Masami MIZUSHIMA*: A conspectus of the genus

_Sstellaria_ in Japan (2)

(Critical studies on Japanese plants 12)**

水島正美*: 日本産ハコベ属の概要 (日本植物学評 12)

Subsect. 2. Larbrea (St. Hil.) Fenzl

   cum β—aucct. mult. fl. Or. Asia.

   An entirely glabrous, matted, winter annual: stems 4-angled glaucous green
   as in leaves and calyces. Leaves all sessile, shortly linear to narrowly obovate,
   often with lacerate, white, stipule-like processes at the base at least in upper
   ones, opaque on margins when dry. Bracts abruptly diminished in size from
   foliage leaves, scarious excepting about green midribs. Sepals 2–4 mm long,
   subulate to elliptical, acuminate. Petals a little shorter than to 1.5 times as
   long as sepals. Stamens usually 5–8 with deep yellow anthers. Capsules ovate,
   acute, nearly as long as sepals. Seeds blackish brown, covered with low mamillae.

   Distr. Eastern Asia from east Nepal eastwards(?), China, Korea, Japan
   (throughout low elevations and including the Idzu Islands and Tsushima), the
   s. Kuriles (Isls. Shikotan & Etorofu); Transbaikal region (?); the Ryukyus,
   Formosa, Indo-China (?). In rice paddies, arable land, waste places, or stream-
   sides, etc.

6) _Stellaria calycantha_ (Ledebl.) Bong. in Mém. Acad. St.-Pét. sér. 6, 2:
   127 (1833).


   Polymorphic but in ours a matted weak perennial: stems 4-angled and
   slender with stolons, glabrous. Leaves narrowly ovate to elliptical, ciliate on
   margins chiefly in lower half. Bracts leafy and usually ciliolate. Flowers solitary
   in forks of stem and terminal, or in a few-flowered leafy cymes. Sepals oblong,
   ovoid, up to 1.5 times as long as sepals, straw-coloured or tinged with chocolate.

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** Contribution no. 15 from the Makino Herbarium of Tokyo Metropolitan University.
Seeds rather light brown, smooth.—Appearance of *S. Alsine* var. *undulata*, but is easily distinguished as above.


A tufted perennial: stems 4-angled, pubescent at nodes. Leaves chartaceous, linear- to oblong-lanceolate, rounded at the base, pilose with crisped hairs on margins and midribs beneath. Bracts abruptly diminished in size from foliage leaves, lower usually pilose on scarious margins and midribs beneath at least near the base, upper becoming glabrous and entirely scarious. Pedicels capillary, glabrous, becoming very long in fruit and 8–10 (–17) times as long as infundibular calyces. Sepals 3–4 mm long, subulate to ovate-lanceolate, acuminate, glabrous on margins. Petals more or less 2/3 of sepals in length. Stamens usually 10 with purple anthers. Styles 3–5. Capsules conic-ovoid, about twice as long as sepals, straw-coloured. Seeds smooth.

Distr. Amur, Ussuri, Kamtschatka, Saghalin, the Kuriles and Japan (Hokkaido & n. Honshu) in forest on rocks.


A loosely tufted, weak and nearly glabrous perennial: stems sharply 4-angled with a little roughened internodes especially at both ends. Leaves linear, 1–2 (–3) mm wide and about 15 times as long, ciliolate at the base, roughened on margins below the middle. Flowers lateral and solitary in axils of leaves or terminal and cymose; bracts lower leafy, becoming scarious and gradually reduced in size upwards, ciliolate or roughened at the base. Pedicels capillary, very long. Sepals subulate to lanceolate, acuminate, 3.5–4 mm long, smooth or scabrous on basal margins. Petals 1.5–2 times as long as sepals. Stamens 10 with wine-purple anthers. Capsules oblong, equalling sepals to 1.5 times as long. Seeds reddish brown, strongly rugose with flat protuberances.

Distr. Endemic to eastern Asia from s.-e. Siberia through Manchuria and n. Korea to c. to n. Honshu in Japan: in bogs around ponds and along rivers.

*S. pterosperma* Ohwi, l.c. (1934).

A matted nearly glabrous perennial: stems 4-angled and smooth. Leaves linear to narrowly lanceolate, often a little falcate, ciliate at the base to beyond the middle, 1-2.5 mm wide 8-23 times as long. Flowers solitary to several-flowered cymes. Bracts broadly scarious, sometimes leafy, ciliate at the base. Sepals subulate to ovate-lanceolate, acuminate, 4-6 mm long. Petals 1.5-2 times as long as sepals seldom more. Stamens 10 with yellowish white anthers. Styles 3 rarely 4. Capsules shorter than to 1.3 times as long as sepals. Seeds brown, rugulose on faces, fimbriate-cristate or winged marginally.

Distr. Endemic to alpine zone in Japan from c. Honshu to Hokkaido, in rocky and gravelly places.

A segregation of *S. pterosperma* based only on the winged seeds needs further confirmation.


