



The genus *Acer* L.

(Sapindaceae)

**Vegetative key to the species
in Western European cultivation.**

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This key is based on vegetative characteristics, present during the longest period of the year, fruits are rarely needed.

List of taxa treated in this key see on page 14.

List of names referred to synonymy see on page 15.

To improve accuracy:

- Use a hand lens to judge bud scale scars and indumentum.
- Characteristics like indumentum and presence of milky juice, can decrease during autumn.
- Do look at the mature plant as a whole. Young specimens and strong shoots give an atypical view.
- Beware of hybridisation, especially with plants raised from seed gathered in collections.

Characteristics based on:

- JDL herbarium specimens.
- living specimens, in various arboreta, botanic gardens and collections.
- literature:

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<http://www.plantentuin.ugent.be>

- 1 a Lamina compound, leaflets ≥ 3 (sometimes simple lamina present). 2
- b Lamina always simple. 10
- 2 a Lamina digitately 5-7-foliolate. *A. pentaphyllum* (Pentaphylla)
- b Lamina 3-foliolate or pinnately 5-9-foliolate. 3
- 3 a Lamina LS completely glabrous. *A. glabrum* subsp. *neomexicanum*
- b Lamina LS pubescent at least along midvein. 4
- 4 a Petiolules of lateral leaflets often >5 mm (terminal bud covered by 2 valvate scales, shoot at base with 2-3 pairs of bud scale scars). **Sectio NEGUNDO**. 5
- b Petiolules of lateral leaflets always ≤ 5 mm (terminal bud covered by imbricate scales, shoot at base with >5 pairs of bud scale scars). **Sectio TRIFOLIATA**. 7
- 5 a Leaflets 3-5(-7-9). IF all 3: terminal leaflets of whole tree clearly variable, terminal and lateral leaflets of one lamina often different in shape. Petiolule terminal leaflet often ≥ 1 cm.
..... *A. negundo* (Negundo/Negundo)
- Shoot +/- glabrous.
- o Leaflets 3-7(9), ≥ 3 cm wide, LS glabrous. *A. negundo* subsp. *negundo*
- o Leaflets 3, ≤ 3 cm wide, LS densely pubescent. *A. negundo* subsp. *mexicanum*
- Shoot pubescent.
- o Leaflets 3(-5?), LS glabrous or slightly pubescent on midvein. *A. negundo* subsp. *interius*
- o Leaflets 3-7, ovate, (at first) densely and white pubescent. *A. negundo* subsp. *californicum*
- b Leaflets always 3. Terminal leaflets of whole tree +/- similarly shaped, terminal and lateral leaflets of one lamina +/- similar in shape. Petiolule terminal leaflet usually ≤ 1 cm. 6
- 6 a Leaflet margin ciliate, and coarsely serrate to dentate. *A. cissifolium* (Negundo/Cissifolia)
- b Leaflet margin glabrous, and entire or with a few small teeth, but on strong shoots and young plants often serrate (dentate). *A. henryi* (Negundo/Cissifolia)
- 7 a Petiole glabrous. Leaflet margin +/- regularly serrate, ≥ 10 teeth/side. Bark smooth.
..... *A. mandshuricum* (Trifoliata/Mandshurica)
- b Petiole pubescent. Leaflet margin coarsely and bluntly dentate or dentate to lobed, <8 teeth/side. Bark smooth, fissured or peeling. 8
- 8 a Bark smooth. Leaflet margin dentate with teeth almost equally sized.
..... *A. maximowiczianum* (Trifoliata/Grisea)
- b Bark fissured or peeling. Leaflet margin irregularly dentate to lobed. 9
- 9 a Bark grey-beige, coarse and fibrous, vertically fissured. LS veins with pubescence death straight. Bud long and slender. *A. triflorum* (Trifoliata/Grisea)
- b Bark cinnamon coloured, peeling in papery horizontal curls. LS veins with pubescence different. Bud short and thick. *A. griseum* (Trifoliata/Grisea)
- Different:
- Bark vertically fissured and/or horizontally peeling, lamina with characteristics between the parents.
..... *A. griseum* \times *A. maximowiczianum*
- 10 a Bud covered by 2 valvate scales. 11
- b Bud covered by several imbricate scales. 36

- 11 a Lamina LS without membranous domatia in vein axils (sometimes vague, +/- green-yellow bark stripes on trunk, branch, shoot). Sectio **GLABRA**, **PARVIFLORA** and **PALMATA**. 12
- b Lamina LS with membranous domatia in vein axils - when vein axils are densely pubescent, remove the hairs to examine this (often conspicuous blue-green bark stripes on trunk, branch and shoot). Sectio **MACRANTHA**. 21
- 12 a Vegetative shoot with terminal bud, rarely reduced (+/- elongated and stipitate). 13
- b Vegetative shoot with terminal bud reduced (results in false dichotomy). Sectio **PALMATA**. 72
- 13 a Lamina lobed **AND** terminal lobe wider than long. Lamina average 15-20 cm across. Bark without stripes. **A. nipponicum** (Parviflora/Parviflora)
- b Lamina lobed **AND** terminal lobe longer than wide, **OR** lamina unlobed. Lamina <15 cm across. Bark sometimes with light stripes. 14
- 14 a Lamina unlobed, resembling a *Tilia* leaf **AND** cordate at base. Margin +/- regularly serrate-dentate. No bark stripes. **A. distylum** (Parviflora/Distyla)
- b Lamina different. 15
- 15 a Bark rough, +/- peeling and/or flaking. Indumentum yellowish to +/- rusty coloured, mainly on bud, top petiole (veins LS). **A. caudatum** (Parviflora/Caudata)
- Lamina margin finely serrate. Lobes acuminate, sharply serrate at apex. **A. caudatum** subsp. **caudatum**
 - Lamina margin coarsely serrate. Lobes acute to acuminate, entire at apex. **A. caudatum** subsp. **ukurunduense**
- b Bark smooth or slightly fissured. Indumentum whitish, fading or absent. 16
- 16 a Lamina LS pale green to blue-green **AND** fully glabrous. **A. glabrum** (Glabra/Glabra)
- o Lamina <6 cm across. **A. glabrum** subsp. **glabrum**
 - o Lamina >6 cm across. **A. glabrum** subsp. **douglasii**
- b Lamina LS green to grey-green **AND** at least with hairs in vein axils. 17
- 17 a Lamina unlobed, **OR** with 2 weak lateral lobes. **A. stachyophyllum** (Glabra/Arguta)
- Multi-stemmed **AND** invasive suckers from base. Lamina often <5 cm. **A. stachyophyllum** subsp. **betulifolium**
 - Multi-stemmed. Lamina often >5 cm. **A. stachyophyllum** subsp. **stachyophyllum**
- b Lamina 3-5-lobed. Lateral lobes often >2 cm. 18
- 18 a Terminal lobe coarsely toothed, <15 teeth/side. 19
- b Terminal lobe more finely toothed (to double-serrate), >15 teeth/side. 20
- 19 a Midvein length 8-17 cm. Terminal lobe widening at base, sinus between lobes sharp, not narrow. **A. spicatum** (Parviflora/Caudata)
- b Midvein length <10 cm. Terminal lobe narrowing at base, sinus between lobes narrow. **A. barbinerve** (Glabra/Arguta)
- 20 a Lamina 3-5-lobed, smooth/soft to the touch, midvein length >10 cm. Lobes caudate, apex entire for +/- 1 cm. **A. acuminatum** (Glabra/Arguta)
- b Lamina (3-)5(-7)-lobed, rough to the touch, midvein length <10 cm. Lobes acuminate, apex serrate. **A. argutum** (Glabra/Arguta)
- 21 a Mature lamina unlobed, **OR** unlobed **AND** weakly lobed. 22
- b Mature lamina mainly lobed. 27

