

PRELIMINARY NOTES ON THE VEGETATION AND FLORA OF MT. TA-TUN, TAIPEI.

II. Flora: Magnoliaceae to Ranunculaceae.

TSAN-JANG CHUANG⁽¹⁾

Enumeration of the vascular plants.

A. Angiospermae*

a. Dicotyledons

I. Archichlamydeae

Fam. 1 Magnoliaceae

Magnoliaceae J. St.—Hil. Expos. Famil. 2: 74, 1805.

- 1) *Michelia* Linn.

Key to species

1. Leaves 14–24 cm. long.....*M. alba*
2. Leaves 6–10 cm. long.....2
2. Shrub, flowers very fragrant*M. fuscata*
2. Tree, flowers slightly fragrant*M. formosana*

Michelia alba DC. Syst. 1: 449, 1818; Merr. Enum. Philip. Pl. 2: 152, 1923.

Michelia longifolia Blume Bijdr. 7, 1825.

白玉蘭 Cultivated for ornamental purposes. A native of Java. M.

Michelia formosana (Kaneh.) Masam. et Suzuk. in Ann. Rep. Taihoku Bot. Gard. 3: 57, 1933.

Michelia compressa (Maxim.) Sarg. var. *formosana* Kaneh. in Trans. Nat. Hist. Soc. Formos. 20: 384, 1930.

烏心石 Evergreen trees; flowers white. Very common in broad-leaved forests at an altitude of 200–1,800 m. throughout the Island. Formosa. M.

Michelia fuscata (Andr.) Blume Fl. Jav. Magnol. 8, 1828.

Magnolia fuscata Andr. in Bot. Reposit. t. 229, 1812.

含笑花 Cultivated for ornamental purposes. A native of China. N.

Fam. 3 Schizandraceae

Schizandraceae J. Hutchinson Fam. Fl. Pl. Dicot. 83, 1926.

- 1) *Kadsura* Juss.

(1) Assistant research fellow, Institute of Botany, Academia Sinica.

* Angiosperms are arranged by families according to the system used by J. Hutchinson.

Kadsura japonica (Linn.) Dunnal Monogr. Fam. Anon. 57, 1817; Mak. et Nem.

Fl. Jap. ed. 2: 354, 1931.

Uvaria japonica Linn. Sp. Pl. 536, 1753.

南五味子，紅骨蛇，美男葛 Evergreen vines; fls. dioecious; fr. light purple when mature. In thickets at low altitudes throughout the Island. China, Japan, Okinawa and Formosa. N.

Fam. 6 Trochodendraceae

Trochodendraceae Prant. in Engl. et. Prant. Nat. Pfl.-fam. 3: (2) 21, 1888.

1) *Trochodendron* S. et Z.

Trochodendron aralioides S. et Z. Fl. Jap. 1: 84, pl. 39, 1885; Matsum. et Hay.

Enum. Pl. Formos. 11, 1906; Kanehira Formos. Tr. Rev. ed. 178, 1936.

Trochodendron aralioides S. et Z. var. *longifolium* Maxim. in Mel. Biolog. 8: 371, 1871.

昆欄樹 A large evergreen tree, scattered in the forests at high altitudes. Southern China, Korea, Japan, Okinawa and Formosa. MM.

Fam. 8 Annonaceae

Annonaceae Benth. et Hook. f.i. 24, 1862.

Key to genera

1. Inner petals sac-like at base, leaves brownish pubescent beneath, apex round or retuse *Fissistigma*
1. Inner petals not sac-like at base, leaves glabrous, apex acute *Artobotrys*

1) *Artobotrys* R. Brown

Artobotrys uncinatus (Lam.) Merr. in Philip. Journ. Sci. 7: Bot. 234, 1912; Merr. Enum. Philip. Pl. 2: 173, 1923.

