
藜属  li shu

Herbs annual or perennial, rarely subshrubs, covered with vesicular or terete hairs (in several species sometimes also with uniseriate, multicellular hairs), farinose (“mealy”) when dry, rarely glabrous. Leaves alternate, petiolate; leaf blade complanate, margin entire or irregularly serrate or lobed. Inflorescence usually of several flowers forming a glomerule (rarely solitary flowers), these arranged in axillary or terminal spikes, panicles, or dichasia; bracts and bractlets absent. Flowers bisexual or some female. Perianth green, globose, 5-parted, in some species (2 or)3- or 4-parted; segments abaxially slightly fleshy at center or longitudinally keeled, adaxially concave, remaining unchanged in fruit, rarely enlarged or becoming juicy, without appendages. Disk usually absent. Stamens 5 or fewer; filaments sometimes basally united, filiform or capillary; anthers oblong, without an appendage. Ovary globose, slightly depressed, rarely ovoid; ovule subsessile; style obscure or very short; stigmas 2(–5). Fruit a utricle; pericarp membranous or slightly fleshy, adnate to seed or free, indehiscent. Seed horizontal, in some species oblique and/or vertical, ovoid, globose, slightly depressed, rarely ovoid; perisperm copious, farinaceous.

About 170 species: almost worldwide, but most abundant in temperate and subtropical zones; 15 species (one introduced) in China.

1. Perianth mostly 5-parted; seeds always horizontal (sometimes oblique or vertical in C. urbicum subsp. sinicum).

1a. Perianth 3- or 4-parted; seeds horizontal, vertical, or oblique.

2. Flowers arranged in dense, axillary, globose inflorescences; perianth becoming red and succulent in fruit ....... 1. C. foliosum

2b. Flowers not arranged in axillary, globose inflorescences; perianth not becoming red and succulent in fruit.

3. Perianth segments mostly united to near apex ......................................................... 4. C. chenopodiioides

3a. Plants farinose; leaves grayish white abaxially .......................................................... 2. C. glaucum

3b. Plants glabrous to weakly farinose; leaves concolorous ............................................. 3. C. rubrum

1b. Perianth mostly 5-parted; seeds always horizontal (sometimes oblique or vertical in C. urbicum subsp. sinicum).

5a. Leaf blade margin entire, or with a pair of simple or divided lateral lobes below middle.

6a. Inflorescences shorter than leaves.

7a. Leaves 1.5–3 cm; seed finely foveolate ................................................................................ 8. C. karoi

7b. Leaves 0.5–1.5 cm; seed subsMOOTH ........................................................................ 9. C. iljinii

6b. Inflorescences longer than leaves.

8a. Inflorescence crowded, rachis or beneath flowers with fascicles of terete hairs; leaf blade margin narrowly pellucid; perianth mostly thickened in fruit and becoming star-shaped .............................................. 5. C. acuminatum

8b. Inflorescence slender and loose, rachis without fascicles of terete hairs; leaf blade margin not pellucid; perianth not thickened in fruit.

9a. Leaf blade margin with distinct, lateral lobes, sometimes lobes 2-divided; perianth segments ovate; seed radially lineate .............................................................. 6. C. bryoniifolium

9b. Leaf blade margin entire or with obscure, lateral lobes; perianth segments narrowly obovate to linear; seed pitted ................................................................. 7. C. gracilispicum

5b. Leaf blade margin ± toothed.

10a. Plants glabrous throughout .......................................................... 10. C. urbicum

10b. Plants ± farinose.

11a. Leaf blade margin palmately lobed; seed usually 2–3 mm in diam., distinctly orbicular pitted .... 11. C. hybridum

11b. Leaf blade margin not palmately lobed; seed less than 2 mm in diam., not orbicular pitted.

12a. Plants 2–3 m tall; lower leaves to 20 cm; inflorescence pendulous .................................. 12. C. giganteum

12b. Plants usually smaller; lower leaves less than 8 cm; inflorescence not pendulous.

13a. Leaf blade margin distinctly 3-lobed, middle and lateral lobes serrate; seed hexagonally pitted; perianth segments valvate in bud and remaining closed at anthesis ..................................................... 13. C. ficifolium

13b. Leaf blade margin not 3-lobed; seed lightly lineate; perianth segments imbricate in bud and spreading in flower.

