***Acer pseudomonspessulanum* Unger emend. Ströbitzer-Herrmann (Sapindaceae)**

Leaf description

- **morphology:**
  organisation: simple; **petiole:** long petiolate; **shape:** palmately lobed with 3 lobes; lobes similar in length, usually slender, angle between the main veins of the lobes wide (between about 40° to > 60°), central lobe up to 5 cm long, lobes more or less continuously tapering along length; **leaf base:** base angle wide obtuse, base shape convex to rounded or cordate; **leaf apex:** apex angle of the individual lobes narrow acute, shape straight, attenuate, utmost lobe tip rounded; **margin:** mainly entire, occasionally with single teeth; **1°-vein framework:** primary veins palmate with 3 main veins running into the lobe apices; **2°-vein framework:** secondaries brochidodromous; **3°-vein framework:** tertiaries random reticulate.
- **cuticle:**
  cuticle delicate, if ever preserved only in tiny and poorly preserved fragments; hypostomatic; **adaxial cuticle:** anticlines straight forming polygonal cells, about 25 µm across; **abaxial cuticle:** surface with wax cover, punctate, anticlines straight to bent, not visible when cell surface domed, 12–25 µm across; stomatal complexes anomocytic, stomata roundish-elliptic or transversally elliptic, 12–17 µm long, 10–17 µm wide, partly overlapped by the domed neighbouring cells, stomata widely scattered, mainly the slender elliptic front cavity visible, which does not reach the poles.

Palecology

- **habitat:** mesic habitats
- **vegetation type:** mixed mesophytic to broad-leaved deciduous and subhumid sclerophyllous forests
- **life form:** tree
- **foliage persistence:** deciduous leaves
- **flower ecology (pollination):** ?
- **fruit ecology (dispersal):** wind-dispersed (anemochorous)

Stratigraphy / Distribution

- **stratigraphy:** Oligocene to Pliocene
- **distribution:** Oligocene (Saxony and North Bohemia), Miocene to Pliocene widespread in Europe.

Miscellaneous

- **synonyms:** *Acer decipiens* A. BRAUN
- **modern relationship:** *A. monspessulanum* L. which occurs in the Mediterranean.
- **remarks:** *A. pseudomonspessulanum* differs from *A. integrilobum* by the usually smaller leaf size, by lobes which are rather equal in length, and the continuously tapering apex of the central lobe. In *A. integrilobum* the central lobe often is longer than the lateral ones and on either side near the apex a rounded tooth/lobe is often developed, so that the apex appears somewhat constricted. Though the cuticles of *A. pseudomonspessulanum* has been described by Walther (1967) and more precisely by Hably & Kvaček (1997) there is not enough evidence available whether the cuticular features of *A.*

pseudomonspessulanum and *A. integrilobum* are useful to distinguish them. *A. pseudomonspessulanum* usually is not common in individual plant assemblages.

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23 macroscopic leaf traits are stored in *Digiphyll*

#	trait code	trait: charcters state
1	A-1.2	petiole: present
2	A-1.2.2	petiole, present: long
3	A-2.1	leaf organisation: simple
4	A-3.6	leaf shape: lobed
5	A-3.6.2	leaf shape, lobed: palmately lobed
6	A-4.2	leaf base angle: obtuse
7	A-4.3	leaf base angle: reflex
8	A-5-1	leaf base shape: without basal extension
9	A-5.1.2	leaf base shape, without basal extension: rounded
10	A-5.2	leaf base shape: with basal extension
11	A-5.2.1	leaf base shape, with basal extension: cordate
12	A-6.1	leaf apex angle: acute
13	A-7.1	leaf apex shape: attenuate (straight)
14	A-7.2	leaf apex shape: acuminate
15	A-8.1	leaf margin: untoothed
16	B-1.2	primary vein framework: palmate
17	B-1.2.1	primary vein framework, palmate: actinodromous
18	B-1.2.1.1	primary vein framework, palmate, actinodromous: basal actinodromous
19	B-3.2	intramarginal vein: absent
20	B-4.2	intersecondaries: absent
21	B-5.1	tertiary vein framework: percurrent
22	B-5.1.1	tertiary vein framework, percurrent: opposite
23	B-5.1.2	tertiary vein framework, percurrent: alternate

For a detailed description of the leaf traits see menu *Manuals*.

? microscopic leaf traits are stored in *Digiphyll*

comming soon

Fossil images

References

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