- 22 a Lamina margin fully or partly entire, at the very most with some shallow teeth.
..... **A. sikkimense** (Macrantha)
- b Lamina margin different. 23
- 23 a Unlobed lamina ≥ 2 x longer than wide. Lamina never wrinkled or bulged, sometimes (weakly) 3-lobed AND sinuses of lateral lobes near the base. 24
- b Unlobed lamina < 2 x longer than wide. Lamina sometimes wrinkled or bulged, sometimes (weakly) 3-5-lobed AND sinuses of lateral lobes near the middle. 26
- 24 a Lamina 7-14 x 4-8 cm AND petiole often > 4 cm. **A. pectinatum** subsp. **laxiflorum** (Macrantha)
- b Lamina ≤ 10 x 4 cm AND petiole $< 3(-4)$ cm. 25
- 25 a Lamina apex sharp and deeply serrate, +/- caudate, with acute tip.
..... **A. caudatifolium** (Macrantha)
- b Lamina apex shallowly serrate, acuminate to caudate, with obtuse tip.
..... **A. crataegifolium** (Macrantha)
- 26 a Domatia obvious, ALSO in axils between secondary veins and tertiary veins (LENS!).
- Lamina (mostly) < 15 cm, +/- flat to +/- wavy, never faintly or wrinkled. Very variable species. **A. davidii** (Macrantha)
 - Lamina > 7 cm, unlobed or with 2 weak lateral lobes. **A. davidii** subsp. **davidii**
 - Lamina < 7 cm, shallowly 3-5-lobed (unlobed on old and weak shoot). **A. davidii** subsp. **grosseri**
 - Lamina 10-30 cm, often curved/bulged and faint/wrinkled (*A. davidii* x *A. pensylvanicum*). **A. xconspicuum**
- b Domatia only in axils between midvein and secondary veins. **A. morifolium** (Macrantha)
- 27 a Sinus between terminal and lateral lobe very narrow and deep, lobes almost touching at base or often partly overlapping. 28
- b Sinus between terminal and lateral lobe wide to very wide. 29
- 28 a Terminal lobe L/W: $\geq 2/1$ **A. micranthum** (Macrantha)
- b Terminal lobe L/W: +/-3/2..... **A. tschonoskii** (Macrantha)
- Lobes acuminate. Petiole and shoots not or vaguely red. **A. tschonoskii** subsp. **tschonoskii**
 - Lobes acuminate to +/- caudate. Shoot and petiole red tinged to conspicuously red.
..... **A. tschonoskii** subsp. **koreanum**
- 29 a Young shoot clearly covered with +/-whitish-blue bloom (real shoot colour scarcely or not at all visible). 30
- b Young shoot different. 31
- 30 a Lamina circumscription obovate, base truncate to subcordate, LS with rusty coloured hairs on venation and in vein axils (fading characteristic). **A. rufinerve** (Macrantha)
- b Lamina circumscription orbicular, base deeply cordate, LS glabrescent.
..... **A. tegmentosum** (Macrantha)
- 31 a Midvein usually 12-25 cm long. **A. pensylvanicum** (Macrantha)
- Different:
- Lamina often curved or bulged and faint or wrinkled. Lateral lobes sometimes weakly or absent. Hybrid between *A. davidii* and *A. pensylvanicum*. **A. xconspicuum**
- b Midvein usually 10-15 cm long or smaller. 32

- 32 a Lamina average ≤ 7 cm, mostly with 2 small lateral lobes 1-2 cm, sometimes a few laminae unlobed. *A. davidii* subsp. *grosseri* (Macrantha)
- b Lamina average > 7 cm, OR lamina 3-5(-7)-lobed or at least in part 5-lobed. 33
- 33 a Lamina variably 3-5(-7)-lobed; IF 5-lobed: terminal lobe $> 1/2$ as wide as lamina width. 34
- b Lamina 3-lobed; OR 5-lobed: terminal lobe $\leq 1/2$ as wide as lamina width. 35
- 34 a Lamina (unlobed)-3-5 lobed. Petiole $< 1/2$ midvein length. *A. capillipes* (Macrantha)
- b Lamina 5-lobed (sometimes weakly 7-lobed). Petiole $> 1/2$ midvein length. *A. rubescens* (Macrantha)
- 35 a Lamina 5-lobed. *A. pectinatum* (Macrantha)
- Terminal lobe $\leq 1/2$ midvein length, lateral lobes ovate-triangular and caudate. Margin finely and sharply serrate with ± 1 teeth per mm. *A. pectinatum* subsp. *pectinatum*
 - Terminal lobe $\geq 1/2$ midvein length, lateral lobes triangular and gradually acuminate. Margin \pm irregularly and coarsely serrate. *A. pectinatum* subsp. *maximowiczii*
- b Lamina 3-lobed.
- Lateral lobes (very) small < 2 cm (base of sinus below the middle). *A. pectinatum* subsp. *laxiflorum*
 - Lateral lobes > 2 cm.
 - o Terminal lobe $\geq 1/2$ midvein length. Lateral sinus below the middle of lamina. Lamina margin double serrate. *A. pectinatum* subsp. *forrestii*
 - o Terminal lobe $1/3-1/2$ midvein length. Lateral sinus often above the middle of lamina. Lamina margin very finely sharply serrate with ± 1 teeth per mm. *A. pectinatum* subsp. *taronense*
- Different:
- Taxon with doubtful status, characteristics between *A. davidii* and *A. pectinatum*. *A. metcalfii* (Macrantha)
- 36 a Petiole lactiferous when broken off or cut through (also damaged shoots, buds and larger veins may show this). Sectio PLATANOIDEA and LITHOCARPA. 37
- b Petiole not lactiferous or juice is hyaline (white pit or fibrous texture in the petiole may bear resemblance to milky sap!). 48
- 37 a Terminal lobe fully entire (no lamina with toothed terminal lobe). 38
- b Terminal lobe with ≥ 1 tooth, OR at least so for several laminae. 42
- 38 a Shoot greenish and staying so, not woody the second (and following) growing season, eventually partly with red or brown, sometimes with bluish bloom. 39
- b Shoot becoming grey- to brownish woody, at least so the second growing season. 40
- 39 a Lamina unlobed and weakly 3-lobed, OR 3-5-lobed, OR 5-lobed and simultaneously terminal lobe wider than long (texture rigid and firm, base cordate). *A. amplum* (Platanoidea)
- Lamina (3-)5-lobed.
 - o Terminal lobe often (much) wider than long = 'broad shouldered lamina'. *A. amplum* subsp. *amplum*
 - o Terminal lobe often $> 1/2$ midvein length. *A. amplum* subsp. *bodinieri*
 - Lamina unlobed to 3-lobed.
 - o Lamina 3-lobed, sinus between lobes \pm acute, lobes directed sideward. *A. amplum* subsp. *tientaiense*
 - o Lamina unlobed to weakly 3-lobed, resembling *Catalpa*. *A. amplum* subsp. *catalpifolium*
- b Lamina 5-lobed AND terminal lobe much longer than wide, OR 5-7-lobed, IF lamina 3-lobed then midvein length < 7 cm (texture thin, papery, base truncate to \pm cordate). *A. cappadocicum* (Platanoidea)
- Tree with smooth bark. Lamina 5-7-lobed.

