T. NAKAI n. 1313, Maio 1913); in silvis Porioron (T. NAKAI n. 4934, Nov. 1917); in silvis 700 m. (T. NAKAI n. 4934, Nov. 1917); in silvis (T. NAKAI n. 4936, Nov. 1917); in silvis secus torrentes (T. NAKAI n. 4935, Nov. 1917).

Zennan: in insula Gyoktô (T. NAKAI n. 849, Jun. 1913); in Syoantô (Y. HANABUSA); in silvis Wangto (T. NAKAI, Jun. 1913); ibidem (T. ISHIDOYA n. 1554); in insula Daikokuzantô (T. ISHIDOYA no. 3473, Aug. 1914); in insula Sadjitô (T. NAKAI n. 9670, Jun. 1921); in monte Sensatuzan insulae Tintô (T. NAKAI no. 9669, Jun. 1921); Sinkinri insulae Gairarôtô (T. NAKAI no. 11184, Maio 1928); Zinpo insulae Totuzantô (T. NAKAI no. 11183, Maio 1928); in insula Nisizima insularum Kyobunto vel Port Hamilton (T. NAKAI no. 11186, Maio 1929); Port Hamilton (C. WILFORD); in monte Taitonzan, Kainan (S. FUKUBARA); insula Hokitudo (T. NAKAI 1921); insula Tyôtô (T. NAKAI no. 9670, Jun. 1921); insula Baikatô (T. ISHIDOYA & TEI no. 3473, Aug. 1914).

Keinan: Gakenri insulae Kyosaitô (T. NAKAI no. 11187, Maio 1928); insula Mugisima (T. NAKAI no. 11184, Maio 1928).

Tyûnan: insula Gaiantô (legitor?).

Distr. Hondo, Sikoku, Kiusiu, Tusima, Liukiu.

Gn. 2. **Akebia** DECAISNE in Arch. Mus. Hist. Nat. I, 195 (1839); ENDLICHER, Gen. Pl. II, 828 (1836); BENTHAM & HOOKER, Gel. Pl. I, pt. 1, 42 (1862); KOCH, Dendrol. I, 390 (1869); BAILLON, Hist. Pl. III, 72 (1872); PRANTL in ENGLER & PRANTL, Nat. Pflanzenfam. III, Abt. 2, 69 (1888); SCHNEIDER, Illus. Handb. Laubholzk. I, 296 (1904); REHDER, Manual 231 (1927).

Syn. *Rajania* (non L.) MURRAY, Syst. Veget. ed. 14, 888 (1784), etc.

Plantæ lignosæ volubiles. Folia alterna petiolata, vulgo annua in regionibus calidis sæpe partim biennia; foliola digitatim 3-9 rarius pedata petiolulata integra vel grosse dentata. Inflorescentia racemosa axillari-solitaria pedunculata, floribus præter 1-2 basalibus ♂. Flores

♀ 1-2 basi racemi positi; sepala 3 dilatata æstivatione valvata post anthesin decidua; petala 0 vel 3 (*Akebia diplochlamys* NAKAI); stamina 0 vel abortiva 6; carpella 6 (abortive 4-5) divaricata cylindrica; stigmata sessilia; placenta parietalia pluriserialia; ovula ∞. Flores ♂ numerosi (in *Akebia longeracemosa* HAYATA, species Formosana perdistincta numerosissima) pedicellati; sepala 3 æstivatione valvata concava patentia; petala 0 vel in *Akebia diplochlamys* NAKAI 3; stamina 6 libera, filamenta brevia, connectiva dilatata extus antheris 2 instructa, antheræ extrorsæ rima longitudinali apertæ, carpella abortiva 6. Fructus oblongi in quoque pedunculo 1-5 ventrali longitudine hiantes carnosi. Semina numerosa in pulpa gelatinosa immersa ∞-serialia, testa nitida crustacea, albuminosa. Embryo minimus circa hilum positus.

Species 6 in Yeso, Hondo, Sikoku, Kiusiu, Tusima, Korea, Taiwan et China incola.

#### **Akebia quinata** DECAISNE

(Tab. III).

*Akebia quinata* (THUNBERG) DECAISNE in Arch. Mus. Nat. Hist. Paris I, 195, Pl. XIII A (1839), in Ann. Sci. Nat. 2 sér. XII, 167 (1839); SIEBOLD & ZUCCARINI, Fl. Jap. I, 143 t. 77 (1841); SCHNIZLEIN, Iconogr. III, t. 172 a (1843); SIEBOLD & ZUCCARINI in Abh. Muench. Akad. IV, 3, 189 (1845); LINDLEY in Bot. Regist. XXXIII, t. 28 (1847); DECAISNE in Rev. Hort. 4 sér. II, 141 f. 8 (1853); V. HOUTTE, Flore des Serres X, 83 t. 1000 (1854-5); W. J. HOOKER in CURTIS, Bot. Mag. LXXXI, t. 4884 (1855); A. GRAY in PERRY'S Expedit. 307 (1857); AGARDH, Theor. Syst. Pl. t. 5 (1858); MIQUEL in Ann. Mus. Bot. Lugd. Bat. III, 9 (1867); Prol. 197 (1867); KIRCHNER, Arbor. Musc. 120 (1864); KOCH, Dendrol. I, 390 (1869); BAILLON, Hist. Pl. III, 72 (1872); FRANCHET & SAVATIER, Enum. Pl. Jap. I, 21 (1874); K. ITO, Catal. Pl. Koishikawa Bot. Gard. 6 (1877); LAUHE, Deutsch. Dendrol. ed. 2, 365 (1883); K. ITO & KAKU, Koishikawa Shokubutuen Somoku Dzusetu II, Pl. 1 (1884); MATSUMURA, Nippon Shokubutsu meii 8 (1884); Catal. Pl. Herb. Coll. Sci. Imp. Univ. 9 & 271 (1886); FORBES & HEMSLEY in Journ. Linn. Soc. XXIII, 30 (1886); OKUBO, Catal. Pl. Bot. Gard. Imp. Univ. 11 (1887); T. ITO in Journ. Linn.



Soc. XXII, 424 (1887); PRANTL in ENGLER & PRANTL, Nat. Pflanzenfam. III, Abt. 2, 67 (1888); NICHOLSON, Illus. Dict. I, 45 (1888); KCEHNE, Deutsch. Dendrol. 162 (1893); REGEL in Gartenfl. XLII, 184 f. 40 (1893); MATSUMURA, Shokubutu Meii 13 (1895); WITTMACK in Gartenfl. XLVIII, 288 f. 58-59 (1899); REHDER in BAILEY, Encyclop. Americ. Hort. I, 39 (1900); DIELS in ENGLER, Bot. Jahrb. XXIX, 344 (1900); SCHNEIDER, Illus. Handb. Laubholzk. I, 296 f. 192 (1904); BEISSNER in Mitteil. Deutsch. Dendrol. Gesells. XVI, 97 (1907); NAKAI in Journ. Coll. Sci. XXVI, Art. 1, 40 (1909); PAMPANINI in Nouv. Gionol. Bot. Ital. n. sér. XVII, 273 (1910); LOTSY, Vorträge Bot. Stammesg. III, 595 f. 397 (1911); MATSUMURA, Ind. Pl. Jap. II, 2, 127 (1912); REHDER & WILSON in SARGENT, Pl. Wilson. I, pt. 3, 247 (1913); NAKAI, Chosen Shokubutsu 85 f. 80 (1914), Veget. Quelpært 47 (1914), Veget. Wangto 7 (1914); REHDER in BAILEY, Stand. Cyclop. Hort. I, 242 f. 152-153 (1914); BEAN, Trees & Shrubs Brit. I, 176 (1914); NAKAI, Veget. Mt. Chirisan 32 (1915), Veget. Dagelet Isl. 19 (1919); LOESNER in Beihefte Bot. Centralb. XXXVII, 124 (1920); MORI, Enum. Pl. Cor. 164 (1922); MAKINO & NEMOTO, Fl. Jap. 95 (1925); REHDER in Journ. Arnold Arboret. IX, 42 (1928); WEHRHAHN in PAREYS, Blumengärtn. I, 616 cum fig. (1931); MAKINO & NEMOTO, Fl. Jap. ed. 2, 344 (1931); NAKAI, Veget. Kôryô Experim. Forest 34 (1932).

Syn. *Rajania quinata* THUNBERG in Nov. Act. Reg. Soc. Sci. Upsal. IV, 40 (1783); MURRAY, Syst. Veget. ed. 14, 888 (1784); GMELIN, Syst. Nat. II, pt. 2, 581 (1791); VITMAN, Summa Pl. V, 423 (1791); POIRET in LAMARCK, Encycl. VI, 60 (1804); WILLDENOW, Sp. Pl. IV, pt. 2, 789 (1805); PERSOON, Syn. Pl. II, pt. 2, 620 (1807); DIETRICH, Vollst. Lexic. VIII, 43 (1808); SPRENGEL, Syst. Veget. II, 154 (1825).

*Raïania quinata* THUNBERG, Fl. Jap. 148 (1784); PERSOON, Syst. Veget. ed. 15, 930 (1797).

Caulis lignosus volubilis in speciminibus Koreanis truncus usque ad 10 mm. latus. Cortex cinereo-fuscus vel fuscus lenticellatus. Folia in Korea propter frigidum hieme omnia decidua, alterna vel in ramis brevibus fasciculata; petioli 1-10 cm. longi, 0,5-1 mm. lati basi tumidi glaberrimi; foliola 3-5 digitata, petiolulis 2-16 mm longis; lamina

glabra oblonga—obovato rotundata 1-7.5 cm. longa 5-40 mm. lata integerrima supra viridissima subtus pallida basi cuneata—obtusa apice rotundata—emarginata. Inflorescentia ex ramulis abbreviatis evoluta. Pedunculi 15-90 mm. longi circ. 1 mm. lati glabri. Flores monœici Corymbosi, basales 1-2 fœminei, ceteri interdum omnes masculi. Flores fœminei 40-50 mm. longe-pedicellati, in alabastro inflati; sepala valvata purpurea vel purpurascens 10-20 mm. longa 8-15 mm. lata; petala 0; stamina 0 vel abortiva 6; carpella 6 (reductim 5-3) subcylindrica apice truncata stigmatosa. Flores masculi 13-20 mm. longe-pedicellati; sepala 6-10 mm. longa 4-6 mm. lata purpurea vel viridipurpurascens; stamina 6 arcuato-incurva libera 4-5 mm. longa; filamenta 1-1.5 mm. longa; antheræ incurvæ extrorsæ; carpella abortiva 3-6. Pedunculi et pedicelli fructiferi fusci 2-4 mm. lati penduli. Fructus in quoque pedicello 1-5, ellipsoidei vel oblongi 5-8 cm. longi 3-4 cm. lati maturitate purpurascens ventre longitudine dehiscentes. Pulpa alba gelatinosa dulcis. Semina castanea nitida.

Nom. Jap. *Akebi*.

Nom. Kor. *Yuran*, *Noton*, *Cholgen-i*, *Yûrûm-monchul* (Quelpært); *Ukuromyongchul* (Wangto); *Ôrumu* (Zenla).

Hab. in

Quelpært; in dumosis (U. FAURIE n. 1672, Jun. 1907); in sepibus (E. TAQUET n. 2601, Maio 1909); in dumosis (E. TAQUET n. 4612, Apr. 1908); in dumosis 250 m. (T. ISHIDOYA n. 172, Aug. 1912); circa Saisyu (T. NAKAI n. 972, Maio 1913); ibidem (T. NAKAI n. 4938, Oct. 1917); Ryutanri (T. NAKAI n. 4939, Oct. 1917); secus torrentes lateris australis (T. NAKAI n. 4937, Nov. 1917).

Zennan: in monte Chiisan (T. NAKAI, Jun. 1913); insula Gyokuto (T. NAKAI, Jun. 1913); in monte Rosekizan, Moppo (T. NAKAI n. 9668, Jun. 1921); insula Chito (T. NAKAI n. 9667, Jun. 1921); insula Seizanto (T. NAKAI no. 11171, Maio 1928); Siyôri insulæ Gairarôtô (T. NAKAI n. 11178, Maio 1928); Kyobunto (R. OLDHAM n. 34 Mart. 1863); in monte Hakuyôzan, Tyôdjô (T. TATE); in monte Taitonzan, Kainan (S. FUKUBARA); insula Hokitutô (T. NAKAI).

Zenhoku: monte Rorei (T. NAKAI n. 1198, Maio 1913); Riri (T. NAKAI, Maio 1913).

Keinan: Gakenri insulae Kyosaitô (T. NAKAI n. 11180, Maio 1928); Tiktô oppidi Kityo, Tôrai (T. NAKAI n. 11182, Maio 1928); Tinkai (T. NAKAI n. 11179, Maio 1928).

Keihoku: in rupibus oppidi Kaiganmen, Tatudjô (T. NAKAI n. 7850, Jul. 1920); Dagelet (K. OKAMOTO); ibidem (T. ISHIDOYA n. 1551, Maio 1916).

Tyunan: Keiryuzan (T. KONDO); in monte Keiryuzan (T. NAKAI n. 7854, Jul. 1920).

Tyuhoku: in monte Zokurisan (T. NAKAI no. 14943 bis, Aug. 1934); ibidem (S. FUKUBARA); Seisyû (legitor?).

Keiki: Zinsen (M. ENUMA n. 158); ibidem (W. CARLES n. 14, 16); Koonpo insulae Hôtô (Y. HANABUSA); in monte Ryumonzan (T. SAWADA); in oppido Kisshômen insulae Kôkatô (S. KOBAYASI); in monte Ankenzan (S. KOBAYASI); in silvis Kôryô (T. NAKAI, Apr. 1913); ibidem (M. KOBAYASI, 10 Maio 1932).

Kôkai: Tyôzankwan (T. NAKAI n. 12794-12796, Aug. 1929); ibidem (TEI DAI GEN); insula Syôtô (T. NAKAI n. 12798, Aug. 1929); ibidem (TEI DAI GEN); insula Hakureitô (T. NAKAI n. 12797, Jul. 1929); in monte Metuakusan (C. MURAMATU); in monte Shuyôzan (C. MURAMATU); insula Taiseitô (TEI DAI GEN); in monte Tyôdzusan (TEI DAI GEN); Inritu (legitor?); Zuikô (legitor?).

Distr. Hondo, Sikoku, Kiusiu, Tusima, China.

**Akebia quinata** var. **polyphylla** NAKAI, var. nov.

Folia vulgo digitatim 6-8 foliolata sed interdum 4-5 foliolata intermixta.

Nom. Jap. *Yatude-Akebi*.

Hab. in

Tyûhoku: in silvis pede montis Zokurisan, vulgaris (T. NAKAI n. 14942, typus, Aug. 1934); Sinsen (T. NAKAI, Aug. 1934).

Among the Chinese *Akebia* having been sent from Nanking University under the name of *Akebia quinata*, a specimen collected by Mr. S. CHEN belongs to an undescribed species.

**Akebia micrantha** NAKAI, sp. nov.

Rami sordide cinereo-fusci flexuosi. Folia in apice ramorum brevium congesta; petioli 40-62 mm. longi; foliola 5 digitata petiolulata

oblonga vel obovato-oblonga vel late elliptica 15-38 mm. longa 7-20 mm. lata basi cuneata vel obtusa apice obtusa vel emarginellata et apiculata supra viridia infra pallida. Inflorescentia racemosa, cum pedunculo 30-40 mm. longo 70-80 mm. longa. Pedicelli 5-6 mm. longi. Sepala 4 mm. longa 3 mm. lata atro-rubro-purpurea. Stamina 6 subsessilia. Antherae 2 mm. longae incurvae extrorsae.

Hab. in China.

Prov. Che-Kiang: Yüan-hai 雲和 (S. CHEN, no. 2946, typus, Apr. 1934).

This comes to the next of *Akebia quinata* which is also found in China, but its inflorescence is raceme instead of corymb with its shorter pedicelled flowers. Flowers are darker coloured as in *Akebia trifoliata* (*A. lobata*), and anthers are smaller and nearly sessile. *Akebia longeracemosa* HAYATA of Formosa is generally regarded as a variety of *Akebia quinata*, but it is evergreen and its inflorescence is racemose and twice as much longer as that of *Akebia quinata*, and bears very many (nearly twenty) male flowers.

小 檗 科

*Berberidaceæ* TORREY & GRAY

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## (2) 朝鮮産小蘗科植物研究ノ歴史

1886年 英國ノ W. B. HEMSLEY 氏ハ The Journal of the Linnæan Society 第 23 卷ニいかりさう (*Epimedium macranthum*) トたつたさうガ 朝鮮ニ産スルト記シテ居ルガ前者ハてうせんいかりさうデアル。同時ニたうめぎ (*Berberis sinensis*) トいぬえんごさく (*Leontice microrhyncha*) ガ Laoling ニ産スト記シテ居ル此 Laoling ヲ朝鮮ト誤ツテ居ルノハ狼林山ト滿洲ノ老爺嶺トヲ取り違ヘタノデアル。

1889年 露國ノ IWAN PALIBIN 氏ハ HEMSLEY 氏ノ書イタモノヲ其儘寫シ其上ニてうせんめぎ (*Berberis koreana*) ヲ新種トシテ始メテ圖解シタ。

1903年 露國ノ VLADIMIR KOMAROV 氏ハ Acta Horti Petropolitani 第 22 卷ニたつたさうトいかりさう (てうせんいかりさうナリ) トなんぶさう (*Achlys japonica*) トガ北鮮ニ産スル事ヲ記シタガ、てうせんいかりさうトなんぶさうノ朝鮮ノ國籍ニ入ツタ始メデアル。

1905年 奥國ノ C. K. SCHNEIDER 氏ハ其著 Illustriertes Handbuch der Laubholzkunde 第 1 卷ニ朝鮮ニてうせんめぎトたうめぎトガ産スル事ヲ記ス。

1906年 同氏ハたうめぎノ學名ヲ從來 *Berberis sinensis* POIRET ニシテ居タノヲ惡イトシテ *Berberis Poiretii* SCHNEIDER ニ改メル事ヲ Mitteilungen der Deutschen Dendrologischen Gesellschaft ニ記シタ。

1908年 同氏ハ Bulletin de l'herbier Boissier 2 séries 第 8 卷ニたうめぎトてうせんめぎガ朝鮮ニ産スル事ヲ記シテ居ル。

同年 中井猛之進ハ東京植物學雜誌第 22 卷ニ三島愛之助氏ガ咸南摩天嶺デ採集シタ植物ノ目錄ヲ記シタ中ニたうめぎトいかりさう (てうせんいかりさう) トヲ擧ゲテ居ル。

1909年 中井猛之進著 Flora Koreana 第 1 卷ニハてうせんめぎ、おほばめぎ、たうめぎ、いぬえんごさく、るゐえふぼたん、たつたさうノ 6 種ヲ記シテ居ル。

1911年 中井猛之進著 Flora Koreana 第 2 卷ニハ更ニてうせんめぎ、た

うめぎ、たつたさう、てうせんいかりさうノ新産地ヲ記シ且ツなんぶさうヲ加ヘタ。

1912年 中井猛之進ハ東京植物學雜誌第26卷ニ米國醫學博士 RAELF G. MILLS 氏ガ北鮮デ採ツタ植物ヲ記シタ中ニハるゐえふぼたんヲ擧ゲテ居ル。

1913年 中井猛之進ハ濟州島産ノ一新種トシテ さいしうめぎ *Berberis quelbertensis* ヲ東京植物學雜誌第27卷ニ記述シタ。

1914年3月 中井猛之進ハ朝鮮植物第1卷ヲ著ハシおほばめぎ、てうせんめぎ、さいしうめぎ、るゐえふぼたん、てうせんいかりさう、なんぶさう、たつたさうノ7種ヲ記述圖解シタ。

同年4月 中井猛之進ハ濟州島植物調査報告ニ さいしうめぎ ヲ記シ又蕨島植物調査報告ニハるゐえふぼたんヲ記シタ。

同年5月 中井猛之進ハ FEDDE 氏監修ノ Repertorium Novarum Specierum 第13卷ニ 鬱陵島ノ新植物ひろはめぎ *Berberis amurensis* v. *latifolia* ヲ記述シタ。

1915年 中井猛之進ハ智異山植物調査報告書ニおほばめぎヲ記ス。

1918年 中井猛之進ハ金剛山植物調査報告書ニおほばめぎ、ひろはめぎ、るゐえふぼたんノ2種1變種ヲ記シタ。

1918年 中井猛之進ハ白頭山植物調査報告書ニおほばめぎヲ記ス。

1919年 中井猛之進ハ鬱陵島植物調査報告書ニひろはめぎヲ記ス。

1922年 森爲三氏著朝鮮植物名彙ニハなんぶさう、おほばめぎ、ひろはめぎ、てうせんめぎ、さいしうめぎ、たうめぎ、るゐえふぼたん、いかりさう(てうせんいかりさうナリ)、いぬえんごさく、たつたさうヲ記シタガ皆前人ノ調査シタモノヲ列記シタニ過ギヌ。

1932年 中井猛之進ハ光陵試験林一班中ニてうせんめぎヲ記シタ。

### (3) 朝鮮産小蘗科植物ノ効用

ぬぎ科植物ニハ有用ノモノガ多イ。草本デハ朝鮮いかりさうノ根ハ淫羊藿ト云ヒ強腎藥トシテ著名デア。支那デハ古來本種類似ノモノヲ仙靈脾、放杖草、三枝九葉草ナドト稱シ酒ニ加ヘテ飲ミ又ハ煎ジテ飲ミ陰痿及ビ女子ノ不妊ヲ治シ利尿ニ用キナドシタ。此草ノ花ハ淡黄色デ美シク庭ニ植エタリ鉢植ニシテ賞美スル値ガアル。

たつたさうノ名ハ日清戦争ノ當時龍田艦ノ乗組員ガ黃海中ノ一小島(名ヲ逸ス)ニ上陸シ始メテ之ヲ採ツテ歸ツテカラ同艦ヲ紀念シテ附ケタノデア。其葉ガ絲卷狀デア。カラ滿洲ノ同好者間デハいとまきさうノ名デ

通ツテ居ル。朝鮮デハ之ヲ土黃蓮ト云ヒ黃蓮ノ根ノ様ニ苦味ハアルガ淫羊藿同様ニ強腎藥トシテ用キテ居ル。北鮮ノ各地ニ多ク殊ニ平安北道ノ江界郡ハ有名ナ産地デア。ツテ韓國時代ニハ商人ガ江界ニ行商ニ行キ當時土地ノ名物デア。ツタ枝生ニ濁レテ無一文トナルト山ニ入ツテ土黃蓮ヲ採集シ之ヲ鬻ヒテ歸郷ノ資ニシタト云フ事ハ餘リニモ周知ノ事實デア。アルガ今モ尙ホ同様ノ事ガアルト傳エ聞イテ居ル。但シ總督府ノ初期ニ内地人ガ其効用ヲ過信シ一時茶ノ代用ニ迄シテ飲ンダガ餘リ効果的デナカッタカラ評判程ノ藥効ガアルノデハアルマイ。然シ此草ハ藥用ニスルヨリモ其花ト葉トヲ見ル爲メニ盆栽ニスル方ガヨイ。朝鮮産ノ山草中デ春早ク咲クモノ、中デハ最も美シイモノ、一デア。ル。

めぎ類ハ其内皮ノ黄色ノ部ヲ煎ジテ飲ムガ是モ亦苦味デア。漢法デハ口瘡ヲ治シ又虫下シニ用キ又利尿ノ効ヲ利用シテ婦人ノ産後ヤ脚氣病者ニ用キタ。主成分ハ Berberin デアル。美シイ紅果ヲ結ブ灌木デア。カラ外人ハ殊ニ賞美シ殊ニ亞米利加合衆國ノ東部デハめぎ類ハ庭園用ニ無クテナラヌ灌木デア。ル事ハ恰モ東京ノ庭ニ南天ヤしやりんばいヲ用キルノト同様デア。ル。

### (4) 朝鮮産小蘗科植物ノ分類

#### 小 蘗 科

多年生草本又ハ半灌木又ハ灌木、莖ハ直立シ決シテ卷纏セズ、葉ハ互生單葉又ハ1-3回3出又ハ羽狀複葉、1年生又ハ2年生、全縁又ハ鋸齒ガアル。無毛又ハ有毛、めぎ類デハ長枝上ノ葉ハ刺ニ變化ス。花序ハ頂生又ハ腋生總狀又ハ單花ヲツク直立又ハ下垂シ通例苞アリ、花ニハ小花梗アルヲ常トス。萼ハ3數稀ニ4數6-15個ガ2-3列ニ竝ビなんぶさう屬ニテハナシ、花瓣ハ4個又ハ6個屢々距アリ、但シなんぶさうデハ花被ナシ、雄蕊ハ4-9個離生、葯ハ2室1-2個ノ辨ニテ上方ニ開ク、心皮ハ1個、1室、卵子ハ多數アル時ハ腹面ニ2-數列ニツキ1-8個ナル時ハ基ヨリ直立ス。果實ハ蒴又ハ漿果、蒴ノ場合ハ胞狀無裂開ナルカ又ハ2瓣ニ裂開シ又ハ先ニ近ク横又ハ斜ニ裂開ス。るゐえふぼたん屬デハ子房ノ壁ハ發育シナイ爲メ卵子ハ壁ヲ破ツテ早クヨリ露出シ漿果様又ハ核果様ノ種子ヲ附ケル。

北半球ノ産デ12屬200餘種ガ知レテ居ル。其中6屬8種ガ朝鮮ニ産スル其ハ次ノ檢索表ノ様ニ區別スル。「ホドフィラム」科 *Podophyllaceae* トなんてん科 *Nandinaeae* トハ科トシテ分ツベキ充分ノ特徴ガアルカラめぎ科カラ除外スル。

- A. 灌木、葉ハ單葉、長枝ニテハ刺ニ化シ眞正葉ハ集束シテ出ヅ、花ハ總狀頂生、果實ハ漿果、卵子ハ2-4個子房ノ底ヨリ直立ス。
- B. 葉ハ全縁狹長、果實ハ紅色長橢圓形、 .....たうめぎ
- B. 葉縁ニハ針狀ノ鋸齒アリ、
- C. 葉ハ殆ンド圓形又ハ廣橢圓形又ハ廣倒卵形、 .....ひろはめぎ
- C. 葉ハ長橢圓倒披針形又ハ長橢圓形、
- D. 葉縁ノ鋸齒ハ頗ル密ナリ、葉質薄シ、
- E. 分岐少ク葉ハ長サ通例 4-8 (3-10) cm. ....おほばめぎ
- E. 分岐多キ灌木、葉ハ長サ通例 1-3 (1-5) cm. ....さいしうめぎ
- D. 葉質ヤ、アツク葉縁ノ鋸齒ハヤ、疎ナリ、
- E. 葉ハ橢圓形又ハ倒卵形又ハ倒卵長橢圓形、 .....てうせんめぎ
- E. 葉ハ長橢圓倒披針形、 .....なかばてうせんめぎ
- A. 多年生ノ草本、
- B. 葉ハ單葉先端凹入ス、花梗ハ直立シ唯1花ヲツク、花ハ葇色美シ、葯ハ長キ2辨ニテ下ヨリ上ニ開ク、卵子ハ多數腹面ニ數列ニツク、蒴ハ紡錘狀斜ニ裂開ス、 .....たつたさう
- B. 葉ハ複葉、
- C. 種子ハ核果様ニシテ露出シ各小果梗上ニ1-3個宛ツキ柄アリ、葉ハ始メ3出シ更ニ羽狀ニ分ル、花序ハ莖ノ先ニ圓錐花叢又ハ繖房様圓錐花叢ヲナス、小葉ハ全縁又ハ缺刻アリ、匍枝ハ地下生多肉、 .....るえふぼたん
- C. 種子ハ果實内ニアリ、果實ハ蒴、
- D. 蒴ハ裂開セス、匍枝ハ球根様、葉ハ1個3出シ小葉ハ3裂ス、總狀花序ハ莖ノ先ニ出デ卵子ハ2-4個宛子房ノ底ヨリ直立ス、 .....いぬえんごさく
- D. 蒴ハ裂開ス、
- E. 葉ハ1回3出ス、花莖ニ葉ナシ、花ハ穗狀花被ナシ、葯ハ丸ク幅廣キ葯間ノ兩側ニアリ丸キ辨ニテ上方ニ開ク、卵子ハ1個子房ノ基ヨリ直立ス、匍枝ハ横ニ地下ヲ匍フ、 .....なんぶさう
- E. 葉ハ2-3回3出ス、小葉ハ卵形又ハ簇形、穗狀花序ハ枝ノ先ニ出デ花瓣ハ淡黄色距アリ、卵子ハ多數子

房ノ腹面ニ2列ニツク、蒴ハ2辨ニ裂開ス、 .....てうせんいかりさう

### 1. 草本類

1. **なんぶさう** (南部草ノ意)、(學名) **Achlys japonica** MAXIMOWICZ.  
(産地) 咸南ノ北部森林中、  
(分布) 本島北部、北海道、
2. **るえふぼたん** (類葉牡丹ノ意)、  
(學名) **Caulophyllum robustum** MAXIMOWICZ.  
(産地) 江原道、(金剛山、劔拂浪、雪岳山)、京畿道(光陵)、全南(莞島)、平南(黄草嶺)、平北(江界)、  
(分布) 樺太、北海道、本州、四國、九州、滿洲、烏蘇利、アムール、
3. **てうせんいかりさう** (朝鮮碇草ノ意)、  
(學名) **Epimedium koreanum** NAKAI.  
(産地) 咸北(清津、朱乙、普天堡)、咸南(元山、摩天嶺、甲山)、平北(白碧山、朔州)、平南(寧遠、大聖山)、江原(劔拂浪)、  
(分布) 滿洲國安東省、
4. **たつたさう** (龍田草ノ意)、  
(學名) **Plagiorhagma dubium** MAXIMOWICZ.  
(産地) 咸北(清津、羅南)、平北(江界、龍西里)、  
(分布) 滿洲、アムール、
5. **いぬえんごさく** (狗延胡索ノ意)(中井新稱)、  
(學名) **Leontice microrhyncha** S. MOORE.  
(産地) 平北、  
(分布) 滿洲國安東省、奉天省、

### 2. 木本類

#### (第I屬) めぎ屬

灌木、莖ハ基ヨリ簇生ス。樹膚ハ縦ニ溝多シ、長枝ノ葉ハ通例廣針形又ハ披針形ノ刺トナリ單一又ハ2-7裂シ永存性ナリ。短枝ノ葉ハ集束シ有柄單葉、針狀ノ鋸齒アルモノト全縁ノモノトアリ。1年生又ハ2年生、總狀



花序ハ腋生 1-多數ノ花ヲツケ下垂シ苞アリ、花ニ小花梗アリ、萼片 6 個 2 列、内列ノ 3 個ハ大ナリ。花瓣ハ 3 個又ハ 6 個基ニ内側ニ 2 個ノ腺アリ。雄蕊ハ 6 個葯間ハ幅廣キ爲メ葯ハ相離ル。葯ハ 2 ツノ瓣ニテ上ニ開ク。子房ハ 1 室、卵子ハ 2-6 個底ヨリ立ツ。柱頭ハ無柄臍狀、果實ハ漿果紅色、朱色、樺色又ハ黒色、球形又ハ橢圓形、2-4 個ノ核ヲ藏ス。胚乳ハ多肉、胚ハ直、子葉ハ幅廣ク幼根ハ下向。

北半球ニノミ産シ約 150 種アリ、朝鮮ニ 3 種アリ次ノ 2 節ニ屬ス。

- 葉ハ 1 年生、披針形、長橢圓形又ハ筧狀通例全縁、花ハ總狀、  
.....たうめぎ節
- .....たうめぎ之ニ屬ス。
- 葉ハ 1 年生常ニ針狀ノ鋸齒アリ、花ハ總狀又ハ集束ス、  
.....おほばめぎ節
- .....おほばめぎ、てうせんめぎ之ニ屬ス。

### 1. たうめぎ

(第 IV 圖)

高サ 1-1.5 m. ノ灌木、枝ハ集束シテ出テ帯紅栗色又ハ帯紫栗色縦ニ稜角アリ。刺狀葉ハ單一又ハ 3 分シ長サ 2-5 mm. 葉ハ短枝上ニ集生シ、無毛倒披針形又ハ狭倒披針形、全縁又ハ上部ニ少數ノ鋸齒アリ、縁ハ少シク裏ヘ反ル。長サ 30-60 mm. 幅 1.5-13 mm. 表面ハ光澤ニ富ミ綠色裏面ハ淡白ク網脈著シ、先ハ尖リ稀ニ丸ク基ハ長ク尖ル。花序ハ未ダ朝鮮産ノモノヲ採集セズ、但シ滿洲産ノモノニテ見ルニ長サ約 3 cm. ニシテ下垂ス。苞ハ狭長ク稀ニ 3 又シ長サ 1.5-2 mm. 小花梗ハ下垂シ長サ 5 mm. 無毛先ハ多少肥厚ス。花ハ黄色、萼ハ 6 個 2 列ニシテ外側ノ 3 個ハ鱗片狀内側ノモノハ大型ニシテ長サ 3-4 mm. 花瓣ハ 6 個、内側ノ萼片ヨリモ小サク内面ニ縦ニ 2 個ノ腺アリ。雄蕊ハ 6 個、雄蕊ハ長サ 2 mm. 果序ハ花梗ヲ併セテ長サ 3-5.5 cm. 苞ハ披針形ニシテ先ハトガリ長サ 1-2 mm. 小花梗ハ長サ 3-7 mm. 果實ハ長橢圓形紅緋色長サ 9-11 mm.

平北 (渭原、雲山郡白碧山、楚山、昌城、朔州)ニ産ス。

(分布) アムール、滿洲、熱河、河北省。

### おほばめぎ

(第 V 圖)

高サ 1-3 m. ノ灌木、樹膚ハ灰白色又ハ灰褐色、縦ニ幾多ノ不規則ノ溝アリ。幹ノ直径ハ大ナルハ 5 cm. 位ニ達ス。刺ハ 3-5 裂シ長サ 1-35 cm. 開出ス。葉ハ短枝上ニ集生シ長橢圓形又ハ倒卵長橢圓形基ハ葉柄ニ向ヒテトガリ先ハ尖ルモノ又ハ丸キモノアリ縁ニハ密ニ針狀ノ鋸齒アリ。葉身ノ長サ 1.2-13 cm. 幅 4-47 mm. 表面ハ光澤乏シク葉脈ハ凹メドモ裏面ハ光澤アリテ往々白キ粉ヲフキ脈ハ凸出ス。花序ハ短枝ノ先ニ近ク出テ下垂シ無毛花梗ト併セテ長サ 3-8 cm. 密ニ花アリ。萼片ハ 6 個外側ノ 3 個ハ長橢圓披針形ニテ長サ僅ニ 1 mm. 内側ノ 3 個ハ殆ンド半球形黄色長サ 4-6 mm. アリ。花瓣ハ 6 個倒卵形内側ニ縦ニ 2 個ノ腺アリ。雄蕊ハ 6 個、雌蕊ハ長サ 2-2.5 mm. 柱頭ハ臍狀無柄、果實ハ長橢圓形又ハ橢圓形長サ 6-12 mm. 紅朱色。

全南 (智異山、白雲山)、慶南 (伽倻山)、京畿 (南山)、江原 (長淵里、金剛山、太白山、雪岳山)、平南 (上南洞、陽德、徳山大極面、价川徳川、社倉、狼林山、劍山嶺、小白山)、平北 (飛來峯、澤銅山、江界、雲山、避難徳、楚山板面、達覺山)、咸南 (新浦、葱田嶺、赴戰高原、摩天嶺、西湖津、寶泰山、千佛山、泗水山、楸愛山、甲山、定平、元山)、咸北 (鏡城湯地洞、清津、明川上鄂南面、甌山、富寧富居面、鏡城朱北面、明川上古面、吉州長白面、明川温水坪) 等ニ産ス。

(分布) 烏蘇利、アムール、滿洲、熱河、河北省、北海道、樺太、本島。

變種二ツアリ。一ハ葉圓形又ハ廣橢圓形ニシテ穂ハ密ニ花ノ附クモノニシテ之ヲひろはめぎ (第 VI 圖) ト謂ヒ蔚陵島竝ニ金剛山ニ産シ、一ハ分枝多ク葉ハ小型ニシテ通例長サ 1-3 cm. 許、花序ハ短ク花梗ヲ併セテモ長サ僅ニ 2-3 cm. 位ナリ、之ヲ濟州めぎト云ヒ濟州島漢拏山ノ標高 1000 m. 以上ノ所ニ生ズ。

### てうせんめぎ

(第 VII 圖)

高サ 1-2.5 m. 許リニ達スル灌木、幹ノ直径ハ 2.5 cm. 許、樹膚ハ灰褐色、小枝ハ紅色又ハ帯紅栗色又ハ帯紫紅色縦ニ溝アリ、無毛、萌枝ノ下部ノ葉ハ下方ノモノハ丸ク長サ 5-45 mm. 許ノ葉柄ヲ有シ葉身ハ長サ 25-70

mm. 幅 15-69 mm 鋭キ鋸齒ヲ有シ表面ハ無毛光澤アレドモ裏面ハ白キ粉ヲフキ脈著シ、上方ノ葉ハ無柄ニシテ長クトガリ刺狀ニ數多ノ裂片トナレドモ葉質ナリ長サハ 20-30 mm. 長枝ノ葉ハ刺ニ化シ厚ク 3-7 裂シ裂片ハ下ニ反レドモ極メテ短キ刺ニテハ立ツ、短枝ノ葉ハ密集シ長橢圓形又ハ倒卵形大型ノモノノミニ葉柄アリ、葉質ハヤ、厚キ洋紙質先ハ丸ク縁ニハ針狀ノ鋸齒アリ基ハ楔形、表面ハ綠色ナレドモ秋ニハ美事ニ紅葉ス。裏面ハ始メ白キ粉ヲフキ後ニハ淡綠白色トナリ脈著シ。總狀花序ハ短枝ノ先ニ出テ下垂シ長サ 35-60 mm. 無毛ニシテ花軸ニ稜角アリ。苞ハ長サ 1-2 mm. 長橢圓形ニシテ先ハ芒狀ニトガル。小花梗ハ長サ 5-7 mm. 萼片ハ 2 列、外側ノ 3 個ハ小サク橢圓形ニシテ長サ 1-2 mm. 内側ノ 3 個ハ黃色大キク廣倒卵形又ハ圓狀倒卵形内凹、長サ 5-7 mm. 花瓣ハ 6 個、黃色倒卵長橢圓形長サ 4-5 mm. 雄蕊ハ 6 個、果實ハ紅色球形ニシテ長サ 10 mm. 許。

京畿 (北漢山、佛岳山、華岳山、冠岳山、阿峴、光陵)、江原 (干葵告、北屯址、春川)、咸南 (元山、楸愛山) ニ産シ朝鮮ノ特産種ナリ。

變種ニツアリ一ハ果實ノ長橢圓形ノモノニシテ之ヲ**ながみのてうせんめぎ** (新稱) ト呼ビ江原道劍拂浪ノ長止門山ニテ發見シ、一ハ葉ノ長橢圓倒披針形ニシテ葉柄長ク長サ 5-25 mm. ニ達シ、果實ハ長橢圓形ナリ。之ヲ**ほそばのてうせんめぎ** (新稱) ト云ヒ、江原道劍拂浪ニテ前者ト共ニ筆者自ラ發見セリ。

**Berberidaceae** TORREY & A. GRAY, Fl. North America I, 49 (1838); LINDLEY, Veget. Kingdom ed. 1, 437 (1846); KOCH, Dendrol. I, 389 (1869); PRANTL in ENGLER & PRANTL, Nat. Pflanzenfam. III, Abt. 2, 70 (1888); REHDER, Manual 232 (1927).