A quite glabrous, fleshy, loosely matted perennial: stems creeping and rooting below then ascending, mostly simple, 4-angled. Leaves narrowly oblong sometimes elliptical or lanceolate, acute to obtusish, 1-2 cm long 2-4 mm wide, many of the axils bearing sterile abbreviated branchlets. Flowers axillary and solitary or few in terminal leafy cymes. Sepals lanceolate, acute, 4-5 mm long. Petals about as long as sepals with narrow oblong lobes. Stamens 10, with yellow (?) anthers. Capsules about as long as sepals, broad ovoid. Seeds smooth.

Distr. Circumpolar, widespread; saline or brakish shores and borders of marshes of e. Hokkaido in Japan.


Similar in habit to *S. filicaulis*: stems ascending or reclining, angles roughened as in leaf-margins. Leaves linear, somewhat falcate, sometimes ciliolate at the base, axils bearing sterile branchlets. Cymes long peduncled, often becoming lateral by unequally prolonged branches; bracts abruptly reduced in size from foliage leaves, scarious excepting green part along midribs, sometimes
ciliolate at the base. Sepals 2–3.5 mm long, lanceolate-ovate, elliptical to oblong, obtuse to acute, usually glabrous. Petals about equalling to twice as long as sepals. Anthers yellowish white. Capsules elliptical, straw-coloured, suffused with brown-black or sometimes nearly black, slightly exceeding to nearly twice as long as sepals. Seeds reddish brown, smooth.


A matted, smooth, glabrous and glaucous perennial: stems 4-angled, slender but rigid. Leaves chartaceous to thin leathery, ovate to lanceolate, seldom oval or very broadly ovate, acute to acuminate, usually somewhat clasping the stem, margins usually thick and glossy when dry. Cymes few-flowered to solitary, seldom more than 10-flowered and leafy-bracted. Sepals linear to ovate-lanceolate, acuminate, 4–7 mm long. Petals 1.5–2 times as long as sepals. Stamens 10 with wine-purple anthers. Styles 3–5. Capsules straw-coloured, usually about equalling sepals in length. Seeds yellowish brown, rugose on faces, fimbriate-cristate marginally.

Distr. East Siberia through the Aleutians (?) to w. Alaska; on rocks and gravels in alpine to subalpine zones in Japan (Hokkaido, seldom coastal cliffs, and n. (?) & c. Honshu); Sakhalin & the Kuriles.


Stellate-tomentose perennial with creeping, radicant, much branched stems: branches terete, arise from axils of stramineous overwintering stems, covered by (2–) 4–5 (–7)-armed stellate or dendroid hairs especially when young as in leaves, peduncles and sepals, often tinged with brownish or violet. Leaves small and sessile or larger with obsolete petioles more or less 2 mm long, nearly rounded, broadly ovate or oval, obtuse to acute and apiculate, 1–3 cm long. Flowers usually axillary and solitary, seldom terminal. Peduncles capillary and surpassing leafy bracts. Sepals ovate-lanceolate to lanceolate or oblong, acute to obtuse, 3–6 mm long. Petals none to 1.4 times as long as sepals. Stamens usually 10 with
deep yellow anthers. Capsules equalling sepals up to 1.4 times as long. Seeds dark brown, tubercled.

Distr. Endemic to w. Japan; Honshu (e. to w. Aichi Pref.), Shikoku, Kyushu (s. not reached to Isls. Yakushima & Tanegashima), on light soil in and along open woods or on rocks in half-shade.

Independency of apetalous or minutely corolliferous plants, though a commoner occurrence, is questionable.

Sect. 2. Fimbripetala Turcz.


A silky-villous perennial: stems 4-angled, prostrate then ascending, becoming glabrous below. Leaves all sessile or lower with short petioles up to 5 mm long, lanceolate, linear-oblong to ovate-lanceolate, seldom ovate-oblong, acuminate at the tip, obtuse to rounded at the base. Bracts leafy, becoming smaller upwards. Sepals 5–8 mm long, ovate-lanceolate to oblong, blunt. Petals equalling to twice as long as sepals, laciniate in 5–12 lobules. Stamens 10 with purple anthers. Capsules ovoid, feebly surpassing sepals to 1.5 times as long, with firm leathery valves. Seeds scrobiculate-reticulate, big among our species more or less 2 mm across.

Distr. Grasslands in low elevations in e. Siberia, Mongolia, Manchuria, n. Korea, Sakhalin, the Kuriles, and Japan (Hokkaido & an isolated station in Aomori Pref. in n. Honshu); the Commander Islands.

Sect. 3. Schizothecium (Fenzl) Edgew. et Hook. f.