- Crown round and broad. Shoot green, sometimes lightly bloomed. Lamina 5-7-lobed, LS pubescent mainly limited to basal vein axils. *A. cappadocicum* subsp. *cappadocicum*
- Crown conspicuously columnar. Shoot clearly bloomed. Lamina mainly 5-lobed (small leaf sometimes 3-lobed), margin more undulated, LS pubescent often in all vein axils. *A. cappadocicum* subsp. *lobelii*
- Small tree, bark often ridged. Lamina 5-lobed.
 - Lamina <10 cm across. Lobes long acuminate, narrow with deep sinuses. *A. cappadocicum* subsp. *sinicum*
 - Lamina ≤7 cm across. Lobes short, +/- blunt to acuminate (lamina texture sometimes firm, various forms cultivated). Shoot quickly reddish brown. Small tree with entangled branches. *A. cappadocicum* subsp. *divergens*

Different:

some hybrids with 5-lobed to weakly 7-lobed lamina with terminal lobe entire as well as with terminal lobe slightly toothed:

- Terminal lobe entire as well as with blunt rounded teeth. Characteristics between *A. campestre* and *A. cappadocicum*. *A. xzoeschense*
- Terminal lobe entire as well as with rounded and acute teeth.
 - Teeth rounded to acute at tip. Lamina margin undulate and initially ciliate. Lamina LS and petiole less pubescent than in *A. miyabei* (especially obvious on young leaves). Characteristics between *A. cappadocicum* and *A. miyabei*. *A. xhillieri*
 - Teeth acute and sometimes bristly at tip. Characteristics between *A. cappadocicum* and *A. platanoides*. *A. xverhaegheanum*

- 40 a Lamina LS pubescent. Lamina 3-5-lobed. *A. longipes* (Platanoidea)
- b Lamina LS glabrous, except venation and/or vein axils, OR lamina LS densely pubescent but then lamina >5-lobed. 41
- 41 a Lamina 3-, or weakly 5-lobed, rarely unlobed, small +/- ≤6 × 6 cm. *A. tenellum* (Platanoidea)
- b Lamina 5-7(-9)-lobed, >6 × 6 cm. Very variable species, numerous subspecies with only a few cultivated. *A. pictum* (Platanoidea)
 - Lamina LS fully pubescent. Lamina 5-7-lobed. *A. pictum* subsp. *pictum*
 - Lamina LS glabrous or pubescent only on midvein and secondary veins.
 - Lamina 5-7-lobed. *A. pictum* subsp. *mono*
 - Lamina 7-9-lobed. *A. pictum* subsp. *okamotoanum*
- 42 a Teeth apex often bristle-like narrowing. Petiole and lamina margin glabrous. 43
- b Teeth apex acute or rounded, not bristle-like narrowing. Petiole often pubescent, lamina margin ciliate (fading in Autumn and on mature lamina). 44
- 43 a Terminal lobe >1/2 midvein length, entire OR with ≤2 teeth (rarely more small teeth); LS with weak secondary veins and glabrous vein axils. *A. truncatum* (Platanoidea)
- b Terminal lobe <1/2 midvein length, always toothed, often with more, (sinuous) teeth; LS with strong secondary veins and pubescent vein axils. *A. platanoides* (Platanoidea)
 - Large tree.
 - Lamina +/- uniform. Lobes obviously toothed, often more teeth per side. Lamina LS pubescent in vein axils. *A. platanoides* subsp. *platanoides*
 - Lamina very variable in shape, sometimes on the same shoot: Some hybrids (see also 41b):
 - Laminas like *A. platanoides* as well as (smaller) laminas like *A. truncatum* with lobes less (bristly) toothed. Characteristics between both parents. *A. platanoides* × *A. truncatum*
 - Teeth acute and/or bristly. Characteristics between *A. cappadocicum* and *A. platanoides*. *A. xverhaegheanum*
 - Lobes sometimes absent, supposed hybrid between *A. cappadocicum* subsp. *lobelii* and *A. platanoides* (sometimes regarded as a form of the latter). *A. xdieckii*
 - Shrub or small tree. Lobes less toothed. Lamina LS pubescent. *A. platanoides* subsp. *turkestanicum*

