***Daphnogene cinnamomea* (Lauraceae)**

Leaf description

- **morphology:**
  organisation: simple; **petiole:** present (often not preserved); **shape:** lamina oval, broad-oval to rounded; rather varaiable in size; **leaf base:** base angle acute to obtuse, base shape cuneate (straight) to rounded; **leaf apex:** apex angle acute to obtuse, apex shape attenuate, acuminate to rounded and only near the very apex acuminate; **margin:** entire; **1°-vein framework:** palmate three-veined, mainly suprabasal acrodromous, sometimes almost basal acrodromous, mid vein robust, lateral veins originating usually alternate but sometimes nearly opposite, running almost parallel to the leaf margin and tapering across the lamina, ending in the upper third or fourth of the lamina; **2°-vein framework:** brochidodromous; **3°-vein framework:** percurrent, forked-percurrent almost perpendicular to the main veins and secondaries.
- **cuticle:**
  hypostomatic; **adaxial cuticle:** medium-thick to thick, anticlines straight, rounded or rarely widely undulate, anticlines sometimes appearing knobby, forming isodiametric cell outlines, usually 10–30 µm across, in small (xeromorphic) leaves 7–15 µm across; trichome bases either almost absent (glabrous) to scattered; **abaxial cuticle:** delicate to very delicate, distinctly thinner than the adaxial cuticle; anticlines rounded to undulate, forming somewhat elongated cell outlines; stomatal complexes paracytic to incompletely amphibrachyparacytic, shape transversal oval to rounded, 15–20 µm long, guard cells sunken, not stainable (achromatophil), limited by faintly colouring subsidiary cells, cuticular ledges weakly visible, outer front cavity short elliptic; trichome bases: present, more or less densely spaced, consisting of more or less radially arranged somewhat thickened cells, trichome pore 7–15 µm in diameter, poral rim distinctly thickened; mesophyllous secretory cells abundant, 30–50 µm across.

Palecology

- **habitat:** ?
- **vegetation type:** broad-leaved evergreen forests
- **life form:** tree or shrub
- **foliage persistence:** evergreen leaves
- **flower ecology (pollination):** ?
- **fruit ecology (dispersal):** ?

Stratigraphy / Distribution

- **stratigraphy:** Upper Eocene, Lower Oligocene
- **distribution:** Central Europe

Miscellaneous

- **synonyms:** –
- **modern relationship:** Lauraceae; in the genera *Litsea*, *Lindera*, *Actinodaphne*, *Phoebe* and *Cinnamomum* species with similar leaf morphology do occur.

- **remarks:** These three-veined leaves occurring at Upper Eocene to Lower Oligocene sites are treated as *D. cinnamomea*. Both in gross morphology and cuticular features they resemble closely *D. cinnamomifolia* and *D. polymorpha*. In all these taxa larger-sized leaves are interpreted as shade leaves while smaller more xerophytic ones are regarded as sun leaves. In sun leaves the cuticles are usually thicker than in shade leaves, bear more trichome bases, the anticlines are less undulate forming smaller-sized cells than in shade leaves.

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27 macroscopic leaf traits are stored in *Digiphyll*

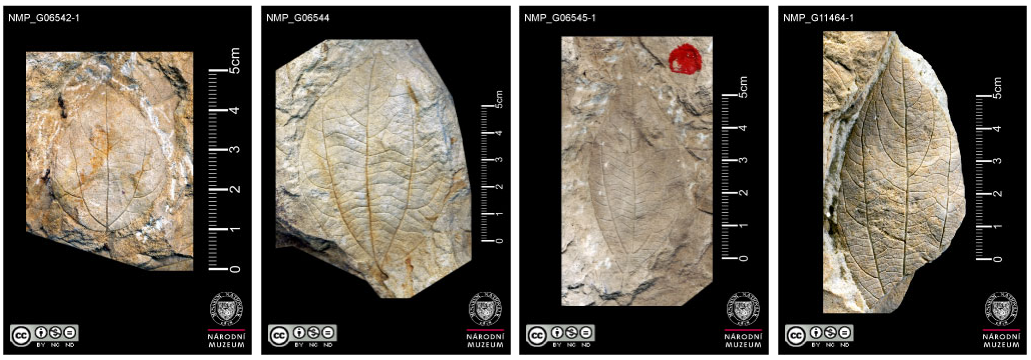
#	trait code	trait: charcters state
1	A-1.2	petiole: present
2	A-1.2.2	petiole, present: long
3	A-2.1	leaf organisation: simple
4	A-3.1	leaf shape: elliptic
5	A-3.3	leaf shape: ovate
6	A-4.1	leaf base angle: acute
7	A-4.2	leaf base angle: obtuse
8	A-5.1	leaf base shape: without basal extension
9	A-5.1.2	leaf base shape, without basal extension: rounded
10	A-5.1.6	leaf base shape, without basal extension: decurrent
11	A-6.1	leaf apex angle: acute
12	A-6.2	leaf apex angle: obtuse
13	A-7.3	leaf apex shape: rounded
14	A-8.1	leaf margin: untoothed
15	B-1.1	primary vein framework: pinnate
16	B-1.2	primary vein framework: palmate
17	B-1.2.1	primary vein framework, palmate: actinodromous
18	B-1.2.1.2	primary vein framework, palmate, actinodromous: suprabasal actinodromous
19	B-2.2	secondary vein framework: 2° veins do not reach margin
20	B-2.2.1	secondary vein framework, 2° veins do not reach margin: eucamptodromous
21	B-2.3	secondary vein framework: 2° veins form loops and do not reach margin
22	B-2.3.1	secondary vein framework, 2° veins form loops and do not reach margin: brochidodromous
23	B-2.3.2	secondary vein framework, 2° veins form loops and do not reach margin: weak brochidodromous
24	B-3.2	intramarginal vein: absent
25	B-4.1	intersecondaries: present
26	B-5.1	tertiary vein framework: percurrent
27	B-5.1.3	tertiary vein framework, percurrent: mixed

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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