Syn. *Papavera*, ADANSON, Fam. Pl. II, 425 (1763), pro parte  
*Berberides* DURANDE, Not. Elém. Bot. 283 (1781), excl. *Hama-melis*; JUSSIEU, Gen. Pl. 286 (1789), excl. *Rinorea* & *Conoria*.  
*Berberideae* VENTENAT, Tab. Règn. Végét. III, 83 (1799); J. ST. HILAIRE, Exposit. Fam. Nat. II, 85 t. 87 (1805); LAMARCK & DE CANDOLLE, Syn. Fl. Gall. 367 (1806), Fl. Franc. ed. 3 IV, 2, 627 (1815); A. P. DE CANDOLLE, Regn. Veget. II, 1 (1821); DUMORTIER, Comm. Bot. 63 (1822); DE CANDOLLE, Prodr. I, 105 (1824); BARTLING, Ord. Nat. Pl. 241 (1830); LINDLEY, Introd. Bot. 30 (1830); G. DON, Gen. Hist. Dichl. Pl. I, 114 (1831); WIGHT & ARNOTT, Prodr. Fl. Penins. Ind. Orient. I, 15 (1831); ENDLICHER, Gen. Pl. 851 (1836); MEISNER, Pl.

Vasc. Gen. I, 6 (1836); SPACH, Hist. Végét. VIII, 29 (1839); MEISNER, l. c. II, 7 (1843); HOOKER & THOMSON, Fl. Ind. I, 215 (1855); AGARDH, Theor. Syst. Pl. 138 (1858); BENTHAM & HOOKER, Gen. Pl. I, pt. 1, 40 (1862), excl. trib. *Lardizabaleae*; EICHLER in MARTIUS, Fl. Brasil. XIII, pt. 1, 229 (1864); BOISSIER, Fl. Orient. I, 98 (1867); EICHLER, Blütendiagramme II, 134 (1878).

*Berberaceae* LINDLEY, Nat. Syst. Bot. 29 (1836).

Herbæ perennes vel suffrutices vel frutices, nunquam scandentes. Folia alterna simplicia vel 1-3 ternatim decomposita vel 1-pinnata, annua vel biennia, integra vel serrata, glabra vel pilosa in *Berberide ramorum turionum* in spinas simplices vel palmatas transformantia. Inflorescentia terminalis vel axillaris racemosa vel uniflora erecta vel pendula bracteata. Flores pedicellati. Sepala trimera rarius tetramera 2-5 serialia, sed in *Achlyde* 0. Petala 4 vel 6, sæpe calcarata, in *Achlyde* 0. Stamina 4-9 libera. Antheræ biloculares valvis 1-2 sursum dehiscentes. Carpellum solitarium 1-loculare. Ovula ventrali-affixa 2-serialia, vel 1-8 ex basi loculi ovarii erecta. Fructus capsularis vel baccatus, et si capsularis alia vesicularis indehiscens, alia bivalvatim dehiscentis, alia sub apice rima horizontali vel obliqua dehiscentis. In *Caulophyllo* tamen ovarium mox evanescens et semina globosa drupacea exposita.

Genera 12 species circ. 200 in boreali-hemisphærica incola. In Korea species 8 generum 6 sunt indigenæ, quæ in sequenti modo inter sese distinguendæ sunt.

- A. Herbæ perennes.
  - B. Folia simplicia utrinque emarginata. Scapi erecti uniflori nudi. Flores violacei pulchri. Antheræ oblongæ valvis elongatis binis sursum dehiscentes. Ovula ∞ ventrali-pluriserialia. Capsula fusiformes oblique dehiscentis.
    - .....*Plagiorhegma dubium* MAXIMOWICZ.
  - B. Folia decomposita.
    - C. Ovarium post anthesin emarcidum ita semina mox exposita in quoque pedicello 1-3 stipitata. Folia ternato-pinnata. Inflorescentia paniculata vel corymboso-paniculata. Foliola integra vel lobata. Rhizoma repens crassum.

- .....*Caulophyllum robustum* MAXIMOWICZ.
- C. Fructus capsularis. ita semina nunquam exposita.
- D. Capsula indehiscens. Rhizoma bulbosum. Folium 1 caulinum ternatum, segmentis trisectis. Racemus erectus. Ovula 2-4 ex basi ovarii loculi erecta. ....*Leontice microrhyncha* S. MOORE.
- D. Capsula dehiscens.
  - E. Folia tripartita. Scapus aphyllum. Flores spicati achlamydei. Antheræ rotundatæ in lateribus connectivi dilatati distantes, rima rotundata sursum apertæ. Ovulum 1 erectum. Rhizoma repens, tenue. ....*Achlys japonica* MAXIMOWICZ.
  - E. Folia 2 (-3) ternata. Foliola ovata vel sagittata. Recemus in apice caulis terminalis. Flores dichlamydei. Petala flavida longe calcarata. Ovula ventrali-2-serialia ∞. Capsula bivalvatim dehiscens. ....*Epimedium koreanum* NAKAI.
- A. Frutex. Folia simplicia, turionum in spinis transformantia, vera fasciculata. Flores racemosi. Fructus baccatus. Ovula in quoque carpello 2-4 ex basi erecta.
- B. Folia integra angusta. Fructus oblongi. ....*Berberis Poirerii* Schneider v. *angustifolia* NAKAI.
- B. Folia spinuloso-serrata vel argute serrata.
- C. Folia tenuia vel tenue-chartacea, margine dense spinuloso-serrulata.
- D. Folia subrotunda vel latissime elliptica vel latissime obovata. ....*Berberis amurensis* RUPRECHT  
var. *latifolia* NAKAI.
- D. Folia oblongo-oblancoolata vel oblonga.
  - E. Minus ramosa. Folia vulgo majora 4-8 (3-10) cm. longa. ....*Berberis amurensis* RUPRECHT.
  - E. Ramosissima. Folia 1-3 (1-5) cm. longa. ....*Berberis amurensis* RUPRECHT  
var. *quelpertensis* NAKAI.
- C. Folia chartacea argute serrulata.
- D. Folia elliptica vel obovata vel obovato-oblonga.

- E. Fructus sphaericus. ....*Berberis koreana* PALIBIN.
- E. Fructus ellipsoideus vel oblongus. ....*Berberis koreana* PALIBIN  
var. *ellipsoidea* NAKAI.
- D. Folia oblongo-oblancoolata distincte petiolata. Fructus ellipsoides. ....*Berberis koreana* PALIBIN  
var. *angustifolia* NAKAI.

*Podophyllaceæ* DC, Prodr. I, 111 (1824) sensu div. (including genera *Podophyllum*, *Glaucidium*, *Diphylleia*) and *Nandinaceæ* (represented by a single genus *Nandina*) are good distinct families, and are excluded here from *Berberidaceæ*. Botanist who regarded *Nandina* as a distinct family is C. A. AGARDH, however, he used *Nandineæ* for the family-name.

**Nandinaceæ** NAKAI, nom. nov.

- Syn. *Berberaceæ* § 2. *Nandineæ* LINDLEY, Nat. Syst. Bot. 29 & 30 (1836), pro parte.  
*Berberideæ*—*Berberideæ*—*Veræ* MEISNER, Pl. Vasc. Gen. I, 6 (1836), II, 7 (1843), pro parte.  
*Menispermaceæ* Trib. 4. *Nandineæ* SPACH, Hist. Nat. Végét. VIII. 26 (1839), pro omnino.  
*Berberidaceæ* § 2. *Nandineæ* LINDLEY, Veget. Kingdom ed. I. 438 (1846), pro parte.  
*Nandineæ* AGARDH, Theor. Syst. Pl. 71, Tab. V, fig. 4 (1858), pro omnino.  
*Berberideæ* Trib. II, *Berbericæ* BENTHAM & HOOKER, Gen. Pl. I, 41 (1862), partim.  
*Berberidaceæ* B. *Epimediæ* TISCHLER in ENGLER, Bot. Jahrb. XXXI, 722 (1902), partim.  
*Berberidaceæ* Unterfam. *Berberidoideæ* § *Epimediæ* ENGLER, Syl-lab. ed. 3, 125 (1903), partim.

Frutex. Caulis indivisus vel pauciramosus (rarius arborescens). Phyllotaxis 1/2. Folia biennia, petiolata; petioli persistentes cum segmentis articulati; segmenta 2-3 ternato-pinnata articulatim decomposita; foliola integerrima. Stipulae 0. Inflorescentia terminalis thyr-

soides sed definita vel ex floribus terminalibus floret. Flores hermaphroditi, basi bibracteati. Sepala 12, 4-serialia imbricata. Petala 6, 2-serialia. Stamina 6 subbiserialia; filamenta brevissima; anthera elongatae oculis binis interiore affixis sed laterali subextrorsim vel vere extrorsim rima longitudinali aperti. Pollina sphaerica longitudine membranaceo-trizonata. Ovarium uniloculare; placentum ventrale biovulatum. Ovula horizontalia apotropa ie. superius cum micropyle supero, inferius cum micropyle infero. Stylus 1 terminalis. Stigmata 2 obovata dorsali divergentia eroso-marginata. Fructus coccineus drupaceus. Pyrena hemisphaerica.

Familia monotypica: *Nandina* THUNBERG, Nov. Gen. Pl. I, 15 (1781).  
Species unica: *Nandina domestica* THUNBERG, l. c. 16.

#### Plantæ Herbaceæ

- 1) **Achlys japonica** MAXIMOWICZ in Bull. Acad. Imp. Sci. St. Pétersb. XII, 61 (1868); KOMAROV in Acta Horti Petrop. XXII, 324 (1903); NAKAI, Fl. Kor. II, 437 (1911); MORI, Enum. 163 (1922).  
Nom. Jap. *Nanbusô*.  
Hab. in Korea: ad ripas fl. Jalu (V. KOMAROV).  
Distr. Yeso, Hondo bor.
- 2) **Caulophyllum robustum** MAXIMOWICZ in Mém. Prés. Acad. Imp. Sci. St. Pétersb. div. sav. IX, 33 (1859).  
Syn. *Caulophyllum thalictroides* (non MICHAUX) REGEL in Bull. Acad. Sci. St. Pétersb. XV, 471 (1857); NAKAI, Fl. Kor. I, 43 (1909), in Tokyo Bot. Mag. XXVI, 30 (1912); Chosen-shokubutsu I, 89 f. 94 (1914), Veget. Isl. Wangto 7 (1914); Veget. Diamond Mts 173 (1918); MORI, Enum. 164 (1922).  
Nom. Jap. *Ruiyô-botan*.  
Hab.  
Kogon: in silvis Kenfuturô (T. NAKAI no. 14115, Aug. 1929); Mt. Kongôsan (T. NAKAI, n. 5446, Aug. 1916, fruct.); ibidem (T. UCHIYAMA, Sept. 1902, fruct.).  
Keiki: Kôryô (T. NAKAI, Apr. 1913, fl.); ibidem (T. MORI n. 208, Jul. 1912, fruct.).

Zennan: in silvis montis Kannonsan insulae Wangtô (T. NAKAI, n. 815, Jun. 1913).

Heinan: in monte Kôsôrei (T. MORI, Jul. 1916, fruct.).

Heihoku: Kôkai (R. G. MILLS n. 334, Maio 1911).

Distr. Sachalin, Yeso, Hondo, Sikoku, Kiusiu, Ussuri, Manshuria, Amur.

#### 3) **Epimedium koreanum** NAKAI, sp. nov.

Syn. *Epimedium macranthum* (non MORREN & DECAISNE) FORBES & HEMSLEY in Journ. Linn. Soc. XXIII, 32 (1886); KOMAROV, Fl. Mansh. II, 324 (1904); NAKAI in Tokyo Bot. Mag. XXII, 180 (1908) Fl. Kor. II, 437 (1911), Chosen-shokubutsu I, 90 f. 85 (1914); MORI, Enum. 164 (1922).

*Epimedio macrantho* affine sed ex omnibus partibus majus et flores flavidi.

Rhizoma repens 3-5 mm. crassum fusco-castaneum, radices fibrosas creberrime ramosas multas surgit, apice foliis squamosis 3-4 amplectum. Caulis sympodialis sub anthesin 13-21 cm. altus arcuato-ascendens glaber 3-4 mm. latus apice folio unico et racemo unico portat, si caulis inevolutus folium solitarium radicale terminale. Folium radicale biternatum; petiolus 90-200 mm. longus glaber; petioluli primarii 55-125 mm. longi 1.5-2.3 mm. lati glabri; petioluli secundarii 25-50 mm. longi 1-1.2 mm. lati glabri, in axillis pilis elongatis multicellularibus fuscis barbati; foliola terminalia late elliptica vel elliptico-rotundata 50-100 mm. longa 33-72 mm. lata supra viridia nitidula infra pallida vel glaucina reticulato-venosa pilis fuscis persistentibus hirtella basi profunde subimbricato-sinuata apice mucronata margine spinescenti-serulata; foliola lateralia late oblique-ovata 50-135 mm. longa 35-75 mm. lata basi limbo interiore rotundato exteriori sagittato-mucronato. Folium caulinum biternatum sub anthesin immaturatum, in fructu petioli 45-85 mm. longi; petioluli primarii 66-125 mm. longi; petioluli secundarii 25-50 mm. longi; laminae in forma cum radicalibus conformes sed minores. Pedunculi basi petioli subvaginante vel stipulis binis amplectentes cum racemo 46-50 mm. longo 80-110 mm. longi. Bractea 1-4 mm. longae falcato-subnaviculares. Pedicelli 8-15 mm. longi graciles. Sepala 4 oblonga 8-10 mm. longa flavida decidua.

Petala flavida 4 limbo erecto apice truncato 7-10 mm. alto postico in nectarium ascendens 18-20 mm. longum calcarato. Stamina 4 libera 4-5 mm. longa; antheræ oblongæ valvis elongatis sursum dehiscentes. Ovarium glabrum fusiforme subsessile in stylum brevem attenuatum. Stigmata apice sulcata. Capsula 10-13 mm. longa 5-6 mm. lata fusiformis subsessilis apice in stylum 5 mm. longum attenuatum. Semina matura ignota.

Nom. Jap. *Chôsen-ikarisô*.

Hab. in Korea.

Heihoku: in monte Hakuhekizan (T. ISHIDOYA, Jun. 1912, fl., typus in herb. Univ. Imp. Tokyo); Sakusyu (T. ISHIDOYA, Oct. 1910).

Heinan: Neien (T. MORI, Jul. 1916); in monte Taiseizan (H. IMAI, Maio 1912).

Kôgen: in silvis inter Kenfuturô & Shasôri (T. NAKAI n. 14117, Aug. 1929).

Kannan: in colle circa Genzan (T. NAKAI, Jun. 1909); in monte Matenrei (A. MISIMA); Kôzan (V. KOMAROV n. 736, Jun. 1897); inter Futempô & Hôtaiidô (T. NAKAI n. 3235, Aug. 1914).

Kanhoku: Seisin (T. NAKAI, Jun. 1909, fruct.); Shuotu-onmen (T. NAKAI n. 7054, Jul. 1918).  
in Manshuria.

An-tung: in monte Fêng-huang-shan (M. KITAGAWA, Maio 1832, fl.).

4) **Leontice microrhyncha** S. MOORE in Journ. Linn Soc. XVII, 377, t. 16, fig. 3-4 (1879); PALIBIN in Acta Hort. Petrop. XVII, 23 (1899); NAKAI, Fl. Kor. I, 42 (1909); MORI, Enum. 164 (1922).

Nom. Jap. *Inu-engosaku* (T. NAKAI).

Hab.

Heihoku: Wah-Lin (R. G. MILLS, in herb. Kew).

Distr. Manshuria.

Laoling where WEBSTER first found this plant is a mountain range in the Manchurian side of Jalu-river.

5) **Plagiorhegma dubium** MAXIMOWICZ in Mém. prés. Acad. Imp. Sci. St. Pétersb. div. sav. IX, 43 t. 2 (1859).

Syn. *Jeffersonia dubia* BENTHAM & HOOKER apud BAKER & MOORE in Journ. Linn. Soc. XVII, 377 (1879); FORBES & HEMSLEY in

Journ. Linn. Soc. XXIII, 33 (1886); PALIBIN in Acta horti Petrop. XVII, 23 (1899); KOMAROV in Acta horti Petrop. XXII, 322 (1903); NAKAI, Fl. Kor. I, 43 (1909), II, 437 (1911), Chôsen-shokubutu I, 91 f. 87 (1914); MORI, Enum. 164 (1922).

*Jeffersonia manchuriensis* HANCE in TRIMEN, Journ. Bot. IX, 258 (1880).

Nom. Jap. *Tatutasô* (T. MAKINO); *Itomakigusa* (Y. YABE).

Hab.

Kanhoku: Seisin (T. NAKAI, Jun. 1907, fruct.); Ranan (I. ONO, Apr. 1913 fl.).

Heihoku: Kôkai (T. NAKAI, ful. 1913); Ryuseiri oppidi Gunnaimen districtus Hakusen (KÔJYNMEI).

Distr. Manshuria, Amur.

#### Plantæ lignosæ

Gn.) **Berberis** (BRUNFELS, Novi Herb. II, 174 (1532), III, 183 (1536); DODOENS, Nieuwe Herb. 683 (1578); BAUHINUS, Pinax 454 (1623); TOURNEFORT, Instit. 614 t. 385 (1870); LINNÆUS, Gen. Pl. ed. I, 94 (1737) LINNÆUS, Gen. Pl. ed. 5, 153 n. 379 (1754); HILL, Brit. Herb. 520 (1756); ADANSON, Fam. II, 433 (1763); JUSSIEU, Gen. Pl. 286 (1789); SCHREBER Gen. Pl. 232 (1789); NECKER, Elem. Bot. II, 370 (1790); MOENCH, Method. 274 (1794); GÆRTNER, Fruct. Sem. Pl. I, 200 (1788); VENTENAT, Tab. Règn. Végét. III, 84 (1799); PERSOON, Syn. I, 387 (1805); LAMARCK & DC, Syn. Fl. Gall. 369 (1806); POIRET in LAMARCK, Encyclop. VIII, 615 (1808); LAMARCK & DC, Fl. Franc. ed. 3, IV, pt. 2, 627 (1815); A. P. DE CANDOLLE, Reg. Veg. II, 4 (1821), Prodr. I, 105 (1824); G. DON, Gen. Hist. I, 114 (1831); WIGHT & ARNOTT, Prodr. Fl. Penins. Ind. Orient. I, 15 (1831); ENDLICHER, Gen. 853 (1840); SPACH, Hist. Végét. VIII, 35 (1839); BENTHAM & HOOKER, Gen. Pl. I, 43 (1862), pro parte; EICHLER in MARTIUS, Fl. Brasil. XIII, pt. I, 229 (1864); BOISSIER, Fl. Orient. I, 162 (1867); KOCH, Dendrol. I, 392 (1869), excl. Gruppe *Mahonia*; BAILLON, Hist. Pl. III, 78 (1872); PRANTL in ENGLER & PRANTL, Nat. Pflanzenfam. III, 2, 77 (1888).

Syn. *Oxyacantha* FUCHS, Hist. Stirp. 542 cum fig. (1542); TRAGUS,

Stirp. Hist. Comm. 992 fig. (1552).

*Berberis* DURANTE, Herb. Nuov. 67 (1585).

Frutices. Caulis ex basi cæspitosus, cortice truncorum longitudine sulcata. Folia turionum subulato- vel lanceolato-spinata 1-7 fida rigida persistentia. Folia ramorum brevium fasciculato-congesta petiolata simplicia spinuloso-serrulata vel integra annua vel biennia. Racemus 1-∞ florus, axillaris nutans bracteatus. Flores pedicellati. Sepala 6 biserialia, interiora 3 majora. Petala 3 vel 6 basi intus longitudine biglandulosa. Stamina 6; connectivum dilatatum ita antheræ distantes; antheræ valvis sursum dehiscentes. Ovarium 1-loculare, ovulis 2-6 e basi erectis. Stigma sessile umbilicatum. Fructus baccatus coccineus vel ruber vel niger sphaericus vel ellipsoideus 2-4 spermus. Albumen carnosum. Embryo rectus. Cotyledon latus. Radicula infera.

Species circ. 150 maxime in boreali hemisphærica incola. In Korea 3 species sunt indigenæ quæ in sectionibus duabus sunt.

**Berberis** sect. **Sinenses** SCHNEIDER in Bull. Herb. Boiss. 2 sér. V, 463 (1905), excl. subsect. *Sieboldiæ*.

Folia decidua, lanceolata, oblonga vel spathulata, plerumque integra. Flores racemosi.

Species 10 in Asia, Europa, et in America septentrionali indigenæ, quarum unica in Korea indigena.

**Berberis Poiretii** SCHNEIDER v. **angustifolia** (REGEL) NAKAI  
(Tab. IV)

*Berberis Poiretii* SCHNEIDER in Mitt. Deutsch. Dendrol. Gesells. XV, 180 (1906).

var. **angustifolia** (REGEL) NAKAI, comb. nov.

Syn. *Berberis chinensis* (non POIRET) DESFONTAINES apud SCHULTES, Syst. Végét. VII, pt. I, 4 (1829), excl. specimen in Europa cultum; BUNGE, Enum. Pl. Chin. bor. 78 (1831), in Mém. Sav. Étrang. Acad. St. Pétersb. II, 78 (1832?).

*Berberis sinensis* (non DESFONTAINES) SCHLECHTENDAL in Linnæa XII, 377 (1838); MAXIMOWICZ, Amur. 32 (1859); KOCH, Dendrol. I, 404 (1869), pro parte; HANCE in TRIMEN, Journ. Bot. IV, 130 (1875); BAKER & MOORE in Journ. Linn. Soc. XVII,

377 (1879); J. D. HOOKER in Bot. Mag. CVIII, t. 6573 (1881); FORBES & HEMSLEY in Journ. Linn. Soc. XXIII, 31 (1886); PALIBIN in Acta Hort. Petrop. XVII, 20 (1899); KOMAROV in Acta Hort. Petrop. XXII, 328 (1903); SCHNEIDER in Bull. Herb. Boiss. 2 sér. V, 655 (1905); NAKAI, Fl. Kor. I, 42 (1909), Chosen-Shokubutsu I, 87 f. 87 (1914); BEAN, Trees & Shrubs I, 248 fig. (1914); MORI, Enum. Cor. Pl. 163 (1922).

*Berberis sinensis* var. *angustifolia* REGEL in Acta Hort. Petrop. II, pt. 2, 416 (1873); FRANCHET in Nouv. Arch. Mus. Paris 2 sér. V, 178 (1882), Pl. David. I, 26 (1884); SCHELLE in PAREYS Blumengärtn. 7 Lief. 618 (1931).

*Berberis sinensis* forma *weichangensis* SCHNEIDER in SARGENT. Pl. Wils. I, pt. 3, 372 (1913).

*Berberis sinensis* var. *weichangensis* SCHNEIDER, l. c. in nota sub *Berberis Purdomii*

*Berberis sinensis* DESFONTAINES quæ ex hac specie separanda foliis oblongis vel fere obovatis instructa est. Hæc varietas recedit a typo bracteis brevibus et foliis vetustis subtus glaucinis.

Frutex circ. 1-1.5 m. altus. Ramus diffusus rubro-castaneus vel purpureo-castaneus longitudine angulato-sulcatus. Spinæ simplices vel trifidæ 2-5 mm. longæ. Folia in ramulis brevibus fasciculata glabra oblanceolata vel lineari-oblanceolata integerrima vel superiore paucidentata margine leviter recurva 30-60 mm. longa 1.5-13 mm. lata supra viridia nitida infra glaucina reticulato-venosa apice acuta vel mucronata rarius obtusa basi longe attenuata. Inflorescentia cernua in speciminibus Koreanis adhuc ignota sed in speciminibus Manshuricis cum pedunculo circ. 3 cm. longæ; bracteæ 1.5-2 mm. longæ angustæ interdum trifidæ; pedicelli cernui circ. 5 mm. longi glabri apice parce incrassati; flores flavi; sepala 6 biserialia, exteriora minima squamosa, interiora 3 majora obovata 3-4 mm. longæ; petala 6 sepalis interioribus minora obovata basi longitudine 2-glandulosa; stamina 6; pistillum 2 mm. altum. Infructescentia cum pedicello 3-5.5 cm. longæ. Bracteæ lanceolato-acuminatæ 1-2 mm. longæ. Pedicelli 3-7 mm. longi. Bacca oblonga coccinea 9-11 mm. longæ.

Nom. Jap. *Tômegi*.

Hab.

Heihoku : Igen (H. IMAI n. 250, Aug. 1912 fruct. semimat.); in monte Hakuhekizan, Unzan (T. ISHIDOYA n. 48, Sept. 1912, fruct. mat.); Sozan (T. NAKAI n. 2014, Jun. 1914, fruct. jun.); Syôzyô (T. SAWADA); Syôzyô Yûmen (T. SAWADA); Sakusyû Gainanmen (T. SAWADA).

Distr. Amur, Manshuria, Jehol, Chili.

The type of *Berberis Poiretii* is a peculiar form with elongated bracts and simple spines. It is not *Berberis sinensis*  $\beta$ . *angustifolia* REGEL, nor the form which J. D. HOOKER had illustrated in Botanical Magazine t. 6573 under the name of *Berberis sinensis*, or the ordinary form in North China, Manchuria, and North Korea. Forma *weichangensis* SCHNEIDER is this ordinary form. I regret that the name of this Chinese *Berberis* has been intentionally changed to *Berberis Poiretii* from *B. sinensis* while the latter has good synonyms such as *Berberis spathulata* SCHRADER, *B. Guimpeli* KOCH & BOUCHÉ, *B. serotina* LANGE.

**Berberis** sect. **Vulgares** SCHNEIDER in Bull. Herb. Boiss. 2 sér, V, 660 (1905).

Folia decidua, semper spinuloso-serrata. Flores racemosi, rarissime fasciculati. Species 20 in Asia et Europa restrictæ, quarum 2 in Korea indigenæ sunt.

**Berberis amurensis** RUPRECHT

(Tab. V)

*Berberis amurensis* RUPRECHT in Bull. Acad. Imp. Sci. St. Pétersb. XV, 260 (1857), in Mém. Biol. II, 517 (1857); MAXIMOWICZ, Amur. 32 (1859); FR. SCHMIDT in Mém. Acad. Imp. Sci. St. Pétersbourg 7 sér. XII, no. 2, 33 (1868); LAVALLÉE, Arb. Segrez. 13 (1877); KOMAROV in Acta Hort. Petrop. XXII, 329 (1903), Fl. Mansh. II, 329 (1904); SCHNEIDER, Illus. Handb. Laubholz. I, 315 fig. 200 h-m. (1905), in Bull. Herb. Boiss. 2 sér. V, 665 (1905); REHDER & CARD in BAILEY, Cyclop. Americ. Hort. I, 154 (1900), excl. var. *japonica*; REHDER in BAILEY, Stand. Cyclop. Hort. I, 489 (1914); BEAN, Trees & Shrubs, I, 252 (1914); NAKAI, Chosen-Shokubutsu I, 88 f. 82 (1914), Veget. Chirisan 32 (1915), Veget. Diamond Mts. 142 (1918); MORI, Enum. Cor. Pl. 163 (1922); REHDER, Manual 249 (1927).

Syn. *Berberis vulgaris* (non LINNÆUS) REGEL in Mém. Acad. Imp. Sci. St. Pétersb. 7 sér. IV, no. 4, 14 (1861); FORBES & HEMSLY in Journ. Linn. Soc. XXIII, 32 (1886).

*Berberis vulgaris* var. *amurensis* RUPRECHT apud REGEL, l. c.; Pl. Radd. I, 126 (1862), in Acta Hort. Petrop. II, pt. 2, 414 (1873); FRANCHET in Nouv. Arch. Mus. Paris 2 sér. V, 177 (1882), Pl. David. I, 25 (1884).

*Berberis amurensis* REGEL apud KOCH, Dendrol. I, 396 (1869), in nota sub *B. vulgaris*.

*Berberis vulgaris* var. *japonica* (non REGEL) FRANCHET & SAVATIER, Enum. Pl. Jap. II, 273 (1876); T. ITO in Journ. Linn. Soc. XXII, 427 (1887); NAKAI, Fl. Kor. I, 42 (1909).

*Berberis vulgaris* f. *amurensis* KORSCHINSKY in Acta Hort. Petrop. XII, 302 (1892).

Frutex 1-3 metralis altus. Cortex cinereus longitudine sulcatus. Truncus usque 5 cm. latus. Spinæ 3-5 partitæ subulatæ divaricatæ 1-3.5 cm. longæ. Folia in ramulis brevibus fasciculata oblonga vel obovato-oblonga basi in petiolos breves attenuata apice acuta vel obtusiuscula vel obtusa vel rotundata margine spinuloso-serrulata 12-130 mm. longa 4-47 mm. lata supra opacis venis sæpe impressis, subtus nitida vel subspinosa venis elevatis reticulatis. Inflorescentia in apice ramulorum terminalis arcuato-dependens glabra cum pedunculo 30-80 mm. longa racemosa densiflora. Sepala 6, exteriora 3 oblongo-lanceolata circ. 1 mm. longa, interiora 3 subrotundata concava 4-6 mm. longa flavida. Petala 6 obovata intus basi longitudine 2-glandulosa. Stamina 6. Pistillum 2-2.5 mm. longum. Stigma umbonatum sessile. Bacca oblonga vel ellipsoidea 8-12 mm. longa coccinea.

Nom. Jap. *Ôba-megi*.

Hab.

Zennan : in montibus Chirisan (T. NAKAI, no. 619, Jul. 1913); ibidem (YANAGIDA).

Keinan : in montibus Kayasan (T. ISHIDOYA n. 5011).

Keiki : in monte Nanzan, Keizyô (N. OKADA, Maio 1908, florif.).

Kôgen : Tchônri (T. UCHIYAMA, Aug. 1902, florif.); in montibus Kongôsân (T. NAKAI, n. 5442, Aug. 1916; n. 5443, Aug. 1916, fructif.); ibidem (TEI DAN GEN); in monte Taihakusan (T. ISHIDOYA n. 5569);

in monte Setugakusan (T. ISHIDOYA, n. 6336); ibidem (T. NAKAI, n. 17405-6, Jul. 1936).

Heinan: Zyômandô (T. MORI, Jul. 1916); Yôtoku (Y. TAKAITI); Toksan Taikyokumen (T. KONDO n. 94); Kaisen-Tokusan (T. ISHIDOYA); Shinseimen (S. KOBAYASHI); Shasô (legitor?); in monte Rôrinsan (K. OKAMOTO); in promontorio Kenzanrei (T. ISHIDOYA n. 4288); in monte Shôhakusan (T. ISHIDOYA, n. 4289).

Heihoku: in monte Hiraihô (T. NAKAI, n. 2013, Jun. 1914, florif.); in monte Takudôzan, Kôkai (T. NAKAI n. 2015, Jul. 1914, fructif.); Unzan (H. IMAI n. 142, Aug. 1912); Kôtiri, Kôkai (M. FURUMI n. 482, Sept. 1917, fructif.); in monte Hinantokuzan (S. FUKUBARA n. 1319); Sosan-Hanmen (S. FUKUBARA n. 1087); in monte Takkakusan (T. SAWADA).

Kannan: Shinpo (T. NAKAI, Jun. 1909); in monte Sôdenrei (T. NAKAI n. 1504, Jul. 1914, fruct. immat.); Fusenkôgen (T. NAKAI n. 15464, Aug. 1935); Matenrei (A. MISIMA, Jul. 1902, florif.); Seikosin (T. NAKAI, Jun. 1909, fruct. immat.); inter Hôtaizan et Kyokôrei (T. NAKAI n. 2017, Aug. 1914, fructif.); in monte Sisuzan (TEI DAI GEN); in monte Syûai-zan (S. FUKUBARA); Fukeimen Kôzan (S. GOTÔ); Teihei (KIN SÔ KAN); in montibus Ouensan (U. FAURIE n. 219, Aug. 1901); ibidem (U. FAURIE n. 539, Aug. 1906); in monte Senbutusan (T. NAKAI, n. 17074, Jul. 1936).

Kanhoku: Tôtidi, Kyôzyô (T. NAKAI n. 7053, Jul. 1918); ibidem (T. NAKAI n. 7052, Jul. 1918, fructif.); Seisin (T. NAKAI n. 2012, Sept. 1914, fructif.); Zyô-u-nanmen, Meisen (S. FUKUBARA n. 1761); in monte Sôzan (TEI DAI GEN n. 769); Funei-Fukyomen (TEI DAI GEN n. 1431); Kyôzyô Shuhokumen (T. SAWADA); Meisen-Zyôkomen (T. KONDO n. 408); Kissyû-Tyôhakumen (S. FUKUBARA n. 1763); Meisen-Onsuihyô (T. NAKAI, n. 7708).

Distr. Ussuri, Amur, Manshuria, Jehol, China, bor., Yeso, Sachalin, Hondo.

**Berberis amurensis** var. **latifolia** NAKAI (Tab. VI) in FEDDE, Repert. Nov. Spec. XIII, 270 (1914); Veget. Diamond Mts. 172 (1918), Veget. Dagelet Isl. 19 (1919); MORI, Enum. Korean Pl. 163 (1922).  
Folia rotundata vel late elliptica. Flores densissima.

Nom. Jap. *Hiroha-megi*.  
Hab.

Dagelet: Dôdô (T. NAKAI n. 4291, Jun. 1917, fruct. immat.); in monte Mirokuhô (T. NAKAI n. 4292, Jun. 1917, florif.); Bôrôdai (T. ISHIDOYA n. 1542, Jun. 1916, fruct. immat.; n. 1543, 1544); Kigan (K. OKAMOTO).

Kôgen; in montibus Kongôsan (legitor?, fructif.).

**Berberis amurensis** var. **quelpartensis** NAKAI, comb. nov.

Syn. *Berberis quelpartensis* NAKAI in Tokyo Bot. Mag. XXVII, 31 (1913), Chôsen Shokubutsu I, 88 (1914), Veget. Isl. Quelpart 46 (1914).

Frutex vulgo vix 1 m., rarius 1.5 m. altus. Truncus usque 4 cm. latus. Folia vulgo 1-3 cm. (rarius 4-5 cm.) longa. Inflorescentia circ. 2-3 cm. longa. Infructescentia 2.5-4 cm. longa.

Nom. Jap. *Saisyû-megi*.  
Hab.

Quelpart: Hallasan 1000 m. (T. ISHIDOYA n. 198, Aug. 1912 fructif.; typus in Herb. Univ. Imp. Tokyo); in sepibus Yengsil 1000 m. (E. TAQUET n. 546, Aug. 1908); in cratere summo montis Hallasan 2000 m. (T. NAKAI n. 924, Maio 1913); Hallasan 1000 m. (U. FAURIE n. 1674, Jun. 1907 florif.); Hallasan 1500 m. (T. NAKAI n. 4940, Oct. 1917, fructif.); Hallasan (T. MORI n. 43, 1911 fructif.).

**Berberis koreana** PALIBIN  
(Tab. VII)

*Berberis koreana* PALIBIN in Acta Hort. Petrop. XVII, 22 t. I, (1899); SCHNEIDER in Bull. Herb. Boiss. 2 sér. V, 688 in nota sub *Berberidis japonica* (1905), VIII, 261 (1908); NAKAI in Journ. Coll. Sci. Tokyo XXVI, Art. 1, 41 Pl V, fig. B. (1909), XXXI, 436 (1911); REHDER in BAILEY, Stand. Cyclop. I, 490 (1914); NAKAI, Chôsen Shokubutsu I, 88 fig. (1914); REHDER, Manual 248 (1927); NAKAI, Kôryô 35 (1932).

Frutex circ. 1-2.5 m. altus. Truncus usque 2.5 cm. latus. Cortex trunci cinereo-fuscescens longitudine varie sulcatus. Ramuli rubri vel rubro-castanei vel purpureo-rubri longitudine sulcati glabri. Folia



turionum inferiora rotundata vel ovato-rotundata, petiolis 5-45 mm. longis, laminis 25-70 mm. longis 15-69 mm. latis argute serratis supra glabris nitidis infra glaucis venosis, superioribus sessilibus acuminatissime spinoso-multilobatis textu foliaceis 20-30 mm. longis. Folia ramorum elongatorum crassum 3-7 lobata, lobis reflexis vel minoribus erectis spinosis. Folia ramorum brevium fasciculata oblonga vel obovata majora tantum petiolata, chartacea apice obtusa margine spinuloso-serrata basi cuneata, supra viridia sed in autumno pulchri-erubescencia, infra primo pruinosa deinde albescencia venosa. Racemus in apice ramulorum brevium terminalis solitarius nutans 35-60 mm. longus glaber, axi angulata. Bractea 1-2 mm. longae oblongae aristatae. Pedicelli 5-7 mm. longi. Sepala 2-serialia 6, exteriora 3 minora elliptica 1-2 mm. longa, interiora majora late obovata vel rotundato-obovata concava 5-7 mm. longa. Petala 6 obovato-oblonga 4-5 mm. longa. Stamina 6. Bacca rubra sphaerica 10 mm. longa.

Nom. Jap. *Tyôsen-megi*.

Hab.

Keiki: in monte Hokkanzan (vel Pauck-san) (A. SONTAG, Maio 1894, florif.—Syntype); ibidem (T. UCHIYAMA, Oct. 1900 fructif.); Kôryô (T. MORI n. 134, Jun. 1912, florif.); ibidem (T. NAKAI n. 2018, Maio 1914, florif. & fructif.); ibidem (T. ISHIDOYA n. 1539-1541, 2386); in monte Butuganzan (T. ISHIDOYA); in monte Kagakusan (T. SAWADA); in monte Kangakusan (T. ISHIDOYA n. 1538); Aken (Y. YAMASHITA).

