

原 寛*: 東亜植物註解 (18)**

Hiroshi HARA*: Comments on the East Asiatic plants (18)

66) バイカアマチャ 1939年大日本植物誌に日本のユキノシタ科をまとめた時には、科を狭義に扱った。しかしそれ以後広義のユキノシタ科植物についてもずっと資料を集めつけ、時折アジサイやウツギ類などの分類について断片的な私見を発表してきた。近年日本の植物がアジア大陸からの資料を加えて再検討されるようになったが、そうかといって中国植物の生品が自由に研究できるまでにはまだ暇がかりそうである。そこで私が今までに集めた資料を一応まとめて発表しておくことは、将来新しい研究が行われる際に基礎として役立つことと思う。

バイカアマチャ属は長らく日本西南部特産の1属1種とみなされていたが、後に中国中部の一部にも産することが分った。中国からの標本 (K, BM にはない) は少ないが、葉の毛の性質で日本産と異なり、葉柄も長くなるので一応別変種として扱うことにした。中国からもっと十分な資料をえて再検討する必要がある。

バイカアマチャは Sieb. et Zucc. (1838) が詳しく記載し図解したため、これに基づいた文献が多い。近年の中国の文献にでている解剖図もこれを模写したもので、中国産植物に基いたものではない。いずれも子房は2室で中軸胎座のようにかかっているが、実際には最下部を除き、両側から突出した側膜胎座の先端部が肥厚してひろがり中央で接触している。蒴果は先端の2本の宿存花柱の中間で裂開する胞間裂開である。

本属は狭義のアジサイ科に属し、クサアジサイ属やアジサイ属に近縁であると考えられている。しかしバイカアマチャは低木で対生葉をつけ、花は中形で垂下し、装飾花の萼は3-4裂し下部は癒合し、正常花の花弁は4(5)枚肉質で鑷合状に接し、雄蕊は数列に於て100本に及び、脱落する時には往々数体にかたまり一部は花弁基部にくっついて落ち、花柱は長く2本で斜上し、柱頭はやや斜めについているなど、それらとはかなり縁遠いものと思う。

Platycrater Sieb. et Zucc., Fl. Jap. 1: 62, t. 27 (1838)—Hook. f. in Benth. et Hook. f., Gen. Pl. 1: 642 (1865)—Maxim., Rev. Hydrang. in Mém. Acad. Sci. St.-Pét. ser. 7, 10(16): 5 (1867)—Baillon, Hist. Pl. 3: 344 & 433 (1872), excl. *Cardiandra*—Hutchinson in Kew Bull. 1927: 107 (1927)—Engler, Pfl.-fam. ed. 2, 18a: 201, f. 113 K-M (1930)—Hutchinson, Gen. Flow. Pl. 2: 17 (1967);

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** 本誌 60: 230-238 (1985) から続く。