A diffusely branched perennial: stems arise from tufted, slender, napiform roots, terete or obsoletely 4-angled, pubescent in 1 or 2 lines, brittle in texture. Leaves with short petioles 2–13 mm long, lanceolate to oblong-lanceolate, long acuminate at the tip, acute at the base, minutely crisped on margins, nearly glabrous or minutely pubescent above when young, 5–13 cm long 1–3 cm wide. Flowers in many-flowered, glandular-pubescent cymes with abruptly diminished, entirely leafy to feebly scarious-margined, glandular-ciliate bracts. Sepals lanceolate, long-acuminate, glandular-pilose dorsally, 3–4 mm long. Petals bifid into acute, somewhat falcate lobes, shorter than sepals. Stamens 5 with white anthers.
Capsules oval, shorter than sepals, indehiscent, containing 1 globular, chestnut-brown, smooth and shining seed.

Distr. n.-e. Afghanistan, the Himalayas, Khasia Mts., disjunctively Nilgiri Hills in s. India, Indo-China, s.-w. China (?); (var.) Japan (Honshu, Shikoku, and Kyushu), in moist woods.

Subgen. 2. Myosoton (Moench) Pax

16) **Stellaria aquatica** (L.) Scop., Fl. Carniol. ed. 2, **1**: 319 (1772).


Similar inhabit to *S. media*, but perennial with overwintering radicant stems from which flowering shoots arise: branches obsoletely 4-angled, often tinged with dark purple, glabrous or faintly lined-pubescent below, glandular above. Leaves lower long petioled, upper becoming sessile, usually cordate at the base, waved on margins. Pedicels and sepals densely glandular-pubescent. Petals about equalling up to 1.5 times as long as sepals. Stamens usually 10 with orange-red anthers. Styles usually 5. Capsules broad ovoid, as long as sepals or longer, dehiscing usually in bifid 5 valves. Seeds rusty brown, mamillate as in *S. media*.

Distr. Temperate regions of Eurasia, naturalized in N. America; very common and troublesome weed throughout Japan, but thrives well in moist half-shade.
異の大きいものがある。目下比較の為に資料を募集中である。本州のイワツメクサに比して北海道の個体群はガッチリ出来ており、葉の縫毛もしばしば多くなり、がく片は常に3脈分明(極期に於て特異)である。エゾイワツメクサは大寒山系の植物に命名され、種子周縁に翼を生ずる。これに対して夕張、日高山系のものは概形エゾイワツメクサに同じで種子に乳頭突起を列生し(本州品と同じく)，オオイワツメクサの名があるが、夕張嶺にも有翼種子を作る個体があり、更に両形共に有翼種子は有翼である。即ちオオイワツメクサ、イワツメクサのネオテニー的存在が、エゾイワツメクサと云うことになる。エゾイワツメクサ型の安定度について更に研究を必要とするので、本文ではイワツメクサと区別せずに扱った。

10) エゾハコベ 周縁要素の塩湿地生種、東北海道の海岸に産する。ノミノフスマに似た所があるが、白饐を帯びず、各葉腋に芽を生ずること。花が単生することが多く、種子が平滑なので区別がつく。

11) ナガツメクサ 此の和名に当る型は欧亜大陸冷温帯の湿性草原生である。茎の4稜上と葉縁の表皮細胞が突出する為に粗沢になる特徴があるが、よく似たイワハコベとはがく片が短く広くて鈍一錐頭、種子が平滑なので弁別出来る。北海道に見られる。

12) シコタン(色丹)ハコベ 確実な分布域はシベリア極東部、樺太、千島と北海道、本州中部の高山一亜高山帯の岩礎地である。北海道以北ではしばしば海岸の塩地に生える。アリューシャン列島とアラスカ西部の1型を本種に属するか否かに疑問があり、稀産種なので材料が少なく、未解決である。全体が白饐を被り、白花にアズキ色の葦が可憐で、種子の周縁に乳頭突起を列生する。

13) ヤマハコベ、オアハコベ 全株に星状毛を生ずる点では台湾のナガサワハコベ式であるが、ずっと密度が低い。邦産種の中では独特の性質で、北半球産各種の中でもこの性質は東亜の種にしか見られぬようである。西日本特産で、低山地の軽い砂質地や岩上に生える。小形で無弁又は微小な花弁を持つ花を着ける個体をオアハコベとして、大形で明かな花弁を有するヤマハコベから区別している。これには甚だ疑問があるので目下実験を試みている。

14) エゾオヤマハコベ 東亜北部の草原生種で、全体に白または黄ばんだ長繊毛を布くので著しい。花弁が細裂するのも北半球産の本属に関する限り独特の形質である。北海道に多いが本州では青森県に1産地がある。

15) オオヤマハコベ 種としては日本とヒマラヤ地域に分布するが、支那大陸のものは更に研究を要する。縁開いた花形を作って全体が散漫な姿になり、1種子を入れたさく果が小花柄の基部で関節して脱落するのは珍しい。細長い束生する紡錘根を持つこともハコベ属としては異例である。オオヤマハコベそのものは日本特産の森林生植物である。

16) ウシハコベ 欧亜大陸温帯の稍々湿地生種で、日本では雑草である。ハコベに酷似するが、多年草で5花柱があり、小花柄をとくに腺毛を密生するので容易に識別し得る。