- 44 a Lamina very large, 15-30 cm, sometimes more. **A. macrophyllum** (Lithocarpa/Macrophylla)
- b Lamina smaller. 45
- 45 a Terminal lobe with obtuse teeth OR with rounded as well as acute teeth. 46
- b Terminal lobe with acute teeth. 47
- 46 a Lamina average ≥ 10 cm. Terminal lobe mostly long acuminate, margin mainly with 1-2 teeth. Indumentum more obvious: often as well on lamina US as LS, especially on venation and petiole. **A. miyabei** (Platanoidea)
- Lamina with 3 lobes. Terminal lobe acuminate, lateral lobe rather +/- obtuse. **A. miyabei** subsp. **miaotaiense**
 - Lamina with 5 lobes. Terminal and basal lobes acuminate.
 - o Margin with obtuse teeth. Lamina LS and petiole obviously pubescent. **A. miyabei** subsp. **miyabei**
 - o Margin with acute to obtuse teeth. Lamina LS and petiole less pubescent (especially so on young laminae). Characteristics between *A. miyabei* and *A. cappadocicum* **A. xhillieri**
- b Lamina average ≤ 10 cm. Terminal lobe often shorter and +/- blunt at apex, lamina margin mostly entire or with one teeth. Indumentum less obvious: more restricted to venation (mainly less obvious on lamina US and petiole or lacking there). See also hybrids. **A. campestre** (Platanoidea)
- Different, some hybrids:
- Lamina 5- (to weakly 7-) lobed. Terminal lobe narrowing towards its base. Lateral lobes long, with 1-2 shallow rounded teeth. Characteristics between *A. campestre* and *A. cappadocicum*. **A. xzoeschense**
 - Lamina 3- (to weakly 5-) lobed. Terminal lobe widest at base. Lateral lobes short, +/- acuminate, entire or almost so. Characteristics between *A. campestre?* and *A. monspessulanum*. **A. xbornmuelleri** (Acer Monspessulana)
- 47 a Terminal lobe widest at base, with 1 (or 2) small acute teeth per side AND lateral lobes entire or almost so. **A. sinopurpurascens** (Lithocarpa/Lithocarpa)
- b Terminal lobe narrow at base and wider above the middle. Terminal lobe AND lateral lobe with more and obvious teeth. **A. diabolicum** (Lithocarpa/Lithocarpa)
- 48 a Bud, shoot and fruit stiffly pubescent (<< in autumn). **A. sterculiaceum** (Lithocarpa/Lithocarpa)
- Lamina 3-lobed, remarkably thick, >15 cm across. Lateral lobes often small. Margin coarsely toothed to entire. **A. sterculiaceum** subsp. **thomsonii**
 - Lamina 3-(more-) lobed, thick. Lateral lobes obvious.
 - o Lamina 3- (weakly 5-) lobed, <15 cm across. Margin irregularly, distantly and coarsely dentate. Fruits a few in short infructescence. **A. sterculiaceum** subsp. **franchetii**
 - o Lamina 3-5-(7-) lobed, >15 cm across. Margin more regularly toothed. Fruits numerous in long infructescence. **A. sterculiaceum** subsp. **sterculiaceum**
- b Bud AND shoot AND fruit never stiffly pubescent at the same time. 49
- 49 a Lamina unlobed, margin sharply double-serrate AND secondary veins >15-20/side. **A. carpinifolium** (Indivisa)
- b Lamina different. 50
- 50 a Lamina leathery AND fully wintergreen AND with caudate apex ("driptip") AND unlobed or both unlobed and 3-lobed. Sectio **PENTAPHYLLA**, **HYPTIOCARPA**. 51
- b Lamina different. Sectio **ACER**, **GINNALA**, **PUBESCENTIA**, **RUBRA**, (**PENTAPHYLLA**). 54
- 51 a Lamina LS and petiole pubescent (fading in Autumn). **A. coriaceifolium** (Pentaphylla/Trifida)
- b Lamina LS and petiole glabrous. 52
- 52 a Lamina <10 cm, ovate to oblong ovate <2 x longer than wide. Juvenile lamina 3-lobed (Lamina margin shallowly dentate at first, entire later). **A. paxii** (Pentaphylla/Trifida)
- b Lamina >10 cm, oblong ovate 2 x longer than wide. Lamina rarely 3-lobed. 53

- 53 a Lamina US with obvious venation, secondary veins ≥ 7 /side. Lamina up to +/- 15 x 5 cm, apex +/- acute at tip). *A. oblongum* (Pentaphylla/Trifida)
- b Lamina US with less obvious venation, secondary veins ≤ 6 /side. Lamina longer and especially wider, up to +/- 18 x 8 cm, apex +/- rounded at tip. *A. laurinum* (Hyptiocarpa)
- 54 a Lamina deeply 3-lobed **AND** terminal lobe narrow, $\geq 3/4$ midvein length, (much) longer than lateral lobes (on strong shoots lobes more equal in size).
Sectio **PUBESCENTIA**. *A. pilosum* (Pubescentia)
- b Lamina different (terminal lobe never so slender and narrow).
Sectio, **GINNALA** and (**ACER**, **PENTAPHYLLA**, **RUBRA**). 55
- 55 a Lamina never palmately 5-lobed: unlobed to 3-lobed or pinnately 5(-7)-lobed. 56
- b Always palmately 5-lobed lamina present. Lamina 3-5(-7-) lobed. 64
- 56 a Lamina +/- <1,5 cm across, margin with sharp, fine +/- prickling teeth. *A. hyrcanum* subsp. *reginae-amaliae*
- b Lamina different, larger. 57
- 57 a Lamina apex acute to acuminate. 58
- b Lamina apex rounded to obtuse, at least so for most of laminas. 61
- 58 a Lamina margin irregularly coarsely serrate-dentate. 59
- b Lamina margin entire **OR** partly entire and shallowly (+/- appressed) serrate. 60
- 59 a Lamina LS pale blue-green, clear contrast with the US green colour.
Sectio (**RUBRA**). *A. pycnanthum* (Rubra)
- b Lamina LS green, little or no contrast with US colour.
Sectio **GINNALA**. *A. tataricum* (Ginnala)
- Lamina <4 cm. *A. tataricum* subsp. *semenovii*
 - Lamina >7 cm.
 - o Lamina unlobed, or with shallow lobes <1 cm deep, also sometimes lobed towards apex.
..... *A. tataricum* subsp. *tataricum*
 - o Lamina lobed at base.
 - Lobes apex blunt. Lamina margin +/- bluntly serrate. *A. tataricum* subsp. *aidzuense*
 - Lobes apex acute to acuminate. Lamina margin sharply serrate. *A. tataricum* subsp. *ginnala*
- 60 a Lamina partly entire and shallowly (+/- appressed) serrate, LS often pale green to blue-green. Sectio (**PENTAPHYLLA**). *A. buergerianum* (Pentaphylla/Trifida)
- Lamina mainly 3-lobed.
 - o Lobes directed forward, lamina LS pale blue-green. *A. buergerianum* subsp. *buergerianum*
 - o Lobes directed sideward, lamina LS remarkably blue-green. *A. buergerianum* subsp. *ningpoense*
 - Lamina unlobed to (weakly) 3-lobed. *A. buergerianum* subsp. *formosanum*
- b Lamina fully entire, rarely with an obtuse little teeth. Similar but totally unrelated hybrid, characteristics between presumed parents: *A. monspessulanum* and *A. campestre*? *A. xbornmuelleri* (Acer/Monspessulana)
- 61 a Lamina 3-lobed **AND** with presence of some unlobed laminas. 62
- b Lamina always 3-lobed. 63
- 62 a Lamina planar to +/- undulate, <4 cm, margin entire (rarely with some shallow little teeth).
..... *A. sempervirens* (Acer/Monspessulana)
- b Lamina often convex, ≤ 6 cm (juvenile >), margin shallowly toothed (sharply on juvenile, becoming entire on adult). *A. obtusifolium* (Acer/Monspessulana)