Anona uncinata Lam. Encycl. 2: 127, 1786; - *Unona uncinata* Dunal Monog. Anon. 105, t. 25, 1817; - *Uvaria sinensis* Blanco Fl. Filip. 465, 1837; - *Artobotrys odoratissimus* R. Br. in Bot. Reg. t. 423.

鶯爪花，鶯爪桃，香花 Pantropic in cultivation. A native of southern China. N.
2) *Fissistigma* Griff.

Fissistigma Oldhami (Hemsl.) Merr. in Philip. Journ. Sci. 15: 134, 1919; Kaneh. Formos. Tr. Rev. ed. 193, 1936.

Melodrum Oldhami Hemsl. in Ind. Fl. Sin. 1: 27, 1886.

毛瓜馥木，山龍眼，藤龍眼 A climber, in broad-leaved forests at low altitudes throughout the Island. Southern China and Formosa. N.

Fam. 11 Lauraceae

Lauraceae Lindl. Veg. Kingd. 535, 1847; Meiss. in DC. Prodr. 15: (I) 1, 1864.

Key to genera

1. Third whorl of stamens extrose..... 2
1. All anthers introse..... 4

- 2. Anthers 2-celled, fruits inclosed in perianth *Cryptocarya*
- 2. Anthers 4-celled, fruits not inclosed in perianth .. 3
- 3. Leaves usually 3-nerved *Cinnamomum*
- 3. Leaves not 3-nerved, calyx lobes reflexed in fruit
 - *Machilus*
 - 4. Anthers 2-celled *Lindera* 5
 - 4. Anthers 4-celled 5
 - 5. Perfect stamens 6, leaves 3-nerved *Neolitsea*
 - 5. Perfect stamens 9, leaves not 3-nerved 6
 - 6. Involucre early deciduous *Actinodaphne*
 - 6. Involucre persistant *Litsea*
 - 1) *Actinodaphne* Nees

Key to species

- 1. Leaves lanceolate, acuminate, about 16 cm. long .. *A. nantoensis*
- 1. Leaves obovate to oblanceolate, apex obtuse, about 8 cm. long
 - *A. pedicellata*

Actinodaphne nantoensis (Hay.) Hay. Icon. Pl. Formos. 3: 165, 1913.

Litsea nantoensis Hay. Mat. Fl. Formos. 251, 1911; *Actinodaphne morrisonensis* Hay. var. *nantoensis* (Hay.) Yamam. in Journ. Soc. Tro. Agr. 4: 52, 1932; *Fiwa nantoensis* (Hay.) Nakai in Journ. Bot. 14: (3) 193, 1938.

南投黃肉楠，真屎楠 In broad-leaved forests from low to medium altitudes throughout the Island. Formosa. M.

Actinodaphne pedicellata Hay. in Matsum. et Hay. Enum. Pl. Formos. 351, 1906; Icon. Pl. Formos. 5: 172, f. 60, 1915; Kanehira Formos. Tr. Rev. ed. 197, 1936.

Fiwa pedicellata (Hay.) Nakai in Journ. Jap. Bot. 14: (3) 193, 1938.

黃肉楠，鐵屎楠 In broad-leaved forests at low altitudes throughout the Island, very common. Formosa. M.

2) *Cinnamomum* Tournefort

Key to species

- 1. Axils of the principal veins with glandular pits.. *C. camphora*
- 1. Axils of the pricipal veins without glandular pits
 - *C. insulari-montanum*

Cinnamomum camphora (L.) Nees et Eberm. Handb. Med. Pharm. Bot. 2: 430, 1831; Kaneh. Formos. Tr. Rev. ed. 201, 1936.

Laurus camphora Linn. Sp. Pl. 369, 1753; *Cinnamomum camphora* (L.) Sieb. Syn. Pl. Oec. Jap. 23, 1930.

樟，本樟，香樟 An evergreen tree; fls. yellowish-green. In broad-leaved forests at low and medium altitudes throughout the Island. Southern China, Indo-China, Japan, Okinawa and Formosa. MM.

