Supplement to the knowledge of the systematics of *Morus* in Japan

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堀田 禎吉：邦産野生桑属の分類学的知見補遺

Key to the species, varieties and forms of *Morus* found in wild.

1. Style long, stigma divided into two parts at its apex.....Sect. I. *Dolichostylae* KOIDZ. 2
 Style none or very short with sessile or subsessile stigma divided into two parts
 Sect. II. *Macromorus* KOIDZ. (*Morus Miyabeana* HOTTA).
2. Apex of the leaf caudate rarely acuminate..... *Morus australis* POIRET. 3
 Apex of the leaf acuminate or acute rarely caudate or subulate.
 (*Morus bombycis* KOIDZ.)..... 4
3. Upper surface of the leaf is conspicuously lustrous, and has a dark green colour.
 var. *glabra* KOIDZ.
 Upper surface of the leaf is usually dull green rarely slightly lustrous.....var. *typica* HOTTA
4. Apex of the leaf subulate, caudate or longiacuminate. 5
 Apex of the leaf acuminate rarely subtricuspidate. 6
5. Upper surface of the leaf rather scabrous or smooth. 7
 Upper surface of the leaf asperate.var. *asperata* HOTTA
6. Under surface with a few short hairs. 8
 Under surface with conspicuously hairs. 9
7. Margin of the leaf arguto-serrulate or dentato-serrulate..... var. *diabolica* HOTTA
 Margin of the leaf dentato-serrato or largely dentato-serrato..... 10
8. Leaf variously lobate, apex of the leaf acuminate and subtricuspidate.....var. *vestita* KOIDZ.
 Leaf usually not lobate or 2-4 lobate, apex of the leaf acuminate or acute.
 var. *pubescens* (YENDO) HOTTA
9. Apex of the leaf subulate.....var. *subulata* HOTTA
 Apex of the leaf caudate..... var. *caudatifolia* KOIDZ
10. Leaf lobate or not lobate. In former case usually the length of the lobe is about half-way
 between the margin and midlib.....f. *normalis* HOTTA
 Lobe are usually rather deep, and the segments are very anormal... ..f. *anormalis* HOTTA

Sect. I. *Dolichostylae* KOIDZUMI Imp. Sericult. Exp. Stat., 2, No. 1, 3 (1923).

- 1). *Morus bombycis* KOIDZUMI Bot. Mag. Tokyo, 24, 313 (1915).

Nom. Jap. *Yamaguwa*.

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Distr. Saghalien, Yezo, Honsiu, Sikoku, Kiusiu and Korea.

var. *Hamadai* HOTTA, var. nov.

Folia varie incisa vel caceria, subtus tomentosa, apice caudata, subtricuspidata, magno dentato-serrata.

Nom. Jap. *Kekameba-guwa* (nov.).

Distr. Honsiu.—Hab. Prov. Rikutiu: Kayakariba, Iwasaki, Waka (G. KOBAYASHI, no. 8791).

Remarks. Leaf is variously incised or lacerate, under surface tomentose, apex caudate and subtricuspidate, margin largely dentato-serrate.

var. *asperata* HOTTA, Bot. Mag. Tokyo, 52, No. 614, 79 (1938).

Folia supra valde asperata rare scaberrima, apice caudata vel longiacuminata.

Nom. Jap. *Zaraba-guwa*.

Distr. Honsiu, Sikoku, Kiusiu.—Hab. Prov. Rikutiu, Nonogami, Kondaiti, Ninohe (T. ISAGO, no. 48990); Hirasimizu, Simohei (T. HOTTA, no. 41999).

var. *diabolica* HOTTA, Bot. Mag. Tokyo, 51, 691 (1937).

Folia irregulariter duplo-lobata, margine arguti-serrulata vel dentato-serrulata, apice leviter incurva.

Nom. Jap. *Oniyama-guwa*.

Distr. Honsiu.—Hab. Prov. Rikutiu: Kayakariba, Iwasaki, Waka, (T. ISAGO, no. 49001), Akasaki, Kesennuma (T. ISAGO, no. 49002).

var. *vestita* KOIDZ., Bull. Imp. Sericult. Exp. Stat., 2, No. 1, 13 (1923).

Folia varie lobata, subtus tomentosa. Apice plerumque lobi fere subito cuspidatus. Petiolus fere tenuis.

Nom. Jap. *Kirebakeyama-guwa*.

Distr. Honsiu.—Hab. Prov. Rikutiu: Kannonbayasi, Hareyama, Kunohe (T. ISAGO, no. 48994).

var. *pubescens* HOTTA, Trans. Sapporo Nat. Hist. Soc., 14, No. 3, 201, t. 6, c (1936). (new to Rikutiu).

Ramuli plerumque tennes, fere declinati. Folia subtus insigniter pubescentia.

Nom. Jap. *Keyama-guwa*.

Distr. Yezo and Honsiu.—Hab. Prov. Rikutiu: Iwasaki, (T. HOTTA, no. 8001); Takekoma, Kesen (T. ISAGO, no. 48002).

var. *subulata* HOTTA, Bot. Mag. Tokyo, 51, 692 (1937).