14a. Leaf blade margins nearly parallel, apex rounded or obtuse ........................................ 14. C. strictum

14b. Leaf blade margins distinctly non-parallel, apex acute or acuminate .......................... 15. C. album


球花藜 qiu hua li


Herbs annual, 20–70 cm tall. Stem mostly branched from base; branches erect or oblique, light green, slender, glabrous. Leaf blade of lower leaves light green on both surfaces, narrowly triangular-ovate, 2–5 × 2–3 cm, equaling or longer than
2. Chenopodium glaucum Linnaeus

Herbs annual, 20–40 cm tall. Stem decumbent or diffusely branched, green or purple-red striate, ribbed. Petiole 5–10 mm; leaf blade oblong-ovate to lanceolate, 2.4 × 0.6–2 cm, fleshy, abaxially gray-white farinose, sometimes slightly reddish purple, adaxially glabrous, base attenuate, margin irregularly erose to dentate (sometimes indistinctly lobed), apex acute or obtuse; midvein prominent, yellow-green. Flowers bisexual and female, usually several per glomerule, arranged on branches in spicate or paniculate inflorescences (and/or in axillary glomerules), these shorter than leaves and interrupted. Perianth segments 3 or 4, light green, narrowly oblong or obovate-lanceolate, less than 1 mm, slightly succulent, usually not farinose, apex usually obtuse. Stamens 1 or 2; filaments not exserted from perianth; anthers globose. Stigmas 2, very short. Utricle protruding from perianth; pericarp yellow-white, membranous. Seed horizontal, oblique, or vertical, dark brown or red-brown, compressed globose, ca. 0.75 mm in diam., pitted, rim margin obtuse. Fl. and fr. May–Oct.

Fields, vegetable gardens, peripheries of villages, slightly saline-alkaline soils. Fujian, Guangdong, Guangxi, Guizhou, Jiangxi, Yunnan [N and S temperate zones].

Chenopodium glaucum is a variable species represented by various forms of little or no taxonomic significance. However, throughout its extremely wide range it is also differentiated into several morphologically intergrading but geographically defined subspecies or microspecies.

Chenopodium amurense Ignatov (Byull. Moskovsk. Obshch. Isp. Prir., Otd. Biol. 91: 111. 1986) was described from the Amur River area of the Russian Far East. This little-known entity clearly belongs to the C. glaucum aggregate (as a species or subspecies), differing from C. glaucum s.str. by having 3-lobed leaves and distinctly spatulate perianth segments. Such plants probably also occur in NE China. It should be noted, however, that 3-lobed leaves are characteristic of the rare hybrid, *C. ×schulzeanum* Murr (C. glaucum × *C. rubrum*).


红叶藜


Herbs annual, 30–80 cm tall. Stem erect or obliquely spreading, light green or reddish, obscurely striate, ribbed, glabrous; upper branches usually 2–8 cm. Leaf blade green or often red tinged on both surfaces, ovate to rhombic-ovate, 4–8 × 2–6 cm, 3–5 × as long as petiole, succulent, axially slightly farinose to subglabrous, base cuneate, margin serrate-dentate to lobed, rarely entire, apex acuminate; teeth in 3–5 pairs, triangular, unequal, usually slightly incurved, apex subobtuse. Flowers bisexual and female, several per glomerule, arranged in spike-like panicles on upper branches. Perianth segments 3 or 4 (or 5), green, often becoming red at maturity, obovate, abaxially slightly fleshy at center, adaxially concave, remaining unchanged in fruit, glabrous or slightly farinose. Stigmas 2, very short. Pericarp membranous, whitish, not adnate to seed. Seed vertical, oblique, or horizontal, red-black to black, globose or broadly ovoid, slightly depressed, 0.75–1 mm in diam., distinctly oblong pitted, rim margin obtuse. Fl. and fr. Aug.–Oct.

Slightly saline-alkaline places. N Gansu, W Heilongjiang, NE Mongolia, Ningxia, Xinjiang [C and SW Asia, Europe, North America; naturalized in other regions].