Kôgen: Kanhatkok (T. UCHIYAMA, Aug. 1902, fructif.); Hok-ton-si (T. UCHIYAMA, Aug. 1902, fructif.); Shun-sen (legitor?).

Kannan: in montibus Genzan (vel Ouensan) (U. FAURIE, Aug. 1901); in monte Syû-ai-zan (S. FUKUBARA).

Planta endemica!

**Berberis koreana** var. **ellipsoidea** NAKAI, var. nov.

Fructus ellipsoideus. Cetera ut typica.

Nom. Jap. *Nagami-no-Tyôsen-megi*.

Hab.

Kôgen: in silvis montis Tchôsizonzan, Kenfuturô (T. NAKAI, n. 14116, Aug. 1929, fructif.).

**Berberis koreana** var. **angustifolia** NAKAI, var. nov.

Folia oblonga-lanceolata distincte petiolata, petiolis 5-25 mm. longis.

Fructus ellipsoideus.

Nom. Jap. *Hosoba-no-Tyôsen-megi*.

Hab.

Kôgen: in silvis Kenfuturô (T. NAKAI, n. 14114, typus, Aug. 1929, fructif.).

トビラノキ  
海桐花科

**Pittosporaceæ** LINDLEY

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- PAX, F. (27) *Pittosporaceae* in ENGLER & PRANTL, Die Natürlichen Pflanzenfamilien III, 2 a, 106-114 (1891).
- PERSOON, C. H. (28) *Pittosporum*, in Synopsis Plantarum I, 248 (1805).
- POIRET, J. L. M. (29) *Pittosporae*, in LAMARCK, Encyclopédie Méthodique V, 361-362 (1804).
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- ST. HILAIRE, J. (35) *Pittosporum*, in Exposition des Familles Naturelles II, 266, (1805).
- SHELLE, E. (36) *Pittosporaceae*, in PAREYS Blumengärtnerei, Lief. 8, 725-726 (1934).
- SCHREBER, C. D. (37) *Pittosporum*, in Genera Plantarum 150 (1789).
- SIMS, J. (38) *Pittosporum Tobira*, in CURTIS, Botanical Magazine XXXV, t. 1396 (Jul. 1811).
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## (2) 朝鮮産海桐花科植物研究ノ歴史ト其効用

1886年5月 英國ノ W. B. HEMSLEY 氏ガ The Journal of the Linnaean Society 第23卷ニ C. WILFORD 氏採集ノ巨文島産ノとびらのきヲ記ス。

1899年 露國ノ J. PALIBIN 氏ハ Acta Horti Petropolitani 第17卷ニ同種ヲ記ス。

1909年 中井猛之進ハ Flora Koreana 第1卷ニ同種ヲ記ス。

1914年 中井猛之進ハ濟州島植物調査報告 及び莞島植物調査報告ニ各同種ヲ記ス。

1914年 中井猛之進ハ朝鮮植物第1卷ニ同種ヲ記載圖示セリ。

1922年 森爲三氏ハ朝鮮植物名彙ニ同種ヲ記ス。

1930年 獨乙國ノ E. PRITZEL 氏ハ Pflanzenfamilien 第2版 18 a 中ニ同種ヲ記ス。

朝鮮ニハ本科ニハ唯とびらのきアルノミ、内地ニアリテハもつこく、まるばしやりんばい等ト共ニ庭園樹ニ用キラレテ居ルガ朝鮮ハ氣候ガ寒イカラ東萊、釜山、鎮海、麗水、木浦等ノ慶南、全南ノ南岸地方デナクテハ庭園ニ植エテモ枯レテシモウ。生木ヲ薪木ニスル爲メニ斧デ割ルト一種謂フニ云ハレヌ不快ナ臭氣ヲ發シ甚ダシイ場合ハ斧ヲ放棄スル迄ニナル。其故内地デハ昔カラ惡魔除ニ用ヒ節分ニ門扉ノ傍ニ其枝ヲ立テタモノデアル。「扉の木」ノ名ハ之ニ起因シテ居ルガ其異様ノ惡臭ノ爲メトべらトモ云フ。

其惡臭ノ何物デアルカハ未ダ誰モ研究シタ事ハナイ。

大木ニナラヌカラ薪ニスル外用途ハナイガ南部ノ海岸林ノ一要素デアリ、つばき、まさき、ひさかき、しやりんばい、ナドト共ニ防風、砂止ノ用ヲナス。

### (3) 朝鮮産海桐花科植物ノ記相文

#### トビラのキ 海桐花科

灌木又ハ喬木、直立又ハ纏卷性、無毛又ハ有毛、葉ハ互生、托葉ナク、有柄、全縁又ハ鋸齒アリ、花ハ兩全花、繖房花序又ハ圓錐花叢ヲナシ又ハ單獨、直立又ハ下垂シ、有柄、整正又ハ少シク歪形、萼片5個縁ハ重ナリ。離生又ハ基ガ相癒合ス。花瓣ハ5個萼片ト互生シ白色、黄色又ハ紅色、又ハ碧色相重ナリ、通例基ハ爪狀ニトガル。雄蕊ハ5個花瓣ト互生離生、花絲ハ絲狀又ハ稍幅廣シ、葯ハ内向2室丁字形ニツキ縦裂ス。子房ハ2-5個ノ心皮ニテ成リ一室又ハ不完全ノ2-5室、側膜胎坐ニハ2列ノ倒生卵子アリ、果實ハ胞背裂開稀ニ胞間裂開シ又ハ全然裂開セズ、皮ハ硬シ、種子ハ通例多數稀ニ唯1個ニシテ假種皮アルモノアリ、胚乳ハ堅シ。胚ハ極メテ小サク臍ノ近クニアリテ幼根ハ下ニ向フ。

9屬ニ屬スル200餘種アリテ主トシテ熱帯、半熱帯地方ニ産ス。朝鮮ハ南部ニ唯一種自生ス。

#### とびらのき屬

灌木又ハ喬木、葉ハ2年生互生通例枝ノ先ニ密生シ有柄通例全縁托葉ナシ、花序ハ頂生又ハ側生苞アリ、繖房、繖房狀圓錐花叢、總狀、又ハ頭狀、又ハ唯1花ヲツク、萼片ハ5個離生又ハ基ガ相癒合ス。花瓣ハ5個基部相重ナル。雄蕊ハ5個子房ノ基ニツキ花絲ハ細ク葯ハ丁字形ニツキ2室内向、子房ハ無柄又ハ短柄ヲ有シ1室2-5個ノ側膜胎坐ヲ有ス。花柱ハ長シ、柱頭ハ平板狀又ハ2-5又ス。果實ハ2-5個ノ瓣ニ割レ又ハ裂開セズ木質ナリ。種子ハ平滑粘質ナリ。

阿弗利加洲、マダガスカル島、東印度、馬來、東亞、濠洲、ニューギニア、ニューギニア、ポリネシア、布哇等ニ亘リ約170種程記載サレ居レドモ其特徴種々ニシテ明ニ數個ノ屬ニ區分スベキモノ、如シ。朝鮮ニハ唯1種アルノミ。

#### とびらのき

(朝鮮名) トンナム、ビトンナム (濟州島)、

ケボートルナム (莞島)

(第VIII圖)

灌木又ハ小喬木朝鮮ニテハ高サ2-5m.ニ達シ分枝甚シ、葉ハ2年生ニシテ小枝ノ先ニ集生シ枝ノ上ニ出ヅルトキハ疎ニ相離レテツク有柄、若キ時ハ白キ毛ニテ密ニ被ハルレトモ後早ク無毛トナル。葉柄ハ長サ2-12mm. 基脚ハ幅廣シ、葉身ハ長橢圓形又ハ倒卵長橢圓形又ハ倒卵形、長サ20-90mm. 幅10-30mm. 表面ハ深綠色ニシテ光澤アリ裏ハ淡綠色、縁ハ多少外ニ反ル。花序ハ枝ノ先端ニツキ繖房花序ヲナシ始メ密毛ニ被ハレ花時ニハ微毛トナル。花ハ香氣ニ富ム。萼片ハ5個綠色基ハ相癒合シ相重リ凋落セズ、卵形又ハ長橢圓卵形長サ2-5mm. 外面ハ微毛アリ縁ニハ鬚毛アリ、花瓣ハ5個白色ナレドモ後黄色トナリ長サ8-12mm. 倒卵長橢圓形、基部ハ相寄り相重ナル。央以上ハ外ニ反ル。花後凋落ス。雄蕊ハ5個花瓣ト互生シ長サ7-8mm. 花瓣ト共ニ落ツ、花絲ハ廣針形白色、葯ハ黄色卵形長サ2mm. 花柱ハ柱狀長サ3mm. 白色、柱頭ハ不明亮ニ三角形ヲナシ粘質ナリ。子房ハ卵形又ハ廣紡錘狀密白毛アリ、3個ノ心皮ヨリ成リ1室3個ノ側膜胎坐ヲ有ス。果實ハ球形直徑約15mm. 永存性ノ花柱ヲ頂キ成熟時ニハ胞背裂開ス。種子ハ長サ5-7mm. 帶紅色粘質ナリ。

濟州島、全南 (巨文島、青山島、甫吉島、莞島、珠島、梅加島、艾島、突山島、木浦)、慶南 (南海島、巨濟島、東萊海雲臺、機張面竹島)ニ産ス。

(分布) 對馬、壹岐、九州、屋久島、四國、本州中部以南、豆南列島、八丈島、青ヶ島、支那 (江蘇省)。

琉球及ビ臺灣ニ本種ガ産スル如ク記シアレドモ何レモ別種ナリ。其記相文ハ歐文欄ヲ参照スベシ。

*Pittosporaceae* LINDLEY, Nat. Syst. Bot. 31 (1836); Veg. Kingd. ed. 1, 441 (1846); ed. 3, 441 (1853); AGARDH, Theor. Syst. Pl. 196 (1858); EICHLER, Blüthendiagr. II, 369 (1878); Pax in ENGLER & PRANTL, Nat. Pflanzenfam. II, 2 a, 106 (1891); KOORDERS, Excursionsfl. Java II, 308 (1912); PRITZEL in ENGLER, Pflanzenfam. 2 Aufl. 18 a, 265 (1930). Syn. *Cisti* III, Sect. ADANSON, Fam. Pl. II, 447 (1763), pro parte.

*Rhamnea* J. ST. HILAIRE, Exposit. Fam. Pl. II, 264 (1805), pro parte.

*Pittospora* R. BROWN in FLINDER'S Voy. II, appendix 542 (1814); A. P. DE CANDOLLE, Prodr. I, 345 (1824); BARTLING,

Ord. Nat. Pl. 377 (1830); LINDLEY, *Introd. Bot.* 138 (1830); G. DON, *Gen. Hist. Dichlamy.* Pl. I, 372 (1831); WIGHT & ARNOTT, *Prodr. Fl. Penins. Ind. Orient.* I, 153 (1831); SPACH, *Hist. Végét.* II, 413 (1834); MEISNER, *Pl. Vasc. Gen.* I, 66 (1836); ENDLICHER, *Gen. Pl.* 1081 (1840); BENTHAM & HOOKER, *Gen. Pl.* I, pt. I, 130 (1862); HOOKER & THOMSON in HOOKER, *Fl. Brit. Ind.* I, 197 (1872).

*Saxifragacées—Pittosporae* Baillon, *Hist. Pl.* III, 443 (1872).

Frutices vel arbores, erecti vel volubiles, glabri vel tomentosi. Folia alterna exstipullata petiolata, integra vel dentata. Flores hermaphroditi vel abortive polygami corymbosi vel paniculati vel solitarii, erecti vel nutantes, pedicellati, regulares vel paulo obliqui. Sepala 5, imbricata, libera vel basi connata. Petala 5 sepalis alterna, alba, flava, vel erubescens, vel cærulea imbricata, vulgo basi unguiculata. Stamina 5 petalis alterna libera; filamenta filiformia vel plus minus dilatata; antheræ 2-loculares introrsæ versatiles rima longitudinali dehiscentes. Ovarium ex carpidiis 2-5 constitutum uniloculare vel imperfecte 2-5 loculare; placenta parietalia. Ovula 2-serialia anatropa. Fructus loculicide rarius septicide dehiscentis, vel indehiscens tum durus, vel coriaceus vel drupaceus. Semina  $\infty$ , rarius 1, nunc arillata. Albumen durum. Embryo minimus circa hilum positus; radícula infera.

Genera 9, species circ. 200 in regionibus tropicis vel subtropicis rarius temperatis incola. In Korea tantum species unica indigena.

**Pittosporum** BANKS ex sched. SOLANDRI in GÆRTNER, *Fruct. & Semin.* Pl. I, 286 t. 59 (1788); SCHREBER, *Gen. Pl.* 150 n. 379 (1789); J. ST. HILAIRE, *Exposit. Fam.* II, 266 (1805); PERSOON, *Syn. Pl.* I, 248 (1805); A. P. de Candolle, *Prodr.* I, 346 (1824); G. DON, *Gen. Hist. Dichl. Pl.* I, 373 (1831); WIGHT & ARNOTT, *Prodr. Fl. Penins. Ind. Orient.* I, 153 (1831); SPACH, *Hist. Végét.* II, 416 (1834); ENDLICHER, *Gen. Pl.* 1082 n. 5661 (1840); BENTHAM & HOOKER, *Gen. Pl.* I, pt. I, 131 (1862); HOOKER & THOMSON in HOOKER, *Fl. Brit. Ind.* I, 198 (1872); BAILLON, *Hist. Pl.* III, 443 (1872); PAX in ENGLER & PRANTL, *Nat. Pflanzenfam.* III, 2 a, 110 (1891); GAGNEPAIN in LÉCOMTE, *Fl. Général Indo-Chine* I, 237 (1909); KOORDERS, *Excursionsfl.* II, 308 (1912); PRITZEL in ENGLER, *Nat. Pflanzenfam.* 2 Aufl. 18 a

273 (1930).

*Syn. Tobira* ADANSON, *Fam. Pl.* II, 449 (1763).

*Evonymus* pro parte. MURRAY, *Syst. Veget.* ed. 14, 238 (1784);

PERSOON, *Syst. Veget.* ed. 15, 249 (1797); WILLDENOW, *Sp. Pl.* I, pt. 2, 1130 (1799); PERSOON, *Syn. Pl.* I, 243 (1805).

*Euonymus* pro parte. GMELIN, *Syst. Nat.* II, pt. I, 300 & 407 (1791).

Frutices vel arbores, sempervirentes. Folia alterna sæpe in apice ramulorum congesta petiolata vulgo integra, exstipullata. Inflorescentia terminalis vel lateralis bracteata. Flores corymbosi, corymboso-paniculati, racemosi, vel capitati, vel solitarii. Sepala 5 libera vel basi coalita. Petala 5 imbricata. Stamina 5 hypogyna; filamenta angusta; antheræ versatiles 2-loculares introrsæ. Ovarium sessile vel breviter stipitatum, uniloculare, placentis parietalibus 2-5. Styli elongati. Stigma discoideum vel 2-5 lobulatum. Capsula valvis 2-5 lignosis, vel indehiscens. Semina lævia viscosa.

Species circ. 170 in Asia orientali, Malesia, India, Australia, N. Zealandia, N. Guinea, Polynesia, Hawii, Madagascar & Africa incola. In Korea tantum species unica est indigena.

The classification of this genus remains still in the condition of Linnæan age, and a new critical classification is necessitated.

#### **Pittosporum Tobira** AITON

(Tab. VIII)

*Pittosporum Tobira* AITON, *Hort. Kew.* ed. 2, II, 27 (1811); SIMS in CURTIS, *Bot. Mag.* XXXIV, t. 1396 (1811); DONN, *Hort. Cantab.* 7 ed. 63 (1812); SWEET, *Hort. Suburb. Lond.* 46 (1818); ROEMER & SCHULTES, *Syst. Veget.* V, 430 (1819); LINK, *Enum. Pl. Hort. Berol.* I, 233 n. 2235 (1821); TRATTINICK, *Ausw. Gartenpfl.* II, t. 167 (1821); STEUDEL, *Nomen. Bot.* ed. 1, I, 628 (1821); A. P. de CANDOLLE, *Prodr.* I, 346 (1824); SPRENGEL, *Syst. Veget.* I, 791 (1825); SWEET, *Hort. Brit.* 2 ed. 48 (1830); G. DON, *Gen. Hist. Dichl. Pl.* I, 373 (1831); SPACH, *Hist. Végét.* II, 417 (1834); DIETRICH, *Neu. Nachtrag Voll. Lex.* VII, 44 (1837); LOUDON, *Arb. & Frutic. Brit.* I, 358 f. 82 (1838); STEUDEL, *Nomen. Bot.* 2 ed. II, 347 (1841); SIEBOLD & ZUCCARINI in *Abh. Muench. Akad.* IV, 2, 152 (1845); KIRCHNER, *Arb. Musc.* 177

(1864); FRANCHET & SAVATIER, Enum. Pl. Jap. I, 44 (1874); MATSUMURA, Nippon Shokubutsumei 141 (1884), Cat. Pl. Herb. Coll. Sci. Imp. Univ. 19 (1886); FORBES & HEMSLEY in Journ. Linn. Soc. XXIII, 58 (1886); OKUBO, Cat. Pl. Bot. Gard. Imp. Univ. 22 (1887); NICHOLSON, Illus. Encyclop. Gard. III, 154 (1888); PAX in ENGLER & PRANTL, Nat. Pflanzenfam. III, 2 a, 111 (1891); MATSUMURA, Shokubutsu Meii 220 (1895); PALIBIN in Acta Hort. Petrop. XVII, 37 (1899); SHIRASAWA, Icon. Ess. Forest. Pl. Jap. I, Pl. 75 f. 14-27 (1900); MATSUDA in Tokyo Bot. Mag, XX, [106] (1906); NAKAI, Fl. Kor. I, 74 (1909); MATSUMURA, Ind. Pl. Jap. II, 2, 192 (1912), excl. specim. ex Liukiu & Formosa; NAKAI, Chosen Shokubutsu I, 129 f. 145 (1914), Veget. Isl. Quelpært 51 (1914), Veget. Isl. Wangto 8 (1914); BEAN, Trees & Shrub. Brit. Isl. II, 197 (1914); HALL in BAILEY, Stand. Cyclop. V, 2654 (1916); MORI, Enum. Pl. Cor. 187 (1922); MAKINO, Shokubutsu Dzukwan 1070 f. 2080 (1925); MAKINO & NEMOTO, Fl. Jap. 845 (1925), ed. 2, 452 (1931); SCHELLE in PAREYS Blumengärtn. 725 (1934).

Syn. *Tobira* KÆMPFER, Amoen. Exot. 796 (1712).

*Tobera*, Kæmpfer, l. c. in fig. in 798.

*Evonymus Tobira* THUNBERG in Nova Acta Reg. Soc. Sci. Upsal. III, 28 (1780), Fl. Jap. 99 (1784); PERSOON, Syst. Veget. ed. 15, 249 (1797); WILLDENOW, Sp. Pl. I, pt. 2, 1130 (1799); DIETRICH, Vollst. Lexic. Gärtn. & Bot. IV, 117 (1804); PERSOON, Syn. Pl. I, 243 (1805).

*Evonymus tobira* THUNBERG jap. mspt. ex Murray, Syst. Veget. ed. 14, 238 (1784); LAMARCK, Encyclop. Méthod. II, 574 (1786); VITMAN, Summa Pl. II 33 (1789).

*Euonymus Tobira* THUNBERG apud GMELIN, Syst. Nat. II, pt. I, 407 (1791).

*Celastrus tobira* THUNBERG, Pl. Jap. Nov. Sp. 6 (1824).

*Pittosporum tobira* AITON apud MIQUEL in Ann. Mus. Bot. Lugd. Bat. III, 108 (1867), Prol. 272 (1867); K. ITO, Cat. Pl. Koishikawa Bot. Gard. 11 (1877); PRITZEL in ENGLER, Nat. Pflanzenfam. 2 Aufl. 18 a, 279 (1930), excl. syn. *P. boninense* & *P. parvifolium*.

*Pittosporum Tobira* DRYANDER apud DAVY in BAILEY, Cyclop. Americ. Hort. III, 1361 (1901).

Frutex vel arborescens, in Korea usque ad 2-5 m. alta, ramosissima. Folia biennia in apice ramulorum conferta, supra ramos alterna distantia, petiolata, juventute pilis albis tomentosa sed mox glabrescentia; petioli 2-12 mm. longi basi dilatati; laminae oblongae vel obovato-oblongae vel obovatae 20-90 mm. longae 10-30 mm. latae supra viridissimae nitidae infra pallidae, margine plus minus reflexa saepe subrevolutae. Inflorescentia in apice ramorum hornotinorum terminalis corymbosa primo lanata sed sub anthesin pilosa. Flores suaveolentes. Sepala 5 basi coalita, imbricata, persistentia ovata vel oblongo-ovata 2-5 mm. longa extus pilosella margine fimbriata. Petala 5 alba sed demum flavescentia 8-12 mm. longa obovato-oblonga basi conniventi-imbricata supra medium reflexa, decidua. Stamina 5 petalis alterna hypogyna 7-8 mm. longa post anthesin decidua; filamenta subulata alba; antherae flavae ovatae 1 mm. longae. Styli columnales 3 mm. longi albi. Stigmata inconspicue trigonalia papillosa viscida. Ovarium ovoideum vel late fusiforme tomentosum, carpidiis 3 constitutum 1-loculare, placentis 3 parietalibus. Capsula globosa circ. 15 mm. lata, stylis persistentibus coronata, maturitate valvis lignosis tribus loculicide dehiscens. Semina 5-7 mm. longa rubescentia facie viscosa.

Nom. Jap. *Tobira-no-ki*, vel *Tobera*.

Nom. Kor. *Tong-nam*, *Pitong-nam* (Quelpært), *Kebbtol-nam* (Wangtô).

Hab.

Quelpært: in latere australe (T. NAKAI n. 4976, Nov. 1917, fructif.); in dumosis inter Taisei & Hôkanri (T. NAKAI n. 144, Maio 1913, florif.); Ryûtanri (T. NAKAI n. 1241, Maio 1913); sine loco speciali (T. MORI n. 60, 1911); sine loco speciali (T. ISHIDOYA n. 278, Aug. 1912, fructif.); in littore (U. FAURIE n. 553, Oct. 1906; n. 568, Maio 1908).

Zennan: insula Kyobuntô (T. NAKAI n. 11335-11336, Maio 1928, florif.); Gyokuto (T. NAKAI, Jun. 1913); ibidem (T. ISHIDOYA n. 1396); insula Totuzantô (T. NAKAI n. 11326, Maio 1928; n. 11325, florif.); insula Kaitô (T. NAKAI n. 11323, Maio 1928); insula Gairarôtô (T. NAKAI n. 11324, Maio 1928, florif.); insula Baikwatô (ISHIDOYA et TEI n. 3507-3509, Aug. 1919, fructif.); insula Seizantô (T. NAKAI n. 11322, Maio 1928); insula Wangtô (T. ISHIDOYA n. 1295); Moppo (T. UCHIVAMA, Nov. 1900 fructif.).

Keinan : insula Tikutô, Tôrai (T. NAKAI n. 11331-11332, Maio 1928); insula Botantô, Nankai (T. NAKAI n. 11327, Maio 1928); Kaiundai, Tôrai (T. NAKAI n. 11329-11330, Maio 1928); Gakenri insulae Kyo-saitô (T. NAKAI n. 11320-11321, Maio 1928); Sekkyôri, Nankai (T. NAKAI n. 11328, Maio 1928); insula Mugishima circa insulam Kyo-saitô (T. NAKAI n. 11333-11334, Maio 1928); Fusan (T. UCHIYAMA, Nov. 1900, fructif.).

Distr. Tsusima, Iki, Kiusiu, Yakusima, Sikoku, Hondo, Ins. Hatidjo, Ins. Aogasima, China (Kiang-su).

The northermost distribution of this species begins from the Pacific coast of the provincè of Hitati, Hondo in Japan, and the south end is the Island of Yakusima south of Kiusiu, and then jumps to the Eastern China (Prov. Kiang-su). The specimens from Liukiu and Formosa which had been identified with this represent two new species.

1) **Pittosporum denudatum** NAKAI, sp. nov.

Syn. *Pittosporum Tobira* (non AITON) ITO & MATSUMURA in Journ. Coll. Sci. Tokyo XII, 309 (1899); MATSUMURA, Ind. Pl. Jap. II, pt. 2, 192 (1912), pro parte, quoad specimen in Liukiu lectum; MAKINO & NEMOTO, Fl. Jap. 845 (1925), excl. specim. ex Hondo, Kiusiu, Bonin & Formosa.

Habitu ut *Tobira* sed ramuli et folia ab initio glabra, inflorescentia pilosella multiflora, flores minores, petala circ. 8 mm. longa (in *Tobira* 11-13 mm. longa).

Nom. Jap. Ryûkyû-Tobira.

Hab.

Ins. Okinawa : Nago (G. NAKAHARA, Apr. 1907-typus floris in Herb. Imp. Univ. Tokyo); circa Shuri (K. MIYAKE, Sept. 1899); Idzumizaki (J. MATSUMURA).

Ins. Amami-Ôsima : sine loco speciali (T. UCHIYAMA, Nov. 1900, typus fructus in Herb. Imp. Univ. Tokyo).

2) **Pittosporum Makinoi** NAKAI, sp. nov.

Syn. *Pittosporum Tobira* (non AITON) HENRY in Trans. Asiat. Soc. Jap. XXIV, Suppl. 18 (1896); MATSUMARA & HAYATA in Journ. Coll. Sci. Tokyo XXII, 33 (1906); HAYATA, Icon. Pl.

Formos. I, 63 (1911); MATSUMURA, Ind. Pl. Jap. II, pt. 2, 192 (1902), pro parte; HAYATA, Gen. Ind. Form. 6 (1916); KANEHIRA, Formos. Trees 46 cum fig. (1917); MAKINO & NEMOTO, Fl. Jap. 845 (1925), pro parte; SASAKI, List Pl. Formosa 209 (1928); MAKINO & NEMOTO, Fl. Jap. ed. 2, 452 (1931), pro parte; MASAMUNE, Short Fl. Formosa 82 (1936); KANEHIRA, Formos. Trees ed. 2, 250 f. 194 (1936).

*Pittosporum Tobira* var. *calvescens* OHWI in Journ. Jap. Bot. XII, no. 5, 331 (1936).

Habitu ut antea, sed inflorescentia perbrevis tantum 2-5 flora. Ovarium subglabrum. Fructus 1-3 apice acutus.

Frutex ramosissimus. Rami hornotini cum foliis ab initio glaberrimi. Folia biennia in apice ramulorum conferta obovata vel obovato-oblonga vel oblongo-oblongata; petioli 2-15 mm. longi supra sulcati; laminae 13-85 mm. longae 7-35 mm. latae, supra lucida viridissima infra pallida nervis inconspicuis. Flores corymbosim 2-5. Axis inflorescentiae sub lente minute sparsim pilosella. Bractea lanceolata 1-2 mm. longae deciduae. Sepala 5 ovata circ. 3 mm. longa sub lente minute fimbriato-ciliolata. Petala 5 circ. 5 mm. longa glabra; filamenta subulata; antherae flavae 2 mm. longae sagittatae. Styli 4 mm. longi glabri. Ovarium 3 (2) carpidiatum apice pilosellum. Fructus subglobosus apice acutus diametro 10-15 mm. loculicide 2-3 valvis cum pedicello 15-20 mm. longo. Semina circ. 5 mm. longa.

Nom. Jap. *Takasago-Tobira*.

Hab. in

Formosa : Tansui (T. MAKINO, type of fruits, Nov. 1896); Shintik (S. Honda, Sept. 1897, fructif.); Kelung (T. MAKINO, Oct. 1896, fructif.); ibidem (C. ÔWATARI, Nov. 1896, fruct.); ibidem (S. NAGASAWA, 1903, fructif.); Bôbokusi (S. NAGASAWA, type of flowers, Apr. 1903).



ア フ ヒ 科  
錦 葵 科

Malvaceæ JUSSIEU

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## (2) 朝鮮産錦葵科植物研究ノ歴史

1899年 露國ノ IWAN PALIBIN 氏ハ Acta Horti Petropolitani XVII, 卷ニ *Malva verticillata* L. ふゆあふひ、*Abutilon Avicennae* GERTNER いちび、*Hibiscus Trionum* L. ぎんせんくわノ三種ガ朝鮮ニアル事ヲ記ス。

1909年 中井猛之進ハ Flora Koreana 第I卷ニふゆあふひ、いちび、ぎんせんくわ、わたノ4種ヲ記ス。其中ぎんせんくわヲ除ク外ハ皆栽培種ナリ。

1911年 中井猛之進ハ Flora Koreana 第II卷ニ更ニふゆあふひトぎんせんくわトノ新産地ヲ記ス。

1914年3月 中井猛之進著朝鮮植物 第I卷ニハふゆあふひ、りょうりあふひ、わた、ぎんせんくわ、むくげノ5種ヲ記ス。

同年4月 中井猛之進提出總督府出版ノ濟州島植物調査報告書ニハはまぼう1種ヲ記ス。

同年10月 中井猛之進ハ植物學雜誌ニ朝鮮特産栽培植物トシテてうせんふゆあるひ *Malva olitoria* NAKAI トりょうりあふひ *Malva olitoria* var. *crispa* NAKAI ナル一種一變種ヲ發表ス。

1915年12月 A. REHDER, E. H. WILSON ノ兩氏ハ SARGENT 氏監督ノ Plantae Wilsonianae II 卷第2部ニむくげガ濟州島ニアル事ヲ記ス。

1922年 森爲三氏ハ朝鮮植物名彙中ニ錦葵科ノ栽培種トシテとろろあふひ、いちび、たちあふひ、わた、ふやう、せにあふひヲ掲ゲ自生種トシテハはまぼう、むくげ、ぎんせんくわ、てうせんふゆあふひヲ掲ゲ居レドモせにあふひハふゆあふひノ誤記又むくげ、てふせんふゆあふひハ共ニ自生品ニ非ズ。

## (3) 朝鮮産錦葵科植物ノ効用

本科植物デ朝鮮ニ自生スルノハ利用ノ價値ガ乏シク僅ニぎんせんくわガ内地デ觀賞用ニ用キラレル事ガアル位デアアル。はまぼうモ美シイ黄花ヲ開ク灌木デアアルカラ庭園樹ニ利用シタイノデハアルガ暖地ノモノデアツテ朝鮮デハ先ヅ其望ハナイ。然シ栽培植物ニハ利用スベキモノガ多イ其ノ第一位ニアルノハ陸地綿 *Gossypium barbadense* L. デアリ紡績會社迄モ建ツテ居ル程デアアル。昔ハ漁業ノ外ハ致シ方ノナイ地ト思ハレテ居タ珍島ナドモ綿ノ栽培ニ成功シテカラハ豊ナル農村トナツタ。昔ハ所謂わた *Gossypium herbaceum* L. ヤ支那わた *Gossypium Nanking* C. A. MEYER ヲ植エテ居タケレドモ今ハ陸地綿ニ推サレテ僻地デナイト見ラレナイ。

とろろあふひハ朝鮮紙ヲ作ル時ノ糊ニ用キラレテ今モ残ツテ居ル。いちび *Abutilon Avicennae* GERTNER モ亦僻地ノ地ニハ植エラレテ居ルガ之ハ滿洲程發育ハヨクナク麻ノ方が勝レテ居ルカラ一般ニハ植エナイ。

食用ニスル目的デハ汁ノ實ヤ蔬菜トシテせにあふひノ類ヲ用キル其葉ノ縮ムモノハ内地デモ「をかのり」ト謂ツテ食ベタモノデアアルガ今ハ内地デハ顧ラレナイ様ニナツタガ朝鮮デハ寺ヤ農家ニ宿レバヨク食膳ニ出ル。併合後庭園植物トシテ移入サレタたちあふひ、ふやう、そこべにあふひ、オクラ等ハ別トシテむくげハ南鮮至ル所ニ植エラレテ居リ。往々自生状態ニナツテ居ルモノモアルガ本來ノ自生デハナイ様デアアル。朝鮮ニハむくげガ至ル所ニアルカラ僅チむくげカラ朝鮮ヲ權域ト云フナドト朝鮮ガむくげノ原産地デデモアルカノ様ニ云フ人ガアルケレドモ吾々植物學者カラハ否定シタイ事デアアル。恰度學名ガ *Hibiscus syriacus* L. トアルカラ原産地ハ「シリア」デアルト云フト似タ事柄デアアル。今明ニ自生ノアルノハ支那ト九州ト中國筋ノ西部トデアアル。

#### (4) 朝鮮産錦葵科植物ノ分類

##### (1) 歸化植物

歸化植物ト云フノハ外國産ノ植物ガ逸出シテ野生状態トナツテ居ルモノデアル。

1. *Abutilon Avicennae* GÄRTNER.  
いちび オジユウエ (濟州島)
2. *Hibiscus syriacus* L.  
むくげ ブクムホア (全南)
3. *Malva verticillata* L.  
ふゆあふひ アオク (京畿、忠北、忠南、全南等)、オウク (平南)、カーレ (濟州島)
4. *Malva verticillata* L. var. *olitoria* NAKAI.  
てうせんふゆあふひ アオク (朝鮮名)
5. *Malva verticillata* var. *olitoria* f. *crispa* NAKAI.  
りやうりあふひ アオク (朝鮮名)
6. *Malva verticillata* var. *crispa* L.  
をかのり アオク (朝鮮名)

##### (2) 自生草本植物

1. *Hibiscus Trionum* L.  
ぎんせんくわ  
朝鮮ノ平野、河原、畑地ノ全部ニアル。

##### (3) 自生木本植物

#### はまぼう屬

灌木又ハ喬木、直立又ハ屈曲横臥傾上ス。葉ハ互生、有柄單葉掌狀脈、主脈上ニハ腺狀部アリ、裏面ニハ通例星狀毛多シ。托葉ハ大ナレドモ早落性、花ハ葉腋ニ1個又ハ若枝ノ先端ニ總狀花序又ハ殆ンド複總狀花序ヲナシ花梗アリ。外萼ハ10-14個ノ裂片アリ、萼ハ5裂片ヲ有シ裂片ハ始メ鑷合狀ニ排列ス。花瓣ハ5個旋回シ基脚ハ相連ル。雄蕊柱ハ花柱ヨリモ短シ。蒴ハ胞背裂開シ各心皮ハ縁ガ内曲ス。各室ニ多數ノ種子アリ、種子ハ有毛又ハ乳頭狀ノ突起アリ。

約30種アリ主トシテ熱帯地方ノ産、但シ朝鮮ニテハ濟州島ニ唯1種アルノミ。

#### はまぼう

(第IX圖)

高サ 3-5 m. ニ達スル灌木ニシテ分岐頗ル多シ。若枝ニハ星狀ノ短毛密生シテ灰白色ヲ呈ス。托葉ハ長橢圓形又ハ橢圓形内面ハ綠色ニシテ星狀毛散生スレドモ外面ハ密生セル星狀毛ニテ灰白色ヲ呈ス。早ク脱落ス。葉柄ハ長サ 5-30 mm. 圓柱狀ニシテ星狀毛密生ス。葉身ハ横廣キ圓板狀又ハホボ五角形又ハ廣倒卵形長サ 22-75 mm. 幅 23-80 mm. 表面ハ綠色ニシテ短キ星狀毛疎生スレドモ裏面ハ2型 (長クシテ立ツモノト短クシテ平ニツクモノト) ノ星狀毛密生ス。掌狀ノ5本ノ主脈アリ。花ハ葉腋又ハ枝ノ先ニ1個宛出デ、花梗ハ花時長サ 7-12 mm. 太クシテ星狀毛密生ス。外萼ハ長サ 8-10 mm. 10個ノ披針形ノ裂片ヲ具ヘ星狀毛密生ス。萼ハ永存性長サ 18-25 mm. 5個ノ卵形ノ萼齒アリ、各萼齒ニハ顯著ナル3脈アリ。花冠ハ脫落性黃色ナレドモ落ツル前ニハヤ、紅化ス。基部ハ黒紫色ナリ。花瓣ハ丸ク長サ 4-6 cm. 内面ハ殆ンド無毛ナレドモ外面ニハ星狀ノ微毛アリ、雄蕊柱ハ長サ 15-18 mm. 葯ハ腎臟形ニシテ横長ク幅 1.2-1.5 mm. 花柱ハ抽出シ柱頭ハ5裂ス。蒴ハ褐色ノ星狀ノ密毛アリ卵形ニシテ先ハ尖リ長サ 20-30 mm. 5室ニシテ胞背裂開ス。種子ハ褐色腎臟形長サ 5 mm. 表面ハ疣狀ノ突起アリ。

濟州島ノ海岸ニ稀ニ生ズ。

(分布) 琉球、九州、對馬、四國、本州ノ暖地ノ海岸地方。

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*Malva* ADANSON, Fam. Pl. II, 390 (1763), pro parte; DURANDE,  
Not. Elém. Bot. 281 (1781), pro parte.

*Hibisceæ* AGARDH, Theor. Syst. Pl. 275 (1858).

Herbæ, frutices vel arbores, fibris corticis sæpe tenacissimis. Folia stipulata, alterna vel subopposita, annua vel biennia, integra vel lobata vel palmatim decomposita. Flores axillari-solitarii vel fasciculati vel racemosi vel paniculati. Bracteolæ 0 vel  $\infty$  calyculiformes. Flores regulares, hermaphroditi vel polygami vel rarius dioici. Sepala 5 (3-4) in calycem coalita, lobis vulgo valvatis. Petala 5 hypogyna basi cum partem infimam columnæ staminum adhærentia et eacum decidua, æstivatione contorta. Stamina  $\infty$ ; filamenta columnam formantia; antheræ vulgo 1-loculares longitudine dehiscentes. Pollina muricata. Ovarium carpidiis 5- $\infty$  constitutum. Styli carpidiis isomeri vel duplicati. Stigmata capitata. Ovula in quoque loculo ovarii 1- $\infty$  angulo interiore affixa amphitropa vel subanatropha. Fructus capsularis loculicide dehiscens. Carpella laterali-uniserialia vel inordinatim capitato-congesta. Semina reniformia, hirsuta, papillosa vel lævia. Albumen parcum vel copiosum vel 0. Embryo reniforme curvatus. Cotyledones sæpe plicati. Radicula hilo spectans.

Species circ. 800 generum 45 in regionibus temperatis vel tropicis incola. In Korea species 2 generum 2 sunt indigenæ sed nonnullæ cultæ sæpe elapsæ sunt.