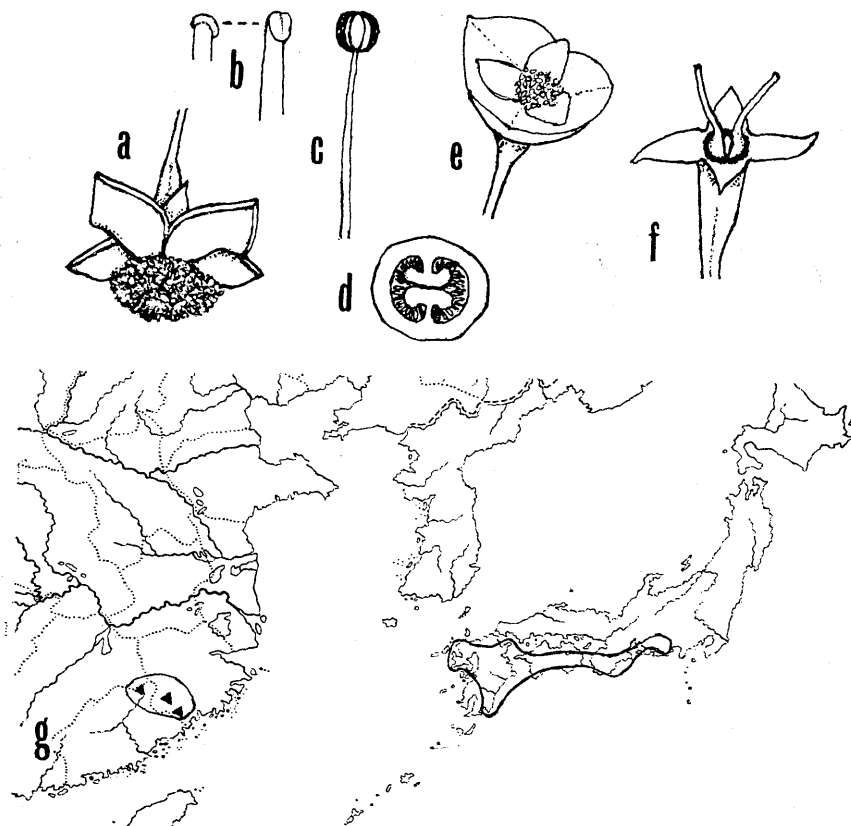


Fig. 1. *Platycrater arguta* Sieb. et Zucc. a. Fertile flower. $\times 1$. b. Stigmas (mag.). c. Stamen (mag.). d. Cross section of ovary (mag.). e. Ornamental flower with abortive petals and stamens. $\times 1$. f. Capsule. $\times 1$. g. Distribution map (\blacktriangle var. *sinensis* Hara).

Fam. Flow. Pl. ed. 3, 201 (1973).

Deciduous branched shrub. Buds perulate. Leaves opposite, simple, serrate, exstipulate, with simple hairs. Inflorescence terminal, loosely cymose, bracteate, generally with a few ornamental sterile flowers having large connate and shallowly 3-4-lobed calyx. Fertile flowers hermaphrodite, nodding, white, medium-sized. Calyx deeply 4-lobed, persistent. Petals 4(5), free, valvate, very thick, carnosous, caducous. Stamens numerous (ca. 100), inserted on the margin

of narrow disk in a few rows, deciduous; filaments filiform; anthers roundish, basifix, 2-celled, longitudinally dehiscent, with a thick connective. Ovary sub-inferior, obconical, spuriously 2-celled, with 2 intruded parietal placentas. Styles 2, separate; stigma oblique. Capsules turbinate, crowned with persistent calyx and styles, septicidally dehiscent between 2 styles at the top. Seeds numerous, minute, narrow oblong, with short tails at both ends.

Type: *Platycrater arguta* Sieb. et Zucc.

Monotypic, in Japan and Central China. (Fig. 1g)

Platycrater arguta Sieb. et Zucc., Fl. Jap. 1: 62, t. 27 (1838)—Regel in Gartenfl. 15: 229, t. 516 (1866)—Maxim., Rev. Hydrang. 5 (1867)—Lescuyer in Hort. Franç. 1870: 206, t. 8 (1870)—Dippel, Handb. Laubh. 3: 329, f. 175 (1893)—Schneid., Ill. Handb. Laubh. 1: 382, f. 245 a-1 (1905)—Matsumura, Ind. Pl. Jap. 2(2): 185 (1912)—Rehder, Man. Cult. Tr. & Shr. ed. rev. 285 (1940); Bibl. Cult. Tr. & Shr. 199 (1949)—Ohwi, Fl. Jap. 610 (1953); ed. Eng. 510 (1965); ed. rev. 713 (1965)—Okuyama, Col. Ill. Wild Pl. Jap. 4: 24, with figs., t. 277. 4 (1959)—Kitam. et Murata, Col. Ill. Woody Pl. Jap. 2: 111, f. 280 (1979).

var. **arguta**

P. arguta β . *hortensis* Maxim., l. c. 5 (1867)—Rehder, l. c. 285 (1940); l. c. 199 (1949).

P. arguta var. *typica* Schneid., l. c. 382 (1905).

P. serrata Makino in Bot. Mag. Tokyo 26 387 (1912), excl. basionym *Viburnum serratum* Thunb.—Engl., Pfl.-fam. ed. 2, 18a: 201 (1930)—Makino, New Ill. Fl. Jap. 239, f. 956 (1961).