Chenopodium gubanovii Sukhorukov (Feddes Repert. 110: 493. 1999) was recently described from the Mongolian Altai Mountains and reported from NE Kazakhstan, W Mongolia, and Russia (Altai and Tuva). Judging from its known distribution pattern, this species can be expected in NW Xinjiang. It differs from *C. rubrum* in having leaf blades broadly ovate to rhombic-ovate, almost entire at the margin; perianth segments oblongate, enlarged and distinctly keeled in fruit; and seeds with an acute rim margin. In general habit this taxon...
resembles *C. chenopodioides*, but evidently differs in the aforementioned perianth and seed characters.


Herbs annual, 20–50 cm tall. Stem erect, much branched, green striate, ribbed, usually not farinose. Leaf blade green abaxially, dark green adaxially, broadly triangular, 3–4 cm, slightly broader than long, ca. 2 × as long as petiole, slightly succulent, glabrous or slightly farinose, base truncate or broadly cuneate, decurrent to base of petiole, margin serrate or subentire, apex obtuse or shortly acuminate. Glomerules arranged in spikelike panicles on branches; central flowers of glomerules bisexual, lateral ones female. Female flowers: perianth obconic, 2–4-lobed, succulent; lobes cochléiform, unequal, unaxially keeled. Bisexual flowers: perianth depressed hemispheric, 4- or 5-parted; stamens as many as perianth segments. Seed vertical keeled. Bisexual flowers: perianth depressed hemispheric, 4- or 2–4-lobed, succulent; lobes cochleariform, unequal, unaxially keeled. Bisexual flowers: perianth depressed hemispheric, 4- or 5-parted; stamens as many as perianth segments. Seed vertical keeled. Bisexual flowers: perianth depressed hemispheric, 4- or 2–4-lobed, succulent; lobes cochleariform, unequal, unaxially keeled. Bisexual flowers: perianth depressed hemispheric, 4- or 5-parted; stamens as many as perianth segments. Seed vertical keeled.

**5a. Chenopodium acuminatum** subsp. *acuminatum* (Willdenow) Kuntze

尖头叶藜 (原亚种) jian tou ye li (yu yan zhong)

*Chenopodium acuminatum* var. *ovatum* Fenzl; *C. album* Linnaeus var. *acuminatum* (Willdenow) Kuntze.

Leaf blade mostly ovate to broadly so, sometimes ovate-lanceolate on upper stem.

River banks, field margins, wastelands. Fujian, Guangdong, Guangxi, Hebei, Jiangsu, Liaooning, Taiwan, Zhejiang [Japan, Korea, Mongolia, Russia (S Siberia); C Asia].


狭叶尖头叶藜 xia ye jian tou ye li


Leaf blade narrowly ovate, lanceolate, or oblong, obviously longer than wide.

Lake shores, beaches, wastelands. Fujian, Guangdong, Guangxi, Hebei, Jiangsu, Liaooning, Taiwan, Zhejiang [Japan, NE Vietnam].

This predominantly littoral and alluvial taxon is certainly of Sino-Japanese distribution and is sometimes treated as a separate species (*Chenopodium virgatum* or *C. vachelii*). However, there was much controversy regarding the taxonomic affiliation of *C. virgatum*: some authors believed that the name refers to narrow-leaved forms of the *C. album* aggregate or to *C. strictum*.

Judging from the presence of characteristic multicellular hairs (especially in the inflorescence) and leaf and inflorescence morphology, *C. acuminatum* s.l. (C. sect. *Acuminata* Ignatov) is related to the Asian perennial *C. fruticosum* C. A. Meyer, the Australian shrubby *C. auricomum* Lindley (the latter, together with the annual *C. auricomum* var. *auricomforme* Murr, is placed in C. sect. *Auricomus* Aellen), and probably to some other shrubby species.


菱叶藜 ling ye li

*Chenopodium koraiense* Nakai.