- 63 a Lateral lobes apex +/- in or below (never clearly above) the middle of lamina. Terminal lobe longer than wide, rounded to obtuse at apex. **A. monspessulanum** (Acer/Monspessulana)
- Tree or small tree. Samara green.
 - o Lamina average <7 cm, LS +/- glabrous, only base pubescent. **A. monspessulanum** subsp. **monspessulanum**
 - o Lamina average >7 cm, LS densely pubescent. **A. monspessulanum** subsp. **ibericum**
 - Dense shrub. Samara red. Lamina LS +/- with rust-coloured hairs. **A. monspessulanum** subsp. **turcomanicum**
- Different:**
- Shrub to small tree, lamina larger than *A. monspessulanum*, colour grey-green to yellow-green, Lobes often with more (shallow) teeth. **A. pentapomicum** (Pubescentia)
- b Lateral lobes apex clearly above the middle of lamina. Terminal lobe wider than long, rounded to obtuse. Similar hybrids, lamina mainly 3-lobed, sometimes a few weakly 5-lobed.
- Lamina remarkably thick and strong, characteristics between *A. monspessulanum* and *A. opalus*? **A. xcoriaceum** (Acer/Monspessulana)
 - Lamina not so remarkably thick and strong, extremely similar hybrids, parents presumed.
 - o Characteristics between *A. opalus* and *A. pseudoplatanus*? **A. xhybridum**
 - o Characteristics between *A. monspessulanum* and *A. opalus* subsp. *obtusatum*? **A. xrotundilobum**
- 64 a Terminal lobe $\geq 2/3$ as long as midvein length, at least so for most of laminae. 65
- b Terminal lobe $\leq 1/2$ as long as midvein length, at least so for most of laminae. 66
- 65 a Terminal lobe with <6 teeth/side AND +/- straight basal part. **A. heldreichii** (Acer/Acer)
- Terminal lobes narrow, $\geq 3/1$ AND $> 3/4$ midvein length. Teeth obtuse to rounded. **A. heldreichii** subsp. **heldreichii**
 - Terminal lobes wide, $\leq 2/1$ AND $< 2/3$ midvein length. Teeth obtuse to acute. **A. heldreichii** subsp. **trautvetteri**
- Different:**
- Lamina with >6 teeth/side AND +/- straight basal part, characteristics between *A. pseudoplatanus* and *A. heldreichii*. **A. xpseudoheldreichii**
- b Terminal lobe with numerous acute teeth/side AND curved basal part. **A. saccharinum** (Rubra)
- Different:**
- Terminal lobe variably narrow to wide at base and lamina margin with +/- blunt teeth, intermediary between the parents *A. rubrum* and *A. saccharinum*. **A. xfreemannii** (Rubra)
- 66 a Terminal lobe widening at its base OR with numerous, >5 teeth/side. 67
- b Terminal lobe narrowing at its base AND with few, ≤ 5 teeth/side. 71
- 67 a Terminal lobe broadly triangular, widest at base AND lobes with conspicuously long acuminate apex. **A. caesium** (Acer/Acer)
- Shoot initially slightly bloomed. Lamina 3-5-lobed. **A. caesium** subsp. **caesium**
 - Shoot strongly bluish-white bloomed (often persistent the 2nd year). Lamina (3-)5-7-lobed. **A. caesium** subsp. **giraldii**
- b Terminal lobe ovate or elongate (if widest at base then apex not long acuminate). 68
- 68 a Terminal lobe mostly wider than long AND widest at base, sinus often wide. Lamina margin +/- shallowly (not sharply) dentate to almost entire. Lamina often bulged or with wrinkled surface, tending to crack when flattened. See also hybrids. **A. opalus** (Acer/Monspessulana)
- Lamina ≥ 12 cm wide, +/- thick and leathery. Lobes obtuse and rounded. **A. opalus** subsp. **obtusatum**
 - Lamina <10 cm wide, thinner. Lobes more acute. **A. opalus** subsp. **opalus**
- Different:** some related hybrids with often 3-lobed lamina, but weakly 5-lobed lamina can be present.
- Lamina remarkably thick and strong. Characteristics between *A. monspessulanum* and *A. opalus*? **A. xcoriaceum** (Acer/Monspessulana)

- Lamina not so thick and strong, very similar hybrids, parents disputed.
 - o *A. opalus* × *A. pseudoplatanus*? *A. ×hybridum* (Acer/Monspessulana)
 - o *A. monspessulanum* × *A. opalus* subsp. *obtusatum*? *A. ×rotundilobum* (Acer/Monspessulana)

b Terminal lobe longer than wide, sinus often narrow OR teeth sharper. 69

69 a Lamina remarkably large, 15-30 cm across. Bud brownish. *A. velutinum* (Acer/Acer)

- Crown broad to broadly dome-shaped. Samara angle +/- 90°.
 - o Lamina LS green to grey-green, +/- glabrous to densely and pale to rusty-coloured pubescent. *A. velutinum* var. *velutinum*
 - o Lamina LS blue-green, completely glabrous. *A. velutinum* f. *glabrescens*
- Crown columnar. Lamina LS +/- blue-green, indumentum restricted to venation. Samara angle >90°. *A. velutinum* var. *vanvolxemii*

Different:

Plant with characteristics between the parents, hybrid between *A. pseudoplatanus* and *A. velutinum*.

b Lamina smaller. Bud green or reddish. 70

70 a Terminal bud green. Terminal lobe with ≥5 secondary veins/side >1 cm long. *A. pseudoplatanus* (Acer/Acer)

b Terminal bud reddish. Terminal lobe with <5 secondary veins/side >1 cm long. *A. rubrum* (Rubra)

Different:

Terminal lobe variably narrow to wide at base and lamina margin with +/- blunt teeth, intermediary between the parents *A. rubrum* and *A. saccharinum*. *A. ×freemannii* (Rubra)

71 a Petiole ≥ midvein length. *A. hyrcanum* (Acer/Monspessulana)

- Lamina 3-lobed (at most with very small basal lobes, samara ≤1 cm). *A. hyrcanum* subsp. *sphaerocarpum*
- Lamina 5-lobed (samara 3-4 cm).
 - o Margin with rounded teeth, or +/- crenate.
 - Lamina dull, thin. Terminal lobe with <4 obtuse teeth. *A. hyrcanum* subsp. *keckianum*
 - Lamina smooth, thick. Terminal lobe with >5 obtuse teeth. *A. hyrcanum* var. *granatense*
 - o Margin with obtuse to +/- acute teeth.
 - Lamina LS blue-green. *A. hyrcanum* subsp. *intermedium*
 - Lamina LS green.
 - Lobes with acute apex and teeth. *A. hyrcanum* subsp. *tauricola*
 - Lobes with blunt apex and teeth. *A. hyrcanum* subsp. *hyrcanum*

b Petiole < midvein length. *A. saccharum* (Acer/Saccharodendron)