Deciduous branched shrub, up to 1.5 m high. Branches sometimes decumbent, green in the first year, often sparsely hairy, later grey-brown to brown; bark peeling off in longitudinal paperly flakes; pith white, thin. Winter buds ovate to ovate-lanceolate, 5-7 mm long, acute, appressed hairy in the upper part; outer scales 2-3-pairs, small, acuminate. Leaves opposite, oblong to oblanceolate, 5-22 cm long 1.5-7 cm wide, long-attenuate to both ends, herbaceous green, caudate, acuminate or acute at the apex, argutely serrate with a cuspidate tip to depressed serrate with a short tip, sparsely hairy above with thin appressed pointed hairs 0.5-0.8 mm long, hairy especially densely so on veins beneath with strict obliquely spreading hairs up to 0.8-1 mm long; main veins slightly impressed above and elevated beneath; petioles 3-30 mm long, often purplish,



Fig. 2. *Platycrater arguta* Sieb. et Zucc. var. *arguta* in flower.

with scattered hairs. Inflorescence terminal, loose cyme 3-11 cm in diameter, (1)3-12-flowered, drooping; peduncle 1.5-4 cm long. Bracts narrow lanceolate, 2-5 mm long. Pedicels 5-25 mm long, those of the terminal flower short and thick; those of ornamental flowers filiform. Ornamental flowers generally at the top of cyme-branches, 1-3 cm in diameter; calyx large, connate, somewhat cupulate, shallowly 3-4-lobed, lobes depressed roundish, distinctly reticulate-veined, white or pinkish; stamens and pistils often rudimental, sometimes developed, but generally sterile. Fertile flowers hermaphrodite, nodding, 2-3 cm in diameter; buds depressed globose. Calyx deeply lobed near to the base; lobes 4, spreading, deltoid to ovate-lanceolate, 2.5-10 mm long 4-6 mm wide, acuminate to acute, light green, sparsely pilose with appressed hairs or glabrous, persistent. Petals 4(5), valvate, spreading or slightly reflexed, ovate, 8-10 mm long 7-10 mm wide, shortly acute, white, very thick (1.2-1.5 mm), carnose, with scattered white appressed hairs outside or glabrous, deciduous. Stamens numerous (ca. 100), 3-6 mm long, inserted on the narrow margin of disk in a few rows; filaments filiform, 0.25 mm thick, white; anthers roundish, 0.7-1 mm long, yellow, basifix, 2-celled, longitudinally dehiscent, with a thick

connective, deciduous. Ovary subinferior, light green, obconical, 5-7 mm long, with sparse appressed hairs or glabrous, spuriously 2-celled, with 2 intruded parietal placentas. Styles 2, separate, 5-8 mm long, 0.8 mm thick, white, obliquely divergent. Capsules ascending or declining, turbinate, subinferior, 5-8 mm long, 4-5 mm in diameter, dehiscent at the top between 2 persistent styles. Seeds numerous, narrow oblong, slightly curved, ca. 1 mm long including short tails at both ends; testa longitudinally striate, with a few connecting striae. Fl. Middle June - Aug. Fr. Aug. - Dec.

Growing generally in sunny but moist rocky places, or on cliff in valley, often on calcareous rocks, alt. 100-900 m, in the warm-temperate zone of Central and Western Japan.

Representative specimens.

Japonia (Siebold ex Herb. Zucc. 1843, K; Buerger ex Herb. Zucc. K). Yokohama, cult. (Maxim. 1862, isotype of var. *hortensis* Maxim., K, BM). Tokyo, cult. in Koishikawa Bot. Gard. (J. Matsumura, Jul. 17 & Sep. 10, 1879, TI).

Honshu. Shizuoka: Shironishi-mura (J. Sugimoto, Jul. 22, 1952, TI); Sakuma-damu, Sakuma-machi, 300 m (H. Kanai et al., Jun. 21, 1965, TI); Urakawa, Sakuma-machi (J. Murata no. 4091, Aug. 13, 1977, TI, KYO).

Aichi: Toyone-mura (K. Torii, May 2, 1953, TI).

Mie: Tobishima-mura, Minamimuro-gun (H. Kanai, Apr. 27, 1957, TI).

Nara: Mt. Ōdaigahara (F. Maekawa no. 8302, Aug. 11, 1934, TI).