Herbs annual, 50–80 cm tall. Stem erect, much branched above, terete below, green striate and slightly obtrusely ribbed above; branches obliquely spreading, slender. Petiole slender; leaf blade of lower and middle leaves ovate-triangular to ovate-rhombic, usually 3–4 × 2–3 cm, 2–3 × as long as petiole; slightly farinose abaxially, not farinose adaxially, base broadly cuneate, margin distinctly 3-lobed, apex acute; middle lobe triangular, lateral lobes near base, usually 2-toothed; upper leaves smaller, leaf blade subhastate. Glomerules borne on upper branches, arranged into slender, spikelike panicles. Flow-
Chenopodium atripliciforme Murr (sometimes incorrectly cited as “atriplicifolium”) has often been treated as a synonym of C. bryonifolium, or misidentified as C. opulifolium Schrader ex Candolle. However, C. atripliciforme is a separate species reported from NE Afghanistan, N India, and N Pakistan. Judging from several herbarium specimens available, it probably also occurs in the mountains of SC Asia. It may also occur to be expected in W China.


Chenopodium koraiense (Murr) Lomonosova.


Herbs annual, 20–40 cm tall. Stem prostrate or obliquely spreading, much branched, green striate, terete or obtusely ribbed. Petiole slender, 0.1–1 cm; leaf blade abaxially pale, adaxially yellow-green, ovate to ovate-triangular, 0.5–1.5 × 1.5–2 cm, slightly tomentose below, base narrowly cuneate, margin entire or 3-lobed, apex obtuse. Stamens 5 or 6, filiform. Pericarp yellow-brown, membranous, adnate to seed. Seed horizontal, black, sublustrous, lenticular, 0.5–1 mm in diam., finely pitted. Fl. and fr. Aug–Sep.

Mountains, often around livestock corrals, wastelands, around houses, vegetable gardens; 1500–4000 m. W Gansu, N Hebei, Qinghai, NW Sichuan, Xinjiang, Xizang [Mongolia, Russia (Far East, Siberia); C Asia].

This species is closely related to Chenopodium iljinii and the C Asian C. pamiricum Iljin on the one hand, and to C. bryonifolium on the other.


Chenopodium bryonifolium Bunge var. kapelleriae Aellen ex Iljin.

Herbs annual, 10–30 cm tall, farinose throughout. Stem usually prostrate or obliquely spreading, much branched, sometimes branched only from base. Petiole slender, 0.4–1 cm; leaf blade gray-green, ovate to ovate-triangular, usually 0.5–1.5 × 0.4–1.2 cm, farinose on both surfaces, base broadly cuneate, margin entire or 3-lobed, apex subobtuse or acute; lateral lobes attached near base of leaf blade, apex obtuse. Glomerules with short spikes on axillary branchlets. Perianth segments (4 or) 5, obovate-linear to oblong, not keeled, abaxially densely farinose. Filaments slightly shorter than perianth; anthers broadly oblong. Style obscure; stigmas 2, filiform. Utricle depressed. Seed horizontal, rarely oblique, black, sublustrous, lenticular, sometimes depressed ovoid, 0.8–1.2 mm in diam., subsmooth or slightly pitted. Fl. and fr. Aug–Oct.

Valley terraces, slopes, drier grasslands; 2000–4000 m. W Gansu, Ningxia, Qinghai (Qilian Shan), NW Sichuan, Xining [Kazakhstan].

The closely related, C Asian Chenopodium pamiricum Iljin (in Shishkin, Fl. URSS 6: 873. 1936) may be expected to occur in the mountains of W China. Probably some Chinese records of C. iljinii refer to that species.


Chenopodium bryonifolium Bunge var. kapelleriae Aellen ex Iljin.

Herbs annual, 20–100 cm tall, not farinose (but young leaves and inflorescence rachis sometimes slightly tomentose). Stem erect, branched or unbranched, striae, ± stout, ribbed. Petiole 2–4 cm; leaf blade concolorous, triangular or rhombic-ovate, 3–8 cm (lower ones sometimes to 15 cm), narrower than or as wide as long, slightly succulent, base subtruncate or broadly cuneate, margin irregularly serrate, apex acute or acuminate. Glomerules few or many flowered, forming axillary or terminal, erect, spikelike panicles. Flowers bisexual and female. Perianth segments 3–5. Filaments slightly shorter than perianth;
antlers oblong. Utricle lenticular; pericarp brown. Seed horizontal, oblique, or vertical, red-brown to black, sublustrous, 0.5–1 mm in diam., obscurely or obviously pitted, rim margin obtuse or acute. Fl. and fr. Jul–Oct.

