***Myrica lignitum* (Unger) Saporta (Myricaceae)**

Leaf description

- **morphology:**
  leaves coriaceous; **organisation:** simple; **petiole:** long-petiolate; **shape:** slender, oblong to slender elliptic to somewhat obovate, up to 100 or rarely 130 mm long, size rather variable; **leaf base:** base angle narrow acute, shape cuneate, decurrent, leaf base not distinctly offset from the petiole; **leaf apex:** angle acute; shape straight to slightly convex, utmost apex bluntly acute; **margin:** untoothed in the lowermost third; leaf teeth widely, sometimes more or sometimes less regularly spaced, small; tooth apex bluntly acute to rounded, sinus rounded or acute; **1°-vein framework:** primary veins pinnate, midvein strong, straight to sometimes bent; **2°-vein framework:** secondaries already much less distinct, (semi)craspedodromous to weak brochidodromous, arising at wide angles from the midvein, 1–3 intersecondaries between adjacent secondaries; **3°-vein framework:** tertiaries reticulate.
- **cuticle:**
  Usually the cuticles of both sides are preserved in small fragments only, cuticle thickness medium, cuticle surface even and smooth; **adaxial cuticle:** anticlines straight to smoothly rounded, slender and smooth forming polygonal cell outlines, about 15–25 µm (rarely even larger) across, two-celled trichome bases occur sporadically (for description see abaxial cuticle); **abaxial cuticle:** anticlines and cell-outlines very similar to those on the adaxial cuticle, stomatal complexes anomocytic, randomly distributed, sometimes densely spaced, stoma shape roundish, about 15–30 µm in diameter, front cavity oval to roundish, stomatal ledges weakly cutinised; trichome bases oval to roundish, up to 25 or even 30 µm in diameter, consisting of two strongly thickened foot cells, surrounding trichome base cells hardly modified to somewhat radially elongated; trichome head pluricellular, peltate, consisting of several radiating cells, shield about 50–100 µm in diameter.

Palecology

- **habitat:** characteristic of wetland and swamp habitats. Due to its accessorical character, it probably was more an element of mesophytic forests than of wetland habitats.
- **vegetation type:** ?
- **life form:** small tree, shrub
- **foliage persistence:** probably evergreen leaves
- **flower ecology (pollination):** wind-pollinated (anemophilous)
- **fruit ecology (dispersal):** animal-dispersed (endozoochorous)

Stratigraphy / Distribution

- **stratigraphy:** Oligocene to Miocene
- **distribution:** widespread in Europe, very common in lignitic facies

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Miscellaneous

- **synonyms:** –

- **modern relationship:** *Myrica* subgen. Morella, sect. Cerophora, *Myrica cerifera* L. The species *Myrica faya* DRYAND. formerly was also classified in the section Cerophora, but according to newer taxonomy it is now a member of the separate section Faya.
- **remarks:** These leaves have a rather wide variability including both toothed and untoothed forms. Also their size is rather variable. The coriaceous texture often obscures the delicate secondaries. Leaves of *Quercus drymeja* may be difficult to differentiate from *M. lignitum*. The two-celled trichome bases and peltate trichome heads enable the unambiguous assignment of these leaves to *Myrica*. Often only the trichome bases are preserved and, if the shield is present, its pluricellular radiating structure may not be discernable. *Myrica lignitum* may be very abundant or even dominant in plant assemblages representing wetland and swamp habitats. Fruits called *M. ceriferiformis* KOWNAS often cooccur with leaves of *M. lignitum*. Probably both derive from the same plant.

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18 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-3.1	leaf shape: elliptic
5	A-4.1	leaf base angle: acute
6	A-5.1	leaf base shape: without basal extension
7	A-5.1.1	leaf base shape, without basal extension: cuneate (straight)
8	A-6.2	leaf apex angle: obtuse
9	A-7.3	leaf apex shape: rounded
10	A-8.2	leaf margin: toothed
11	A-9.2.2	leaf teeth, tooth density: not dense
12	B-1.1	primary vein framework: pinnate
13	B-2.3	secondary vein framework: 2° veins form loops and do not reach margin
14	B-2.3.1	secondary vein framework, 2° veins form loops and do not reach margin: brochidodromous
15	B-3.2	intramarginal vein: absent
16	B-4.2	intersecondaries: absent
17	B-5.1	tertiary vein framework: percurrent
18	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

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