Wakayama: Mt. Nachi (J. Matsumura, Jul. 29, 1888, TI); Nachino-taki to Sannotaki, Mt. Nachi (M. Wakabayashi no. 120, Aug. 13, 1967, KYO, TI); between Koguchi and Ohara, Kumanogawa-cho (G. Murata no. 13567, Oct. 15, 1960, TI); Uigo, Tomisato-mura, 500 m (G. Murata & F. Konta, Aug. 9, 1965, TI); Mikawa-mura (T. Nakajima, Aug. 24, 1926, TI).

Shikoku. Tokushima: Nishiu, Miyoshi Co. (R. Yatabe, Jul. 24, 1888, fl., TI); Koyadaira-mura (J. Nikai no. 1280, Aug. 14, 1904, TI); Nishiiyayama-mura (G. Koidzumi, Jun. 28, 1915, fl., TI); Dogama, Ichiu-mura, 250 m (T. Yamazaki, Aug. 9, 1976, TI); Higashiiyayama-mura (Y. Momiyama, Jul. 28, 1957, TI).

Kochi: Mt. Hōnokawa-yama (S. Yano, Jul. 25, 1889, TI); Mt. Tebako (N. Satomi, Sep. 20, 1950, TI); Nanokawa-mura (K. Watanabe?, Jul. 1, 1889, fl., TI); Hirosa, Tosayama-mura (G. Koidzumi, Aug. 20, 1934, KYO, TI); Beppu, Makiyama-mura (N. Inagaki no. 250, Aug. 7, 1968, TI); Mt. Ishidate, 900 m

(H. Ohashi, Jun. 20, 1966, TI).

Ehime: Harayama, Omogō (M. Ogata, Aug. 6, 1923, KYO).

Kyushu. Ōita: Yabakei (M. Togashi, TNS1422, Oct. 18, 1956, TNS, TI).

Nagasaki: Nagasaki (Maxim. 1862, BM; 1863, K); secus rivulos in m. Zidsi-yama, prope Nagasaki (Maxim., Jul. 1863, fl., BM); Mt. Unzen (F.C. Greatrex, 1935, fl., TI); Is Hirato (T. Hashimoto, Aug. 16-19, 1951, TI).

Kumamoto: Toshio-mura (T. Nakajima, Oct. 1910, TI).

Miyazaki: Keyaki-dani, Mt. Osuzu-yama (J. Murata no. 11322, Jun. 27, 1981, TI); Nanuki R., Mt. Osuzu, 250-500 m (Y. Tateishi no. 3392, Oct. 1, 1975, TI); Hiuga-Rhine City (M. Nagasawa, Sep. 30, 1962 & Nov. 12, 1963, TI); Kaichighodani (M. Nagasawa, Sep. 2, 1955, TI); Inohae, Kitagō-mura, 100-200 m (M. Togashi et al. no. 10070, Jun. 25, 1965, old fr., TI).

Kagoshima: Natsui, Shibushi-machi (Sakamoto, Aug. 1917, fr., KYO).

I could not confirm reports of this species from Tanzawa (Kanagawa), Mt. Amagi (Idzu), and Gokurakujisan (Hiroshima). In old days, the species seems to have been cultivated more frequently in Japan, but nowadays it is rarely in cultivation. The pollen grains of *Platycrater* are small, and the sexine is finely reticulate or foveoloid with verrucose muri, and they are similar to those of *Cardiandra alternifolia* Sieb. et Zucc., *Hydrangea involucrata* Sieb., and others, but differ widely from those of *Deinathe bifida* Maxim.

The species is considerably variable in Japan in mode of serrature of leaves, hairiness and shape of ovary and calyx, and size and shape of ornamental flowers. The leaves are sparsely pilose above or glabrescent, but the principal veins on the underside of leaves are consistently and distinctly hairy with obliquely ascending hairs up to 0.8-1 mm long. They are variable also in margin: sometimes argutely serrate with a cuspidate tip, or sometimes depressed serrate with a short tip. The ovary and calyx-lobes are generally sparsely pilose outside with appressed hairs, but sometimes glabrous. The ovary is often narrow-obconical, but sometimes deltoid-obconical. The calyx-lobes are variable from triangular and 2.5 mm long to lanceolate up to 10 mm long.

Platycrater arguta var. **sinensis** Hara, var. nov. (Fig. 3)

P. arguta Sieb. et Zucc. sensu W. Y. Chun in Acta Phytotax. Sin. 3: 106, t. 3 (1954)—Icon. Cormophyt. Sin. 2: 96, f. 1922 (1972).