Gobi desert, wastelands, saline-alkaline places, field margins. Hebei, Heilongjiang, N Jiangsu, Jilin, Liaoning, Nei Mongol, N Shaanxi, Shanxi, Xinjiang [N Africa, C and SW Asia, Europe; introduced in North America and some other regions].

1a. Leaf blade triangular, 3–8 cm; glomerules few flowered, forming axillary, spikelike panicles; perianth segments 5; seed horizontal, ca. 1 mm in diam., obscurely pitted, rim margin obtuse. Fl. Aug–Sep, fr. Oct.

Gobi desert, field margins. N Xinjiang [N Africa, C and SW Asia, Europe; introduced in North America and some other regions].

1b. Leaf blade rhombic-ovate, lower ones to 15 cm; glomerules many flowered, forming mainly terminal, spikelike panicles; perianth segments 3–5; seed horizontal, oblique, or vertical, 0.5–0.7 mm in diam., obviously pitted, rim margin acute.

10a. Chenopodium urbicum subsp. urbicum

叶柄 (原亚种) shi li (yuán yà zhòng)


Gobi desert, field margins. N Xinjiang [N Africa, C and SW Asia, Europe; introduced in North America and some other regions].


东亚市藜 dong ya shi li

Leaf blade rhombic-ovate, lower ones to 15 cm, margin with a pair of larger teeth near base. Glomerules many flowered, forming mainly terminal, spikelike panicles. Perianth segments 3–5, narrowly obovate to spatulate. Seed horizontal, oblique, or vertical, 0.5–0.7 mm in diam., obviously pitted, rim margin acute. Fl. and fr. Jul–Oct.


市藜 za pei li

Herbs annual, 0.4–2.2 m tall. Stem erect, sparsely branch- ed above, stout, light yellow or purple ribbed, glabrous or sparsely farinose. Petiole 2–7 cm; leaf blade fresh green on both surfaces, broadly ovate to ovate-triangular, 6–15 × 5–13 cm, glabrous or slightly farinose, base rounded, truncate, or subcordate, margin palmerely lobed to deeply crenate-dentate, apex acute or acuminate; lobes in 2 or 3 pairs, unequal, apex usually acute to acuminate; upper leaves smaller, leaf blade mostly triangular-hastate, margin with a few lobelike teeth, sometimes subentire. Flowers bisexual and female, usually several per glomerule, these arranged in spreading panicles on upper branches. Perianth segments 5, narrowly ovate, abaxially keeled, slightly farinose, margin membranous, apex obtuse. Stamens 5. Utricle lenticular; pericarp white dotted, membranous, adnate to seed. Seed horizontal, black, not lustrous, of same shape as utricle, usually 2–3 mm in diam., distinctly orbicular pitted; embryo annular. Fl. and fr. Jul–Sep.

Forest margins, scrub, valleys, slopes. Gansu, Hebei, Heilongjiang, Jilin, Liaoning, Nei Mongol, Ningxia, Qinghai, Shaanxi, Shanxi, Sichuan, Xinjiang, Xizang, Yunnan, Zhejiang [NE India, Japan, Korea, Mongolia, Russia (Siberia); C Asia, Europe; represented by a vicariant race in North America].

The Chenopodium hybridum aggregate is represented in China by at least two entities (subspecies or even species) which differ from the typical European and SW Asian plant (C. hybridum subsp. hybridum): (1) C Asian plants which were described as C. badachschanicum Tzvelev (Bot. Mater. Gerb. Bot. Inst. Komarova Akad. Nauk SSSR 20: 434. 1960), and (2) E Asian plants which may be an as yet undescribed taxa. The plants from E China somewhat approach in their characters the North American species (or subspecies) C. simplex (Torrey) Rafinesque (C. gigantesperum Aellen) Aellen). A new taxonomic revision of the C. hybridum aggregate throughout its range could clarify the situation.