Cinnamomum insulari-montanum Hay. Icon. Pl. Formos. 3: 158, 1913.

Cinnamomum pseudo-loureirii Hay. Icon. Pl. Formos. 4: 20, 1914; *Cinnamomum acuminatifolium* Hay. Icon. Pl. Formos. 5: 152, 1919.

臺灣肉桂 In broad-leaved primary forests at medium altitudes. Formosa. M.

3) *Lindera* Thunb.

Key to species

1. Leaves 10-20 cm. long, 6 cm. wide..... *L. Oldhami*

1. Leaves less than 8 cm. long 2

2. Young shoots and underside of leaves silky pubescent

..... *L. glauca* var.

Kawakamii

2. Underside of leaves brownish pubescent..... *L. communis*

Lindera communis Hemsl. in Forbes et Hemsl. Ind. Fl. Sin. 2: 387, 1891.

Lindera formosana Hay. Mat. Fl. Formos. 255, 1911; *Benzoin commune* Rehd.

in Journ. Arn. Arb. 1: 144, 1919; *Benzoin formosanum* (Hay.) Kamik.

in Ann. Rep. Taihoku Bot. Gard. 3: 79, 1933.

香葉樹 In broad-leaved forests at low altitudes throughout the Island. Southern China, Siam, Burma, India, Okinawa and Formosa. M.

Lindera glauca (S. et Z.) Bl. var. *Kawakamii* Hay. Mat. Fl. Formos. 255, 1911.

Benzoin glaucum Sieb. et Zucc. var. *Kawakamii* (Hay.) Sasak. List Pl. Formos. 191, 1928.

川上氏山胡椒 A small deciduous shrub, in thickets at low altitudes. Formosa. N.

Lindera Oldhami Hemsl. in Journ. Linn. Soc. 26: 390, 1891.

Linder pricei Hay. Icon. Pl. Formos. 5: 178, 1915; *Benzoin Oldhami* (Hemsl.)

Rehd. in Journ. Arn. Arb. 1: 145, 1919; *Benzoin pricei* (Hay.) Kamik.

in Ann. Rep. Taihoku Bot. Gard. 3: 79, 1933.

大香葉樹，大葉釣樟 A small deciduous tree, in thickets in the northern and central parts of the Island. Southern China, Formosa. M.

4) *Litsea* Lam.

Key to species

1. Deciduous tree or shrub, leaves membranaceous... *L. cubeba*

1. Evergreen tree, leaves coriaceous..... 2

2. Leaves lanceolate, about 9 cm. long..... *L. dolichocarpa*

2. Leaves obovate to broadly oblong, 15-20 cm. long

..... *L. Hayatae*

Litsea cubeba (Lour.) Persoon Syn. 2: 4, 1913; Rehder in Journ. Arn. Arb. 8:

112, 1927; Kaneh. Formos. Tr. Rev. ed. 215, 1936.

Laurus cubeba Lour. Fl. Cochinch. 4, 1790; *Litsea citrata* Bl. Bijdr. 565,

1825; *Actinodaphne citrata* (Bl.) Hay. Icon. Pl. Formos. 3: 164, 1913.

山胡椒，木薑子 A small deciduous tree; berry globose, black when mature.

Very common in secondary forests and waste lands at medium and high altitudes. India to Malaya and Southern China, Formosa. M.
Litsea dolichocarpa Hay. Icon. Pl. Formos. 5: 166, f. 59, 1915; Kaneh. Formos. Tr. Rev. ed. 216, 1936.

Litsea hypophaea Hay. Icon. 5: 167; -*Litsea Nakaii* Hay. l.c. 168.

虎皮楠, 長果木薑子, 南投楠 In forests from medium to high altitudes in the northern and central parts of the Island, very common. Formosa. MM.