Differt a typo foliis glabrescentibus, supra pilis appressis 0.3-0.5 mm longis crassis obtusis parce adspersis, infra ad nervos saepe pilis tenuioribus usque ad

0.8 mm longis adpersis,
et petiolis longioribus ad
4-7 cm longis.

Specimens examined.

China. Chekiang:
Yunhwo-hsien (S. Chen
no. 705, Sep. 13, 1932,
fr.—typus in E; isotypus
in PE); Chekiang (S. Y.
Chang no. 3016, fl., PE);

Fukien: Chungan,
Da'an, 520 m (Q. Y. Ma
no. 921, Aug. 3, 1974,
PE).

Platycrater seems to
be very restricted and
rare in China, and I have
examined only one flower-
ing specimen (PE) by
courtesy of Prof. Sing-
chi Chen.

The Chinese speci-
mens are slightly differ-
ent from the Japanese in
having glabrescent leaves
with a longer petiole, and glabrous ovary and calyx. In the Chinese specimens, the leaves are sparsely pilose above with short appressed thick often blunt hairs 0.3-0.5 mm long, and pilose on veins beneath with scattered thinner pointed hairs up to 0.8 mm long, or glabrous. The calyx-lobes are triangular, 2.5-3 mm long, and glabrous. The ovary is short obconical, 4-5 mm long, and glabrous. In having glabrous ovary and calyx, and short triangular calyx-lobes, the Chinese specimens resemble those from the Tōkai district of Japan. The mode of leaf-serrature is variable also in China as in the Japanese specimens.

The analytical figures of flowers and fruits published in *Acta Phytotax.*

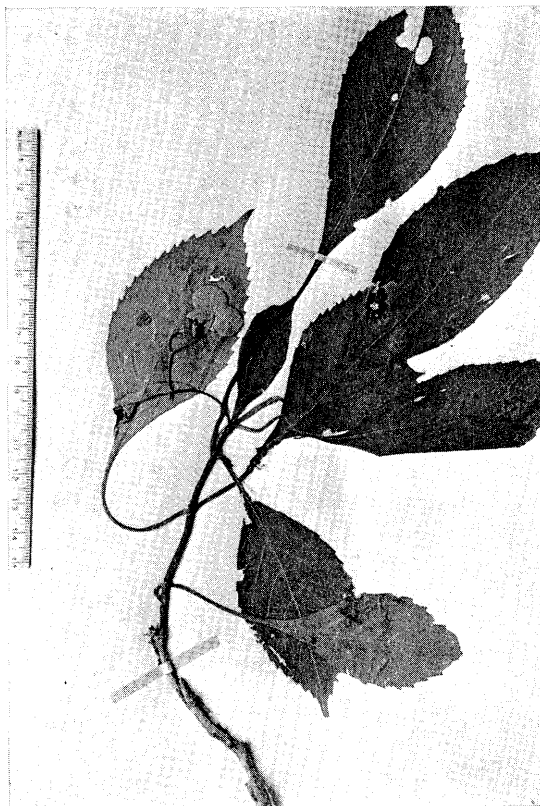


Fig. 3. *Platycrater arguta* var. *sinensis* Hara.
Type specimen (E).

Sin. 3: t. 3 (1954) and also Icon. Cormophyt. Sin. 2: f. 1922 (1972) were copied from Sieb. et Zucc., Fl. Jap. 1: t. 27 (1838) based on the Japanese plants.

More ample material from China is much needed to fix the final status of this variety.

67) **ハシカグサ** ハシカグサの所属については本誌 18: 85-90 (1942) に当時の見解をのべ、*Hedyotis* 属にいれて扱った。W.H. Lewis (1966) は、花粉の形質を特に重視して6-12孔粒をもつものを新属 *Neanotis* として *Hedyotis* から区別し、ハシカグサ類をふくむアジア産28種をここに入れた。広義の *Hedyotis* は種類が多く分布も広く、日本ではとても十分な資料を集めて再検討することは難しい。花粉の形質についても、フタバムグラも3孔粒ではない。しかし Lewis の見解を大きく変えるほどの資料もないので、一応それに従っておく。その場合に日本産のものの学名は次のように扱うのがよいと思う。

Neanotis hirsuta (L. f.) W.H. Lewis in Ann. Miss. Bot. Gard. 53: 38 (1966)
—Hara et Gould in Enum. Flow. Pl. Nepal 2: 205 (1979).