杖藜 zhang li

Chenopodium amaranticolor Coste & Reynier; C. mairei H. Léveillé.

Herbs annual, large, to 3 m tall. Stem erect, much branch- ed above, stout, reddish green or reddish purple striate, ribbed, base to 5 cm in diam. Leaf blade abaxially light green, adaxially dark green, rhombic to ovate, to 20 × 16 cm, 1.5–2 × as long as petiole, abaxially farinose or glabrescent, adaxially not farinose, base broadly cuneate, margin irregularly undulate serrate, apex usually obtuse; upper leaf blades gradually becoming smaller, ovate to ovate-lanceolate, reddish or golden yellow vesicular hairy when young, margin serrate or entire. Inflorescence of large, terminal panicles, farinose, usually pendulous in fruit. Flowers bisexual, several per glomerule or solitary. Perianth segments 5, green or dark purple, ovate, margin membranous. Stamens 5. Utricle lenticular; pericarp membranous. Seed horizontal, black or red-black, ca. 1.5 mm in diam., reticulate line- ate, rim margin obtuse. Fl. Aug, fr. Sep–Oct.

Long cultivated in China and becoming naturalized. Beijing, Guan- su, Guangxi, Guizhou, Hebei, Henan, Hunan, Liaoning, Shandong, Shaanxi, Sichuan, Taiwan, Yunnan [native origin unknown; commonly cultivated in many countries of the world].

This plant most probably represents a cultivar, which originated in India, of the Chenopodium album aggregate. Similar cultivated plants of E Asia were described as C. centrorubrum (Makino) Nakai. Other similar plants (probably of different origin) are known as C. amaranticolor, C. purpurascens Jacquin, etc. A new taxonomic revision of cultivated members of the C. album aggregate is badly needed.

The stout stems are used for making walking sticks.

小藜 小藜

Herbs annual, 20–50 cm tall. Stem erect, green striate, ribbed. Leaf blade ovate-oblong, 2.5–5 × 1–3.5 cm, margin usually 3-lobed; central lobe margins almost parallel, subentire to sinuate-dentate, apex obtuse or obaculate, mucronate; lateral lobes positioned in proximal 1/3 or near base of leaf blade, margin entire or shallowly dentate. Flowers bisexual, several per glomerule, these arranged in spreading, terminal panicles on upper branches. Perianth subglomerose, 5-parted; segments valvate in bud, remaining closed at anthesis, broadly ovate, abaxially longitudinally keeled, densely farinose. Stamens 5, exerted at anthesis. Stigmas 2, filiform. Utricle included in perianth, usually longitudinally keeled, densely farinose. Stamens 5, exserted in bud, remaining closed at anthesis, broadly ovate, abaxially usually glabrous, or sometimes reddish purple vesiculiferous hairy on young leaves, base cuneate to broadly so, margin irregularly serrate, apex subobtuse or acute. Glomerules arranged into large or small panicles or spikelike panicles on upper part of branches. Flowers bisexual. Perianth segments 5, abaxially ovate or elliptic, abaxially longitudinally keeled, farinose, margin membranous, apex acute or slightly emarginate. Stamens 5; anthers exserted. Stigmas 2. Pericarp adnate to seed.

*Chenopodium ficifolium* is represented in China by two subspecies: subsp. *ficifolium* and subsp. *blomianum* (Aellen) Aellen (Hegi, Ill. Fl. Mitt.-Eur., ed. 2, 3(2): 624. 1960; *C. blomianum* Aellen, Bot. Not. 1928: 203. 1928). The latter differs from the typical subspecies in having leaf blades with an often shorter middle lobe and less prominent lateral lobes, and seeds with shallower and less evident pits and a sinusoid rim margin. It is distributed from Iraq to S and SE Asia. However, the typical subspecies also occurs within the range of subsp. *blomianum*. Both subspecies are variable, and several varieties have been described.

*Chenopodium ficifolium* occasionally hybridizes with other species of *C. sect. Chenopodium*.

The name *Chenopodium serotinum* Linnaeus has often been misapplied to this species but in fact refers to a species of *Atriplex*.