Litsea Hayatae Kaneh. Formos. Tr. Rev. ed. 217, f. 161, 1936.

Litsea obovata Hay. Mat. Fl. Formos. 252, 1911; -*Cylicodaphne Hayatae* (Kaneh.) Nakai in Journ. Jap. Bot. 14: (3) 192, 1938.

早田氏木薑子 In forests at low and medium altitudes throughout the Island. Formosa. M.

5) *Machilus* Nees

Key to species

- 1. Uppersurface of leaf dull..... *M. zuihoensis*
- 1. Uppersurface of leaf shiny..... 2
- 2. Calyx glabrous..... *M. arisanensis*
- 2. Calyx pubescent or at least slightly pubescent.... 3
- 3. Leaves 15-20 cm. long, lateral veins 13-15 pairs... *M. Kusanoi*
- 3. Leaves 8-10 cm. long, lateral veins about 8 pairs... *M. Thunbergii*

Machilus arisanensis (Hay.) Hay. Icon. Pl. Formos. 5: 160, f. 57, 1915; Kaneh. Formos. Tr. Rev. ed. 219, 1936.

Machilus macrophylla Hemsl. var. *arisanensis* Hay. Mat. Fl. Formos. 243, 1911; -*Cinnamomum caudatifolium* Hay. l.c. 155, f. 54, b.

阿里山楠木 In broad-leaved forest at medium altitudes, most abundant in Arisan. Formosa. MM.

Machilus Kusanoi Hay. Mat. Fl. Formos. 241, 1911; Kaneh. Formos. Tr. Rev. ed. 220, 1936.

大葉楠, 楠仔 Occurring in broad-leaved forests at low altitudes throughout the Island. Formosa. MM.

Machilus Thunbergii Sieb. et Zucc. in Abh. Bayer. Akad. Wiss. Math. Phys. 4: (3) 202, 1846; Kaneh. Formos. Tr. Rev. ed. 222, 1936.

Machilus kwashotensis Hay. Icon. Pl. Formos. 5: 160, 1915; -*Machilus Thunbergii* S. et Z. var. *kwashotensis* (Hay.) Yamam. in Journ. Soc. Trop. Agr. 4: 53, 1932; -*Machilus arisanensis* Hay. var. *nanshoensis* (Kaneh.) Yamam. l.c. 54.

紅楠, 猪脚楠 In forests and thickets at low altitudes throughout the Island. China, Korea, Japan, Okinawa and Formosa. M.

Machilus zuihoensis Hay. Mat. Fl. Formos. 244, 1911; Icon. Pl. Formos. 5: 162, 1915; Kaneh. Formos. Tr. Rev. ed. 224, 1936.

Machilus longipaniculata Hay. Icon. Pl. Formos. 3: 161, t. 30, 1913; *Machilus longisepala* Hay. I.c. 3: 162, 1913; I.c. 5: 160, f. 56, 1915.

香楠，瑞香楠 A fairly large tree with straight trunk, in forests at low altitudes throughout the Island but more abundant in the north. Formosa. MM.

6) *Neolitsea* Merr.

Neolitsea variabilima (Hay.) Kaneh. et Sasak. in Trans. Nat. Hist. Soc. Formos. 20: 381, 1930.

Tetradenia variabilima Hay. Icon. Pl. Formos. 5: 176, f. 61, e, 1915.

In forests from medium to high altitudes. Formosa. M.

變葉新木薑子

Fam. 15 Ranunculaceae

Ranunculaceae Juss. Gen. Pl. 231, 1789.

Key to genera

- 1. Vines often woody, leaves opposite.....*Clematis*
- 1. Erect herbs2
- 2. Petals present, flowers yellow showy.....*Ranunculus*
- 2. Petals lacking, flowers small white and numerous
.....*Thalictrum*

1) *Clematis* Linn.