(1) Species elapsæ et cultæ

1. **Abutilon Avicennæ** GÆRTNER, Fruct. & Semin. Pl. II, 25, t. 135 f. 1 (1791).

Nom. Jap. *Itibi*.

Nom. Quelpært. *Ojuwe*.

2. **Hibiscus syriacus** L. Sp. Pl. ed. 1, 695 no. 9 (1753); NAKAI, Chosen Shokubutsu I, 170 (1914); REHDER & WILSON in SARGENT, Pl. Wils. II, pt. 2, 374 (1915); MORI, Enum. Pl. Corea. 249 (1922).

Nom. Jap. *Mukuge*.

Nom. Kor. *Bukumuhoo*.

3. (a) **Malva verticillata** L. Sp. Pl. ed. 1, 689 no. 12 (1753); PALIBIN in Acta Horti Petrop. XVII, 46 (1899); NAKAI, Fl. Kor. I, 101 (1909), Chosen Shokubutsu I, 168 (1914).

Syn. *Malva sylvestris* L. var. *mauritanica* (non BOISSIER) MORI, Enum. Pl. Cor. 250 (1922).

Nom. Jap. *Fuyu-Aoi*.

Nom. Kor. *Aok, Auck, Kåre*.

(b) **Malva verticillata** L. var. **crispa** L. Sp. Pl. ed. 1, 689 (1753).

Nom. Jap. *Oka-nori*.

Nom. Kor. *Aok*.

(c) **Malva verticillata** L. var. **obitoria** NAKAI, comb. nov.

Syn. *Malva obitoria* NAKAI in Tokyo Bot. Mag. XXVIII, 309 (1914); MORI, Enum. Pl. Corea. 250 (1922).

Nom. Jap. *Tyõsen-Fuyu-Aoi*.

Nom. Kor. *Aok*.

(d) **Malva verticillata** L. var. **olitoria** f. **crispa** NAKAI, comb. nov.

Syn. *Malva olitoria* var. *crispa* NAKAI l. c. 310 (1914).

Nom. Jap. *Ryõri-Aoi*.

Nom. Kor. *Aok*.

(2) Species spontanea herbacea

1. **Hibiscus Trionum** L. Sp. Pl. ed. 1, 697 no. 20 (1753); PALIBIN in Acta Horti Petrop. XVII, 47 (1899); NAKAI, Fl. Kor. I, 102 (1909), II, 454 (1911), Chosen-Shokubutsu I, 170 f. 205 (1914), MORI, Enum. Pl. Cor. 250 (1922).

Nom. Jap. *Ginsenkwa*.

Nom. Kor.

Hab.

Quelpært: in agris Mokan (E. TAQUET n. 2697); in agris Sineum (E. TAQUET n. 596); in hortis (E. TAQUET n. 190); sine loco speciali (T. ISHIDOYA n. 158).

Zenhoku: Unpõ (T. MORI n. 220).

Keiki: Zinsen (M. ENUMA n. 66); inter Kasyõkyori et Nansen (T.

UCHIYAMA); Suigen (H. UYEKI n. 508).  
 Kôkai : Zuikô (T. NAKAI n. 2829); Tyôzankwan (T. NAKAI, n. 13142).  
 Heinan : Heidyô (H. IMAI).  
 Heihoku ; Kôkai (R. G. MILLS n. 199); Sohori Unzan (T. ISHIDOYA).  
 Kannan : Kankô (SEKI TYÛ MEI n. 27).  
 Kanhoku : Seisin (K. DYÔ).

(3) Species spontanea lignosa

Gn.) **Paritium** A. JUSSIEU in A. DE ST. HILAIRÉ, Fl. Brasil. Merid. I, pt. 2, 255 (1827); WIGHT & ARNOTT, Prodr. Fl. Penins. Ind. Orient. I, 52 (1831); G. DON, Gen. Hist. Dichl. Pl. I, 484 (1831); SPACH, Hist. Végét. III, 386 (1834); ENDLICHER, Gen. Pl. 983 (1836); MEISNER, Pl. Vasc. Gen. II, 23 (1843); GRISEBACH, Fl. Brit. West Ind. Isl. 30 (1864).  
 Syn. *Pariti* [RHEED, Hort. Malab. I, 53 t. 30 (1678)] ADANSON, Fam. Pl. II, 401 (1763).  
*Novella* [RUMPHIUS, Herb. Amb. 218 t. 73 (1741)].  
*Hibiscus* pro parte, LINNÆUS, Gen. Pl. ed. 5, 310 n. 756 (1754); SCHREBER, Gen. Pl. 468 n. 1139 (1789); JUSSIEU, Gen. Pl. 273 (1789); NECKER, Elem. Bot. II, 406 (1790); GMELIN, Syst. Nat. II, no. 2, 1000 n. 1062 (1791); WILLDENOW, Sp. Pl. III, 575 n. 806 (1800); etc.  
*Hibiscus* Sect. *Azanza*, fl. mex. ic. ined. ex A. P. DE CANDOLLE, Prodr. I, 453 (1824); SCHUMANN in ENGLER & PRANTL, Nat. Pflanzenfam. III, Abt. 6, 49 (1890); HOCHREUTINNR in Ann. Conserv. Jard. Bot. Gênevè IV, 58 (1900).  
*Azanza* MOCQUIN & SESSÉ ex A. P. DE CANDOLLE. 1. c. pro syn.  
*Hibiscus*, *Involucro monophyllo multidentato & Fruticosi s. arborescentes* SPRENGEL, Syst. Veget. III, 106 (1826).  
*Hibiscus* Sect. *Azanza* Subsect. *Paritium* GARCKE in Bot. Zeit. VII, 825 (1849).  
*Hibiscus* Sect. *Paritium* BENTHAM & HOOKER, Gen. Pl. I, 208 (1862); MASTERS in HOOKER fil., Fl. Brit. Ind. I, 343 (1874).  
*Hibiscus* Sect. IV, *Azanza* GARCKE apud GÜRKE in MARTIUS. Fl. Brasil. XII, pt. 3, 544 (1891).  
 Frutices vel arbores, erecti vel ascendentes, ramis sæpe flexuosis.

Folia alterna petiolata simplicia palmatinervia subtus supra venas primarias glanduligera. Stipulae amplae deciduae. Flores pedunculati, axillari-solitarii vel terminali-racemosi vel subpaniculati. Calyculus 10-14 dentatus. Calyx 5-lobatus lobis valvatis. Petala 5 contorta basi coalita. Columna staminum stylo 5-fido brevior. Capsula 5 vel 10-locularis loculicide dehiscens, carpellis margine involutis vel valvatis, loculis ∞-spermis. Semina hirsuta vel papillosa.

Species circ. 30 sub hoc genere enumeratae sunt, sed sequentes 8 sunt distinctissimae et *Paritium verum* formant.

- 1 { Corollae lobi oblanceolati obtusi vel acuti. Corolla 8-10 cm. longa.  
 Capsula ovato-oblonga obtusa aureo-pubescentis. .... *P. elatum*
- 1 { Corollae lobi subrotundati, imbricato-contorti. Corolla 4-10 cm. longa. .... 2
- 2 { Carpidia septis destituta. Flores axillari- vel terminali-solitarii. .... 3
- 2 { Carpidia involuto-septata. Flores racemosi vel subpaniculati. .... 5
- 3 { Flores breve pedicellati. Pedicelli floriferi vulgo calyce breviores. Pedicelli et rami stellato-lanati. Folia basi sæpe truncati. .... *P. Hamabo*
- 3 { Flores longe pedicellati. Pedicelli calyce longiores. Pedicelli et rami glabri vel glabrescentes. Folia basi leviter cordata. .... 4
- 4 { Rami et pedicelli adpressissime stellato-pilosi. Folia subtus pilis stellatis adpressissimis vestita, ita oculis nudis glaucescentia. Pedicelli vulgo longissimi calycem 2-4 plo superantes. .... *P. boninense*
- 4 { Rami et pedicelli glabri. Folia glaberrima lucida, subtus viridia. .... *P. glabrum*
- 5 { Folia infra fusciscenti-tomentosa, supra stellato-pilosa, ramorum juvenilium sæpe basi aperte cordata. Calyx fusciscenti-tomentosus. .... 6
- 5 { Folia infra albo-lanata supra glabriuscula, ramorum juvenilium basi sæpe imbricata. Calyx albo-lanatus. .... 7
- 6 { Folia infra in quaque vena primaria glandulibus linearibus 1-3. Corolla 4-7 cm. longa. .... *P. simile*
- 6 { Folia infra in medio venarum primariarum 1-glandulosa. Corolla

- 10 cm. longa. .... *P. macrophyllum*
- 7 { Calyculus calyce 2-3 plo (vulgo duplo) breviores. Folia supra viridissima lucida, subtus juventute tomentosa adulta valde venosa. .... *P. abutiloides*
- 8 { Calyculus calyce 2-4 plo (vulgo 3-4 plo) breviores. Folia subtus juventute adpresse pubescentia, venis modestis. .... 8
- 8 { Folia ramorum floriferorum cordata vel cordato-ovata. .... *P. tiliacifolium*
- 8 { Folia adpressissime ciliata, ramorum floriferorum distincte dimorpha, alia cordata, alia elongata plus minus angulata. .... *P. tiliacifolium* var. *heterophyllum*

1) **Paritium abutiloides** G. DON, Gen. Hist. Dichl. Pl. I 485 (1831).  
Syn. *Malva arborea maritima* etc. SLOAN, Nat. Hist. Jamaica 215 t. 135 fig. 4 (1707).

*Hibiscus abutiloides* WILLDENOW, Enum. Pl. Hort. Berol. 736 (1809).

*Hibiscus arboreus* DESVAUX in HAMILTON, Prodr. Fl. Ind. Occid. 49 (1825).

*Paritium tiliaceum* A. ST. HILAIRE, Fl. Brasil. Merid. I, 256 (1827); GRISEBACH, Fl. Brit. West. Ind. Isl. 86 (1864); etc.

*Hibiscus tiliaceus* (non L.) CHAPMAN, Fl. South. Unit. States 58 (1872); etc.

Hab. in Florida, Mexico, Equador, India occid., Columbia, et Brasilia.

This American species differs from *Hibiscus tiliaceus* of Old World with its dark green shining, more venose leaves, deeper and longer lobes of outer calyx, and shorter peduncles.

2) **Paritium boninense** NAKAI, comb. nov.  
Syn. *Hibiscus boninensis* NAKAI in Tokyo Bot. Mag. XXVIII, 311 (1914).

Hab. in Bonin.

3) **Paritium elatum** G. DON, Gen. Hist. Dich. Pl. I, 485 (1831).  
Syn. *Malva arborea, foliis rotundis, cortice in funes ductili, flore miniato*

*maximo liliaceo* etc. SLOAN, Nat. Hist. Jamaica 215 t. 315 fig. 1-3 (1707).

*Hibiscus elatus* SWARTZ, Fl. Ind. Occid. II, 1218 (1800); A. P. DE CANDOLLE, Prodr. I, 454 (1824); GRISEBACH, Fl. Brit. West. Ind. Isl. 86 (1864); etc.

Hab. in Florida, India occid.

4) **Paritium glabrum** NAKAI, comb. nov.  
Syn. *Paritium tiliaceum*  $\beta?$  *foliis utrinque glabris* etc. HOODER & ARNOTT, Bot. Captain BEECHEY'S Voy. 259 (1838).

*Hibiscus tiliaceus* var. *glabra* MATSUMURA apud HATTORI in Journ. Coll. Sci. Tokyo XXIII, Art. 10, 30 (1908); MATSUMURA, Ind. Pl. Jap. II, pt. 2, 350 (1912).

*Hibiscus glaber* MATSUMURA ex NAKAI in Tokyo Bot. Mag. XXVIII, 310 (1919).

Hab. in Bonin.

5) **Paritium Hamabo** NAKAI  
(Tab. X)

*Paritium Hamabo* NAKAI, comb. nov.  
Syn. *Hibiscus Hamabo* SIEBOLD & ZUCCARINI, Fl. Jap. II, 176 t. 93 (1841); MIQUEL in Ann. Mus. Bot. Lugd. Bat. III, 19 (1867); Prol. Fl. Jap. 207 (1867); FRANCHET & SAVATIER, Enum. Pl. Jap. I, 63 (1874); ITO, Catal. Pl. Koishikawa Bot. Gard. 15 (1877); MATSUMURA, Nippon Shokubutsumei 92 (1884), Catal. Pl. Herb. Coll. Sci. Tokyo 27 (1886); OKUBO, Catal. Pl. Bot. Gard. Imp. Univ. 33 (1887); DIPPEL, Handb. Laubholzk. III, 54 f. 33 (1893); HOCHREUTNER in Ann. Conserv. Jard. Bot. Genère IV, 66 (1900); SCHNEIDER, Illus. Handb. Laubholzk. II, 391 (1909); NAKAI, Veget. Isl. Quelpært 64 n. 886 (1914); MORI, Enum. Pl. Cor. 249 (1922); MAKINO & NEMOTO, Fl. Jap. 566 (1925); ed. 2, 725 (1931).

*Hibiscus tiliaceus* var. *Hamabo* MAXIMOWICZ in Bull. Acad. Imp. Sci. St. Pétersb. XXXI, 20 (1886), in Mém. Biol. XII, 427 (1886); MATSUMURA, Shokubutsu Meii 142 (1895); ITO & MATSUMURA in Journ. Coll. Sci. Tokyo XII, 72 (1899); MATSU-



MURA, Ind. Pl. Jap. II, pt. 2, 350 (1912).

Frutex 3-5 metralis altus ramosissimus. Rami hornotini pilis stellatis glauco-lanuginosi. Stipulae oblongae vel ellipticae, intus virides pilis stellatis pilosae, extus pilis stellatis lanatae, deciduae. Petioli 5-30 mm. longi teretes pilis stellatis lanati. Lamina foliorum depressorotundata vel subquingularis vel latissime obovata 22-75 mm. longa 23-90 mm. lata, supra viridis pilis stellatis 3-9 radiatis adpressis scabra, infra pilis stellatis dimorphis lanata, supra medium obscure repando-dentata, palmatim 5-nerva. Flores axillari- vel terminali-solitarii. Pedunculi sub anthesin 7-12 mm. longi robusti pilis stellatis lanati. Calyculus 8-10 mm. longus lanceolato-10-lobatus pilis stellatis lanatus, persistens. Calyx 18-25 mm. longus ovato-5-lobatus, lobis distincte 3-nerviis, persistens. Corolla decidua, flava demum parce erubescens fundo atro-purpurea, petalis rotundatis 40-60 mm. longis intus subglabris extus ciliolatis, basi columnae staminum adhaerentibus. Columna staminum 15-18 mm. longa. Antherae reniformes 1.2-1.5 mm. latae. Styli exerti, stigmatibus 5-lobatis. Capsula fusco-tomentosa ovoidea acuminata 20-30 mm. longa 5-loculata, loculicide 5-valvata. Semina fusca reniformia 5 mm. longa verrucosa.

Nom. Jap. *Hamabô*.

Hab.

Quelpaert: in rupibus littoris Hpaltai (E. TAQUET n. 597, Oct. 1908); in littore (E. TAQUET n. 2698, Aug. 1909; n. 4139, Sept. 1910).

Distr. Liukiu, Kiusiu, Tsusima, Sikoku, Hondo.

6) **Paritium macrophyllum** G. DON, Gen. Hist. Dichl. Pl. I, 485 (1831); DRURY, Handb. Ind. Fl. 74 (1864).

Syn. *Hibiscus macrophyllus* ROXBURGH, Hort. Benghal. 51 (1814), nom. nud.; HORNEMANN, Suppl. Hort. Bot. Hafniensis 149 (1819); A. P. DE CANDOLLE, Prodr. I, 455 (1824), etc.

*Hibiscus vulpinus* REINWARDT apud BLUME, Catal. Buitenzorg 88 (1823), nom. nud.; MIQUEL, Pl. Junghun. 281 (1851), Fl. Ind. Bat. I, pt. 2, 157 (1859).

*Hibiscus spathaceus* BLUME, Bijdr. 2 stuk 72 (1825).

*Hibiscus setosus* ROXBURGH, Fl. Ind. ed. 2, 194 (1832).

Hab. in India. Malaya, Java.

7) **Paritium simile** G. DON, Gen. Hist. Dichl. Pl. I, 485 (1831).

Syn. *Hibiscus similis* BLUME, Bijdr. 2 Stuk 72 (1825).

*Hibiscus elatus* (non SWARTZ) MIQUEL, Pl. Junghuhn. 280 (1851), Fl. Ind. Bat. I, pt. 2, 154 (1859).

Hab. in Sumatra, Java, Amboina.

8) **Paritium tiliæfolium** NAKAI, comb. nov.

Syn. *Navella repens* [RUMPHIUS, Herb. Amboin. II, 222 t. 73 (1741)].

*Hibiscus tiliaceus* LINNAEUS, Sp. Pl. ed. 1, II, 694 (1753); ed. 2, II, 976 (1763), excl. syn. *Malva arborea maritima*.

*Hibiscus tiliæfolius* SALISBURY, Prodr. Stirp. Hort. Chapel Allerton vident. 383 (1796).

*Paritium tiliaceum* (non A. DE ST. HILAIRE) G. DON, Gen. Hist. Dichl. Pl. I, 485 (1831), etc.

*Hibiscus tortuosus* ROXBURGH, Fl. Ind. ed. 2, III, 192 (1832).

*Hibiscus tiliaceus* var. *tortuosus* MASTERS in HOOKER fil., Fl. Brit. Ind. I, 343 (1874).

*Hibiscus tiliaceus*  $\alpha$ . *genuinus* f. *tortuosa* HOCHREUTNER in Ann. Conserv. Jard. Bot. Genre IV, 63 (1900).

Hab. in India, Malaya, Sumatra, Java, Madeira, Amboina, Borneo, Celebes, Banka, Australia bor.-orient. Insulae Pacificae, Philippin, China (Kwangtung, Hainan), Indo-China, Philippin, Formosa, Liukiu, Bonin.

**Paritium tiliæfolium** var. **heterophyllum** NAKAI, comb. nov.

Syn. *Hibiscus tiliaceus* var. *heterophyllus* NAKAI in Tokyo Bot. Mag. XXVIII, 310 (1914).

Hab. in Bonin, Formosa, Philippin.

ガン カウ ラン  
岩 高 蘭 科

**Empetraceæ** LINDLEY

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### (2) 朝鮮産岩高蘭科植物研究ノ歴史ト其効用

1911年 中井猛之進ハ Flora Koreana 第2巻ニがんかうらんガ濟州島ニアル事ヲ記ス。

1914年 同人ハ濟州島植物調査報告書ニ同種ヲ記ス。

1918年 同人ハ白頭山植物調査書中ニモ同種ヲ記ス。

1922年 森爲三ハ朝鮮植物名彙ニ同種ヲ記ス。

がんかうらんハ高山ノ乾地ニ生ヘ豆大ノ黒色ノ漿果ヲ結ブ。其ハ可ナリ美味ノモノデアアル。濟州島ノ住民ハ之ヲ「しろみ」ト云ヒ食用ニ供スル許リデナク古來仙人ノ食スル不老長生ノ果實ダト考ヘテ居ル。事實ハ保證ノ限リデハナイガ昔濟州島ヲ東瀛州ト云ツタ頃漢拏山上ニ産スル此果實ハ不老不死ノ木ノ實デアアルト謂ハレテ居タト言ヒ傳ヘテ居ル。近來盆栽ニスル爲メ濟州島デハ禁ヲ犯シテ之ヲ根コソギ採掘スル爲メ非常ニ其個數ヲ減ジタノハ惜シイ事デアアル。朝鮮デハ濟州島ノ漢拏山上ノ白頭山ノ近ニアル無頭峯ト南胞胎山トニヨリナイモノデアアルカラ濟州島ノモノハ宜シク天然紀念物トシテ保護ヲシタラヨイ。歐洲ニアルがんかうらんハ *Empetrum nigrum* L. 其物デアアルガ東亞ノがんかうらん *Empetrum nigrum* var. *asiaticum* NAKAI トハ異リ其果實ハ苦クテ到底食ベラレヌ。恰度くろみのうぐひすかぐら屬 *Lonicera caerulea* L. var. *edulis* REGEL, *Lonicera caerulea* var. *emphyllocalyx* NAKAI ニ對スル歐洲ノ *Lonicera caerulea* L. ヤ、くろまめのき(ツルチユツク) *Vaccinium Fauriei* LÉVEILLÉ 對歐洲ノ *Vaccinium uliginosum* L. 又ハ若葉ノ食ベラレルよもぎ *Artemisia asiatica* NAKAI ヤ ひめよもぎ *Artemisia lavandulifolia* DC ニ對スル食用ニナラヌ歐洲ノ *Artemisia vulgaris* L. トノ關係ニアルモノデ此點丈ケデモ東亞ハ歐洲ヨリモ惠マレテ居ル土地ト謂ヘル。

### (3) 朝鮮産岩高蘭科植物ノ分類

#### 岩高蘭科

小サキ匍匐性ノ分岐多キ灌木、雌雄異株又ハ多性、葉ハ密ニ互生シ小サク、單葉無柄又ハ極メテ短キ葉柄アリ、托葉ナク葉縁ハ下側ニ折レ曲リ其爲メニ生ジタル第2次的ノ葉縁ニハ小鋸齒アリテ腺毛ヲ生ズ。裏面ニハ短柄アル腺アリ。花ハ葉腋又ハ枝ノ先ニ聚生ス。花被ハ1列又ハホボ2列、花被片ハ4-6個ニシテ相重ナル。雄蕊ハ2-3(4)個、花絲ハ絲狀開出シ離生、葯ハ2室内向背部ニテ花絲ニツキ縦裂ス。雌花ニアリテハ發育セズ。

子房ハ雄花ニテハナキカ又ハ痕跡アリ雌花ニテハ無柄 2-9 個ノ心皮ヨリ成リ 2-9 室、花柱ハナキカ又ハ圓柱狀、柱頭ハ子房ノ室數ト同數ニ分ル。卵子ハ各室ニ 1 個宛アリテ内側中軸ニツキ屈生、果實ハ漿果 2-9 個ノ核ヲ有シ各核ニハ 1 個ノ種子ヲ藏ス。種皮ハ薄膜質、胚乳アリ。胚ハ中央ニアリテ曲ラズ。子葉ハ極小。

3 屬ニ屬スル 7 種ノ植物之ニ屬シ亞細亞、歐羅巴、南北亞米利加ニ産ス。朝鮮ニハ唯 1 屬アルノミ。

### がんかうらん屬

匍匐性ノ小灌木雌雄異株、葉ハ常緑ニシテ基ニ關節アリ、苞ハ 2-4 (5) 個、萼ハ 3 個相重ナル。花瓣ハ 3 個萼片ヨリモ大ナリ。雄蕊 3 個葯ハ背着内向、子房ハ上位 6-9 室、柱頭ハ 6-9 個射出ス。花柱ハ短シ、果實ハ漿質、黑色、紅色、白色、紫色等アリ、6-9 個ノ核ハ輪狀ニ排列ス。

亞細亞、歐羅巴、南北亞米利加ノ高山又ハ周北極地方ニ 5 種アリ、朝鮮ニ 1 種アリ。

### がんかうらん

(朝鮮名) シロミ、シルム

(第 X 圖)

雌雄異株ノ小灌木ニシテ幹ノ直徑ハ最モ太キモノニテモ 10-15 mm. 許ナリ。分岐多ク主幹ハ横臥シ枝ハ傾上ス。小枝ハ帶紅栗色又ハ帶黑褐紫色、2-3 年生ノ枝ニハ相踵グ葉痕アリ、表面ニ縮毛ト腺毛トアリ、葉ハ互生又ハ輪生密生シ殆ンド無柄基脚ニ關節アリ。長サ 2-6 mm. 幅 0.7-1 mm. 先ハヤ、トガルカ又ハ丸ク縁ハ裏面ニ折レテ重ナル爲メ第 2 次ノ縁ヲ生ズ此縁ニハ小鋸齒アリ、又若キ時ニハ有柄ノ小腺毛アリ、表面ハ光澤ニ富ミ裏ハ折リ重ナル縁ヲ以テ中洞ヲ作り内ニ有柄ノ小腺毛アリ、又ハ眞ノ葉縁ハ相接シ且ツ毛ヲ生ズ。苞ハ 2 個兩側ニ對生シ紅色長サ 1-1.5 mm. 先端部ノ縁ニハ鬚毛アリ。萼片ハ 3 個廣卵形紅色、縁ハ相重ナル。花瓣ハ 3 個萼片ト互生シ倒卵長橢圓形帶紅色雌花ニテハ長サ 2.5 mm. 雄花ニテハ 1.5-2 mm. 雄蕊ハ花瓣ト互生シ 3 個、長サ 7-8 mm. 葯ハ背着、球形又ハ倒卵形兩端凹入シ側方ニテ縱裂ス。子房ハ扁球形綠色、花柱ハ長サ約 1 mm. 柱頭ハ 7-9 個射出シ下ニ反ル。漿果ハ球形直徑 6-8 mm. 黒熟シ甘味ナリ。

咸北(無頭峯、南胞胎山)、濟州島(漢學山 1700 m. 以上)ニ産ス。

*Empetraceae* LINDLEY, Nat. Syst. Bot. 117 (1836); Veget. Kingd. ed. 1, 285 (1846); AGARDH, Theor. Syst. Pl. 103 t. X, f. 1-2 (1858);

ALP. DE CANDOLLE, Prodr. XVI, pt. 1, 24 (1869); EICHLER, Blüthen-diagr. II. 403 (1878); BENTHAM & HOOKER, Gen. Pl. III, 413 (1880); PAX in ENGLER & PRANTL, Nat. Pflanzenfam. III, Abt. 5, 123 (1890). Syn. *Cisti* ADANSON, Fam. Pl. 434 (1763), pro parte.

*Erica* JUSSIEU, Gen. Pl. 159 (1789), pro parte; J. St. HILAIRE, Exposit. Fam. Pl. I, 357 (1805).

*Bicornes* VENTENAT, Tab. Règne Végét. II, 458 (1799), pro parte. *Coniferae* Sect. *Empetreae* NUTTALL Gen. N. America II, 233 (1818).

*Empetreae* NUTTALL apud D. DON in Edinburgh New Phil. Journ. XVI, 61 (1826); W. J. HOOKER in Bot. Mag. LIV, sub t. 2758 (1827); LINDLEY, Syn. Brit. Fl. ed. 1, 224 (1829), Introd. Bot. 109 (1830); BARTLING, Ord. Nat. Pl. 372 (1830); SPACH, Hist. Végét. II, 482 (1834); MEISNER, Pl. Vasc. Gen. I, 336 (1836); KOCH, Syn. Fl. Germ. & Helv. 625 (1837); ENDLICHER, Gen. 1105 (1840).

*Empetrineae* DUMORTIER, Analyse 80 (1829).

*Rutaceae-Empetreae* REICHENBACH, Fl. Germ. Excurs. II, 765 (1832).

*Ericaceae-Empetreae* BAILLON, Hist. Pl. XI, 193 (1891).

Fruticuli debiles, dioici rarissime polygami. Folia alterna v. verticillatim congesta parva simplicia sessilia vel subsessilia exstipullata margine falcato-reflexa et margines secundarias sæpe serrulatas formantia, subtus pilosa vel glandulosa. Flores axillares vel terminali-congesti. Perigonium uniseriale vel subbiseriale, segmentis 4-6 imbricatis. Stamina 2-3 (4); filamenta filiformia patentia libera; antheræ biloculares introrsæ dorsifixæ longitudine dehiscentes, in flore ♀ abortiva. Ovarium in floribus ♂ nullum vel abortivum, in floribus fæmineis sessile ex carpidiis 2-9 constitutum, 2-9 locale. Styli subnulli vel columnares, stigmatibus loculis ovarii isomeris. Ovulum in angulo locularum ventrale affixum in quoque loculo solitarium, amphitropum. Fructus drupaceus succulentus, pyrenis 2-9 unispermis. Semen albuminosum cum testa membranacea. Embryo rectus centralis, cum cotyledonibus minimis.

Species 7 generum 3 in Asia, Europa et America incola. In Korea genus unicum adest.

**Empetrum** (non PLINIUS<sup>(1)</sup>, nec TRAGUS<sup>(2)</sup>). [TOURNEFORT, Instit. Rei Herb. 579 t. 421 (1700); BOERHAAVE, Ind. Pl. II, 173 (1720); LINNÆUS, Fl. Lapp. 305 (1737), Gen. Pl. ed. 1, 319 (1737)]; LINNÆUS, Sp. Pl. ed. 1, II, 1022 (1753), Gen. Pl. ed. 5, 447 n. 977 (1754), Syst. Nat. ed. auct. 140 (1756), Gen. Pl. ed. 6, 515 n. 1100 (1764) Syst. Nat. ed. 13, III, 649 (1770); MILLER, Gard. Dict. abridg. ed. I, En (1754); HILL, Brit. Herb. 511 (1756); HUDSON, Fl. Angl. ed. 1, 367 (1762); ADANSON, Fam. Pl. II, 448 (1763); GLEDITSCH Syst. Pl. 12 n. 41 (1764); HALLER, Hist. Stirp. Indig. Helv. II, 279 (1768); DIETRICH, Pflanzenreich 1148 (1770); MURRAY, Syst. Veget. ed. 13, 737 n. 1100 (1774); LAMARCK, Encyclop. I, pt. 2, 567 (1783); MURRAY, Syst. Veget. ed. 14, 880 n. 1101 (1784); GILLIBERT, Syst. Pl. Europ. IV, 532, 547 (1785); ALLIONI, Fl. Pedemont. I, 236 (1785); VILLARS, Hist. Dauphiné II, 288 (1787); SCHREBER, Gen. Pl. 676 n. 1496 (1789); JUSSIEU, Gen. Pl. 162 (1789); NECKER, Elem. Bot. II, 371 (1790); VITMAN, Summa Pl. V, 404 (1791); GMELIN, Syst. Nat. II, pt. 1, 90 & 209 (1791); GÆRTNER, Fruct. Sem. Pl. II, 107 t. 106 f. 1 (1791); HOST, Syn. Pl. Austr. 530 (1797); PERSOON, Syst. Veget. ed. 15, 923 n. 1100 (1797); SMITH, Engl. Bot. VII, 526 (1798); DIETRICH, Pflanzenreich ed. 2, III, 160 (1799); VENTENAT, Tab. Règn. Végét. II, 465 (1799); WITHERING, Syst. Arrangem. Brit. Pl. ed. 4, II, 176 (1801); WILLDENOW, Sp. Pl. IV, pt. 2, 712 (1804); J. ST. HILAIRE, Exposit. Fam. Pl. I, 363 (1805); SMITH, Fl. Brit. III, 1072 (1806); PERSOON, Syn. Pl. II, pt. 2, 605 (1807); LAPEYROUS, Hist. Arbrég. Pl. Pyrénées I, 604 (1813); LAMARCK & A. P. DE CANDOLLE, Fl. Franc. III, 685 (1815); D. DON in Edinburgh New Phil. Journ. XVI, 62 (1826); SPRENGEL, Syst. Veget. III, 893 (1826); LINDLEY, Syn. Brit. Fl. 224 (1829); LOISELEUR-DESLONGCHAMPS, Fl. Gall. II, 345 (1828); LECHMANN, Fl. Brunsvic. II, 312 (1829); REICHENBACH, Fl. Germ. Excurs. III, 685 (1832); NEES, Gen. Pl. Fl. Germ. III, n. 252 (1835); MUTEL, Fl. Franc. II, 270 (1835); MEISNER, Pl. Vasc. Gen. I, 336 (1836); KOCH, Syn. Fl. Germ. & Helv. ed. 1, 625 (1837); ENDLICHER, Gen. Pl. II, 1106 n. 5761 (1840); DÖLL, Rhein. Fl. 284 (1843); BERTELONI, Fl. Ital. X, 337 (1854); GRENIER & GODRON, Fl. Franc. III, pt. 1, 74 (1855); DÖLL, Fl. Grossherz. Baden II, 570 (1859);

(1) *Empetrum* of PLINIUS is *Solanum Dulcamara* L.

(2) *Empetrum* of TRAGUS is *Salsola Kali* L.

GRENIER, Fl. Chaîne Jurass. I, 150 (1864); ALP. DE CANDOLLE, Prodr. XVI, pt. 1, 25 (1869); BENTHAM & HOOKER, Gen. Pl. III, 414 (1880), Handb. Brit. Pl. 5 ed. 397 (1887); PAX in ENGLER & PRANTL, Nat. Pflanzenfam. III, Abt. 5, 127 (1890); BAILLON, Hist. Pl. XI, 193 (1891); BRITTON & BROWN, Illus. Fl. N.U.S. & Canada II, 383 (1897); THOMÈ, Fl. Deutsch. III, 241 t. 395 (1905).

Syn. *Erica baccifera* CLUSIUS, Hist. Pann. t. in 29 (1583); BAUHINUS, Pinax 486 (1623).

Fruticuli prostrati dioici. Folia sempervirentia conferta basi articulata. Bracteæ 2-4 (5). Sepala 3 imbricata. Petala 3 sepalis majora. Stamina 3; antheræ dorsifixæ introrsæ. Ovarium superum 6-9 locale. Stylus brevis vel subnullus. Stigmata 6-9 radiata. Fructus succosus edulis vel astringens, niger vel ruber vel albus vel purpureus. Pyrenæ 6-9 annulari-collocatæ.

Species 5 in Asia, Europa, America sept. & austr. incola. In Korea tantum unica est indigena.

**Empetrum nigrum** LINNÆUS, Sp. Pl. ed. 1, 1022 (1753), Fl. Suec. ed. 2, 354 (1755).

var. **asiaticum** NAKAI ex H. ITO in Tokyo Bot. Mag. XLVII, 895 (1933), nom.; NAKAI, Catal. Sem. & Spor. Hort. Bot. Univ. Tokyo (1936) 23, nom., Tôa Shokubutu 150, 167, 170, 173, 192 (1936), nom.

Syn. *Empetrum nigrum* (non LINNÆUS) CHAMISSE & SCHLECHTENDAL in Linnæa I, 538 (1826), pro parte; HOOKER & ARNOTT, Bot. Beechey Voy, pt. 3, 116 (1832); TRAUTVETTER in MIDDENDORF, Reise I, pt. 2, 8, 146, 154 (1847); LEDEBOUR, Fl. Ross. III, pt. 2, 555 (1849), pro parte; A. GRAY, Bot. Jap. 398 (1859); MAXIMOWICZ, Amur. 238 (1859); MIQUEL in Ann. Mus. Bot. Lugd. Bat. II, 167 (1866), Prol. 99 (1866); FR. SCHMIDT in Mém. Acad. Imp. Sci. St. Pétersb. 7 sér. XII, no. 2, 60 n. 321, 117 no. 376 (1868); FRANCHET & SAVATIER, Enum. Pl. Jap. I, 429 (1875); MATSUMURA, Nippon Shokubutsumei 73 (1884); MIYABE, Fl. Kurile 260 (1891); HERDER in Acta Hort. Petrop. XI, pt. 2, 350 (1892), pro parte; MATSUMURA, Shokubutsu Meii 113 (1895); KOMAROV in Acta Hort. Petrop. XXII, 791 (1903); MIYOSHI & MAKINO, Pocket Atlas

Alp. Pl. Jap. I, Pl. XXVI, f. 147 (1907); KOIDZUMI in Journ. Coll. Sci. Tokyo XXVII, art. 13, 87 (1910); NAKAI, Fl. Kor. II, 210 (1911); MATSUMURA, Ind. Pl. Jap. II, pt. 2, 311 (1912); NAKAI, Veget. Isl. Quelpaert 60 (1914); TAKEDA in Journ. Linn. Soc. XLII, 485 (1914); MIYABE & MIYAKE, Fl. Saghalien 433 (1915); NAKAI, Fl. Paiktusan 67 (1918); KUDO, Fl. Isl. Paramushir 129 (1922); MORI, Enum. Pl. Cor. 235 (1922); KUDO, Report Veget. N. Saghalien 175 (1924); MAKINO & NEMOTO, Fl. Jap. 629 (1925); TATEWAKI, Veget. Mt. Apoi 47 (1928); HULTEN in Kungl. Svens. Vet. Akad. Handl. VIII, no. 1, 122 (Fl. Kamtch. III) (1929), partim?; KOMAROV, Fl. Penins. Kamtsch. II, 300 (1929), partim?; MAKINO & NEMOTO, Fl. Jap, ed. 2, 664 (1931); TATEWAKI, Prelim. Survey Veget. M.-Kuriles in Journ. Facult. Agric. Hokkaido Imp. Univ. XXIX, no. 4, 138, 142, 144, 147, 153, 154, 156, 158, 159, 164, 171, 173, 174, 177, 179, 182, 184 (1931), List Pl. Teshio Univ. Experim. Forest (II) 193 (1932), Alp. Fl. Mt. Horo-nupuri in Acta Phytotax. & Geobot. II, no. 2, 88 (1933), Vasc. Pl. N. Kuriles in Bull. Biogeograph. Soc. Jap. IV, no. 4, 282 (1934), Kitami Rebuntô Shokubutu Gaikyô 10 (1934).

*Empetrum nigrum* f. *japonicum* [non GOOD in Journ. Linn. Soc. XLVII, 518 f. 3-4 (1927)] NAKAI, Veget. Daisetuzan Mts 50 (1930), Veget. Mt. Apoi 58 (1930).

Hæc varietas a typo in sequentibus ingeniis abhoret.

*Empetrum nigrum* L. var. *genuinum*.

Ramuli tantum papilloso-glandulosi. Folia vulgo oblonga. Bracteæ 4. Stamina petalis 2-2.5 plo longiora. Stylus nullus. Bacca vulgo amara.

*Empetrum nigrum* L. var. *asiaticum* (*Empetrum asiaticum* NAKAI).

Ramuli crispulo-hirsuti vel barbulati simulque papilloso-glandulosi. Folia vulgo lineari-oblonga. Bracteæ 2. Stamina petalis 3-4 plo longiora. Stylus circ. 1 mm. longus. Bacca dulcis edulis.