Oldenlandia hirsuta L. f., Suppl. Pl. 127 (1781).

Hedyotis hirsuta (L. f.) Smith in Rees, Cyclop. 17: no. 8 (1811); non Lamarck (1791).

H. Lindleyana Hook. ex Wight et Arnott, Prodr. Fl. Ind. Or. 1: 409 in nota (1834)—Hara in Journ. Jap. Bot. 18: 89 (1942); Enum. Sperm. Jap. 2: 19 (1952).

Oldenlandia japonica Miquel, Ann. Mus. Lugd.-Bat. 3: 109 (1867).

Hedyotis stipulata R. Brown [ex Wall., Cat. no. 863a (1829), p. p.; no. 6195 (1831-2), nom. nud.] ex Hook. f., Fl. Brit. Ind. 3: 63 (1880).

Anotis hirsuta (L. f.) Miquel ex Backer et v. Slooten, Geillust. Handb. Theonkr. 203 (1924); in Blumea 6: 360 (1950)—Icon. Corm. Sin. 4: 225 (1975).

Hedyotis Lindleyana var. *hirsuta* (L. f.) Hara in Journ. Jap. Bot. 18: 89 (1942); Enum. Sperm. Jap. 2: 19 (1952)—Ohwi, Fl. Jap. ed. rev. 1236 (1965)—Satake et al., Wild Flow. Jap., Herb. 3: 47, t. 38-4 (1981).

Nom. Jap. Hashika-gusa.

Distr. Himalaya (Nepal, Sikkim), Khasia, Burma, Malaysia, east to China and Japan.

f. ***glabricalycina*** (Honda) Hara, stat. et comb. nov.

Oldenlandia hirsuta var. *glabricalycina* Honda in Bot. Mag. Tokyo 53: 333 (1939).

Hedyotis hirsuta var. *glabricalycina* (Honda) Hara, l. c. 89 (1942)—Walker, Fl. Okinawa 968 (1976).

Neanotis hirsuta var. *glabricalycina* (Honda) W.H. Lewis, l. c. 38 (1966).

Nom. Jap. Marumino-hashikagusa.

Distr. Japan (Kyushu, Ryukyu), Korea, and China.

var. **glabra** (Honda) Hara, comb. nov.

Oldenlandia hirsuta var. *glabra* Honda in Bot. Mag. Tokyo 45: 2 (1931).

O. glabra (Honda) Honda in Bot. Mag. Tokyo 47: 297 (1933); non *O.*
Kuntze (1891).

Hedyotis Honda Hara in Journ. Jap. Bot. 18: 90 (1942).

H. Lindleyana var. *glabra* (Honda) Hara [in Journ. Jap. Bot. 18: 90 (1942),
pro syn.] Enum. Sperm. Jap. 2: 19 (1952).

Neanotis Honda (Hara) W.H. Lewis, l. c. 38 (1966).

Nom. Jap. Ô-hashikagusa.

Distr. Japan (Tohoku and Hokuriku districts of Honshu).

○高等植物分布資料 (117) Materials for the distribution of vascular plants
in Japan (117)

○ヒシバウオトリギ *Grewia rhombifolia* Kanehira et Sasaki 沖縄の沢岬安喜氏が
石垣島で採集したウオトリギ属の標本を送ってこられた。調べた所、今まで台湾固有と
されていたヒシバウオトリギであることがわかった。海近くの岩上に群生しているとい
う。この属は中国大陸に多くの種類が知られ、台湾でも5種ある。乾いた所にはえる低
木で、丈夫な植物であり、アツバウオトリギ *Grewia biloba* G. Don は小石川植物園
で野外でもよく繁殖している。今まで日本領内にないのが不思議なくらいであった。日
本の野生植物に新しい属が加わることになった。

Grewia rhombifolia Kanehira et Sasaki in Trans. Nat. Hist. Formos. 18:
335 (1928).

Ryukyu, Isl. Ishigaki, Okamizaki (Anki Takushi, July 23, 1985, no. 5075,
TI). New to Japan.

(東京大学 理学部付属植物園 山崎 敬 Takasi YAMAZAKI)