Key to species

- 1. Stems and leaves glabrous2
- 1. Stems and leaves densely tomentose4
- 2. Inflorescence in axillary open panicle3
- 2. Flowers solitary, in axils of leaves.....*C. Tashiroi*
- 3. Leaflets 5-7*C. floribunda*
- 3. Leaflets 3.....*C. Meyeniana*
- 4. Leaflets 7-11 cm. long, hairs on underside of leave, golden yellow
.....*C. Leschenaultiana*
- 4. Leaflets 3-5 cm. long, hairs not golden yellow....*C. Gouriana*

Clematis floribunda (Hay.) Yaman. in Journ. Soc. Trop. Agric. 4: 188, 1932.

Clematis uncinata Champ. var. *floribunda* Hay. Mat. Fl. Formos. 18, 1911.

臺灣女萎 At low altitudes throughout the Island. Formosa. Ch.

Clematis Gouriana Roxb. Hort. Beng. 43, 1814; Merr. Enum. Philip. Pl. 2: 141, 1923.

Clematis vitalba Linn. subsp. *cumingii* O. Kuntze in Verg. Bot. Verein. Prov. Brandenb. 26: 100, 1885.

In thickets and forests at low and medium altitudes. Philippines, India, Malaya, Java and Formosa. Ch.

Clematis Leschenaultiana DC. Syst. 1: 151, 1818; Prodr. 1: 6, 1824; Merr. in

Philip. Journ. Sci. 5: Bot. 348, 1910.

Clematis acuminata DC. var. *Leschenaultiana* (DC.) O. Kuntze in Verg. Bot. Verein. Prov. Brandenb. 26: 167, 1885.

串鼻龍 In thickets at medium altitudes. Philippines, Java, and Formosa. Ch. *Clematis Meyeniana* Walp. in Nov. Act. Acad. Nat. Cur. 19: Suppl. 1, 297, 1843; - Merr. Philip. Pl. 142, 1923.

邁氏鐵線蓮 In thickets, borders of forests at low and medium altitudes. Burma, central and southern China to Okinawa, Indo-China and Formosa. Ch.

Clematis Tashiroi Maxim. in Bull. Acad. Sci. St. Petersb. 32: 477, 1888.

琉球鐵線蓮 At low altitudes, in northern part of the Island. Ch.

2) *Ranunculus* Tournefort

Key to species

- | | |
|---|---------------------|
| 1. Plants pubescent..... | 2 |
| 1. Plants entirely glabrous..... | <i>R. scleratus</i> |
| 2. Plants hispid, 30-70 cm. high..... | <i>R. Vernyii</i> |
| 2. Plants slightly pubescent, 15-20 cm. high..... | <i>R. Zuccarini</i> |

Ranunculus scleratus Linn. Sp. Pl. 551, 1753; Hay. Icon. Pl. Formos. 3: 8, 1913.

石龍芮 In or near water. Eurasia and North America. H.

Ranunculus Vernyii Fr. et Sav. Enum. Pl. Jap. 2: 266, 1876; Yamamoto Supp. Icon. 3: 32, 1927.

Ranunculus ternatus (non Thunb.) DC. Prodr. 1: 31, 1824; *Ranunculus japonicus* (non Thunb.) Lagsd. et Fisch. in DC. Prodr. 1: 38, 1824.

毛茛 Near the sea level, in wet lands especially in rice fields. Japan, Korea, Okinawa, Formosa. H.

Ranunculus Zuccarini Miq. in Ann. Lugd. Bat. 3: 5, 1869.

Ranunculus ternatus Thunb. Nakai in B. M. T. 42: 22.

小金鳳花 In wet lands at low altitudes. Japan, Okinawa, Formosa. H.

3) *Thalictrum* Tournefort

Thalictrum Urbaini Hay. Icon. Pl. Formos. 1: 25, 1911; Masamune Trop. Ag. 3: 21.

臺灣鐵大烏 In marshy ground at medium altitudes. Formosa. H.

(To be continued)