Fruticulus dioicus. Truncus usque 10-15 mm. latus, prostratus, ramis ramosis ascendentibus. Ramuli rubro-castanei vel atro-fusco-purpurei, biennes et triennes vulgo cicatrice foliorum imbricatum vestiti, hornoti pilis fuscis crispis pilosi vel barbulati atque stipitato-

glandulosi. Folia alterna vel verticillata dense congesta subsessilia basi articulata, 2-6 mm. longa 0.7-1 mm. lata apice acutiuscula vel obtusa, marginibus ciliolatis et revolutis et sub costa conniventibus, supra lucida et marginibus secundariis obscure serrulatis vel integris juventute sæpe papilloso-glandulosis, facie fossæ vel pagina inferiore vera glandulosis cum stipitibus cellulis 2-3 compositis papillosa. Bracteæ 2 laterali-oppositæ costato-falcatae rubescentes 1-1.5 mm. longæ circa apicem

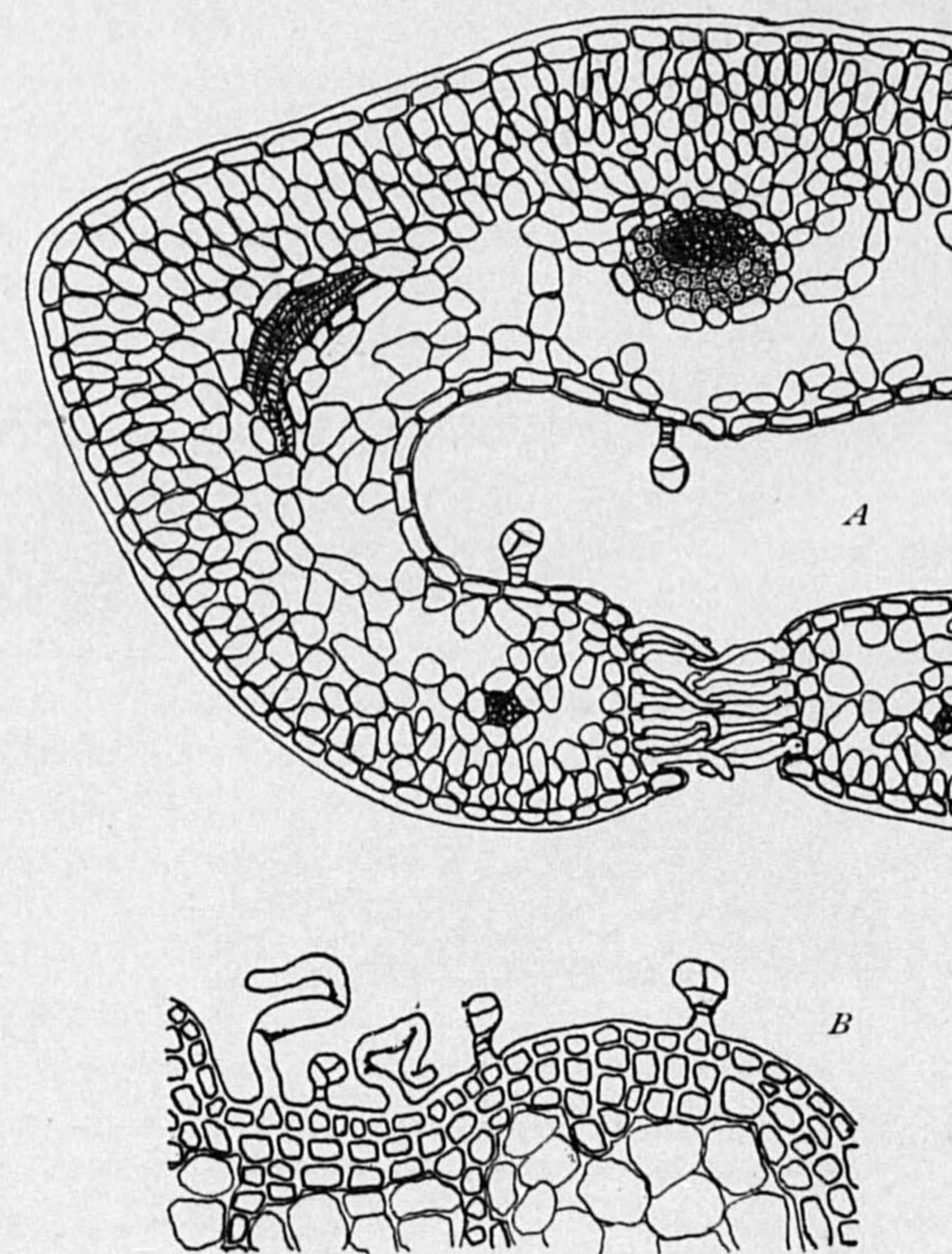


Fig. 2.

A. Larger half of cross-sectioned leaf of Asiatic *Empetrum*.  
 B. A part of cross section of branchlets of Asiatic *Empetrum*; curved hairs and stalked glands are seen at the edge. Magnified 100 times.  
 (Figures were drawn by Mr. Shidzuo MOMOSE)

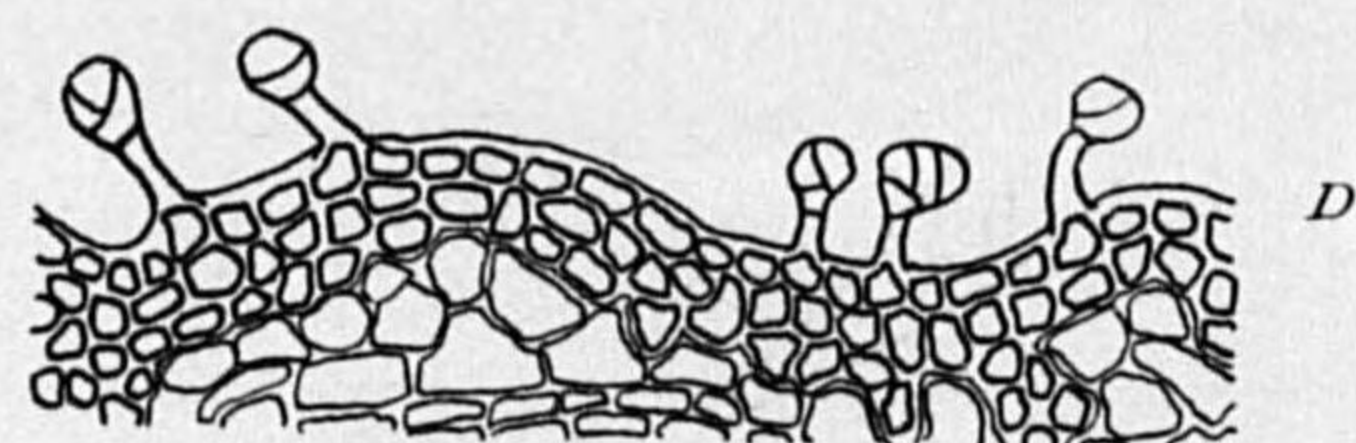
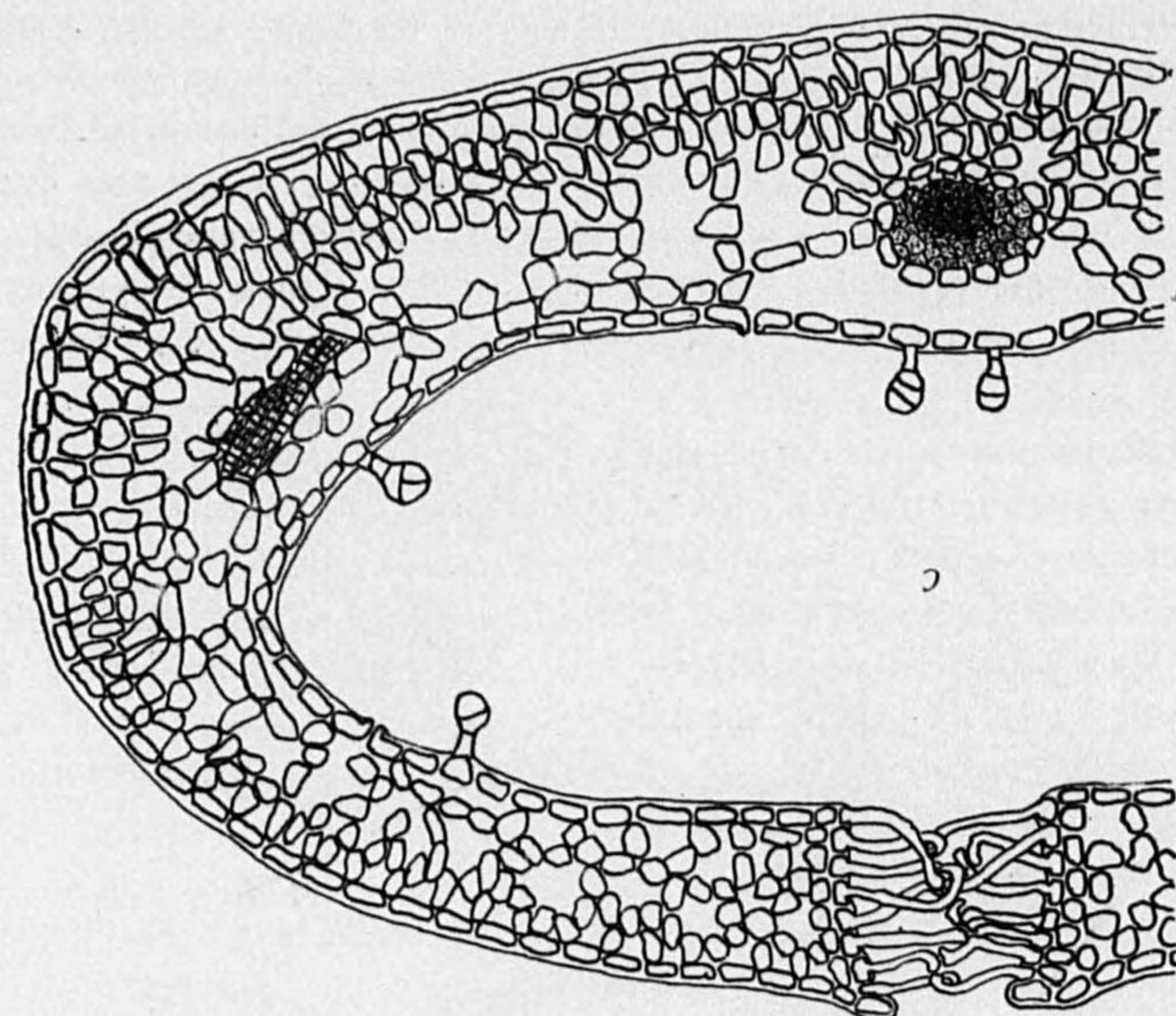


Fig. 3.

C. Larger half of cross-sectioned leaf of European *Empetrum*, in which lower gap of leaf far bigger than the Asiatic.  
 D. A part of cross section of branchlets of European *Empetrum*, no hairs are present and the stalk of glands is made of only one or two cells while in the Asiatic of two—four cells.

(All are magnified 100 times).

(Figures were drawn by Mr. SHIDZUO MOMOSE).

margine sub lente minutissime fimbriatæ. Sepala 3 late ovata falcato-imbricata rubescentia. Petala 3 sepalis alterna obovato-oblonga rubicunda, in floribus fæmineis 2.5 mm. longa. in floribus masculis 1.5-2

mm. longa. Stamina 3 petalis alterna 7-8 mm. longa; antheræ dorsifixæ rotundatæ vel obovatæ utrinque emarginatæ longitudine sublateralidehiscentes. Ovarium depresso-globosum viride. Styli circ. 1 mm. longi columnales. Stigmata 7-9 radiata et reflexa. Bacca globosa 6-8 mm. lata nigra vel parce pruinosa, dulcis vel dulcissimis.

Nom. Jap. *Gankōran*.

Nom. Quelpært. *Siroimi*, *Sirum*.

Hab.

Kanhoku: in monte Minami-Hōtaizan (M. FURUMI n. 201, 11, Jul. 1917); in monte Mutōhō (T. NAKAI n. 2191 fructif., 8 Aug. 1914).

Quelpært: in monte Hallasan (S. ICHIKAWA, fl. fæm., 1905); ibidem, in latere boreali 1850 m. (T. NAKAI n. 166, fl. ♂, 17 Maio 1913); ibidem, in latere australi 1800 m. (T. NAKAI n. 6274, alabastrif., 31 Oct. 1917); in monte Hallasan (T. MORI n. 96); in monte Hallasan 2000 m. (E. TAQUET n. 323, Oct. 1907); in apice Hallasan 2000 m. (U. FAURIE n. 1882, Jun. 1907); in monte Hallasan 1700 m. (E. TAQUET n. 4664, Aug. 1910).

Distr. var. Ussuri, Amur, Hondo, Yeso, Kuriles, Sachalin, Peninsula Kamtchatica.

I had tasted myself the fruits of the real *Empetrum nigrum* on Mt. Jungfrau in Switzerland, and in the coastal island of Sweden during my sojourn in Europe in 1924-1925. They were bitter and inedible. East Asiatic *Empetrum* has nice sweet edible fruits. Similar contrasts are also seen in the followings.

Europe	Asia
Inedible fruits of <i>Lonicera cerulea</i> L. ....	{ Edible fruits of <i>Lonicera edulis</i> TURCZANINOW.
	{ Edible fruits of <i>L. emphylocalyx</i> MAXIMOWICZ.
Inedible fruits of <i>Vaccinium uliginosum</i> L. ...	{ Edible fruits of <i>Vaccinium Fauriei</i> LÉVEILLÉ.
	{ Edible foliages of <i>Artemisia asiatica</i> NAKAI.
Inedible foliages of <i>Artemisia vulgaris</i> L. ....	{ ( <i>A. dubia</i> f. <i>asiatica</i> PAMPANINI).
	{ Edible foliages of <i>A. lavandulifolia</i> DC.



In the sterile specimens, the leaves of Asiatic *Empetrum* are remarkably narrower than the European. In this case, the respective relation is quite contradictory to the genus *Diapensia*. With the exception of *Stellaria media*, *Oxalis corniculata*, and a few circumpolar elements Asiatic plants differ from the European specifically or as a variety. The west flank of distribution of East-Asiatic plants is Baical-Davurian region as I had already noticed in the page 252 of Tokyo Botanical Magazine XLVII, 1933. This is probably due to the big gap made by the basins of the Obi and the Jenisei where had been the sea continued to Aral Sea and Caspian Sea until quite recent geological age. North American plants especially Canadian resemble more to the Asiatic than either to the European or to the American as their origin came from the Asiatic side over the Bering-district where the present two continents were connected until the American glacier had retired to the north arctic region,

イラ      クサ  
蕁      麻      科

**Urticaceæ** DUMORTIER

(1) 主要ナル引用書類

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EICHLER, A. W.	(13) <i>Urticaceae</i> , in Blüthendiagramme II, 49-54 (1878).
ENDLICHER, S.	(14) <i>Urticaceae</i> , in Prodrömus Floræ Norfolkicæ 37-40 (1833).

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(28) *Urticaceæ*, in *A Natural System of Botany* 175-178 (1836).
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(31) *Urtica*, in *Genera Plantarum* ed. 5, 423 (1754).  
(32) *Caturus*, in *Mantissa Plantarum* I, 19-20 (1767).  
(33) *Scabridæ*, in *Prælectiones in Ordines Naturales Plantarum*, ed. P. D. GISEKE, 593 (1792).
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- (55) *Urtica*, in Flora Japonica 69-71 (1784).
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## (2) 朝鮮産蕁麻科植物研究ノ歴史

1899年、英國ノ W. B. HEMSLEY 氏ハ The Journal of the Linnæan Society, Botany. XXVI 卷第6部ニ WILFORD, OLDHAM 兩氏ガ巨文島ニテ探リシ かねさう *Nanocnide japonica* BLUME, OLDHAM 氏ガ朝鮮群島ノ何地ニテ探リシ こけみづ *Pilea peploides* HOOKER & ARNOTT, CARLES 氏ガ京城ノ山ニテ探リシ *Bahmeria spicata* THUNBERG トヲ記ス。但シ最後ノモノハ くさこあかそ *Bahmeria paraspicata* NAKAI ヲ誤認セルモノナリ。

1900年 露國ノ JWAN PALIBIN 氏ハ Acta Horti Petropolitani 第XVIII 卷ニ朝鮮植物誌第2部ヲ發表シテ HEMSLEY 氏ノ記セシト同ジモノヲ列舉セリ。

1901年 露國ノ VLADIMIR KOMAROV 氏ハ Acta Horti Petropolitani 第XIX 卷ニ蕁麻科ノ新屬 *Bahmeriopsis pallida* KOMAROV ガ北鮮ニアル事ヲ記述セシガ之レハ蕁麻科植物ニ非ズシテ桑科植物ノ くはくさ屬ニ移スベキモノナリ。

1903年 同氏ハ Acta Horti Petropolitani 第XXII 卷ニ滿洲植物誌第2

部ヲ發表セシガ 其中ニ北鮮ニ次ノ蕁麻科植物アルヲ記ス。 *Urtica latevirens* MAXIMOWICZ, *Laportea bulbifera* MAXIMOWICZ, *Girardinia cuspidata* WEDDELL, *Achudenia japonica* MAXIMOWICZ, *Bahmeria japonica* MIQUEL, *Bahmeriopsis pallida* KOMAROV, *Parietaria debilis* FORSTER var. *micrantha* WEDDELL. 而シテ *Bahmeriopsis pallida* ヲ圖解セリ。但シ *Bahmeria japonica* ト鑑定セルハ くさこあかそ *Bahmeria paraspicata* NAKAI ニシテ *Bahmeriopsis pallida* ハ桑科ノ *Fatoua* ニ移スベキハ既記ノ如シ。

1911年 中井猛之進ハ 東京帝國大學理科大学 紀要 第31 卷ニ朝鮮植物誌 第II 部ヲ發表シ、其中ニ次ノ蕁麻科植物ヲ記セリ。

*Laportea bulbifera* MAXIMOWICZ     *Parietaria debilis* FORSTER var. *micrantha* WEDDELL

*Girardinia cuspidata* WEDDELL     *Pilea pumila* A. GRAY

*G. condensata* WEDDELL     *Pilea peploides* HOOKER & ARNOTT

*Urtica latevirens* MAXIMOWICZ     *Bahmeria spicata* THUNBERG

*Urtica angustifolia* FISCHER     *Bahmeria holosericea* BLUME

*Nanocnide japonica* BLUME     *Bahmeria japonica* MIQUEL

*Achudenia japonica* MAXIMOWICZ

其中 *Pilea pumila* ハあをみづ *Pilea viridissima* MAKINO, *Bahmeria holosericea* BLUME ハさいかいかやぶまを *Bahmeria pannosa* SATAKE, *Bahmeria japonica* MIQUEL ハくさこあかそ *Bahmeria paraspicata* NAKAI ニ改ムベシ。

1914年 4月 中井猛之進 提出ノ 濟州島植物調査報告書ト 莞島植物調査報告書トヲ併セテ朝鮮總督府ヨリ出版アリ 其中ニアル蕁麻科植物ハ 16 種 1 變種ナリ。

*Achudenia japonica* MAXIMOWICZ やまみづ

*Bahmeria japonica* MIQUEL.....おほあかそ *Bahmeria tricuspis* MAKINO  
ニ改ム。

*Bahmeria holosericea* BLUME.....さいかいかやぶまを *Bahmeria pannosa*  
SATAKE ニ改ム。

*Bahmeria nivea* HOOKER & ARNOTT.....一部ハまを *Bahmeria frutescens* THUNBERG ニ改ム。

*Bahmeria Sieboldiana* BLUME なかじばやぶまを

*B. Sieboldiana* var. *scabra* NAKAI.....濟州なかじばやぶまを *Bahmeria Nakaiana* SATAKE ニ改ム。

*Bahmeria Taquetii* NAKAI 濟州あかそ

- Bahmeria spicata* THUNBERG こあかそ  
*Elatostemma sessile* FORSTER var. *cuspidata* WEDDELL ときほこり.....  
 學名ハ近時 *Elatostemma nipponica* MAKINO ト改メラレタリ。  
*Elatostemma umbellata* BLUME ひめうはばみさう  
*Laportea bulbifera* WEDDELL むかごいらくさ  
*Nanocnide japonica* BLUME かてんさう  
*Pellionia scabra* BENTHAM きみづ  
*Pilea Hamaoi* MAKINO みづ.....耽羅みづ *Pilea Taquetii* NAKAI = 改ム。  
*Pilea peploides* HOOKER & ARNOTT こけみづ  
*Pilea viridissima* MAKINO あをみづ  
*Urtica latevirens* MAXIMOWICZ こばのいらくさ  
 同年5月中井猛之進ハ FEDDE 氏監修ノ Repertorium Specierum Novarum Regni Vegetabilis 第 XIII 卷ニ *Bahmeria Taquetii* ノ記相文ヲ載ス。  
 1915 年 中井猛之進ノ智異山植物調査報告書ガ 總督府ヨリ出版サレシ中ニハ次ノ3種ノ蕁麻科植物アリ。  
*Bahmeria japonica* MIQUEL.....くさこあかそ *Bahmeria paraspicata* NAKAI = 改ム。  
*Pilea peploides* HOOKER & ARNOTT こけみづ  
*Urtica angustifolia* FISCHER.....なかばいらくさ *Urtica sikokiana* MAKINO = 改ム。  
 1916 年 中井猛之進ハ朝鮮彙報特別號ニ鷲峯植物ノ調査ト題シテ一文ヲ草セシ中ニハ蕁麻科植物ハ唯ほそばいらくさ *Urtica angustifolia* FISCHER 一種ノミヲ擧グ。  
 1918 年 中井猛之進提出ノ金剛山植物調査書ガ 總督府ヨリ出版セララル。其中ニ記シアル蕁麻科植物ハ次ノ8種ナリ。  
*Bahmeria japonica* MIQUEL.....くさこあかそ *Bahmeria paraspicata* NAKAI = 改ム。  
*Bahmeria spicata* THUNBERG.....同上ニ改ム。  
*Laportea bulbifera* WEDDELL むかごいらくさ  
*Parietaria debilis* FORSTER var. *micrantha* WEDDELL ひかげみづ  
*Pilea peploides* HOOKER & ARNOTT こけみづ  
*Pilea viridissima* MAKINO あをみづ  
*Urtica angustifolia* FISCHER ほそばいらくさ

- Urtica latevirens* MAXIMOWICZ こばのいらくさ  
 1919 年3月中井猛之進ハ東京植物學雜誌ニ咸北七寶山産ノ新種つるみづ *Parietaria coreana* NAKAI ヲ記載發表ス。  
 1919 年4月中井猛之進提出ノ鬱陵島植物調査書ガ 總督府ヨリ出版セララル。其中ニアル蕁麻科植物ハ次ノ4種ナリ。  
*Bahmeria nivea* GAUDICHAUD なんばんからむし  
*Bahmeria spicata* THUNBERG こあかそ  
*Bahmeria tricuspis* MAKINO おほあかそ  
*Urtica japonica* MAXIMOWICZ いらくさ.....*Urtica latevirens* MAXIMOWICZ var. *robusta* F. MAEKAWA = 改ム。  
 1921 年9月中井猛之進ハ東京植物學雜誌第35卷ニ平北、咸南ノ一新みづナルおくやまみづ *Pilea oligantha* NAKAI ト更ニ濟州島ノ耽羅みづ *Pilea Taquetii* NAKAI トヲ記述ス。  
 1922 年森爲三氏編朝鮮植物名彙ガ 總督府ヨリ出版セララル。其中ニアル蕁麻科植物ハ次ノ如シ。  
*Achudenia japonica* MAXIMOWICZ やまみづ  
*Bahmeria japonica* MIQUEL あかそ.....*Bahmeria paraspicata* NAKAI くさこあかそナリ。  
*Bahmeria holosericea* BLUME のまを.....*Bahmeria pannosa* SATAKE さいかいやぶまをナリ。  
*Bahmeria nivea* GAUDICHAUD まを.....一部ハ *Bahmeria frutescens* THUNBERG まを、一部ハ *Bahmeria nivea* GAUDICHAUD なんばんからむしナリ。  
*Bahmeria platanifolia* FRANCHET & SAVATIER おほやぶまを.....  
*Bahmeria longispica* STEUDEL やぶまをナリ。  
*Bahmeria Sieboldiana* BLUME なかばやぶまを  
*Bahmeria Sieboldiana* var. *scabra* NAKAI.....*Bahmeria Nakaiana* SATAKE さいしうなかばやぶまをナリ。  
*Bahmeria Taquetii* NAKAI さいしうあかを  
*Bahmeria tricuspis* MAKINO おほあかそ  
*Elatostemma sessilis* FORSTER var. *cuspidata* WEDDELL ときほこり.....  
 學名ハ *Elatostemma nipponica* MAKINO ナリ。  
*Elatostemma umbellata* BLUME ひめうはばみさう  
*Girardinia cuspidata* WEDDELL おほいらくさ.....次ノおにいらくさニ

同じ。

*Girardinia condensata* WEDDELL おにいらくさ

*Laportea bulbifera* WEDDELL むかごいらくさ

*Nanocnide japonica* BLUME かてんさう

*Parietaria coreana* NAKAI つるみづ

*Parietaria debilis* FORSTER var. *micrantha* WEDDELL ひかげみづ.....

*Parietaria micrantha* LEDEBOUR = 同ジ。

*Pellionia scabra* BENTHAM きみづ..... 學名ハ *Polychroa scabra* HU = 改ム。

*Pilea Hamaoi* MAKINO みづ..... 1部ハ おくやまみづ *Pilea oligantha* NAKAI ニシテ 1部ハ 耽羅みづ *Pilea Taquetii* NAKAI ナリ。

*Pilea oligantha* NAKAI おくやまみづ

*Pilea peploides* HOOKER & ARNOTT こけみづ

*Pilea Taquetii* NAKAI 耽羅みづ

*Pilea viridissima* MAKINO あをみづ

*Urtica angustifolia* FISCHER ほそばいらくさ..... 1部ハ なかがばいらくさ *Urtica sikokiana* MAKINO ナリ。

*Urtica latevirens* MAXIMOWICZ こばのいらくさ

*Urtica japonica* MAXIMOWICZ いらくさ..... *Urtica latevirens* var. *robusta* F. MAEKAWA ナリ。

### (3) 朝鮮産蕁麻科植物ノ効用

蕁麻科植物ハ麻科植物ト共ニ纖維植物トシテ著名ノモノデア。殊ニらみー (Ramie) ト云フノハ學名ヲ *Bœhmeria utilis* ANDRÉ ト云ヒ丈モ高ク育チ纖維モ良質デア。ガ暖地ヲ好ムカラ朝鮮デハ濟州島ガ最適地デア。之ニ次デ纖維ヲ利用シ得ルモノハ南蠻カラむし。からむし、西海やぶまを、やぶまを、おほあかそナドデア。ガ殊ニからむし類ハ良質ノ纖維ヲ採ル原料植物デア。廣意ノらみーヲナシテ居ル。隣邦滿洲國デハ年々百數十萬圓ノらみーヲ南洋カラ輸入シテ居ルニ鑑ミカラむし類ノ適地デア。中鮮以南デ副業的ニ栽植スルノハ有利ナ事ト考ヘル。殊ニからむしハ堤防ニ植エテ土砂ヲ防ギ出來ノ悪イ丈ノ低イモノハ唯纖維ヲ集メテ椅子、「ソファー」等ノ綿ノ代用品ニスレバ綿ヨリモ良質デア。又縦リ合セテ丈夫ナ綱ニスル事モ出來ル。殊ニ唐米袋、雜穀袋ニハ最適當デア。

ひめうはばみさう。みづ等ハ何レモ食用トナル。雜草ヲ何ニヨラズ食ベ

ル鮮人ニハ上等ナ「なむる」デア。ル。

之ニ反シテ本科中最モ厄介ナモノハいらくさノ類デア。殊ニほそばいらくさ、おにいらくさノ如キハ纖維ヲ利用スルヨリモ如何ニシテ之ヲ絶スベキカガ先決問題デア。山林ニ入ルモノガ此等ノ植物ノ刺毛ニ觸レテ刺サレタ時ハ酷シイ場合ニハ蜂ニ刺サレタ以上ニ痛ム事モアル。

### (4) 朝鮮産蕁麻科植物ノ分類

#### 蕁麻科

1年生又ハ多年生；草本、半灌木、灌木又ハ喬木、有毛又ハ刺毛アリ稀ニ乳管ヲ有スルモノモアル。葉ハ互生又ハ對生、有柄、有鋸齒又ハ全縁、托葉アリ。花ハ雌雄同株又ハ異株稀ニ兩全、葉腋ニ密集スルモノ、穗狀花序ヲナスモノ、頭狀花序ヲナスモノ、圓錐花叢ヲナスモノナドアリ。花被片ハ4又ハ5個又ハ2又ハ3個離生又ハ合萼、花瓣ナシ、雄蕊ハ花被片ト同數ニシテ花被片ニ對生シ蕾ニアリテハ内曲シ、花絲ハ離生又ハ基部相癒合ス。葯ハ背着、側方ニ開ク、但シ雌花ニテハ雄蕊ナキカ又ハ痕跡アルノミ。子房ハ1室、上位、卵子ハ1個基生直立ス。花柱ハ1個分岐セヌモノ2岐スルモノ、毛筆狀ニ分レルモノ、楕形ニ開クモノナドアリ。果實ハ瘦果堅キ果皮ヲ有シ永存性ノ花被又ハ漿質ノ花被ニ包マル。胚乳ハ脂質、幼根ハ上向。

43屬ニ屬スル600餘種ニ屬シ、全世界ノ温帶、暖帶、熱帶地方ニ廣ク分布ス。其中朝鮮ニ次ノ各種アリ。

1. *Achudenia japonica* MAXIMOWICZ in Bull. Acad. Sci. St. Pétersb. XXII, 241 (1877).  
やまみづ 濟州島
2. *Bœhmeria frutescens* THUNBERG in Trans. Linn. Soc. II, 330 (1794).  
まを 濟州島
3. *Bœhmeria hirtella* SATAKE, sp. nov.  
けなかがばやぶまを 濟州島
4. *Bœhmeria longispica* STEUDEL, Fl. Regensb. 260 (1850).  
やぶまを 濟州島、巨文島、大青島
5. *Bœhmeria Nakaiana* SATAKE, sp. nov.  
濟州なかがばやぶまを 濟州島
6. *Bœhmeria nivea* (L.) HOOKER & ARNOTT, Bot. Capt. BEECHY'S

- Voy. pt. 5, 214 (1836).  
南蠻からむし 濟州島、全南、鬱陵島  
モシ (濟州島)
7. *Boehmeria pannosa* SATAKE, sp. nov.  
西海やぶまを 濟州島、巨文島、慶南  
ブクチン (濟州島)
8. *Boehmeria paraspicata* NAKAI, Veget. Mt. Apoi 19 (1930), cum  
diagn. Jap.  
くさこあかそ 慶南、京畿、江原、平南、咸南
9. *Boehmeria quelpaertensis* SATAKE, sp. nov.  
耽羅やぶまを 濟州島
10. *Boehmeria Sieboldiana* BLUME, Mus. Bot. Lugd. Bat. II, 220  
(1856).  
なかばやぶまを 濟州島
11. *Boehmeria spicata* THUNBERG in Trans. Linn. Soc. II, 330 (1794).  
あかそ 濟州島、全南、慶南、慶北、鬱  
サンヂン (濟州島) 陵島、忠南、黄海、平南
12. *Boehmeria Taquetii* NAKAI, Veget. Isl. Quelpaert 39 (1914), nom.  
nud., in FEDDE, Repert. XIII, 267 (1914).  
濟州あかそ 濟州島
13. *Boehmeria tricuspis* (HANCE) MAKINO in Tokyo Bot. Mag. XXVI,  
387 (1912).  
おほあかそ 京畿、鬱陵島
14. *Elatostemma nipponica* MAKINO, Journ. Jap. Bot. II, 19 (1921).  
ときほこり 濟州島
15. *Elatostemma umbellata* BLUME, Mus. Bot. Lugd. Bat. II, pt. 4,  
fig. XIX, (1852).  
ひめうはばみさう 平南、濟州島
16. *Girardinia cuspidata* WEDDELL in ALP. DE CANDOLLE, Prodr.  
XVI, pt. 1, 103 (1869).  
おにいらくさ 京畿、江原、咸北、咸南
17. *Laportea bulbifera* (SIEBOLD & ZUCCARINI) WEDDELL in Arch.  
Mus. Paris IX, 139 (1856).  
むかごいらくさ 江原、平南
18. *Nanocnide japonica* BLUME, Mus. Bot. Lugd. Bat. II, 154 t. 17  
(1856).

- かてんさう 濟州島、全南、全北
19. *Parietaria coreana* NAKAI in Tokyo Bot. Mag. XXXIII, 46 (1919).  
つるみづ 咸北
20. *Parietaria micrantha* LEDENBOUR, Icones Pl. Nov. Imperf. Cogn.  
Fl. Ross. I, pt. 1, t. 7 (1829).  
ひかげみづ 平南、江原、咸南
21. *Pilea oligantha* NAKAI in Tokyo Bot. Mag. XXXV, 140 (1921).  
おくやまみづ 平北、咸南
22. *Pilea peploides* (GAUDICHAUD) HOOKER & ARNOTT, Bot. Capt.  
BEECHY'S Voy. 96 (1832).  
こけみづ 濟州島、慶南、黄海、江原
23. *Pilea Taquetii* NAKAI in Tokyo Bot. Mag. XXXV, 141 (1921).  
たんなみづ 濟州島、慶南
24. *Pilea viridissima* MAKINO in Tokyo Bot. Mag. XXIII, 87 (1904).  
あをみづ 濟州島、京畿、江原、平南、平  
北、咸南
25. *Polychroa scabra* (BENTHAM) HU in Journ. Arnold Arboret. V,  
228 (1924).  
きみづ 濟州島
26. *Urtica angustifolia* FISCHER ex HORNEMANN, Hort. Hafn. Suppl.  
I, 107 (1819).  
ほそばいらくさ 慶北、京畿、黄海、江原、平南、  
平北、咸南、咸北
27. *Urtica laetevirens* MAXIMOWICZ in Bull. Acad. Sci. St. Pétersb.  
XXII, 236 (1877).  
こばのいらくさ 黄海、江原、咸南  
var. *robusta* F. MAEKAWA  
たけしまいらくさ 鬱陵島、巨文島、濟州島  
ソワンエ、ソワイン (濟州島)
28. *Urtica sikokiana* MAKINO in Tokyo Bot. Mag. XXIV, 5 (1905).  
ながばいらくさ 智異山

以上 28 種ノ中眞ノ木本植物ハからむし屬ノこあかそノミニシテ朝鮮ニ  
於テモ濟州島、甫吉島、莞島等ノ暖地ノ溪谷ニ於テハ高サ 4-5 m. 幹ノ直  
徑 3-5 cm. ニ達ス。

からむし属

多年生ノ草本、半灌木又ハ灌木有毛、葉ハ對生ニシテ相對スル葉ガ同形同大ナルト異型不同ナルモノトアリ。有柄1-2年生、托葉ハ離生又ハ基ガ相癒合シ脱落性、花ハ必ズ集團シテ出デ其集團ハ或ハ腋生或ハ穂ヲナシ或ハ圓錐花叢ヲナス。苞ハ鱗片狀、花ハ單性、雌雄同株又ハ異株、雄花ハ4(3-5)個ノ裂片ヲ有スル萼ト、4(3-5)個ノ萼片ニ對生スル雄蕊トヲ有シ雌蕊ナシ。雌花ハ合萼ヲ有シ其先端ニ短キ2-4齒アリ。萼ハ永存性ニシテ果實ヲ包ミ往々兩翼アルアリ。雄蕊ナク、子房ハ1個1室2個ノ永存性ノ柱頭ヲ有シ、卵子ハ基生直生2珠被アリ。瘦果ハ堅キ果皮ヲ有ス。種皮ハ薄シ。

暖帶、熱帶ニ亙リ約100種アリ。朝鮮ニハ次ノ13種ヲ産ス。

*Urticaceæ* DUMORTIER, Analyse 17 (1829), pro parte; REICHENBACH, Fl. Germ. Excurs. II, 178 (1831), pro parte; ENDLICHER, Prodr. Fl. Norfolkicæ 37 (1833), pro parte; LINDLEY, Nat. Syst. Bot. 175 (1836), pro parte; ENDLICHER, Gen. Pl. I, 282 (1836), pro parte; MEISNER, Pl. Vasc. Gen. I, 348 (1836), pro parte; ENDLICHER, Enchir. 169 (1841); pro parte; LINDLEY, Veget. Kingd. ed. 1, 260 (1846), pro parte; BLUME, Mus. Bot. Lugd. Bat. II, 137 (1856); WEDDELL in Arch. Mus. Paris IX, 49 (1856), in ALP. DE CANDOLLE, Prodr. XVI, pt. 1, 32 (1869); EICHLER, Blüthendiagr. II, 49 (1878); BENTHAM & HOOKER, Gen. Pl. III, 341 (1880); ENGLER in ENGLER & PRANTL, Nat. Pflanzenfam. III, Abt. 1, 98 (1888); REHDER, Manual 201 (1927).

Syn. *Scabridæ* LINNÆUS [Phil. Bot. ed. 1, 29 (1751)]; ed. 2 a GLEDITSCH 29 (1780); Prælect. Ord. Nat. Pl. ed. GISEKE 593 (1792).

*Castaneæ* ADANSON, Fam. Pl. II, 366 (1763), pro parte.

*Urticæ* DURANDE, Not. Elém. Bot. 293 (1781), pro parte; JUSSEU, Gen. Pl. 400 (1789), pro parte.

*Urticæ* VENTENAT, Tabl. Règn Végét. III, 524 (1799), pro parte; J. ST. HILAIRE, Exposit. Fam. Pl. II, 302 t. 110 (1805), pro parte; PERSOON, Syn. Pl. II, pt. 2, 552 (1807), pro parte; MIRBEL, Elém. 904 (1815), pro parte; LAMARCK & DE CANDOLLE, Fl. Franç. ed. 3, III, 321 (1815); pro parte; GAUDICHAUD in FREYCINET Voy. 492 (1826); LINDLEY, Syn. Brit. Fl. ed. 1, 218 (1829), pro parte, Introd. Bot. 93 (1830), pro

parte; BARTLING, Ord. Nat. Pl. 105 (1830); RICHARD in Dict. Class. XVI, 479 (1830) SPACH, Hist. Végét. XI, 22 (1842); MIQUEL in Pl. Junghuhn. I, 18 (1850), in MARTIUS, Fl. Brasil. IV, pt. 1, 78 (1853); AGARDH, Theor. Syst. Pl. 257 (1858).

*Urticææ* Trib. II, *Urticææ* LAMARCK & DE CANDOLLE, Syn. Fl. Gall. 182 (1806), pro parte.

*Urticææ* Trib. I, *Urticææ* *Genuinææ* KOCH, Syn. Fl. Germ. & Helv. ed. 1, 635 (1837).

*Urticacæes* Sous-ord. IV, *Urticineæ* ROUY, Fl. Franc. XII, 270 (1910).