圆头藜 圆头藜

*Chenopodium betaceum* Andrzejowski; *C. striatum* (Krašan) Murr.

Herbs annual, 20–50 cm tall. Stem erect, basal branches ascending, upper branches usually erect; stem and branches green and red striate, often becoming deep beet red at maturity, ribbed. Leaf blade abaxially whitish gray to dark green, ovate-oblong to oblong, usually 1.5–3(–6) × 0.8–2.5 cm, 2–3 × as long as petiole, abaxially moderately to densely farinose, adaxially slightly or moderately farinose, base broadly cuneate, margin above base subentire to serrate or dentate, apex rounded, sometimes shortly mucronate; teeth gradually becoming smaller distally on margin. Glomerules arranged into narrow, interrupted, spikelike or moniliform panicles on upper part of branches. Flowers bisexual. Perianth segments 5, obovate, abaxially slightly keeled, margin membranous. Stigmas 2, filiform, recurved. Utricle depressed; pericarp adnate to seed. Seed black or black-red, sublustrous, depressed ovoid, ca. 1 mm in diam., slightly lineate, rim margin acutely ribbed. Fl. and fr. Jul.–Sep.

Valleys, river banks, roadsides. Gansu, Hebei, Shaanxi, Shanxi, S Xinjiang; also NE China [Japan, Korea, Russia (S Siberia); C and SW Asia, Europe; naturalized in North America and occasionally elsewhere].

The *Chenopodium strictum* group includes several closely related, predominantly (or exclusively?) tetraploid (*2n = 36*) species or infraspecific taxa, such as *C. novopokrovskyi* (Aellen) Uotila, *C. striatiforme* Murr, *C. strictum*, and some others. *Chenopodium novopokrovskyi* (Aellen) Uotila (Ann. Bot. Fenn. 30: 192. 1993; *C. album* Linnaeus subsp. *novopokrovskyi* Aellen, Trudy Rostovsk. Otd. Vsesoyuzn. Bot. Obshch. 2: 3. 1938) differs from *C. strictum* in having leaf blades narrow, densely farinose (grayish green to silvery), and with the margin entire or subentire, occasionally with 1, rarely 2, pairs of teeth. In its overall habit, *C. novopokrovskyi* is superficially similar to North American species of *C. sect. Leptophylla* Clemants & Mosyakin, but it is not directly related to them. *Chenopodium novopokrovskyi* is known from the steppe and desert zones of SE Europe (SE European Russia and SE Ukraine), C and SW Asia, and probably also NW China, W Mongolia, and S Siberia. The distribution of this taxon in China needs clarification.


藜 藜

Herbs annual, 15–150 cm tall. Stem erect, much branched, green or purple-red striate, stout, ribbed; branches oblique or spreading. Leaf blade rhombic-ovate to broadly lanceolate, 3–6 × 2.5–5 cm, 1–2 × as long as petiole, abaxially ± farinose, adaxially usually glabrous, or sometimes reddish purple vesiculiferous hairy on young leaves, base cuneate to broadly so, margin irregularly serrate, apex subobtuse or acute. Glomerules arranged into large or small panicles or spikelike panicles on upper part of branches. Flowers bisexual. Perianth segments 5, abaxially ovate to elliptic, abaxially longitudinally keeled, farinose, margin membranous, apex acute or slightly emarginate. Stamens 5; anthers exerted. Stigmas 2. Pericarp adnate to seed. Seed horizontal, black, sublustrous, ca. 1 mm in diam., lineate, rim margin obtuse. Fl. and fr. May–Oct.

Fields, waste places, roadsides, a difficult weed to control. Throughout China [probably throughout temperate and tropical regions of the world].

*Chenopodium album* s.l. in its more or less traditional circumscription is a diverse aggregate of predominantly hexaploid (*2n = 54*) taxa. It is represented in China by many insufficiently known and poorly delimited infraspecific entities. Some of them are, however, rather distinct from European plants. The taxonomic situation is further obscured by exceptional variability and widespread hybridization in the group. Consequently, no attempt has been made here to classify the Chinese infraspecific entities of *C. album* s.l. The precise global distribution is uncertain because many plants reported as *C. album* in the literature in fact belong to other, closely related species.