Extremely variable species, some infraspecific taxa:

- Lamina >10 cm. Lobes clearly long acuminate, slender and acute.
 - o Lamina LS yellow-green to green, indumentum stiff. Petiole with stipules at base. *A. saccharum* subsp. *nigrum*
 - o Lamina LS pale green to blue-green, indumentum different. Petiole without persistent stipules.
 - Lamina LS +/- glabrous to softly pubescent. Petiole glabrous and slender. *A. saccharum* subsp. *saccharum*
 - Lamina LS remarkably densely pubescent. Petiole densely pubescent and rather thick. *A. saccharum* subsp. *skutchii*
- Lamina average <10 cm. Lobes obtuse to acute or +/- acuminate.
 - o Lamina LS green to yellow-green. Lobes +/- acuminate. *A. saccharum* subsp. *leucoderme*
 - o Lamina LS pale green to blue-green. Lobes obtuse to +/- acute.
 - Teeth obtuse. Terminal lobe hardly narrowing towards base. *A. saccharum* subsp. *floridanum*
 - Teeth rounded. Terminal lobe very narrow towards base. *A. saccharum* subsp. *grandidentatum*

72	a	Lamina unlobed. Sectio PALMATA/Penninervia .	73
	b	Lamina unlobed and 3-lobed OR 3-more-lobed. Sectio PALMATA/Palmata + Sinensia, WARDIANA .	75
73	a	Lamina base rounded to +/- cordate. Basal secondary veins ending high in the lamina margin: between 1/3 and 1/2 midvein length. Lamina LS +/- paler green to blue-green. A. cordatum (Palmata/Penninervia)	
	b	Lamina base cuneate to rounded. Basal secondary veins ending low in the lamina margin: under 1/3 midvein length. Lamina LS and US +/- concolorous, green.	74
74	a	Lamina usually >10 cm, with numerous traces of tertiary veins along midvein (vein pattern more reticulate). A. laevigatum (Palmata/Penninervia)	
	b	Lamina <10 cm, without such traces of tertiary veins (vein pattern not reticulate). A. fabri (Palmata/Penninervia)	
75	a	Lamina 3-lobed, OR unlobed and 3-lobed.	76
	b	Lamina 3-5 lobed OR 5- to more-lobed.	79
76	a	Lamina 3-lobed, ≤10 cm. Terminal lobe L/W : >2/1, margin finely serrate. Petiole 3-5 cm, long + thin compared with midvein length.	77
	b	Lamina 3-lobed (rarely unlobed, or 5-lobed when juvenile), 10-25 cm. Terminal lobe L/W : ≤2/1, margin coarsely serrate at first, entire later. Petiole 2-4 cm, short and thick compared with midvein length.	78
77	a	Lobe apex clearly narrowly caudate >2 cm. Lamina LS rusty-pubescent on midvein and secondary veins. A. wardii (Wardiana)	
	b	Lobe apex caudate. Lamina LS glabrous. A. tutcheri (Palmata/Sinensia)	
78	a	Lamina unlobed to 3-lobed, 10-25 cm. Terminal lobe caudate and lateral lobes acute to +/- caudate at apex. Juvenile lamina coarsely serrate, mature lamina entire. A. calcaratum (Palmata/Sinensia)	
	b	Lamina 3-lobed (juvenile 5-lobed), 10-15 cm. Lobes blunt to long acuminate. Juvenile lamina with margin coarsely dentate, mature lamina entire (several subspecies are recognised). A. tonkinense (Palmata/Sinensia)	
79	a	Petiole AND annual shoot lasting and densely covered with adpressed, short and stiff hairs. Lamina LS initially +/- greyish by similar kind of hairs. Lamina 5-7-lobed, resembling a dull-green coloured <i>A. palmatum</i> A. pauciflorum (Palmata/Palmata)	
	b	Petiole AND shoot not so densely nor lasting pubescent. Lamina LS different IF lamina is 5-7-lobed, OR lamina 7- to more-lobed.	80
80	a	Lamina 3-5-lobed, OR 5-lobed.	81
	b	Lamina 5-7-lobed or more-lobed.	85
81	a	Lamina 3-5-lobed, basal lobes very small, <1 cm. Lamina base cuneate to +/- rounded. A. campbellii subsp. wilsonii (Palmata/Sinensia)	
	b	Lamina 5-lobed, basal lobes >1 cm (sometimes 3- and/or 4-lobed lamina present). Lamina base truncate to cordate.	82
82	a	Terminal lobe +/- 1/2 midvein length (Lamina +/- thick, often +/- leathery and smooth waxy to the touch, base cordate to deeply cordate). A. campbellii subsp. sinense (Palmata/Sinensia)	
	b	Terminal lobe 2/3 to 3/4 midvein length.	83

- 83 a Petiole stout +/- thick and short, $\leq 1/3$ midvein length. Lamina +/- leathery.
..... *A. campbellii* subsp. *sinense*
- b Petiole slender, usually (not for all laminas) $> 1/2$ midvein length. lamina not leathery. 84
- 84 a Terminal lobe with entire part towards its base. *A. elegantulum* (Palmata/Sinensia)
- b Terminal lobe serrate-dentate towards its base. *A. oliverianum* (Palmata/Sinensia)
- Basal vein axils lamina LS strongly pubescent. *A. oliverianum* subsp. *oliverianum*
 - Basal vein axils lamina LS scarcely pubescent. *A. oliverianum* subsp. *formosanum*
- Different:
- Closely related taxon, looks like a large-leaved *A. oliverianum*. *A. schneiderianum*
- 85 a Lamina LS remarkably densely tufted "cobweb-like" pubescent **AND** 5-7-lobed.
..... *A. erianthum* (Palmata/Sinensia)
- b Lamina LS different, IF tufted pubescent, then lamina always 7-lobed. 86
- 86 a Emerging lamina often remarkably reddish-brown **AND** lobes long and narrow $> 3/4$ midvein length, margin coarsely dentate. Mature lamina on older plant is less deeply lobed and less coarsely dentate to very finely serrate (lobes 5-7 sometimes weakly 7-9).
(Sectio **PALMATA/Sinensia**). *A. campbellii* (Palmata/Sinensia)
- Lobes narrow to wide and lamina margin very finely serrate. *A. campbellii* subsp. *campbellii*
 - Lobes narrow and lamina margin irregularly sharply serrate. *A. campbellii* subsp. *flabellatum*
- b Emerging lamina not so remarkably reddish-brown, similar to mature leaf and only smaller (lobes 5-7 or more). (Sectio **PALMATA/Palmata**). 87
- 87 a Terminal lobe (from apex to leaf base) $1/2$ - $3/4$ midvein length. 88
- b Terminal lobe (from apex to leaf base) $< 1/2$ midvein length. 91
- 88 a Lamina 5-7(-9)-lobed. 89
- b Lamina 9-11(-13)-lobed. 90
- 89 a Lamina 5-7(-9)-lobed, LS sparsely pubescent (hybrids occur! between infraspecific and with related *A. shirasawanum*, *A. sieboldianum*, *A. pseudosieboldianum* etc.). *A. palmatum* (Palmata/Palmata)
- Lamina margin finely serrate. Terminal lobe $1/2$ - $2/3$ midvein length. *A. palmatum* subsp. *amoenum*
 - Lamina margin coarsely serrate. Terminal lobe $> 2/3$ - $3/4$ midvein length.
 - o Lobes 5-7, terminal lobe $2/3$ - $3/4$ midvein length. *A. palmatum* subsp. *palmatum*
 - o Lobes 7(-9), terminal lobe $> 3/4$ midvein length. *A. palmatum* subsp. *matsumurae*
- b Lamina 7(-9)-lobed, LS remarkably (long) tufted pubescent. *A. robustum* (Palmata/Palmata)
- 90 a Lamina base +/- truncate to subcordate. *A. tenuifolium* (Palmata/Palmata)
- b Lamina base deeply cordate. *A. pseudosieboldianum* (Palmata/Palmata)
- Lobes 9-11. *A. pseudosieboldianum* subsp. *pseudosieboldianum*
 - Lobes 9-13. *A. pseudosieboldianum* subsp. *takesimense*
- 91 a Lobes 5-7 (rarely 5-9). Lamina margin sharply double-serrate with teeth up to 1 mm.
..... *A. duplicatoserratum* (Palmata/Palmata)
- b Lobes 7-11(-13) (no lamina with 5 lobes present). Lamina margin not so finely double-serrate. 92