Herbæ annuæ vel perennes, suffrutices, frutices vel arbores, pilosæ vel urenti-pilosæ, rarius lactiferæ. Folia alterna vel opposita vel verticillatim terna, stipullata, petiolata, serrata, annua vel biennia. Flores monœici vel dioici rarius hermaphroditi, glomerati. Glomeruli florum axillares vel spicati, vel paniculati. Perigonii segmenta 4-5 vel 2-3 libera vel gamosepala. Stamina segmentis perigonii isomera, in alabastro incurva; filamenta libera vel basi coalita; antheræ basifixæ laterali apertæ; in floribus fæmineis nulla vel abortiva. Ovarium 1-loculare superum. Ovulum 1 basifixum orthotropum. Stylus 1 indivisus vel bifidus, vel penicillatus, vel peltatus. Fructus testis crustaceis. Albumen oleaceum. Radicula supera.

Species ultra 600 generum 43 in regionibus temperatis et tropicis per totas regiones orbis distributæ. Inter eas in Korea sequentes sunt indigenæ.

1. **Achudenia japonica** MAXIMOWICZ in Bull. Acad. Sci. St. Pétersb. XXII, 241 (1877).

Quelpart, Kannan?

2. **Boehmeria frutescens** THUNBERG in Trans. Linn. Soc. II, 333 (1794).

Quelpart.

3. **Boehmeria hirtella** SATAKE, sp. nov.

Quelpart.

4. **Boehmeria longispica** STEUDEL, Fl. Regensb. 260 (1850).

Quelpart, Prov. Keinan: Insl. Kyosaitô, Prov. Kokai: insl. Taiseitô.



5. **Bœhmeria Nakaiana** SATAKE, sp. nov.  
Quelpært.
6. **Bœhmeria nivea** (LINNÆUS) HOOKER & ARNOTT, Bot. Capt. BEECHEY'S Voy. pt. 5, 214 (1836).  
Nom. Kor. *Mosi*. Quelpært, Zennan, Dagelet.
7. **Bœhmeria pannosa** SATAKE, sp. nov.  
Nom. Kor. *Puck-chin* Quelpært, Prov. Zennan: Isl. Kyobuntô, Prov. Keinan: Tôrai.
8. **Bœhmeria paraspicata** NAKAI, Veget. Mt. Apoi 19 (1930), cum diagn. Jap.  
Prov. Keinan, Prov. Keiki, Prov. Kôgen, Prov. Heinan, Prov. Kannan.
9. **Bœhmeria quelpærtensis** SATAKE, sp. nov.  
Quelpært.
10. **Bœhmeria Sieboldiana** BLUME, Mus. Bot. Lugd. Bat. II, 220 (1856).  
Quelpært.
11. **Bœhmeria spicata** THUNBERG in Trans. Linn. Soc. II, 330 (1794).  
Nom. Kor. *San-djin* Prov. Zennan, Quelpært, Prov. Keinan, Prov. Keihoku, Prov. Tyunan, Prov. Kôkai, Prov. Heinan, Dagelet.
12. **Bœhmeria Taquetii** NAKAI, Veget. Isl. Quelpært 79 (Apr. 1914), nom. nud., in FEDDE, Repert. Nov. Sp. XIII, 267 (Mao 1914).  
Quelpært.
13. **Bœhmeria tricuspis** (HANCE) MAKINO in Tokyo Bot. Mag. XXVI, 387 (1912).  
Prov. Keiki, Dagelet.
14. **Elatostemma nipponica** MAKINO, Journ. Jap. Bot. II, 19 (1921).  
Quelpært.
15. **Elatostemma umbellata** BLUME, Mus. Bot. Lugd. Bat. II, pt. 4 fig. XIX, (1852).  
Prov. Heinan, Quelpært.
16. **Girardinia cuspidata** WEDDELL in ALP. DE CANDOLLE, Prodr. XVI, pt. 1, 103 (1869).  
Prov. Keiki, Prov. Kôgen, Prov. Kannan, Prov. Kanhoku.

17. **Laportea bulbifera** (SIEBOLD & ZUCCARINI) WEDDELL in Arch. Mus. Paris IX, 139 (1856).  
Prov. Kôgen, Prov. Heinan, Quelpært.
18. **Nanocnide japonica** BLUME, Mus. Bot. Lugd. Bat. II, 154 t. 17 (1856).  
Quelpært, Prov. Zennan, Prov. Zenhoku.
19. **Parietaria coreana** NAKAI in Tokyo Bot. Mag. XXXIII, 46 (1919).  
Prov. Kanhoku.
20. **Parietaria micrantha** LEDEBOUR, Icon. Pl. Nov. Imperf. Cogn. Fl. Ross. I, pt. 1, t. 7 (1829).  
Prov. Heinan, Prov. Kannan.
21. **Pilea oligantha** NAKAI in Tokyo Bot. Mag. XXXV, 140 (1921).  
Prov. Heihoku, Prov. Kannan.
22. **Pilea peploides** (Gaudichaud) HOOKER & ARNOTT, Bot. Capt. BEECHEY'S Voy. 96 (1832).  
Prov. Keinan, Prov. Kôkai, Prov. Kôgen, Quelpært.
23. **Pilea Taquetii** NAKAI in Tokyo Bot. Mag. XXXV, 141 (1921).  
Quelpært, Prov. Keinan.
24. **Pilea viridissima** MAKINO in Tokyo Bot. Mag. XXIII, 87 (1904).  
Prov. Kannan, Prov. Kôgen, Prov. Heinan, Prov. Keiki, Quelpært.
25. **Polychroa scabra** (BENTHAM) HU in Journ. Arnold Arboret. V, 228 (1924).  
Quelpært.
26. **Urtica angustifolia** FISCHER ex HORNE-MANN, Hort. Hafn. Suppl. I, 107 (1819).  
Prov. Heihoku, Prov. Heinan, Prov. Kôkai, Prov. Kannan, Prov. Kanhoku, Prov. Kôgen, Prov. Keiki, Prov. Keihoku.
27. **Urtica laetevirens** MAXIMOWICZ in Bull. Acad. Sci. St. Pétersb. XXII, 236 (1877).  
Prov. Kôkai, Prov. Kôgen, Prov. Kannan.

var. **robusta** F. MAEKAWA, var. nov.<sup>(1)</sup>

Isl. Dagelet, Isl. Kyobuntô, Isl. Quelpært.

- 28. **Urtica sikokiana** MAKINO in Tokyo Bot. Mag. XXIV, 5 (1905).  
Prov. Keinan, Prov. Zennan.

**Behmeria** JACQUIN, Enum. Syst. Pl. Inst. Carib. 9 & 31 (1760), Select. Hist. Americ. 216, t. 157 (1763); JUSSIEU, Gen. Pl. 403 (1789); SCHREBER, Gen. Pl. II, 632 n. 1421 (1791); GMELIN, Syst. nat. II, pt. I, 217 & 267 (1791); ST. HILAIRE, Exposit. II, 307 (1805); WILLDENOW, Sp. Pl. IV, 340 (1805); PERSOON, Syn. Pl. II, pt. 2, 556 (1807); AITON, Hort. Kew. ed. 2. V, 261 (1813); SPRENGEL, Syst. Veget. III, 760 (1826); GAUDICHAUD in FREYCINET, Voy. 499 (1826); ENDLICHER, Gen. Pl. 284 (1836); MEISNER, Pl. Vasc. Gen. I, 349 (1836); MIQUEL in MARTIUS, Fl. Brasil. IV, pt. 1, 185 (1853); BLUME, Mus. Bot. Lugd. Bat. II, 194 (1856); WEDDELL in Arch. Mus. Paris IX, 343 (1856); MIQUEL, Fl. Ind. Bat. II, 249 (1859); BENTHAM & HOOKER, Gen. Pl. III, pt. 1, 387 (1880); ENGLER in ENGLER & PRANTL, Nat. Pflanzenfam. III, Abt. 1, 111 (1889); HOOKER fil., Fl. Brit. Ind. V, 575 (1888); RIDLEY, Fl. Malay Penins. III, 365 (1924).

Syn. *Caturus* LINNÆUS, Mant. Pl. I, 19 (1767), Syst. Nat. ed. 13, 650 (1770); MURRAY, Syst. Veget. ed. 13, 739 (1774); HOUTTUYN, Pflanzensyst. IV, 595 (1779); MURRAY, Syst. Veget. ed. 14, 882 (1784); VITMAN, Summa Pl. V, 408 (1791); PERSOON,

(1) *Urtica laetevirens* MAXIMOWICZ var. **robusta** F. MAEKAWA var. nov.

Syn. *Urtica japonica* (non MAXIMOWICZ) NAKAI, Report Veget. Isl. Dagelet, Corea, p. 17 (1918)—MORI, Enum. Corean Pl. p. 127 (1922).

Planta robusta ca. 60–100 cm. alta. Folia longe petiolata, petiolo 4.5–9 cm. longo, lamina ampla ovata vel late ovata 9–16 cm. longa 9–12 cm. lata apice acuta vel caudato-acuminata basi late atque breviter cordata margine grosse serrata, serris deltoideo-falcatis acutissimis. Cetera ut in typico.

Nom. Jap. *Takeshima-Irakusa* (F. MAEKAWA nom. nov.)

Nom. Cor. *Suiyaki-pul*

Hab. Corea, prov. Keihoku: Insl. Uteryôtô vel Dagelet, Mt. Songosan (T. NAKAI, Jun. 8, 1917—no. 4240—Typus in Herb. Univ. Imp. Tokyo.)—Mt. Zyôhôtô (T. NAKAI, Maio 31, 1917—no. 4242)

prov. Zennan: Insl. Nishi-jima, insularum Kyobun-tô vel Port Hamilton, (T. NAKAI, Maio 24, 1928—no. 11100), in parva insula Hiyôtô circa Insl. Quelpært (T. NAKAI, Maio 22, 1913)

Syst. Veget. ed. 15, 925 (1797), Syn. Pl. II, pt. 2, 605 (1807).

*Duretia* GAUDICHAUD in FREYCINET, Voy. 500 (1826).

*Splitgerbera* MIQUEL, Comment. Phytogr. 134 (1839).

*Ramium* RUMPHUIS apud O. KUNTZE, Rev. Gen. Pl. II, 631 (1891).

Herbæ perennes, suffrutices vel frutices, vulgo pilosæ vel scabræ. Folia opposita æqualia vel inæqualia et plus minus asymmetrica, petiolata, annua vel biennia. Stipulæ liberæ vel basi connatæ, deciduæ. Glomeruli florum axillares vel spicati vel paniculati. Bracteæ scariosæ. Flores monœci vel dioici. Flores masculi: perigonium 4 (3–5) lobum vel partitum, lobis valvatis; stamina 4 (3–5) segmentis perigonii opposita; pistillum nullum. Flores fœminei: perigonium gamosepalum tubulosum vel ovatum apice 2–4 dentatum in fructu rarius alatum; stamina 0; ovarium 1-loculare stigmatibus binis persistentibus coronatum; ovulum 1 ex basi erectum orthotropum dichlamydeum. Achenia testa crustacea. Testa seminum membranacea.

Species circ. 100, præcipue in regionibus calidis incolæ. In Korea species 13 sunt spontaneæ.

### 朝鮮産からむし屬植物ノ分類

男爵 佐竹義輔

Taxonomic Study on Korean *Behmeria*

by Baron YOSHISUKE SATAKE

からむし屬植物ハ次ノ2亞屬ニ分類セラル。

葉ハ常ニ互生、葉身ハ下面白色綿毛ヲ密生シ純白色ヲ呈ス。雄花序ハ密ナル複總狀。 .....I. からむし亞屬

葉ハ常ニ對生、葉身ハ下面白色綿毛ヲ生ゼズ。短毛又ハ毳毛ヲ布クカ稀ニ無毛トナル。雌花序ハ穗狀又ハ總狀。 .....II. 眞正やぶまを亞屬

*Behmeria* is divided into two subgenera.

{ Folia alterna, laminis subtus niveo-tomentosis. Inflorescentia fœminea composite paniculata. ....I. subgen. *Tilocnide*  
Folia opposita, laminis subtus non niveo-tomentosis, sed pubescentibus vel holosericeis rarius glabris. Inflorescentia fœminea spicata vel paniculata. ....II. subgen. *Duretia*

第一亞屬 からむし亞屬

{ 莖ノ上部ト葉柄ニ短毛ヲ密生。葉ノ下面ハ白色綿毛ヲ密生スルモ脈上  
ハ無毛或ハ短毛ヲ疎生ス。 .....からむし  
莖ノ上部ト葉柄ニ灰褐色ノ長剛毛ヲ密生。葉ノ下面ハ白色綿毛ヲ密生。  
葉脈上ニハ灰褐色剛毛ヲ生ズ。 .....なんばんからむし

Subgen. I. **Tilocnide** SATAKE in Journ. Fac. Sci. Imp. Univ. Tokyo, Sect. III. Bot. IV, pt. 6, 474 (1936).

*Bahmeria* sect. *Tilocnide* BLUME in Mus. Bot. Lugd.-Bat. II, p. 210 (1856).

{ Rami superne et petioli pubescentes. Laminae foliorum subtus  
niveo-tomentosae, sed in nervis glabrae vel hispidulae. ....*B. frutescens*  
Rami superne et petioli dense canescenti-hispidi. Laminae foliorum  
subtus niveo-tomentosae, praesertim in nervis canescenti-hirsutae.  
.....*B. nivea*

1. からむし、まき

高サ 1-2 m. ニ達スル灌木。莖ハ直立、分枝ス、下方ハ無毛ナレドモ上方ハ短毛又ハ絨毛ヲ密生ス。葉ハ互生、葉身ハ卵形又ハ卵狀披針形ニシテ、先端漸尖尾形ヲナシ、基部ハ截狀鈍形又ハ圓形ヲナス、三行脈、長サ 8-12 cm, 幅 5-8 cm 下面ハ白色綿毛ヲ密生、葉脈ハ無毛又ハ小剛毛ヲ疎生、上面ハ稍無毛又ハ小剛毛ヲ散生シ、平滑又ハ稍粗糙ナリ。葉縁ハ一様ナル鈍狀鋸齒ニシテ鋭尖頭、葉柄ハ葉身ヨリ或ハ長ガク或ハ短カク、無毛又ハ小剛毛ヲ疎生ス。雄花ハ短總狀ヲナシテ下方ニ腋生ス、花被ハ 4 深裂、花被片ハ卵狀舟形ニシテ凸頭、外面ニ絨毛疎生、内面ノ基部ニ長柔毛アリ。雄蕊ハ 4。退化雌蕊ハ極小、倒卵形ナリ。雌花ハ總狀ヲナシテ上方ニ腋生下垂ス。瘦果ハ橢圓形、縁部ハ極メテ狭マク、剛毛ヲ密生ス。長サ 1 mm 内外ナリ。

濟州島、全羅南道ニ産ス。

(分布) 支那、本州、四國、九州、臺灣。

1. *Bahmeria frutescens* THUNBERG

*Bahmeria frutescens* THUNBERG in Trans. Linn. Soc. II, 339 (1794);

WILLDENOW, Sp. Pl. IV, 343 (1805); PERSOON, Syn. Pl. II, 556 (1807); WEDDELL in Arch. Mus. d'Hist. Nat. IX, Liv. III, 384 (1856); NAKAI in Bot. Mag. Tokyo, XLI, 513 (1927); HANDEL-MAZZETTI, Symb. Sin. VII, 151 (1929); MAKINO & NEMOTO, Fl. Jap. ed. 2, 222 (1931); NEMOTO, Fl. Jap. Suppl. 145 (1936); SATAKE in Journ. Fac. Sci. Imp. Univ. Tokyo, Sect. III, Bot. IV, Pt. 6, 476 (1936).

*Urtica frutescens* THUNBERG, Fl. Jap. p. 70 (1784).

*Bahmeria nivea* (non GAUDICHAUD) SIEBOLD & ZUCCARINI in Abh. Münch. Akad. IV, Abt. 3, 214 (1846)—BLUME in Mus. Bot. Lugd.-Bat. II, 210 (1856) pro parte—MIQUEL in Ann. Mus. Bot. Lugd.-Bat. III, 131 (1867)—FRANCHET & SAVATIER, Enum. Pl. Jap. I, 439 (1875)—MAXIMOWICZ in Mém. Biol. IX, 639 (1876)—MATSUMURA & HAYATA, Enum. Pl. Formos. 385 (1906)—MATSUMURA, Ind. Pl. Jap. II.-2, 42 (1912)—MAKINO, INUMA's Somoku Dzusetsu, IV, 1270, Pl. 1159 (1912)—YAMAMOTO, Suppl. Icon. Pl. Formos. I, 20 (1925)—MAKINO & NEMOTO, Fl. Jap. 1063 (1925).

*Bahmeria frutescens* var. *concolor* (non NAKAI) SASAKI, Catal. Govern. Herb. 177 (1930).

Frutex monoicus. Caulis erectus, ramosus, inferne glabratus, superne pubescens vel hirsutus. Folia alterna, laminis ovatis vel ovato-lanceolatis, apice acuminato-caudatis, basi truncato-obtusis vel rotundatis, trinerviis, usque ad 8-12 cm. longis 5-8 cm. latis, subtus niveo-tomentosis ad nervos glabratis vel sparse hispidulis, supra subglabris vel sparse hispidulis laevigatis vel scabriusculis, margine aequaliter crenato-serratis serris acuto-apiculatis, petiolis laminis longioribus vel brevioribus, glabris vel sparse hispidulis. Glomeruli florum ♂ breve paniculati inferne axillares descendentes; perigonium 4-partitum, partibus naviculari-ovatis apiculatis, extus sparse hirsutis, intus ad basin lanatis; stamina 4; pistillum rudimentale obovatum minimum. Glomeruli florum ♀ dense paniculati superne axillares; perigonium fructiferum ellipsoideum, angustissime complanato marginatum, apice brevissime tubulosum dense hirsutum basi subcuneatum pubescens, ca. 1 mm. longum.

Nom. Jap. *Mao*, *Karamusi*.

Hab.

Quelpaert: circa Saisyu (T. NAKAI, n. 1041, Mai. 1913); Kôro (T. NAKAI,

Jun. 1913); Saisyû (T. NAKAI, n. 6157, Oct. 1917); Seikiho (T. NAKAI, n. 6158, Nov. 1917).  
Prov. Zennan: Ins. Daikokuzantô (T. ISHIDOYA, n. 3455, Aug. 1919).  
Distr. China, Honsyû, Sikoku, Kyûsyû and Formosa.

2. なんばんからむし

高サ 1-2 m. 二達スル亞灌木。莖ハ叢生スレドモアマリ分枝セズ、下部ハ稍無毛ナレドモ、上部ハ灰白色又ハ灰褐色ノ長剛毛ヲ密生ス。葉ハ互生、葉身ハ廣卵形、鋭頭、圓脚又ハ稍心脚、長サ 10-12 cm. 幅 7-9 cm. 上面ハ稍粗糙又ハ平滑ニシテ無毛又ハ剛毛ヲ散生スレド、下面ハ白色綿毛ヲ密布シ特ニ葉脈上ニハ平開スル灰褐色ノ剛毛ヲ密生ス。葉縁ハ一様ナル鋸齒トナル。葉柄ハ莖ノ上部ト同様ナル灰褐色ノ長剛毛ヲ密生シ葉身ヨリ短カイ。雄花序ハ短總狀ヲナシテ莖ノ下方ニ腋生、密毛ヲ被ル。花被ハ四深裂、花被片ハ卵形ニシテ外面絨毛密布シ、内面ハ無毛、雄蕊ハ 4. 退化雌蕊ハ棍棒狀ニシテ小形無毛ナリ。雌花序ハ密ナル長總狀ヲナシ上方ニ腋生シ下垂ス。瘦果ハ橢圓形ニシテ長サ約 1.5 mm. 縁部ハ極メテ狭ク剛毛ヲ密生ス。

濟州島、蔚陵島、全羅南道ニ産ス。  
(分布) 支那、比利賓、印度支那、馬來半島。

2. *Boehmeria nivea* GAUDICHAUD

*Boehmeria nivea* GAUDICHAUD in Bot. Voy. FREYCINET 499 (1826)—HOOKER & ARNOTT, Bot. BEECHEY Voy. 214 (1841)—MIQUEL, Fl. Ind. Bat. I.-2, 253 (1859) et in Ann. Mus. Bot. Lugd.-Bat. III, 131 (1867); BLUME, Mus. Bot. Lugd.-Bat. II, 210 (1856); WEDDELL in Arch. Mus. d'Hist. Nat. IX, Liv. III, 380, t. 11, f. 10-17 (1856) et in DC. Prodr. XVI.-1, 206 (1869); BENTHAM, Fl. Hongkong, 331 (1861); C. H. WRIGHT in Journ. Linn. Soc. XXVI, 486 (1899); KOORDERS, Exkurs. Fl. Jav. II, 143 (1912)—SCHNEIDER in SARGENT, Pl. Wilson. III, pt. 2, 312 (1916)—GAGNEPAIN in Lecomte, Fl. Gén. L'Indo-Chine, V, 845 (1929); MERRILL, Enum. Philip. Fl. Pl. II.-1, 90 (1923) et in Trans. Amer. Phil. Soc. XXIV, Pt. II, 139 (1935); MAKINO & NEMOTO, Fl. Jap. 1063 (1925) pro parte, SATAKE in Journ. Fac. Sci. Imp. Univ. Tokyo, Sect. III, Bot. IV, Pt. 6, 475, f. 5 (1936).

*Urtica nivea* LINNÆUS, Sp. Pl. 1398 (1753); THUNBERG, Fl. Jap. 71 (1784); WILLDENOW, Sp. Pl. IV, 366 (1805).

*Ramium niveum* O. KUNTZE, Rev. Gen. Pl. II, 632 (1891).

Suffrutex monoicus. Caulis cæspitosus, simplex vel ramosus, usque 1-2 m. altus, inferne glabratus superne dense canescenti-hispidus. Folia alterna, laminis late ovatis apice acuto-acuminatis, basi rotundatis vel rotundato-subcordatis, usque 10-12 cm. longis 7-9 cm. latis, supra viridibus subscabridis vel lævigatis, glabris vel sparse hispidis, subtus niveo-tomentosis præsertim ad nervos patenti-hispidis, margine æqualiter serratis, petiolis dense canescenti-hispidis laminis fere brevioribus. Glomeruli florum ♂ breve paniculati deorsum axillares; perigonium 4-partitum lobis naviculari-ovatis extus hirsutis intus glabris; stamina 4; pistillum rudimentale minimum obovoideum glabrum. Glomeruli florum ♀ dense paniculati sursum axillares descendentes; perigonia fructifera compresse ellipsoideum usque 1.5 mm. longa, apice non tubulosa, basi subcuneata, dense hispidula seminibus conformibus lenticulari-ovatis 1 mm. longis.

Nom. Jap. *Namban-Karamusi*.

Nom. Kor. *Mosi* (Quelpært).

Hab.

Prov. Zennan: Yakusuitei (T. NAKAI, Mai. 1913).

Quelpært: Ins. Hiyôtô (T. NAKAI, Jun. 1913).

Ins. Uturyôtô vel Dagelet: Tûdô (T. ISHIDOYA, n. 158, Mai. 1916); Taikadô (T. NAKAI, n. 4244, Jun. 1917).

Distr. China, the Philippines, Indo-China and the Malay Peninsula. Commonly cultivated.

第二亞屬 眞正やぶまを亞屬

瘦果ト葉トノ性質ニヨリテ次ノ四節ニ分類サル。

- 瘦果ハ一様ニ生ズル短柔毛ヲ被ル。……………第一節 こあそ節
- 瘦果ハ殆ンド無毛ナルモ上部ニ於テノミ伏臥セル少數ノモアリ……………第二節 なかばやぶまを節
- 瘦果ハ短柔毛ヲ被ルモ、特ニ上部ニ於テ剛毛密生ス。
  - 葉縁ハ一様ナル鈍狀鋸齒ヲ有シ、葉ノ下面ニ毳毛多ク、成熟セル雌花穂ハ太ク、瘦果密生ス。……………第三節 さいかいやぶまを節
  - 葉縁ハ一様ナラザル鋸齒ヲ有シ、先端ハ往々大ナル重鋸齒トナリ又稀ニ深ク缺刻狀トナル。成熟セル雌花ハ細ク、瘦果ハ疎生又ハ稍密生ス。……………第四節 やぶまを節

Subgen. II. **Duretia** SATAKE in Journ. Fac. Sci. Imp. Univ. Tokyo, Sect. III, Bot. IV, Pt. 6, 478 (1936).

*Duretia* GAUDICHAUD in Bot. Voy. Freycin. 499 (1826) pro parte.

*Bahmeria* Sect. *Duretia* BLUME in Mus. Bot. Lugd.-Bat. 212 (1856).

Species Koreanæ in 4 sectiones distinguendæ.

- Perigonia fructifera constanter pubescentia. ....Sect. 1. *Spicatae*
- Perigonia fructifera glabrata sed apice tantum adpresse puberula. ....Sect. 2. *Sieboldianæ*
- Perigonia fructifera pubescentia præsertim ad apicem dense hispida vel villosa. ....Sect. 3. *Pannosæ*
- Laminæ foliorum margine æqualiter crenatæ, subtus fere holosericeæ vel pannosæ. Spicæ femineæ maturæ sæpe crassi-cylindricæ, cum perigoniis fructiferis conferte glomeratis. ....Sect. 4. *Longispicæ*

第一節 こあかそ節

灌木又ハ草本、莖ハ單一又ハ分枝、葉ハ對生、卵形、卵狀披針形又ハ菱狀卵形又ハ披針形、先端尾狀、又ハ三裂ス。基部ハ楔狀又ハ鈍狀又ハ稍圓形、乾ケバ薄キ膜質又ハ紙質又ハ革質トナル。瘦果ハ壓扁倒三角形又ハ倒心臟形ヲナシ、縁部ハ廣ク、先端ハ無筒、基部ハ稍楔形、一樣ナル短柔毛ヲ被ル。朝鮮ニ3種アリ。次ノ如ク區別サル。

- 葉ハ大形、乾ケバ稍革質、先端深ク裂ケ、裂片ハ披針狀龜尾狀トナル。 .....あかそ
- 葉ハ小形、乾ケバ紙質又ハ膜質、先端尾狀ヲナスモ深ク裂ケズ。 .....こあかそ
- 莖ハ灌木狀、多ク分枝ス。葉身ハ菱狀披針形、基部ハ多ク楔形。 .....こあかそ
- 莖ハ草質、單一。葉身ハ菱狀卵形、基部多ク圓形。.....くさこあかそ

Sect. 1. **Spicatae** SATAKE in Journ. Fac. Sci. Imp. Univ. Tokyo, Sect. III, Bot. IV, Pt. 6, 480 (1936).

Frutex vel herba. Caulis simplex vel ramosus. Folia opposita, laminis ovatis, ovato-lanceolatis vel rhombeo-ovatis vel lanceolatis, apice acuto-

caudatis vel tri-cuspidatis, basi cuneatis vel obtusis vel subrotundatis, in sicco tenuibus membranaceis, papyraceis vel subcoriaceis. Perigonia fructifera compresse turbinata vel obcordata, late complanato-marginata, apice non tubulosa, basi subcuneata, constanter pubescentia. Species Koreanæ 3.

- Laminæ foliorum majores, ad apicem profunde tricuspidatæ, in sicco subcoriaceæ. ....*B. tricuspis*
- Laminæ foliorum minores, ad apicem acuto-caudatæ nunquam tricuspidatæ, in sicco papyraceæ vel membranaceæ. ....*B. spicata*
- Caulis fruticosus ramosus. Laminæ foliorum rhombeo-lanceolatæ, basi sæpe cuneatæ. ....*B. paraspicata*
- Caulis herbaceus, simplex. Laminæ foliorum rhombeo-ovatae, basi sæpe rotundatæ. ....*B. paraspicata*

3. あかそ

高サ 1 m. 内外ノ草本、莖ハ直立、單一又ハ分枝、下部ハ圓形ニシテ無毛、上部ハ圓狀四角ニシテ明瞭ニ縦皺アリ無毛又ハ微毛アリ。葉ハ對生、一對ハ同形同大、葉身ハ半廣卵形、長サ 10-14 cm. 幅 9-12 cm. 基部ハ鈍狀截形、葉縁ハ粗鋸齒、先端ハ深ク缺刻狀ニ裂ケ、裂片ハ披針形ノ尾狀ヲナス。上面ハ小剛毛散在ヤ、粗糙ナレドモ、下面ハ殆ンド無毛ニシテ葉脈上ニノミ毛アリ。葉柄ハ無毛或ハ僅ニ毛アリ。葉身ト同長又ハヤ、短カシ、雄花序ハ穗狀、下方ニ腋生、單一又ハ稀ニ分枝、花被ハ4深裂、裂片ハ卵形、外面稍有毛、内外無毛、雄蕊 4. 退化雌蕊ハ棍棒狀ナリ。雌花序ハ穗狀ニシテ單一、上方ニ腋生、花叢ハ稍密ナリ。瘦果ハ壓扁廣倒卵形又ハ心臟形、縁部ハ極メテ廣ク、上部無筒、下部楔狀、一樣ニ短柔毛ヲ被ル、長サ幅約 1 mm. 許リナリ。

京畿道、鶴陵島、濟州島ニ産ス。  
(分布) 支那、北海道、本州、九州。

3. **Bahmeria tricuspis** MAKINO

*Bahmeria tricuspis* MAKINO in Bot. Mag. Tokyo, XXVI, 387 (1912); MORI, Enum. Pl. Corea, 125 (1922); MAKINO & NEMOTO, Fl. Jap. 1064 (1925); ed. 2, 224 (1931); MIYABE & KUDÔ, Fl. Hokkaido and Saghal. IV, 490 (1934); HARA in Bot. Mag. Tokyo, XLVIII, 812 (1934); MASAMUNE in Mem. Fac. Sci. Agr. Taihoku Imp. Univ. XI. Bot. n. 4,

159 (1934); NEMOTO, Fl. Jap. Suppl. 146 (1936); SATAKE in Journ. Fac. Sci. Imp. Univ. Tokyo, Sect. III, Bot. IV, Pt. 6, 481 (1936).

Syn. *Bahmeria platyphylla* var. *tricuspis* HANCE in Journ. Bot. n. ser. III, 261 (1874).

*Bahmeria japonica* var. *tricuspis* MAXIMOWICZ in Mém. Biol. IX, 642 (1876).

*Bahmeria longispica* var. *tricuspis* FRANCHET & SAVATIER, Enum. Pl. Jap. II, 497 (1877).

*Bahmeria platanifolia* var. *tricuspis* MATSUMURA, Ind. Pl. Jap. II, -2, 42 (1912).

*Bahmeria rubricaulis* MAKINO, l.c. pro syn.

Herbaceus monoicus. Caulis crectus ca 1 m. altus, simplex vel ramosus, inferne teres glaber, superne tereti-quadratus distincte 4-sulcatus glabratus vel pilosellus. Folia opposita, pro quaque pare longitudine et magnitudine æqualia; laminæ late hemi-ovatae, usque ad 10-14 cm. longæ 9-12 cm. latae, margine grosse serratae, basi obtuse truncatae integræ, apice profunde tricuspidatae lobo medio oblongo-lanceolato serrato laterales intus curvato-excisos vix superante, supra scabriusculæ, sparce hispidulæ, subtus glabræ ad nervos tantum scabro-pilosæ, petiolis glabris vel pilosellis laminis brevioribus vel æquantibus. Spicæ masculæ deorsum axillares, simplices vel ramosæ; perigonium 4-partitum, partibus ovato-navicularibus extus pilosellis intus glabris; stamina 4; pistilli rudimentum clavatum glabrum. Spicæ femineæ sursum axillares, solitariae, cum floribus densius glomeratis; perigonia fructifera compresse obcordata vel late obovata, late complanato-marginata, apice non tubulosa basi cuneata, constanter pubescentia, usque 1 mm. longa et lata.

Nom. Jap. *Akaso*.

Hab.

Prov. Keiki: Suigen (H. UYEKI, n. 545, Sept. 1912).

Ins. Uturyôtô: Zyôhō (T. NAKAI, n. 4243, Mai. 1917).

Quelpart; in sepibus Saingmoultong 800 m. (E. TAQUET, n. 1408, Jul. 1908); secus torrentis Hongno (E. TAQUET, n. 1406, Sept. 1908).

Distr. China, Hokkaidô, Honsyû and Kyûsyû.

#### 4. こあかそ

高サ 1-2 m. ニ達スル灌木、大ナルモノハ徑 2-5 cm. ニ達スル。多ク分枝ス。枝ハ殆ンド無毛、圓形ニシテ淺ク4縱襞。葉ハ對生、相對スルニ葉ハ大キサ長サ不同ナリ。葉身ハ菱狀卵形又ハ卵狀披針形、基部ハ楔狀、又ハ截狀鈍形、先端ハ漸尖尾狀ヲナシ、長サ 5-12 cm. 幅 3-7 cm. 邊緣ハ粗鋸齒、上面ハ殆ンド平滑無毛、房狀體ハ微小圓形ニシテ明瞭、下面ハ無毛、葉脈上ノミヤ、有毛。葉柄ハ立毛ニシテ、葉身ヨリヤ、短カキカ又ハ著シク短カシ。雄花序ハ穗狀單一、下方ニ腋生、花叢ハ疎生、花被ハ4深裂、裂片ハ舟狀卵形、銳頭、外面稍無毛、内面無毛、雄蕊4、退化雌蕊ハ倒卵形無毛ナリ。雌花穗ハ單一、上方ニ腋生、花叢稍密生、瘦果ハ壓扁倒圓錐狀又ハ心臟形、縁部ハ廣ク、上部ハ圓形ニシテ凹形無筒、下部ハ楔形、一樣ニ短柔毛ヲ生ズ。長サ約 1.5 mm. 幅 1 mm. 種子ハレンズ狀卵形ニシテ長サ約 0.8 mm.

慶尙南道、慶尙北道、全羅南道、黃海道、咸鏡南道、濟州島、麟陵島ニ産ス。

(分布) 支那、滿州、本州、四國、九州。

#### 4. *Behmeria spicata* THUNBERG<sup>(1)</sup>

(Tab. XI)

*Behmeria spicata* THUNBERG in Trans. Linn. Soc. II, 330 (1794); WILLDENOW, Sp. Pl. IV, pt. 1. 341 (1805); PERSOON, Syn. Pl. II, pt. 2, 556 (1807); DIETRICH, Vollst. Lexic. Gärt. Bot. X, 297 (1810), Nachtrag I, 620 (1815); STEUDEL, Nom. Bot. ed. 1, I, 112 (1820); SPRENGEL, Syst. Veget. III, 844 (1826); BLUME, Mus. Bot. Lugd. Bat. II, 220 (1856); MIQUEL in Ann. Mus. Bot. Lugd. Bat. III, 131 (1867); FRANCHET & SAVATIER, Enum. Pl. Jap. I, 440 (1875); MAXIMOWICZ in Mém. Biol. IX, 645 (1877); MATSUMURA, Nippon Shokubutsumei 30 (1884), Cat. Pl. Herb. Coll. Sci. Imp. Univ. 176 (1886); OKUBO, Cat. Pl. Bot. Gard. Imp. Univ. 196 (1887); MATSUMURA, Shokubutsu Meii 50 (1895); C. H. WRIGHT in Journ. Linn. Soc. XXVI, 488 (1899), pro parte; PALIBIN in Acta Hort. Petrop. XVIII, 47 (1900); NAKAI, Fl. Kor. II, 198 (1911); MATSUMURA, Ind. Pl. Jap. II, pt. 2, 43 (1912); MORI, Enum. Pl. Cor. 125 (1922); MAKINO & NEMOTO, Fl. Jap. ed. 1, 1064 (1925), ed. 2, 224 (1931); NEMOTO Supplm. 146 (1936); SATAKE in Journ. Fac. Sci.

(1) The literatures cited of this species were compiled by T. NAKAI.

Imp. Univ. Tokyo, Sect. III, Bot. IV, pt. 6, 482 (1936).

Syn. *Urtica japonica* LINNÆUS fil., Suppl. 418 (1781), non THUNBERG 1784<sup>(1)</sup>; VITMAN, Summa Pl. V, 318 (1791).

*Urtica spicata* THUNBERG japon, mspt. ex MURRAY, Syst. Veget. ed. 14, 850 (1784), (non BLUME 1825)<sup>(2)</sup>; THUNBERG, Fl. Jap. 69 (1784), excl. ' Japonice : Ira Gusa ; GMELIN, Syst. Nat. II, pt. 1, 269 (1791); VITMAN, Summa Pl. V, 315 (1791); LAMARCK, Encyclop. IV, 641 (1797).

*Urtica elongata* GMELIN, Syst. Nat. II, pt. 1, 269 n. 10 (1791).

*Urtica spicata* PERSOON, Syst. Veget. ed. 15, 898 (1797).

*Acalypha japonica* THUNBERG apud WILLDENOW, Sp. Pl. IV, pt. 1, 341 (1805), pro syn. *Bahmeria spicata*; STEUDEL, Nom. Bot. ed. 1, I, 112 pro syn. *B. spicata* (1821); MIQUEL in Ann. Mus. Bot. Lugd. Bat. III, 130 (1867), pro syn. *Bahmeria spicata*.

*Bahmeria platyphylla* DON *γ. japonica* WEDDELL in Arch. Mus. Paris IX, 365 (1856), pro parte, in ALP. DE CANDOLLE, Prodr. XVI, pt. 1, 213 (1869), pro parte.

*Bahmeria platyphylla* DON var. *japonica* OLIVER, herb. OLDHAM ex MIQUEL in Ann. Mus. Bot. Lugd. Bat. III, 131 (1867), pro syn.

Frutex 1-2 m. altus 1-5 cm. in diametro, valde ramosus. Rami glabri teretes, leviter 4-sulcati. Folia opposita, pro quaque pare longitudine et magnitudine inæqualia; laminae rhombeo-ovatae vel ovato-lanceolatae, apice acuminato-caudatae basi cuneatae vel truncato obtusae, usque 5-12 cm. longae 3-7 cm. latae, margine grosse serratae serris 4-8 mm. longis et latis, supra glabrae sublævigatae cystolithis minutissime globosis distinctis, subtus glabrae sed ad venas pilosellis, petiolis glabris laminis paulo vel valde brevioribus. Spicae masculae deorsum axillares solitariae interrupte glomeratae; perigonium 4-partitum partibus naviculari-ovatis apiculatis, extus glabriusculis intus glabris; stamina 4; pistilli rudimentum obovoideum glabrum. Spicae femineae sursum axillares solitariae, subconferte glomeratae; perigonia fructifera compresse obconica vel obcordata, late complanato-marginata, apice rotundata subretusa, non tubulosa, basi cuneata, constanter pubes-

(1) *Urtica japonica* THUNBERG is *Fatoua villosa* (THUNBERG) NAKAI.