Folia plerumque 2-4 lobata vel non lobata, apice subulata, margine dentato-serrata, basi cuneata vel truncata rare aperte cordata, petiolo 2.5-4 cm. longo.

Nom. Jap. *Kirisakiyama-guwa*.

Distr. Honsyu.—Hab. Rikutiu: Terata, Waki (T. HOTTA, no. 8291).

var. *caudatifolia* KOIDZUMI, *Kuwazoku Shokubutsuko*, 33 in nota sub. *M. bombycis*, (1919).

Folia; apice caudata subito elongata.

Nom. Jap. *Onaga-guwa*.

Distr. Saghalien, Yezo, Honsiu, Sikoku, Kiusiu and Korea.—Hab. Prov. Rikutiu: Yonesato, Yeri (T. ISAGO, no. 9974) (New to Rikutiu).

f. *anormalis* HOTTA, Trans. Sapporo. Nat. Hist. Soc., 14, 203 (1936).

Segmenta folii valde anormalia; petiolo plerumque omnino fere insigniter pubescentia.

Nom. Jap. *Okinayama-guwa*.

Distr. Yezo and Honsiu.—Hab. Prov. Rikuzen: Akazaki, Kesen (T. ISAGO, no. 48997).

2). *Morus australis* POIRET, LAMARCK, Ency. Method. Bot., 4, 380 (1797).

Nom. Jap. *Suima-guwa*.

Distr. Formosa, Riukiu, Kiusiu (Ôsumi, Tanegasima, Yakusima, Tokunosima).

Hab. Prov. Ôsumi: Ôsima, Nago (T. HOTTA, no. 34474).

Remarks. The leaf of the one (A) is less lustrous than of the other (B); the lateral vein of A is alternate and that of B is opposite; the margin of A is dentato-serrate and that of B is crenato-dentate; the base of A is cordate and that of B is truncate. There are two kinds of A, while the one falls late Autumn and the other is evergreen, B is deciduous.

var. *glabra* KOIDZUMI, Bull. Imp.

Sericult. Exp. Stat. 2, No. 1, (1932)

Morus cuspidata WALL. var. *Loo-chooensis* YENDO, Traite sur la cult. du Mûr. au Jap., 30 (1930). nom. seminud.

Folia glaberrima nitida valde viridia.

Nom. Jap. *Terihasima-guwa* (T. HOTTA, no. 1704).

Distr. Kiusiu, Riukiu and Formosa.

Hab. Hiyuga: Ôsima, Minami-naka. (New to Kiusiu).

Sect. II *Macromorus* KOIDZUMI,

Imp. Sericult. Exp. stat. 2, No. 1, 3, (1923).

3.) *Morus Miyabeana* HOTTA, sp. nov.

Arbor; cortice fusca vel fuliginosa, lenticellis lineari-elliptica vel rotundata, cinereofusca, dispersa. Ramuli fere declinata. Gemmae ovaes, rufae. Folia ovato-lanceolata vel ovata rarissime crassa, adulta supra valde viridia non nitida, fere

Fig. 1. Two types in leaf of *Morus australis* POIRET

glabra rare fere pilosa, apice acuminata vel acuta, margine dentato-serrata vel

Fig. 2. *Morus Miyabeana* HOTTA

dentato-serrulata, basi truncata vel rotundata. Lamina fere 8 cm. longa, 5 cm. lata, nervis axillaribus 4-5; nervis majoribus ex petiolo divis, nervis capillaribus infra nervos axillares promissis petiolus tenuis circ. 3 cm. longus, sulco valde angustus. Stipulae circ. 1 cm. longae linearilanceolatae caducae. Cystolithus apice fere acuto. Tepala perianthii masculi 4, apice obtusa extus supra ciliolata, 2 mm. longa. Amenta mascula fere pendula, cylindrica, 1-1.5 cm. longa, pedicellata pilosa filiformia brevissima. Tepala perianthii feminei ovario approximata. Ovarium circ. 0.7

mm. longum. Stylus brevis 0.2 mm. stigmatibus 2 eum sessilibus, intus densissime pilosis. Spica fructifera circ. 3-5 mm. longa, primo rubra mox atrata.

Nom. Jap. *Amakusa-guwa* (nov.).—Nom. Vern. *Yama-guwa*.

Distr; Kiusiu.—Hab. Higo: Honto, Amakusa (T. HOTTA, no. 7, typus).

Remarks. This species is closely akin to *Morus macroura* MIQ. in the length of its style and in the leaf form, but the former is less tomentose than that of the latter.

摘 要

Morus Miyabeana の1新種および *Morus bombycis* KOIDZ. var. *Hamadai* の1新変種を創定した。また *Morus australis* POIRET var. *glabra* KOIDZ. を九州において発見し *Morus bombycis* KOIDZ. において var. *diabolica* HOTTA, var. *pubescens* HOTTA, var. *asperata* HOTTA, var. *subulata* HOTTA, var. *vestita* KOIDZ. の5変種が陸中に産し, f. *anormalis* HOTTA の1品種が陸前に産することを確認した。