- 92 a Lamina always <8 cm. Lobes 9 (sometimes 7-11). **A. sieboldianum** (Palmata/Palmata)
- b Lamina >8 cm or at least so for part of leaves. Lobes 7-9 or more. 93
- 93 a Lobes 7-9. Shoot greenish and lasting so the 2nd and 3th year. **A. circinatum** (Palmata/Palmata)
- b Lobes 9-11(-13). Shoot initially green, becoming grey to brown the 2nd year. 94
- 94 a Lobes 9-11. Lamina base inverted V-shaped, LS +/- dull (hybrids occur frequently, e.g. with **A. circinatum** and **A. pseudosieboldianum**). **A. japonicum** (Palmata/Palmata)
- b Lobes 9-13. Lamina base deeply cordate, LS shiny. **A. shirasawanum** (Palmata/Palmata)

List of taxa treated in this identification key.

- A. acuminatum* (Glabra/Arguta)
A. amplum (Platanoidea)
A. amplum subsp. **amplum**
A. amplum subsp. **bodinieri**
A. amplum subsp. **catalpifolium**
A. amplum subsp. **tientaiense**
A. argutum (Glabra/Arguta)
A. barbinerve (Glabra/Arguta)
A. xbornmuelleri (Acer Monspessulana)
A. buergerianum (Pentaphylla/Trifida)
A. buergerianum subsp. **buergerianum**
A. buergerianum subsp. **formosanum**
A. buergerianum subsp. **ningpoense**
A. caesium (Acer/Acer)
A. caesium subsp. **caesium**
A. caesium subsp. **giraldii**
A. calcaratum (Palmata/Sinensia)
A. campbellii (Palmata/Sinensia)
A. campbellii subsp. **campbellii**
A. campbellii subsp. **flabellatum**
A. campbellii subsp. **sinense**
A. campbellii subsp. **wilsonii**
A. campestre (Platanoidea)
A. capillipes (Macrantha)
A. cappadocicum (Platanoidea)
A. cappadocicum subsp. **cappadocicum**
A. cappadocicum subsp. **divergens**
A. cappadocicum subsp. **lobelii**
A. cappadocicum subsp. **sinicum**
A. carpinifolium (Indivisa)
A. caudatifolium (Macrantha)
A. caudatum (Parviflora/Caudata)
A. caudatum subsp. **caudatum**
A. caudatum subsp. **ukurunduense**
A. circinatum (Palmata/Palmata)
A. cissifolium (Negundo/Cissifolia)
A. xconspicuum
A. coriaceifolium (Pentaphylla/Trifida)
A. xcoriaceum (Acer/Monspessulana)
A. crataegifolium (Macrantha)
A. davidii (Macrantha)
A. davidii subsp. **davidii**
A. davidii subsp. **grosseri**
A. diabolicum (Lithocarpa/Lithocarpa)
A. xdieckii
A. distylum (Parviflora/Distyla)
A. duplicatoserratum (Palmata/Palmata)
A. elegantulum (Palmata/Sinensia)
A. erianthum (Palmata/Sinensia)
A. fabri (Palmata/Penninervia)
A. xfreemannii (Rubra)
A. glabrum (Glabra/Glabra)
A. glabrum subsp. **douglasii**
A. glabrum subsp. **glabrum**
A. glabrum subsp. **neomexicanum**
A. griseum (Trifoliata/Grisea)
A. griseum × *A. maximowiczianum*
A. heldreichii (Acer/Acer)
A. heldreichii subsp. **heldreichii**
A. heldreichii subsp. **trautvetteri**
A. henryi (Negundo/Cissifolia)
A. xhillieri
A. xhybridum
A. hyrcanum (Acer/Monspessulana)
A. hyrcanum subsp. **hyrcanum**
A. hyrcanum subsp. **intermedium**
A. hyrcanum subsp. **keckianum**
A. hyrcanum subsp. **reginae-amaliae**
A. hyrcanum subsp. **sphaerocarpum**
A. hyrcanum subsp. **tauricola**
A. hyrcanum var. **granatense**
A. japonicum (Palmata/Palmata)
A. laevigatum (Palmata/Penninervia)
A. laurinum (Hyptiocarpa)
- A. longipes* (Platanoidea)
A. macrophyllum (Lithocarpa/Macrophylla)
A. mandshuricum (Trifoliata/Mandshurica)
A. maximowiczianum (Trifoliata/Grisea)
A. 'metcalfii' (Macrantha)
A. micranthum (Macrantha)
A. miyabei (Platanoidea)
A. miyabei subsp. **miaotaiense**
A. miyabei subsp. **miyabei**
A. monspessulanum subsp. **ibericum**
A. monspessulanum subsp. **monspessulanum**
A. monspessulanum subsp. **turcomanicum**
A. monspessulanum (Acer/Monspessulana)
A. morifolium (Macrantha)
A. negundo (Negundo)
A. negundo subsp. **californicum**
A. negundo subsp. **interius**
A. negundo subsp. **mexicanum**
A. negundo subsp. **negundo**
A. nipponicum (Parviflora/Parviflora)
A. oblongum (Pentaphylla/Trifida)
A. obtusifolium (Acer/Monspessulana)
A. oliverianum (Palmata/Sinensia)
A. oliverianum subsp. **formosanum**
A. oliverianum subsp. **oliverianum**
A. opalus (Acer/Monspessulana)
A. opalus subsp. **obtusatum**
A. opalus subsp. **opalus**
A. palmatum (Palmata/Palmata)
A. palmatum subsp. **amoenum**
A. palmatum subsp. **matsumurae**
A. palmatum subsp. **palmatum**
A. pauciflorum (Palmata/Palmata)
A. paxii (Pentaphylla/Trifida)
A. pectinatum (Macrantha)
A. pectinatum subsp. **forrestii**
A. pectinatum subsp. **laxiflorum**
A. pectinatum subsp. **maximowiczii**
A. pectinatum subsp. **pectinatum**
A. pectinatum subsp. **taronense**
A. pensylvanicum (Macrantha)
A. pentaphyllum (Pentaphylla)
A. pentapomicum (Pubescentia)
A. pictum (Platanoidea)
A. pictum subsp. **mono**
A. pictum subsp. **okamotoanum**
A. pictum subsp. **pictum**
A. pilosum (Pubescentia)
A. platanoides (Platanoidea)
A. platanoides × *A. truncatum*
A. platanoides subsp. **platanoides**
A. platanoides subsp. **turkestanicum**
A. xpseudoheldreichii
A. pseudoplatanus (Acer/Acer)
A. pseudosieboldianum (Palmata/Palmata)
A. pseudosieboldianum subsp. **pseudosieboldianum**
A. pseudosieboldianum subsp. **takesimensis**
A. pycnanthum (Rubra)
A. robustum (Palmata/Palmata)
A. xrotundilobum (Acer/Monspessulana)
A. rubescens (Macrantha)
A. rubrum (Rubra)
A. rufinerve (Macrantha)
A. saccharinum (Rubra)
A. saccharum (Acer/Saccharodendron)
A. saccharum subsp. **floridanum**
A. saccharum subsp. **grandidentatum**
A. saccharum subsp. **leucoderme**
A. saccharum subsp. **nigrum**
A. saccharum subsp. **saccharum**
A. saccharum subsp. **skutchii**
A. schneiderianum (Palmata/Sinensia)
A. sempervirens (Acer/Monspessulana)
A. shirasawanum (Palmata/Palmata)