(2) *Urtica spicata* BLUME, Bijdr. 10 Stuk 492 (1825) is *Bahmeria platyphylla* DON.

centia, usque 1.5 mm. longa 1 mm. lata, seminibus lenticulari-ovatis ca 0.8 mm. longis.

Nom. Jap. *Ko-akaso*, *Ki-akaso*.

Nom. Kor. *Sanjin* (Quelpært).

Hab.

Prov. Keinan; Mt. Chiisan (T. NAKAI, n. 125, Jun. 1913); Ins. Kyo-saitô (T. NAKAI, n. 11101, 11098, Mai. 1928); Mte. Mirokuhō, Tōei (T. NAKAI, n. 11097, Mai. 1928); Tinkai (T. NAKAI, n. 11096, Mai. 1928); Mt. Inzan (K. YANAGI, n. 48, Aug. 1929); Masan (T. MORI, n. 109, Aug. 1912); Tokusan (T. MORI, n. 107, Aug. 1912).

Prov. Keihoku: Tai Kyû (T. UCHIYAMA, Oct. 1902).

Prov. Zennan: Ins. Wangtô (T. NAKAI, n. 577, Jun. 1913); Ins. Seizantô (T. NAKAI, n. 11095, Mai. 1928); Ins. Daikokuzantô (T. ISHIDOYA, n. 3456, Aug. 1919); Chiisan (R. K. SMITH n. 16, Aug. 1934). Ins. Totuzantô (T. NAKAI, n. 11099, Mai. 1928).

Prov. Kokai: Ins. Taiseitô (T. NAKAI, n. 1267, Jul. 1929); Ins. Haku-reitô (T. NAKAI, n. 12672, Jul. 1926); Tyôzankan (T. NAKAI, n. 12674, 12675, 12677, Jul. 1929); Kumiho (vel Sorai Beach) (R. G. MILLS n. 4461, Jul. 1921).

Prov. Kannan: in rupibus Ouensan (U. FAURIE, n. 596, Aug. 1901).

Prov. Heinan: Kandju (T. NAKAI n. 2979, Sept. 1915).

Quelpært: Mt. Hallasan (T. NAKAI, n. 1061, Mai. 1913); in sepibus (E. TAQUET, n. 5964, Aug. 1911); in silvis 1500 m. (E. TAQUET, n. 4430, Aug. 1910); in rupibus 1000 m. latere australe (T. TAQUET, n. 4429, Jul. 1910); in sepibus Hongno (E. TAQUET, n. 1411, Sept. 1908); in sepibus Hallasan 1400 m. (E. TAQUET, n. 1414, Aug. 1908); in rupibus Yengsil (E. TAQUET, n. 3233, Jul. 1909); sine loco speciali (U. FAURIE, n. 909, Oct. 1906; n. 2044, Aug. 1907); in petrosis Hongno (E. TAQUET, n. 343, Oct. 1907); in petrosis (U. FAURIE, n. 2017, Mai. 1907); in sepibus Hongno cascade (T. TAQUET, n. 1412, n. 1416, Sept. 1908); in silvis 1800 m. (E. TAQUET, n. 1413, Aug. 1908); in rupibus secus torrentis 800 m. (E. TAQUET n. 5967, Sept. 1911); in sepibus Setchineri 600 m. (F. TAQUET n. 1415, Jul. 1908); orientalis Sampang (E. TAQUET n. 4434, Jul. 1910).

Uturyô-tô: Zyôhō (T. NAKAI, n. 4241, Mai. 1917).

Distr. China, Manchuria, Honsyû, Sikoku and Kyûsyû.

5. くさこあかそ

高サ 60-80 cm. 許リノ草本、雌雄同株、莖ハ直立、單一、褐色又ハ褐綠色ニシテ四角狀圓形、僅カニ或ハ明瞭ニ4縱襞、殆ンド無毛ナレドモ、上部ニ於テヤ、有毛。葉ハ對生、相對スルニ葉ハ長サ形ニ於テヤ、不同、葉身ハ菱狀卵形或ハ卵形、漸尖頭尾狀、基部ハ截狀楔形又ハヤ、圓形ヲナシ、縁邊ハ鋸齒又ハ齒牙狀鋸齒ヲ有シ下方ノモノハ小サク上方ノモノハ次第ニ大トナル。上面ハ毛散在、下面ハ無毛ナレドモ特ニ脈上ニ於テ有毛ナリ、三行脈、葉柄ハ長サ 2-5 cm. 無毛又ハ毛ヲ散在ス。雄花穂ハ單一ニシテ下方ニ腋生、花被ハ4裂、裂片ハ舟狀披針形、銳尖頭、外面有毛、4雄蕊、退化雄蕊ハ棍棒狀ニシテ無毛、雌花穂ハ單一ニシテ上方ニ腋生、葉アリ抽出シ、花叢ハ徑 3-4 mm. 疎生ス。瘦果ハ壓扁倒圓形錐狀、廣キ縁部ヲ有シ、長サ 1.5 mm. 幅 1 mm. 一樣ニ短柔毛ヲ被リ。上部ハ圓形無筒、下部ハ楔狀ヲナス。種子ハレンズ卵形、長サ約 1 mm.

京畿道、江原道、咸鏡南道ニ産ス。  
(分布) 支那、滿洲、北海道、本洲、四國。

5. *Boehmeria paraspicata* NAKAI

*Boehmeria paraspicata* NAKAI Rep. Veg. Mt. Apoi, 17, 19 (1930); YAMAMOTO & TSUKAMOTO, Fl. Hakodate, 23 (1932); MIYABE et KUDO, Fl. Hokkaido and Saghal. IV, 490 (1934), HARA in Bot. Mag. Tokyo, XLVIII, 812 (1934); NEMOTO, Fl. Jap. Suppl. 145 (1936); SATAKE in Journ. Fac. Sci. Imp. Univ. Tokyo. Sect. III, Bot. IV, pt. 6, 483, t. 9-10 (1936).

Syn. *Boehmeria japonica* (non MIQUEL) KOMAROV, Fl. Mansch. I, 101 (1901).

*Boehmeria japonica* (non MIQUEL) NAKAI, Fl. Korea II, 198 (1911), MORI, Enum. Pl. Corea, 125 (1922) pro parte.

*Boehmeria spicata* (non THUNBERG) NAKAI, l. c. 198 (1911) pro parte.

*Boehmeria tricuspis* (non MAKINO) TATEWAKI, Veg. Mt. Apoi, 32 (1928).

*Boehmeria tricuspis* MAKINO var. *paraspicata* HARA, l. c. 812 (1934) pro syn.

Planta herbacea monoica. Caulis erectus simplex usque 60-80 cm. altus, fulvus vel fusco-viridis, tetragono-teres, leviter 4-sulcatus

omnino glabrescens interdum pilosulus. Folia opposita, pro quaque pare magnitudine et longitudine subæqualia; laminis rhombeo-ovatis vel ovatis, usque 5-10 cm. longis 3-6 cm. latis apice acuminato-caudatis basi subtruncato-cuneatis vel subrotundatis, margine grandi-arguto-serratis vel -dentato-serratis, serris superiore majoribus 5-10 mm. longis et latis superrime excisis inferiore minoribus, supra sparse pilosis subtus glabris, præsertim in nervis pilosis, trinerviis; petiolis 2-5 cm. longis glabris vel sparse ciliatis. Spicæ masculæ deorsum axillares solitariae; perigonium 4-partitum, partibus naviculari-lanceolatis apiculatis; extus pilosellis, 4 staminibus, pistillo rudimento clavato-glabro. Spicæ femineæ superne axillares solitariae folia superantes, interrupte glomeratae, glomeris 3-4 mm. in diametro. Perigonia fructifera compresse turbinata, late complanato-marginata; usque 1.5 mm. longa 1 mm. lata, apice rotundata non tubulosa basi cuneata, constanter pubescentia. Semina lenticulari-ovoidea ca 1 mm. longa.

Nom. Jap. *Kusa-Koakaso*.

Hab.

Prov. Keiki: in lacunis Nanzan (U. FAURIE n. 908, Sept. 1906); Nanzan (T. UCHIYAMA, Jul. 1902); ibid. (N. OKADA, Jul. 1909); Kôryô (T. MORI, n. 239, Jul. 1912).

Prov. Kôgen: Mt. Kongôsan (T. UCHIYAMA, Aug. 1902).

Prov. Kannan: Genzan (T. NAKAI, Jun. 1909); Sanbô (T. NAKAI, n. 14072, Aug. 1930).

Distr. China, Manchuria, Hokkaidô, Honsyû and Sikoku.

第二節 ながばやぶまを節

亞灌木又ハ草本、雌雄同株、莖ハ單一又ハ分枝、殆ンド平滑無毛、稀ニ有毛、葉ハ對生、相對スルニ葉ハ同形同大、葉身ハ乾クハ薄キ膜質、紙質、稍革質トナル。葉縁ハ一樣ナル粗鋸齒、上面ハ無毛又ハ僅カニ短毛アリ。下面ハ無毛、時ニ葉脈ニノミ小毛散在スルカ或ハ短毛ガ密生スルコトアリ。雌雄花穂ハ單一、瘦果ハ壓扁、廣倒卵形又ハ倒圓錐形、縁部ハ廣ク或ハ狭ク、殆ンド無毛ナレドモ、上部ニノミ少數ノ伏臥セル毛アリ。4種アリ次ノ如ク區別サル。

{葉ノ下面及ビ葉柄ニ短毛稍密生ス。……………けながばやぶまを  
{葉ノ下面及ビ葉柄ハ殆ンド無毛ナリ。



- 葉ハ狹橢圓形又ハ狹披針形、基部ハ鈍狀楔形、枝ノ上方ニ毛アリ。  
.....さいしうながばやぶまを
- 葉ハ卵形又ハ廣卵狀橢圓形、基部ハ鈍狀圓形又ハ圓形、枝ノ上方無毛  
葉ハ稍革質、卵形、基部ハヤ、圓形、鋸齒ハ小ナリ。  
.....さいしうあかそ
- 葉ハ稍膜質又ハ紙質、廣橢圓形又ハ卵狀橢圓形、基部鈍狀圓形、  
鋸齒ハ大ナリ。  
.....ながばやぶまを

Sect. 2. **Sieboldianæ** SATAKE in Journ. Fac. Sci. Imp. Univ. Tokyo, Sect. III, Bot. IV, pt. 6, 486 (1936).

Syn. *Bœhmeria* Sect. *Duretia* BLUME in Mus. Bot. Lugd.-Bat. II, 212 (1856) pro parte.

Planta herbacea vel suffruticosa, monoica, Caulis simplex vel ramosus, interdum glaber vel pilosus. Folia opposita, pro quaque parte magnitudine et longitudine æqualia; laminæ in sicco sæpe membranaceæ vel papyraceæ, rarius coriaceæ, margine æqualiter grosse vel minute serratæ, supra glabræ vel sparse hirtellæ, subtus glabræ in nervis sparse puberulæ rarius densius hirtellæ. Spicæ femineæ et masculæ solitariae axillares. Perigonia fructifera compressa obovoidea vel turbinata, anguste vel late complanato-marginata, glabra sed apice tantum adpresse puberula. Species Koreanæ 4.

- Laminæ foliorum subtus et petioli densius hirtellæ. Rami sursum pilosi. ....*B. hirtella*
- Laminæ foliorum subtus et petioli fere glabræ.
  - Laminæ foliorum angusto-ellipticæ vel lanceolatæ, basi obtuse cuneatæ. Rami superne pubescentes. ....*B. Nakaiana*
  - Laminæ foliorum ovatæ vel late ovato-ellipticæ vel late ellipticæ, basi obtuse rotundatæ vel subrotundatæ. Rami superne glabri.
    - Laminæ foliorum in sicco subcoriaceæ, ovatæ, basi subrotundatæ, margine minute serratæ. ....*T. Taquetii*
    - Laminæ foliorum in sicco membranaceæ vel papyraceæ, ovato-ellipticæ vel late ellipticæ, basi obtuse rotundatæ, margine grosse serratæ. ....*B. Sieboldiana*

6. **けながばやぶまを**

葉ハ對生、葉身ハ質厚ク、卵形、漸尖頭、圓脚、長サ 10-12 cm. 幅 5-6

cm. 縁邊ハ粗銳鋸齒、上面ハヤ、粗糙、剛毛散在、下面ハ短毛ヤ、密生ス。葉柄ハ長サ 2-2.5 cm. 短毛ヲ密生ス。花、果實不明。

濟州島ニ産ス。

(分布) 固有種。

6. **Boehmeria hirtella** SATAKE

*Bœhmeria hirtella* SATAKE in Journ. Fac. Sci. Imp. Tokyo, Sect. III, Bot. IV, Pt. 6, 493 (1936).

Syn. *Bœhmeria Sieboldiana* var. *scabra* NAKAI, Rep. Veg. Quelpært, 39 (1914) nom. nud.; MORI, Enum. Pl. Corea, 125 (1922).

Folia opposita; laminis ovatis, apice acuminatis, basi rotundatis, usque 10-12 cm. longis 5-6 cm. latis, margine grosse arguto-serratis, supra scabridis sparse hispidis subtus densius hirtellis, petiolis 2-2.5 cm. longis dense hirtellis. Flores et achenia ignota.

Nom. Jap. *Ke-Nagabayabumao*.

Hab.

Quelpært: Sampang (E. TAQUET n. 4433, Aug. 1910).

Distr. Endemica.

7. **さいしうながばやぶまを**

亞灌木、莖ハ直立、分枝、褐黄色、圓形、下部ハ無毛徑 5 mm. 上部ハ淺ク 4 縱稜無毛又ハ短毛散生ス。葉ハ對生、同形同大、葉身ハ狹橢圓形、或ハ狹披針形、先端漸尖尾狀、基部鈍狀楔形、縁邊ハ粗鋸齒、上面ハヤ、平滑或ハヤ、粗糙、短毛散在シ、鐘狀體ハ微小球狀、非常ニ明瞭、下面ハ無毛、ヤ、灰白色、脈上ニ稀ニ短毛アリ、葉柄ハ長サ 2-3 cm. 短毛疎又ハ稍密生、托葉ハ尖披針形長サ 3-4 mm. 幅 1 mm. 中肋ノ外面有毛ナリ。雄花ハ不明、雌花叢ハ穗狀花序ヲナシ上方ニ腋生、單一、疎又ハヤ、密生、葉ヨリ稍短カシ、瘦果扁壓倒卵形、廣キ縁部ヲ有シ、上部ハ圓形、極短筒、伏臥毛少數散在シ、下部ハ楔形、無毛 長サ約 1.7-2 mm. 幅 1 mm. 種子ハ平滑レンズ狀卵形、長サ 0.7 mm. アリ。

濟州島ニ産ス。

(分布) 固有種。

7. **Boehmeria Nakaiana** SATAKE

*Bœhmeria Nakaiana* SATAKE in Journ. Fac. Sci. Imp. Univ. Tokyo,

Sect. III, Bot. IV, pt. 6, 491; Fig. 14-15, (1936).

Syn. *Behmeria Sieboldiana* (non BLUME) NAKAI, Rep. Veg. Quelpært, 39 (1914) pro parte; MORI, Enum. Pl. Corea, 125 (1922) pro parte.

Planta suffruticosa monoica? Caulis erectus ramosus, fulvo-lutescens, teres, multo lenticellatus, inferne haud sulcatus glabratus usque 5 mm. crassus, superne leviter 4-sulcatus glabrescens vel parcissime hirtellus. Folia opposita, pro quaque pare magnitudine et longitudine æqualia; laminis oblongo- vel angusto-ellipticis vel lanceolatis, apice acuminato-caudatis, basi obtuse cuneatis, usque 8-10 cm. longis 2.5-4 cm. latis supra sublævigatis vel scabriusculis sparcissime hirtellis cystolithis minutissime globosis valde distinctis, subtus glabræ subglaucae in nervis rarissime hirtellis; petiolis 2-3 cm. longis sparse vel densius hirtellis. Stipulae subulato-lanceolatae usque 3-4 mm. longae 1 mm. latae costis extus pilosis. Flores masculi ignoti, feminei glomerati et spicas sursum axillari-solitarias laxas vel subconfertas foliis paulo breviores formans. Perigonia fructifera compresse obovoidea late complanato-marginata, apice orbicularia brevissime tubulosa sparse adpresse puberula, basi cuneata glabrescentia, usque 1.7-2 mm. longa 1 mm. lata. Semina glabra lenticulari-ovoidea ad 0.7 mm. longa.

Nom. Jap. *Saisyû-Nagabayabumao*.

Hab.

Quelpært: latere boreale (T. NAKAI, n. 6156, Oct. 1917); in silvis 800 m. (E. TAQUET, n. 5966, Sept. 1911).

Distr. Endemica.

#### 8. さいしうあかそ

莖ハ叢生、平滑、無毛、分枝、鈍状四角形、ヤ、4縦襞、葉ハ對生同形同大、葉身ハ卵形、鋭尖頭、基部ハヤ、圓形、長サ 4-10 cm. 幅 2-5 cm. 葉縁ハ一様ナル小鋸齒、上面ハ毛散生、下面無毛ニシテ脈上ニノミ有毛、葉柄ハ長サ 0.5-2 cm. 無毛、雌花穂ハ上方ニ腋生、單一、長サ 4-10 cm. 花叢ハ疎生、苞ハ卵形長サ 1 mm. 未熟瘦果ハ長サ 0.7 mm. 卵形、剛毛ヲ生ジ、筒部ハ短カク、花柱ハ長シ。

濟州島ニ産ス。

(分布) 固有種。

#### 8. *Behmeria Taquetii* NAKAI

*Behmeria Taquetii* NAKAI, Veg. Isl. Quelpært, 39 (1914), nom. nud.; in FEDDE, Rep. Sp. Nov. XIII, 267 (1914); MORI, Enum. Pl. Corea, 125 (1922); SATAKE in Journ. Fac. Sci. Imp. Univ. Tokyo, Sect. III, Bot. IV, Pt. 6, 493 (1936).

Planta caespitosa monoica? Caulis glaber, ramosus, obtuse quadrangularis leviter 4-sulcatus. Folia opposita, pro quaque pare longitudine et magnitudine æqualia; laminis ovatis, apice acuminatis basi subrotundatis, usque 4-10 cm. longis 2-5 cm. latis, margine æqualiter serrulatis, supra sparse pilosis, subtus glabris secus venas pilosis; petiolis 0.5-2 cm. longis glabris. Spicae femineae sursum axillares, solitariae, usque 4-10 cm. longae, interrupte glomeratis, bracteis ovatis 1 mm. longis. Perigonia fructifera immatura ca. 0.7 mm. longa, compresse ovoidea, apice breve tubulosa hispida, stylis elongatis. Flores masculi ignoti.

Nom. Jap. *Saisyû-Akaso* (NAKAI).

Hab.

Quelpært: in sepibus (E. TAQUET n. 5965, Aug. 1911); in sepibus Saingmoultong 800 m. (E. TAQUET n. 1409, Aug. 1908).

Distr. Endemita.

#### 9. ながばやぶまを

草本又ハ亞灌木、雌雄同株、莖ハ直立、平滑、多ク分枝ス。鈍状四角形明瞭ニ4縦裂、高サ 1-2 m. ニ達ス。葉ハ對生、枝ニ於テハヤ、互生、相對スルニ葉ハ大キサ及ビ葉柄ノ長サヤ、異ナル。葉身ハ卵状椭圆形、或ハ卵状披針形、長サ 10-16 cm. (稀ニ 20 cm.) 幅 4-8 (稀ニ 10) cm., 先端漸尖尾状、基部ハ鈍形又ハヤ、圓形、葉縁ハ一様ナル粗鋸齒、乾ケハ膜質、三行脈、上面ハ稍平滑、毛散在シ、下面ハ無毛脈ニノミ稀ニ小毛アリ。葉柄ハ無毛ニシテ長サ 3-10 cm. アリ。雄花穂ハ下方ニ腋生、細クシテ單一、花叢ハ疎生、花被ハ4裂、裂片ハ舟状披針形、尖頭、外面ハ白色毛アリ。内面ハ無毛、雄蕊 4. 退化雄蕊ハ無毛ニシテ倒圓錐形、鈍頭。雌花穂ハ上方ニ腋生、單一、葉ヨリ短キカ又ハ長シ、花叢ハ疎又ハ稍密生。瘦果ハ壓扁倒卵形、縁部ハ廣ク、上部ハ鈍形無筒ニシテ少數ノ伏臥毛ヲ有シ、下部ハ鈍状楔形ニシテ平滑ナリ、長サ 1.5-2 mm. 幅 1-1.5 mm. 種子ハ長サ 1 mm. 許、壓扁卵形ヲナス。

濟州島ニ産ス。  
(分布) 本州、四國、九州。

9. *Boehmeria Sieboldiana* BLUME

*Boehmeria Sieboldiana* BLUME, Mus. Bot. Lugd.-Bat. II, 220 (1856); MIQUEL in Ann. Mus. Bot. Lugd.-Bat. III, 131 (1867); MAXIMOWICZ in Mém. Biol. IX, 644 (1876); FRANCHET & SAVATIER, Enum. Pl. Jap. II, 497 (1877); MATSUMURA, Ind. Pl. Jap. II-2, 43 (1912); NAKAI, Rep. Veg. Quelpært, 39 (1914) pro parte; MORI, Enum. Pl. Korea, 125 (1922) pro parte; MAKINO & NEMOTO, Fl. Jap. 1044 (1925) et ed. 2, 224 (1931); MASAMUNE, Prel. Rep. Veg. Isl. Yakusima, 68 (1929) pro parte; in Mem. Fac. Sci. Agr. Taihoku Imp. Univ. n. 4, 53 (1934); NEMOTO, Fl. Jap. Spppl. 146 (1936); SATAKE; in Journ. Fac. Sci. Imp. Univ. Tokyo, Sect. III, Bot. IV, pt. 6, 490, f. 16 (1936).

Syn. *Boehmeria longispica* var. *Sieboldiana* FRANCHET & SAVATIER, l. c. I, 440 (1875).

*Boehmeria platyphylla* var. *Sieboldiana* WEDDELL in DC. Prodr. XVI.-1, 213 (1869).

Herbacea vel suffruticosa monoica. Caulis erectus glaber, sæpe ramosus, obtuse quadrangularis distincte 4-sulcatus, usque 1-2 m. altus. Folia opposita (vel ramorum passim subalterna), pro quaque pare magnitudine et petiolorum longitudine subinæqualia; lamina ovato-ellipticis vel lanceolatis, usque 10-16 cm. (rarius 20 cm.) longis 4-8 cm. (rarius 10 cm.) latis, apice acuminato-caudatis, basi obtusis vel subrotundatis, margine æqualiter grosse serratis, in sicco membranaceis, trinervatis, supra sublævigatis sparsissime pilosis, subtus glabris sed ad nervos sparsissime puberulis, petiolis glabris 3-10 cm. longis. Spicæ masculæ graciles deorsum axillares, interrupte glomeratæ; perigonium 4-partitum, lobis naviculari-lanceolatis apiculatis extus setulis albidis intus glabris; stamina 4; pistillum rudimentum turbinatum obtusum glabrum. Spicæ femineæ sursum axillares, solitariae, foliis breviores vel longiores, cum floribus laxè vel densius glomeratis. Perigonia fructifera matura compressa obovoidea, late complanato-marginata, apice obtusa non tubulosa adpresse puberula, basi obtusa vel cuneata glabra, 1.5-2 mm. longa 1-1.5 mm. lata. Semina lenticulari-ovoidea ca. 1 mm. longa.

Nam. Jap. *Nagaba-yabumao*.

Hab.

Quelpært: in monte Hallasan (T. NAKAI, n. 344, Jun. 1913): Hongno (T. NAKAI, n. 157, Mai. 1913).

Distr. Honsyû, Sikoku and Kyûsyû

第三節 さいかいやぶまを節

亞灌木、雌雄同株又ハ異株、莖ハ直立、單一又ハ分枝、葉ハ對生、相對スルニ葉ハ同形、同大、葉身ハ菱狀卵形、圓狀卵形、圓狀心臟形又ハ卵狀心臟形、葉縁ハ一様ナル粗鋸齒、鈍狀鋸齒、鈍狀齒牙鋸齒、下面ハ短柔毛ヲ生ジ、又ハ絹様毳毛ヲ生ジ、稀ニ短毛ヲ散生ス。葉柄ハ葉身ヨリ著シク短カシ、雌花穗ハ上方ニ腋生、直立斜上、單一又ハ分岐、花叢ハ疎又ハ稍密生、葉ト同長又ハヨリ長シ。瘦果ハ壓扁倒卵形、多少廣キ縁部ヲナシ、上部鈍形短筒、剛毛ヲ密生、下部ハ鈍形又ハ稍楔狀短柔毛ヲ生ズ。朝鮮ニ2種アリ。

{ 葉身ハ、下面灰白色ノ毳毛又ハピロード狀ノ毛ヲ密生シ、葉柄モピロード狀ノ毛ヲ密生ス。 .....さいかいやぶまを  
葉身ハ、下面短柔毛ヲ生ズ。葉柄ニハ剛毛又ハ絨毛ヲ生ズ。  
.....たんなやぶまを

Sect. 3. **Pannosæ** SATAKE in Journ. Fac. Sci. Imp. Univ. Tokyo, Sect. III, Bot. IV, Pt. 6, 503 (1936).

Planta suffruticosa monoica vel dioica. Caulis erectus simplex vel ramosus. Folia opposita, pro quaque pare magnitudine et longitudine æqualia; laminae rhombeo-ovatae, rotundo-ovatae vel -cordatae, vel ovato-cordatae, margine regulariter grosse serratae, crenatae, crenato-dentatae vel dentato-serratae, subtus dense vel plus minus pubescentes vel holosericeae vel canescenti-pannosae rarius hirtellae, petiolis sæpe brevissimis. Spicæ femineae sursum axillares erecto-ascendentes solitariae vel ramosae, subconferte vel laxè glomeratae, foliis æquantes vel longiores. Perigonia fructifera compressa obovoidea plus minus complanato-marginata apice obtusa breve tubulosa dense hispida, basi obtusa vel subcuneata pubescentia. Species Koreanæ 2.

{ Laminae foliorum subtus canescenti-pannosae vel velutino-holosericeae, petiolis dense velutino-villosis. ....B. pannosa  
Laminae foliorum subtus pubescentes, petiolis hispidis vel villosis.  
.....B. quelpærtensis

10. **さいかいやぶまを**

亞灌木、雌雄異株又ハ同株。莖ハ單一、四角狀圓形、ヤ、深キ4縱襞アリ。乾イテ褐色又ハ黒褐色ヲ呈ス。上方ハビロード狀密毛ヲ生ジ、下方ハ毛少ナク、經約4-5mm。葉ハ對生、相對スル二葉ハ圓形同大；葉身ハ卵形、卵狀圓形、先端漸尖頭、基部ハ圓形又ハ圓狀心臟形又ハ圓狀ニシテ稍楔形、長サ約12-18cm。幅10-17cm。多クハ3行脈或ハ稍5行脈ヲ有ス。邊緣ハ一様ナル鈍鋸齒狀、鋸齒ハ銳尖頭又ハ鈍頭上方ノモノハ大形、長サ5-6mm。幅7-10mm。下方ノモノハヨリ小ナリ。上面ハヤ、粗糙鈎狀剛毛ヲ密生、鐘狀體ハ明瞭ニシテ微小球形、下面ハビロード狀毳毛ヲ密生ス。葉柄ハ長サ3-10cm。ビロード狀毳毛ヲ密生。托葉ハ披針形長サ10-12mm。幅3-4mm。外面ニ短毛ヲ生ジ、中肋ニ剛毛アリ。雄花序ハ總狀、腋生、短毛ヲ密生シ、葉ヨリ遙ニ短カシ、花叢ハ疎。苞ハ披針形ニシテ花叢ト同長。花被ハ4裂、裂片ハ舟狀倒卵形、外面毛ヲ布ク。雄蕊4。退化雄蕊ハ短棍棒狀。雌花穗ハ單一又ハヤ、分枝シ、腋生、花叢ハ疎、葉ヨリモ短カシ、瘦果ハ未熟、倒披針形、長サ約2mm。幅7mm。上部ニ剛毛ヲ生ジ下部ハ楔狀短毛ヲ生ズ。

濟州島、慶尙南道ニ生ズ。

(分布) 本州、九州。

10. **Bœhmeria pannosa** NAKAI & SATAKE

*Bœhmeria pannosa* NAKAI & SATAKE apud OKA in Tennen-Kinenbutu-Tyōsa-Hokoku, Syokubutu-no-bu, XVI, 4 (1936) nom. tantum; SATAKE in Journ. Fac. Sci. Imp. Univ. Tokyo, Sect. III, Bot. IV, Pt. 6, 510, f. 30 (1936).

Syn. *Bœhmeria holosericea* (non BLUME) YABE in Bot. Mag. Tokyo, XVII, 177 (1903); NAKAI, Veg. Isl. Quelpært, 39 (1914) pro parte; MORI, Enum. Pl. Corea, 125 (1922) pro parte.

Suffrutex dioicus vel monoicus. Caulis simplex tetragono-teres subprofunde 4-sulcatus, in sicco fulvus vel atro-fuscus, superne velutino-tomentosus, inferne glabratus usque 4-5 mm. crassus. Folia opposita, pro quaque parte longitudine et magnitudine æqualia; laminæ ovatae vel ovato-rotundatae apice acuminato-acutae basi rotundatae vel rotundato-cordatae vel -subcuneatae, usque ad 12-18 cm. longae 10-17 cm. latae, sæpe trinerves vel subquinenerves, margine æqualiter crenatae crenis apiculatis vel obtusis superiore majoribus ad 5-6 mm. longis 7-10 mm. latis inferiore minoribus, supra scabriusculae dense curvato-

hispidae cystolithis distinctis minutissime punctatis, subtus dense velutino-pannosae vel -tomentosae; petioli 3-10 cm. longi dense velutino-pannosi. Stipulae lanceolatae 10-12 mm. longae 3-4 mm. latae extus pubescentes costis hispidulis. Inflorescentia mascula paniculata axillaris foliis valde brevior dense pubescens, floribus laxè glomeratis; bractea glomeruli lanceolata glomerulo æquilonga; perigonium 4-partitum, tepalis naviculari-obovatis extus pubescentibus intus glabris; stamina 4; pistilli rudimentum clavatum parvum. Spicae femineae axillares solitariae vel subramosae, foliis breviores, floribus laxè glomeratis. Perigonia fructifera immatura oblanceolata, ca. 2 mm. longa 1 mm. lata, apice breve tubulosa dense villosa, basi subcuneata pubescentia.

Nom. Jap. *Saikai-yabumao*.

Nom. Kor. *Puk-chin* (Quelpært).

Hab.

Quelpært: latere australe, in sepibus (E. TAQUET n. 5968, Sept. 1911); in incultis Hongno (E. TAQUET n. 1405, Jul. 1908); in sepibus Tai-tjyeng (E. TAQUET n. 3232, Aug. 1909); sine loco speciali (U. FAURIE Oct. 1906), in declivitatibus (U. FAURIE n. 2016, Aug. 1906); in sepibus Hongno (E. TAQUET n. 4432, Aug. 1910); sine loco speciali (U. FAURIE n. 2016, Aug. 1907).

Prov. Keinan: Kaiundai (T. NAKAI, n. 11093, Mai. 1928).

Prov. Zennan: Ins. Kyobuntō (T. NAKAI, n. 11103, Mai. 1928).

Distr. Honsyū and Kyūsyū.

11. **たんなやぶまを**

亞灌木、雌雄同株。莖ハ直立、單一、圓狀四角形、淺ク或ハ稍深ク4縱襞、概ネ有毛、徑4-5mm。葉ハ對生、相對スル二葉ハ同長同大、葉身ハ卵形或ハ圓狀卵形、銳頭又ハ銳尖頭、基部ハ圓形稍心臟形、長サ約10-20cm。幅8-16cm。邊緣ハ鈍鋸齒又ハ鈍狀齒牙、鋸齒ハ稍銳頭長サ5-8mm。幅7-12mm。下部ノモノハ小形、上面ハ粗糙稍屈曲剛毛ヲ生ジ、主脈ハ陥入シ毛密生ス。鐘狀體ハ微小球形、下面ハヤ、白色ヲ帶ビ短柔毛ヲ生ジ、脈上ハ剛毛ヲ生ジ、常ニ3行脈、葉柄ハ長サ2-10cm。絨毛密生。托葉ハ披針形長サ約10mm。幅2-2.5mm。外面有毛中肋ニ長毛アリ。雌花穗ハ腋生。上方ノモノハ單一、下方ノモノハ分岐シ多クハ葉ヲ生ズ、葉ヨリモ短カク、花叢ハ密接ス。太サ6-8mm。瘦果ハ壓扁倒卵形或ハ倒披針狀倒卵形、緣部ハ狭ク、上部ハ鈍形短筒、剛毛ヲ密生。下部ハ稍楔形柔毛ヲ有

シ、長サ約 2 mm. 幅 1-1.5 mm. 種子ハ橢圓狀卵形長サ約 1 mm. 雄花ハ不明。

濟州島ニ産ス。

(分布) 固有種。

一種葉ノ下面ニ毛ノ少ナキモノアリ。コレヲ

けなしたんなやぶまをト稱ス。コレ亦濟州島ノ特産ナリ。

11. *Behmeria quelpaertensis* SATAKE

*Behmeria quelpaertensis* SATAKE in Journ. Fac. Sci. Imp. Univ. Tokyo, Sect. III, Bot. IV, Pt. 6, 514, f. 34-35 (1936).

Syn. *Behmeria holosericea* (non BLUME) NAKAI, Rep. Veg. Quelpaert, 39, n. 520 (1914); MORI, Enum. Pl. Corea. 125 (1922) pro parte major.

Suffruticosa monoicus? Caulis erectus, simplex tereti-tetragonus leviter vel subprofunde 4-sulcatus saepe hirsutus, usque 4-5 mm. in diametro. Folia opposita, pro quaque pare longitudine et magnitudine aequalia; laminis ovatis vel rotundato-ovatis, apice acutis vel acuto-acuminatis, basi rotundatis vel subcordatis, usque ad 10-20 cm. longis 8-16 cm. latis, margine crenatis vel crenato-dentatis, dentibus subapiculatis 5-8 mm. longis 7-12 mm. latis inferiore minoribus, supra scabris subcurvato-hispidis, in nervis primariis impressis dense hirtellis, cystolithis minutissime globosis, subtus subglaucis pubescentibus in nervis hispidis, saepe trinervatis; petiolis 2-10 cm. longis dense villosis. Stipulae lanceolatae ad 10 mm. longae 2-2.5 mm. latae extus pubescentes costis hirsutis. Spicae femineae axillares, superiore solitariae, inferiore ramosae, saepe foliosae, foliis breviores, cum floribus conferte glomeratis, usque 6-8 mm. crassae. Perigonia fructifera compresse obovoidea vel oblanceolato-obovoidea, anguste complanato-marginata, apice obtusa breve tubulosa dense hispida, basi subcuneata pubescentia, usque 2 mm. longa 1-1.5 mm. lata. Semina lenticulari-elliptica vel ovoidea ca 1 mm. longa. Flores masculi ignoti.

Nom. Jap. *Tanna-yabumao*.

Hab.

Quelpaert: Ibi (T. NAKAI n. 4999, Nov. 3, 1917); Saisyû (T. NAKAI n. 4977, Oct. 28, 1917); circa Kwannonzi (T. NAKAI n. 4998, Oct. 1917). Prov. Zennan: Ins. Daikokuzantô (T. ISHIDOYA, n. 3953, Aug. (1919).

Distr. Endemica.

forma **glabra** SATAKE, l. c.

Laminae foliorum subtus glabratae.

Nom. Jap. *Kenasi-tanna-yabumao*.

Hab.

Quelpaert: Ibi (T. NAKAI n. 4999, Nov. 1917).

Distr. Endemica.

第四節 やぶまを節

亞灌木又ハ草本、莖ハ單一又ハ分枝。葉ハ對生、相對スルニ葉ハ同長同大。葉身ハ卵形、卵狀圓形或ハ卵狀心臟形、縁邊ハ不同ナル鋸齒ヲ有シ、上部デハ往々淺ク或ハ稍深ク重鋸齒ヲナシ、稀ニ缺刻狀重鋸齒ヲナシ又裂尾狀ヲナス。上面ハ剛毛ヲ生ジ多クハ粗糙トナリ、下面ハ短柔毛ヲ生ズルカ絹毛様毛アリ、又ハ短毛ヲ生ジ、稀ニ無毛トナル、乾ケバ稍紙質又ハ革質トナル。雌花穂ハ單一又ハ分岐シ上方ニ腋生ス。瘦果ハ扁壓倒卵狀又ハ倒卵狀橢圓形、縁部ハ多少廣イ、上部ニ剛毛密生、稀ニ散生ス。朝鮮ニ 2 種アリ。

葉身ハ基部圓形又ハ鈍形又ハ截狀鈍形、乾ケバ質厚ク稍革質、葉縁ノ上部ハ時ニヤ、重鋸齒ヲナス。上面ニ小剛毛アリ、下面ノ脈上ニ多少小剛毛アルカ又ハ無毛。……………やぶまを  
葉身ハ基部截狀楔形、乾ケバ往々薄紙質、葉縁ノ上部ハ常ニ深キ重鋸齒ヲナス。上面ニ長剛毛散在、下面ノ脈上ニ平開セル剛毛散生ス。……………ゆやぶまを

Sect. 4. **Longispicae** SATAKE in Journ. Fac. Sci. Imp. Univ. Tokyo, Sect. III, Bot. IV, Pt. 6, 521 (1936).

Syn. *Behmeria* Sect. *Duretia* BLUME, Mus. Bot. Lugd.-Bat. II, 212 (1856) pro parte.

Suffrutex vel herbaceus. Caulis simplex vel ramosus. Folia opposita, pro quaque pare longitudine et magnitudine semper aequalia; laminae ovatae vel ovato-rotundatae vel rotundato-cordatae, margine inaequaliter serratae apice interdum leviter vel distincte duplicato-serratae rarius profunde inciso-duplicato-serratae vel tricuspidatae, supra hispidae fere valde scabrae, subtus pubescentes vel holosericeae vel hirtellae rarius glabratae, in sicco coriaceae vel papyraceae vel subchartaceae. Spicae femineae simplices vel ramosae sursum axillares. Perigonia fructifera

compreste obovoidea vel obovato-ellipsoidea, plus minus complanato-marginata, apice dense rarius sparse hispida.