A. sieboldianum (Palmata/Palmata)
A. sikkimense (Macrantha)
A. sinopurpurascens (Lithocarpa/Lithocarpa)
A. spicatum (Parviflora/Caudata)
A. stachyophyllum (Glabra/Arguta)
A. stachyophyllum subsp. **betulifolium**
A. stachyophyllum subsp. **stachyophyllum**
A. sterculiaceum (Lithocarpa/Lithocarpa)
A. sterculiaceum subsp. **franchetii**
A. sterculiaceum subsp. **sterculiaceum**
A. sterculiaceum subsp. **thomsonii**
A. tataricum (Ginnala)
A. tataricum subsp. **aidzuense**
A. tataricum subsp. **ginnala**
A. tataricum subsp. **semenovii**
A. tataricum subsp. **tataricum**
A. tegmentosum (Macrantha)
A. tenellum (Platanoidea)

A. tenuifolium (Palmata/Palmata)
A. tonkinense (Palmata/Sinensia)
A. triflorum (Trifoliata/Grisea)
A. truncatum (Platanoidea)
A. tschonoskii (Macrantha)
A. tschonoskii subsp. **koreanum**
A. tschonoskii subsp. **tschonoskii**
A. tutcheri (Palmata/Sinensia)
A. velutinum (Acer/Acer)
A. velutinum f. **glabrescens**
A. velutinum var. **vanvolxemii**
A. velutinum var. **velutinum**
A. xverhaegheanum
A. wardii (Wardiana)
A. wuyuanense (Palmata/Sinensia)
A. xzoeschense

List of taxa referred to synonymy in this identification key.

A. aidzuense = **A. tataricum** subsp. **aidzuense** (New Trees)
A. bodinieri = **A. amplum** subsp. **bodinieri** (Flora of China)
A. catalpifolium = **A. amplum** subsp. **catalpifolium** (Flora of China)
A. chapaense = **A. amplum** subsp. **bodinieri** (Flora of China)
A. craibianum = **A. calcaratum** (New Trees)
A. divergens = **A. cappadocicum** subsp. **divergens** (New Trees)
A. xdurettii = **A. xcoriaceum** (New Trees)
A. flabellatum = **A. campbellii** subsp. **flabellatum** (Flora of China)
A. forrestii = **A. pectinatum** subsp. **forrestii** (New Trees)
A. franchetii = **A. sterculiaceum** subsp. **franchetii** (New Trees)
A. ginnala = **A. tataricum** subsp. **ginnala** (New Trees)
A. giraldii = **A. caesium** subsp. **giraldii** (New Trees)
A. grandidentatum = **A. saccharum** subsp. **grandidentatum** (New Trees)
A. grosseri = **A. davidii** subsp. **grosseri** (New Trees)
A. grosseri var. **hersii** = **A. davidii** subsp. **grosseri** (New Trees)
A. komarovii = **A. tschonoskii** subsp. **koreanum** (Flora of China)
A. laxiflorum = **A. pectinatum** subsp. **laxiflorum** (New Trees)
A. leucoderme = **A. saccharum** subsp. **leucoderme** (New Trees)
A. maximowiczii = **A. pectinatum** subsp. **maximowiczii** (New Trees)
A. mono = **A. pictum** (New Trees)
A. nigrum = **A. saccharum** subsp. **nigrum** (New Trees)
A. nikoense = **A. maximowiczianum** (New Trees)
A. oliverianum = **A. schneiderianum** (Flora of China)
A. pubinerve = **A. wuyuanense** (Flora of China)
A. pubipalmatum = **A. pauciflorum** (New Trees)
A. serrulatum = **A. oliverianum** subsp. **formosanum** (Flora of China)
A. sinense = **A. campbellii** subsp. **sinense** (Flora of China)
A. taronense = **A. pectinatum** subsp. **taronense** (New Trees)
A. tientaiense = **A. amplum** subsp. **tientaiense** (Flora of China)
A. trautvetteri = **A. heldreichii** subsp. **trautvetteri** (New Trees)
A. tschonoskii var. **australe** = **A. tschonoskii** subsp. **koreanum** (Flora of China)
A. tschonoskii var. **rubripes** = **A. tschonoskii** subsp. **koreanum** (Flora of China)
A. ukurunduense = **A. caudatum** subsp. **ukurunduense** (New Trees)
A. wilsonii = **A. campbellii** subsp. **wilsonii** (New Trees)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	cm
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