Laminae foliorum, basi rotundatae vel obtusae vel truncato-obtusae, in sicco crassae subchartaceae, margine superiore grosse serratae interdum leviter duplicato-serratae, supra hispidulae, subtus ad nervos plus minus hispidulae vel glabratae. ....*B. longispica*

Laminae foliorum basi truncato-cuneatae, in sicco interdum tenues papyraceae, margine superiore saepe profunde duplicato-serratae vel inciso-duplicato-serratae, supra sparse hispidae, subtus ad nervos sparse patenti-hispidae. ....*B. platanifolia*

12. やぶまを

亞灌木、雌雄同株、莖ハ直立、單一又ハ分岐、下部ハ無毛圓形、徑 5-8 mm. 上部ハ稍四角狀圓形有毛、輕ク4縱襞アリ、高サ 1-1.5 m. ニ達ス。葉ハ對生長柄、相對スルニ葉ハ同長同大、葉身ハ卵形又ハ圓狀卵形、長サ約 10-15 cm. (稀ニ 20 cm.) 幅 6-12 cm. (稀ニ 15 cm.)、基部ハ圓形又ハ楔狀鈍形、葉緣ハ不同ナル大鋸齒アリ、又ハ粗重鋸齒、鋸齒ハ下部ノモノ小サク、上部ノモノハ大キク長サ幅 10-15 mm. 許、ヤ、鎌形ヲナシ銳頭、上部ハ往々淺キ粗重鋸齒ヲナシ尾狀ニ終ル。上面ハ粗糙ニシテ短柔毛又ハ小剛毛ヲ有シ、下面ハ短柔毛アルカ又ハ長絹毛アリ。特ニ葉脈ニ小剛毛アリ、3 行脈ヲナス。葉柄ハ葉身ト同長又ハヤ、短カク短柔毛ヲ生ズ。雄花ハ不詳、雌花穗ハ上方ニ腋生、通常單一、稀ニ基部ノミ分岐シ、葉ヨリ超出シ、長キモノハ 26 cm. ニ達スルモノアリ。花叢ハ疎又ハ稍密生、徑 5-6 mm. 瘦果ハ壓扁倒披針形或ハ倒卵形、長サ 1.5 mm. 幅 1 mm. 緣部ハ多少廣ク、上部ハ鈍形短筒剛毛ヲ密生、下部ハ楔狀短柔毛ヲ有ス。種子ハレンズ狀卵形長サ 0.8 mm. 許ナリ。

黃海道、慶尙南道、濟州島ニ生ズ。

(分布) 支那、北海道、本州、四國、九州。

12. *Bahmeria longispica* STEUDEL

*Bahmeria longispica* STEUDEL in Flora Regensb. XXXIII, 260 (1850); BLUME, Mus. Bot. Lugd.-Bat. II, 221 (1856)—FRANCHET & SAVATIER, Enum. Pl. Jap. I, 440 (1875); SATAKE in Journ. Fac. Sci. Imp. Univ. Tokyo, Sect. III, Bot. IV, Pt. 6, 533, f. 53 (1936).

Syn. *Acalypha* HOUGHTUYN, Nat. Hist. XI, Aanwy Pl. LXXII, fig. 2 (1779), Pflanzensyst. X, t. 72, fig. 2 (1783), cum nota 'Herr

Hougtuyn etc' sub *Acalypha australis* in 226.

*Bahmeria macrophylla* SIEBOLD & ZUCCARINI in Abh. Math.-Phys. Akad. Wiss. München, IV-3, 215 (1846) excl. syn. *Urtica spicata* THUNBERG.

*Bahmeria grandifolia* WEDDELL in Ann. Sci. Nat. 4-ser. I, 199 (1854); C.H. WRIGHT in Journ. Linn. Soc. XXVI, 485 (1899); MATSUMURA, Ind. Pl. Jap. II.-2, 41 (1912); MATSUDA in Bot. Mag. Tokyo, XXVIII, 7 (1914).

*Bahmeria platyphylla* var. *japonica* WEDDELL, Monogr. Fam. Urtic. 365 (1856).

*Bahmeria japonica* MIQUEL in Ann. Mus. Bot. Lugd.-Bat. III, 131 (1867); MAXIMOWICZ in Mém. Biol. IX, 642 (1876); MAKINO, IINUMA's Somoku Dzusetsu, IV, 1272, Pl. 1161 (1912); MORI, Enum. Pl. Corea, 125 (1922); MAKINO & NEMOTO, Fl. Jap. 1063 (1925); ed. 2, 223 (1931); MIYABE & KUDÔ, Fl. Hokkaido and Saghal. IV, 490 (1934); MASAMUNE in Mem. Fac. Sci. Agr. Tai-koku Imp. Univ. XI, Bot. n. 4. 158 (1934).

*Bahmeria platyphylla* var. *macrophylla* WEDDELL in DC. Prodr. XVI.-1, 212 (1869).

*Bahmeria spicata* (non THUNBERG) WRIGHT, l.c. 488, excl. syn. *Urtica spicata* THUNBERG et *B. platyphylla* var. *japonica* WEDDELL.

*Bahmeria Miqueliana* TANAKA in Bult. Sci. Fukult. Kjusju Imp. Univ. I, 198 (1925); HATSUSHIMA in Bull. Exp. Forest. Kyushu Imp. Univ. n. 4, 53 (1934); NEMOTO, Fl. Jap. Suppl. 145 (1936).

*Ramium caudatum* O. KUNTYE, Rev. Gen. Pl. II, 631 (1891).

Suffruticosa monoica. Caulis erectus simplex vel ramosus, ca. 1-1.5 m. altus, inferne glabratus teres 5-8 mm. crassus, superne sub-tetragono-teres pubescens vel tomentosus, leviter vel haud 4-sulcatus. Folia opposita, pro quaque pare longitudine et magnitudine aequalia; laminae ovatae vel orbiculari-ovatae, usque ad. 10-15 cm. (rarius 20 cm.) longae, 6-12 cm. (rarius 15 cm.) latae, basi rotundatae vel cuneato-obtusae, margine inaequaliter grosse serratae rarius grosse duplicato-serratae, serris superiore subfalcatis acutis 10-15 mm. longis et latis, apice sub-profunde dentato-serratae vel duplicato-serratae, saepe in cuspidem linearem productae, supra scabro-pubescentes vel hispidulae, cystolithis distinctis minutissime punctatis, subtus pubescentes vel holosericeae

praesertim ad nervos hispidulae, 3-nervatae; petiolis pubescentibus laminis aequantibus vel brevioribus. Flores masculi ignoti. Spicae femineae sursum axillares, saepe simplices rarissime basi ramulosae, foliis valde superantes, 5-6 mm. crassae, interrupte vel densius glomeratae. Perigonia fructifera compressa oblanceolata vel obovata, ca. 1.5 mm. longa 1 mm. lata, late vel plus minus complanato-marginata, apice obtusa brevissime tubulosa dense hispida, basi cuneata pubescentia, seminibus lenticulari-ovatis ca. 0.8 mm. longis.

Nom. Jap. *Yabumao*.

Hab.

Prov. Kokai: Ins. Taiseitô (T. NAKAI n. 12680, Jul. 1929).

Prov. Keinan: Ins. Kyosaitô (T. NAKAI n. 11094, Mai. 1928).

Quelpart: Hongno (T. NAKAI n. 156, Mai. 1913); circa Kwannonzi (T. NAKAI Oct. 1917).

Distr. China, Hokkaido, Honsyû, Sikoku and Kyûsyû.

### 13. めやぶまを

多年生草本、雌雄同株、莖ハ直立、単一又ハ分枝、下部ハ圓形無毛、淺ク4縱襞、徑3-5 mm. 上部ハ鈍狀四角形明瞭ニ4縱襞、短柔毛又ハ稍絨毛ヲ生ズ。高サ約50-100 cm. ニ達ス。葉ハ對生、相對スルニ葉ハ同長同大、葉身ハ廣卵形又ハ稍圓形、長サ幅10-20 cm. 基部ハ截狀楔形、邊緣ハ粗鋸齒、往々重鋸齒、鋸齒ハ劍狀三角形長サ幅1-2 cm. 先端銳尖屢々内側ニ曲ル、上端ハ深キ重鋸齒又ハ缺刻狀重鋸齒ヲナシ、乾ケバ往々薄紙質、上面ハ剛毛散生又ハ稍密生、鐘狀體ハ明瞭微小點狀、下面ハ稍白色ヲ帶ビ有毛、時ニ主脈上ニハ平開セル小剛毛ヲ生ズ。葉柄ハ細ク葉身ヨリ短カキカ同長、托葉ハ鈍狀披針形、長サ10 mm. 幅2 mm. 中肋ノ外面ニモアリ。雄花ハ不詳、雌花穗ハ上方ニ腋生、單一、葉身ヨリ短カク或ハ長シ。花叢ハ疎生、徑3-4 mm. 瘦果ハ壓扁倒卵形、長サ約1.5 mm. 幅1 mm. 緣部ハ多少廣イ、上部ハ鈍狀短筒、剛毛密生ス。下部ハ稍楔形、短毛ヲ生ズ。種子ハレンズ狀卵形平滑、長サ0.8 mm.

全羅南道、黃海道、慶尙北道、濟州島ニ産ス。

(分布) 支那、北海道、本州、九州。

### 13. *Behmeria platanifolia* FRANCHET & SAVATIER

*Behmeria platanifolia* FRANCHET & SAVATIER, Enum. Pl. Jap. I, 440 (1875); FRANCHET, Pl. David. I, 270 (1884); C. H. WRIGHT in Journ.

Linn. Soc. XXVI, 486 (1899); MATSUMURA, Ind. Pl. Jap. II.-2, 42 (1912); MORI, Enum. Pl. Corea, 125 (1922); HANDEL-MAZZETTI, Symb. Sin. VII, 151 (1929); MASAMUNE in Mem. Fac. Sci. Agr. Taihoku Imp. Univ. XI, Bot. n. 4, 158 (1934); SATAKE in Journ. Fac. Sci. Imp. Univ. Tokyo, Sect. III, Bot. IV, Pt. 6, 534, f. 154 (1936).

Syn. *Behmeria longispica* var. *platanifolia* FRANCHET & SAVATER, l.c. II, 497 (1879).

*Behmeria holosericea* (non BLUME) NAKAI, Fl. Korea. II, 198 (1911).

*Behmeria japonica* var. *platanifolia* MAXIMOWICZ apud MAKINO & NEMOTO, Fl. Jap. 1063 (1925); ed. 2, 223 (1931).

*Behmeria Miqueliana* TANAKA var. *platanifolia* HATSUSIMA in Bult. Exper. For. Kyusyu Imp. Univ. V, 55 (1934); NEMOTO, Fl. Jap. Suppl. 145 (1936).

Herbacea monoica. Caulis erectus simplex vel ramosus, inferne teres glabratus leviter vel haud 4-sulcatus, 3-5 mm. in diametro, superne obtuse tetragonus distincte 4-sulcatus pubescens vel subtomentosus, usque 50-100 cm. altus. Folia opposita, pro quaque magnitudine et longitudine aequalia; laminis late ovatis vel subrotundatis, usque 10-20 cm. longis et latis, basi truncato-cuneatis, margine grandi-serratis interdum duplicato-serratis, serris falcato-triangularibus 1-2 cm. longis et latis apice acutis fere intus curvatis, apice saepe profunde duplicato-serratis vel inciso-duplicato-serratis, in sicco interdum tenuibus papyraceis, supra sparse vel densius hispidis, cystolithis distinctis minutissime punctatis, subtus subglaucis pubescentibus praesertim in nervis primariis patenti-hispidulis; petiolis gracilibus laminis aequantibus vel brevioribus. Stipulae lanceolatae 10 mm. longae 2 mm. latae costis extus pilosis. Flores masculi ignoti. Spicae femineae sursum axillares, simplices, interrupte glomeratae, foliis longiores vel breviores, 3-4 mm. crassae. Perigonia fructifera compressa obovoidea, ca. 1.5 mm longa 1 mm. lata, plus minus complanato-marginata, apice obtusa breve tubulosa dense hispida, basi subcuneata pubescentia, seminibus lenticulari-ovatis glabris ca. 0.8 mm. longis.

Nom. Jap. *Meyabumao*, *Yamaso*.

Hab.

Prov. Zennan: Insl. Kyobuntô (T. NAKAI n. 11102, Mai. 1928).

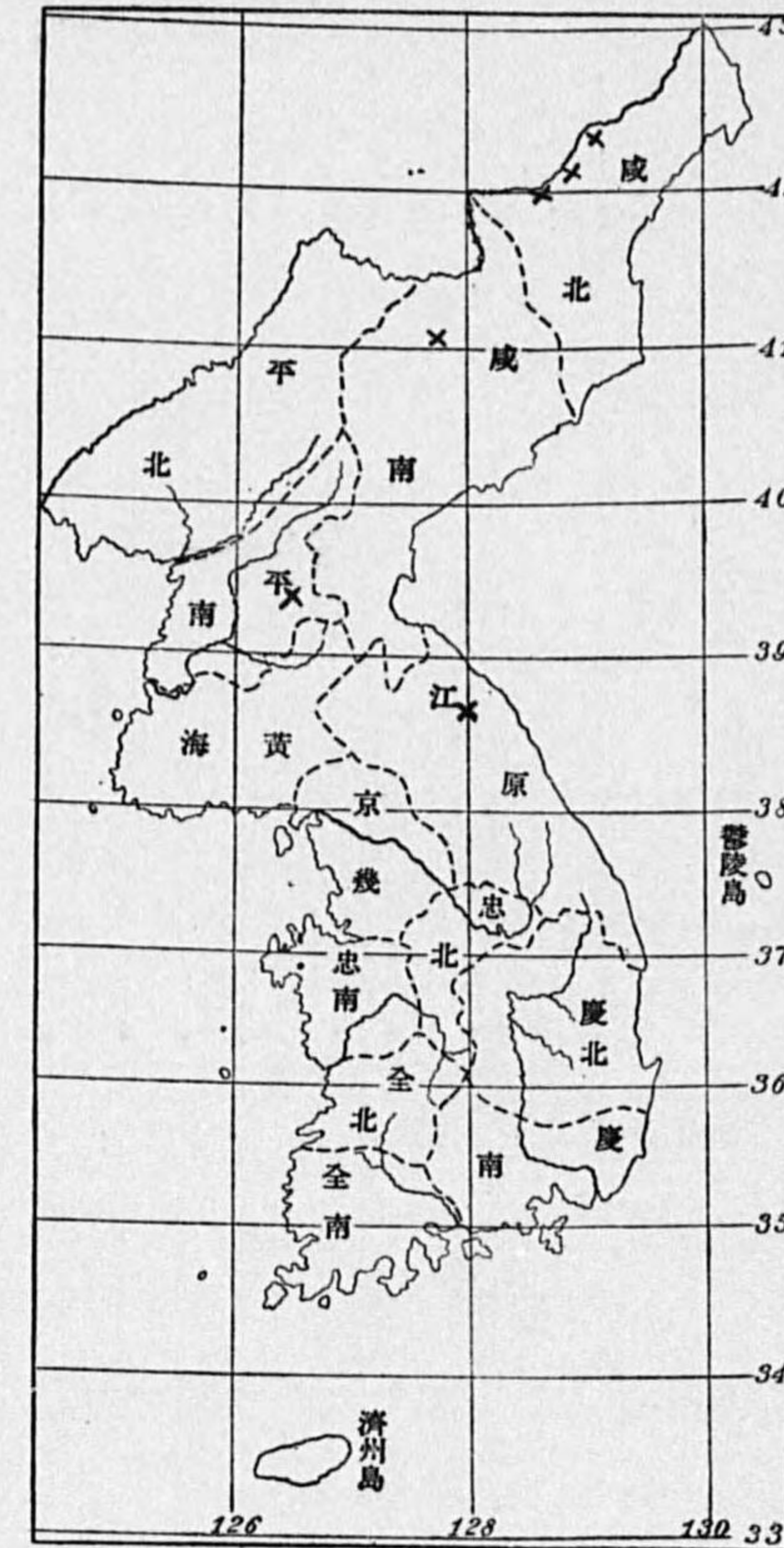
Prov. Kokai: Insl. Taiseitô (T. NAKAI n. 12679, Jul. 1929); Peninsula

Tyôzankwan (T. NAKAI, n. 12678, Jul. 1929).  
 Prov. Keihoku: Mt. Tyôreizan (T. UCHIYAMA, Oct. 1902).  
 Quelpært: latere boreale (T. NAKAI n. 6155, Oct. 1917).  
 Distr. China, Hokkaidô, Honsyû and Kyûsyû.

朝鮮産ノ馬兜鈴科、木通科、小蘗科、海桐花科、  
 錦葵科、岩高蘭科、蓴麻科植物ノ木本類ノ和名、  
 朝鮮名、學名ノ對稱表、

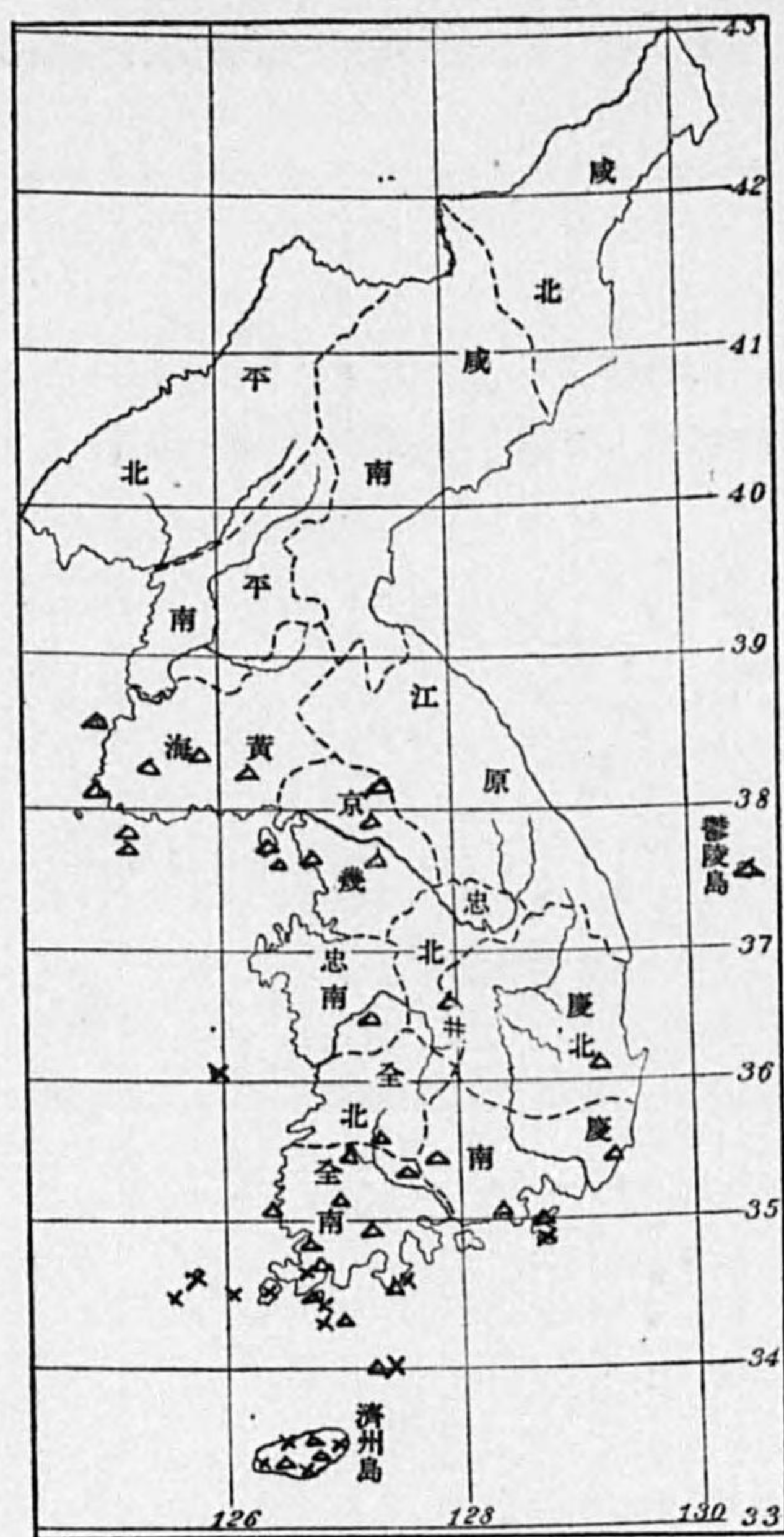
和名	朝鮮名	學名
きだちうまのすずくさ	トンチヨー、トンチャルモツク	<i>Hocquartia manshuriensis</i> NAKAI
むべ、ときはあけび	モーグクル、ム、メウング (濟州島) モーンヨルチュル (莞島) モンノツクアル (外羅老島)	<i>Stauntonia hexaphylla</i> DECAISNE
あけび	ユルン、ノトン、チヨルゲンイ、ユールムノンチュル (濟州島)、ウクロムヨンチュル (莞島)、オールム (全南長城)、ウアルムノギユル (東醫寶鑑)、オルムナム (字釋)	<i>Akebia quinata</i> DECAISNE
やつであけび		<i>Akebia quinata</i> var. <i>polyphylla</i> NAKAI
たうめぎ		<i>Berberis Poiratii</i> SCHNEIDER var. <i>angustifolia</i> NAKAI
おほばめぎ		<i>Berberis amurensis</i> RUPRECHT
ひろはめぎ		<i>Berberis amurensis</i> var. <i>latifolia</i> NAKAI
さいしうめぎ		<i>Berberis amurensis</i> var. <i>quelpertensis</i> NAKAI
てうせんめぎ		<i>Berberis koreana</i> PALIBIN
ながみのてうせんめぎ		<i>Berberis koreana</i> var. <i>ellipsoidea</i> NAKAI
ほそばのてうせんめぎ		<i>Berberis koreana</i> var. <i>angustifolia</i> NAKAI
とびらのき	トンナム、ピトンナム (濟州島)、ケポートルナム (莞島)	<i>Pittosporum Tobira</i> AITON
はまぼろ		<i>Paritium Hamabo</i> NAKAI
むくげ		<i>Hibiscus syriacus</i> LINNÆUS
がんかうらん	シロミ、シルム (濟州島)	<i>Empetrum nigrum</i> L. var. <i>asiaticum</i> NAKAI
こあかそ		<i>Boehmeria spicata</i> THUNBERG

朝鮮産ノ馬兜鈴科、木通科、小蘗科、海桐花科、  
 錦葵科、岩高蘭科、蓴麻科植物木本類ノ分布表

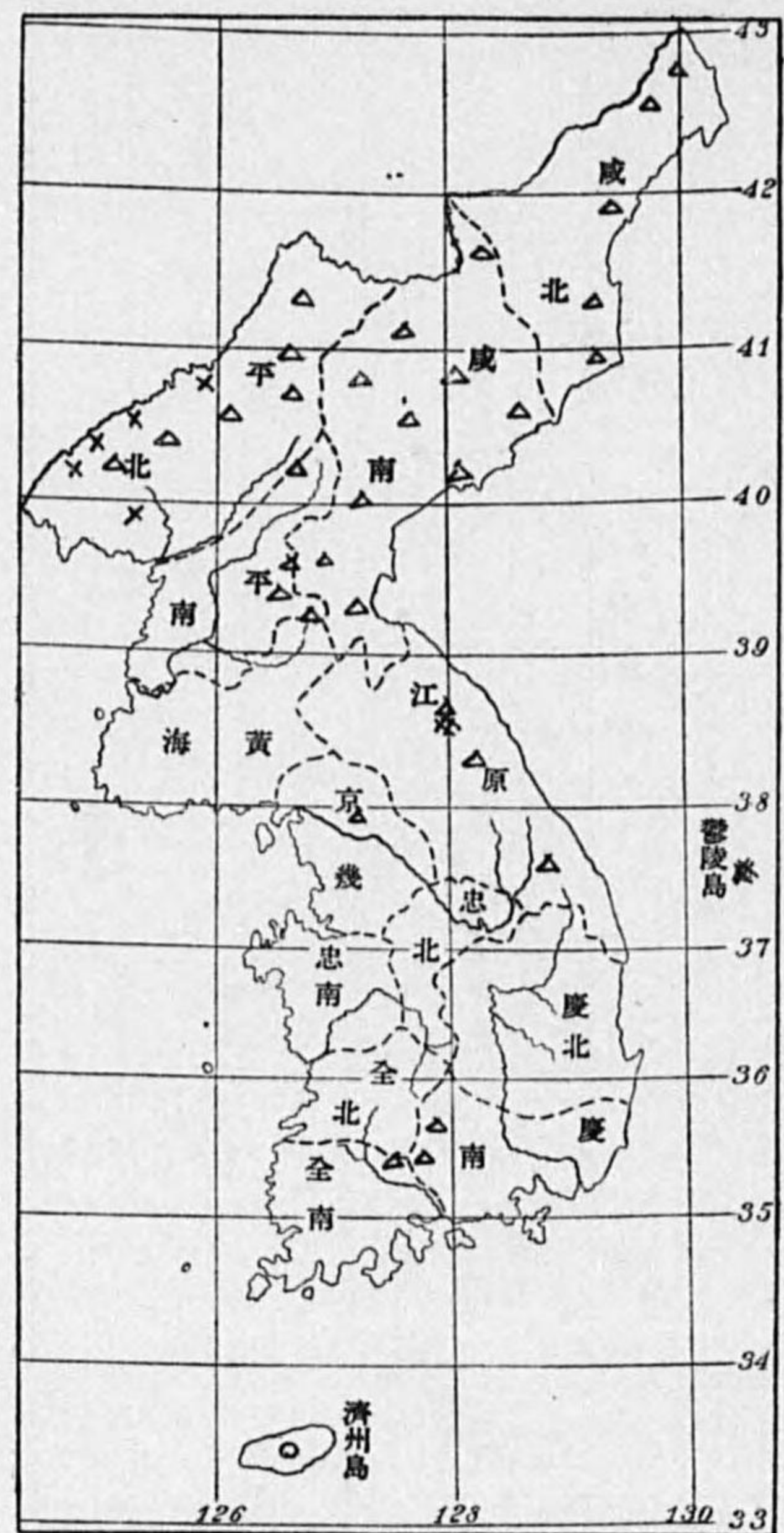


× きだちうまのすずくさ *Hocquartia manshuriensis*

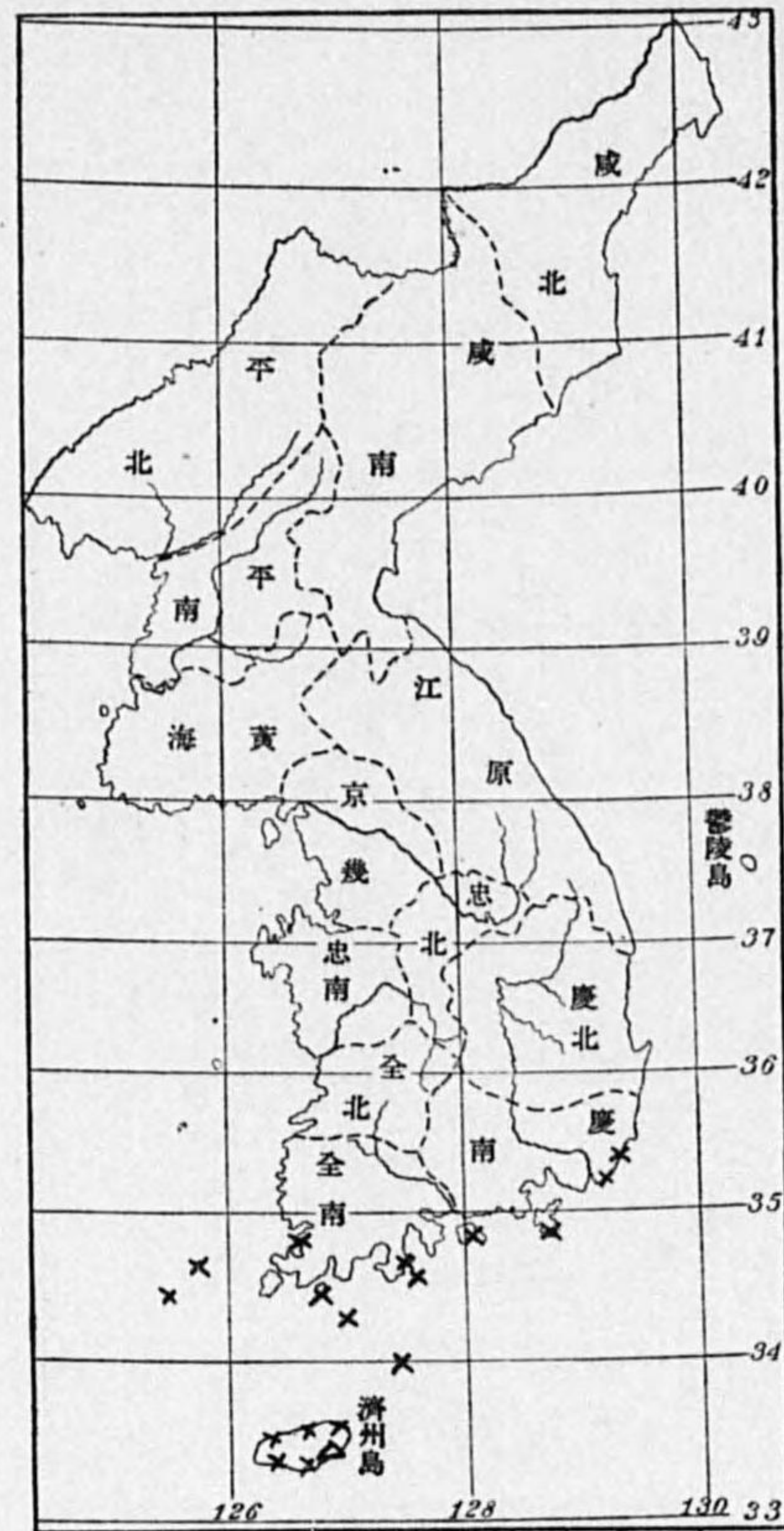




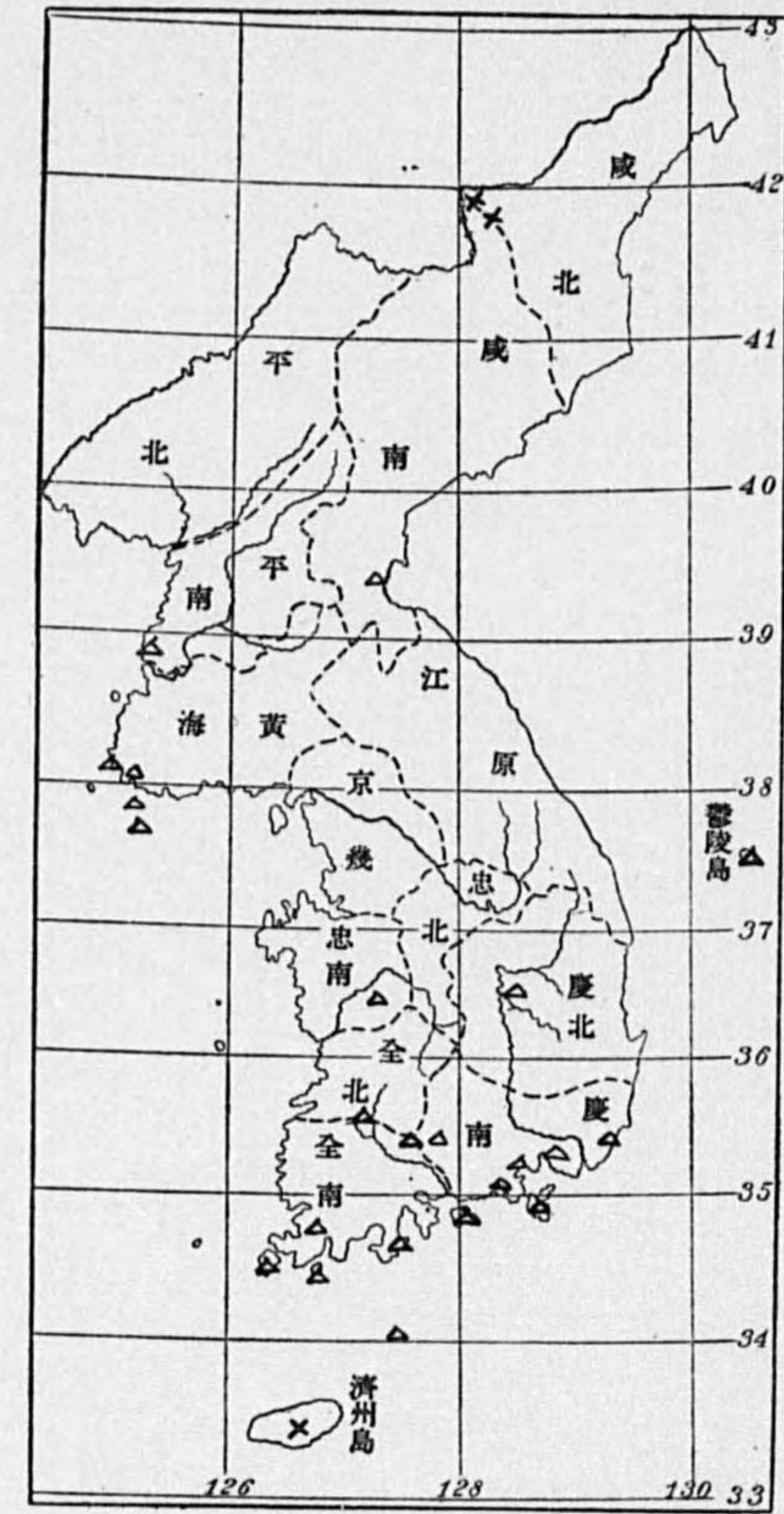
- × む *Stauntonia hexaphylla*
- △ あ け び *Akebia quinata*
- # やつであけび *Akebia quinata* var. *polyphylla*



- × た ろ め き *Berberis Poirerii* v. *angustifolia*
- △ お ほ ば め き *Berberis amurensis*
- # ひ ろ は め き *Berberis amurensis* v. *latifolia*
- さ い し ろ め き *Berberis amurensis* v. *quelpartensis*



× とびらのき *Pitosporum Tobira*  
 △ はまぼろ *Paritium Hamabo*



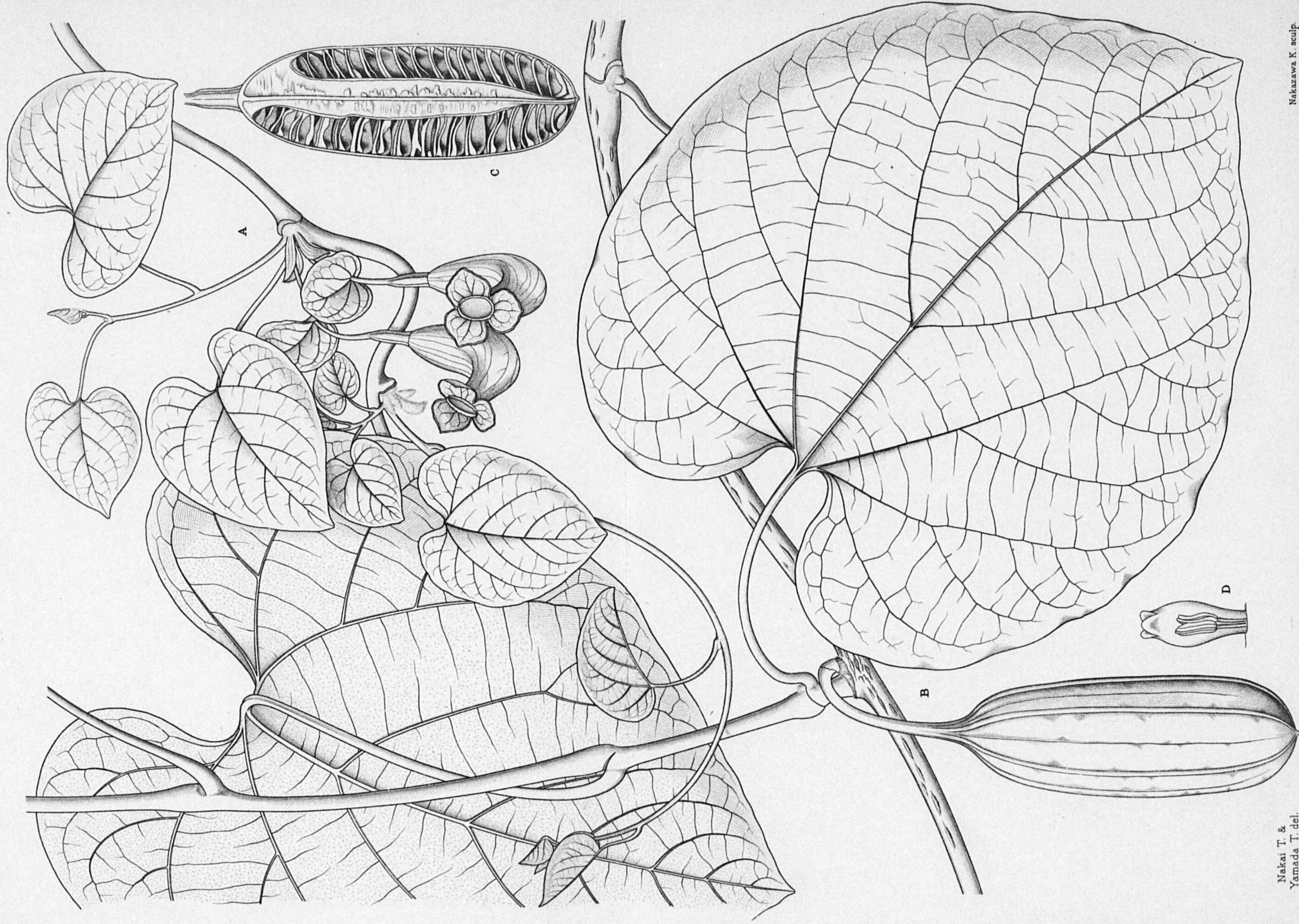
× がんからん *Empetrum nigrum* var. *asiaticum*  
 △ こあかそ *Boehmeria spicata*

第 I 圖 Tabula I

さだちうまのすすくさ

*Hocquartia manshuriensis* NAKAI

- |                 |                                   |
|-----------------|-----------------------------------|
| A. 花ヲ附クル枝 (×1)  | A. Ramus florifer (×1)            |
| B. 果實ヲ附クル枝 (×1) | B. Ramus fructifer (×1)           |
| C. 果實ノ縱斷面 (×1)  | C. Capsula longitudine secta (×1) |
| D. 花柱ト柱頭 (廓大)   | D. Stylus et stamina (aucta)      |



Nakai T. &  
Yamada T. del.

Nakazawa K. sculp.