

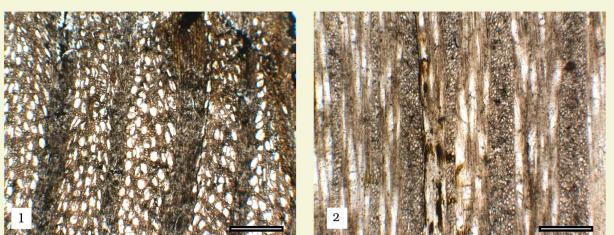
Wood from the Tertiary of Hungary: Greguss's collection of slides in the Natural History Museum in Budapest and fossil trunks from the famous palaeontological site in Ipolytarnóc

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GREGUSS'S COLLECTION IN BUDAPEST

Greguss's collection of fossil wood slides, formerly deposited in Szeged, is today housed in the Natural History Museum in Budapest. Its inventory reveals there are 168 items, mainly Tertiary in age, including numerous figured specimens and about 20 types described in two monographs by Greguss (1967, 1969). Here is an example of "Platanoxylon / Icacinoxylon" woods; their ages and exact determinations are the object of the present study.

Locality	Number	Age	Identification	Described by Greguss in
Ajka, Kavicsbánya	2008.104.3.	Helvetian (Lower)	Icacinoxylon cf. citrinellonum	AW, p. 61, Plate XL, Figs 1-9, legend p. 140
Hárásy, Ek-re levő gódiör	2008.143.3.	Helvetian	Icacinoxylon sp. ? (No. 10) seu Platanoxylon sp.	AW, p. 70, Plate LX, Fig. 6, legend p. 144
Bodajk, Bodajki-völgy	2008.110.3.	Helvetian Lower	Icacinoxylon sp. ? (No. 11) seu Platanoxylon sp.	AW, p. 70, Plate LX, Figs 1, 2, legend p. 144
Hornokőrösi	2008.152.3.	Helvetian	Icacinoxylon sp. ? (No. 12) seu Platanoxylon sp.	AW, p. 70, Plate LX, Figs 3, 4, legend p. 144
Homokbőlőgő	2008.153.3.	Helvetian	Icacinoxylon sp. ? (No. 13) seu Platanoxylon sp.	AW, p. 70, Plate LX, Figs 7-9, legend p. 144
Homokbőlőgő, Kiskúltomb	2008.154.3.	Helvetian	Icacinoxylon sp. ? (No. 13) seu Platanoxylon sp.	AW, p. 70, Plate LX, Figs 7-9, legend p. 144
Sólymár	2008.235.3.	Oligocene	Icacinoxylon sp. ? (No. 14) seu Platanoxylon sp.	AW, p. 70, Plate LX, Figs 7 and 8, legend p. 144
Pétervárad, Körtvélyén völgy	2008.194.3.	Helvetian	Icacinoxylon sp. ? (No. 15) seu Platanoxylon sp.	AW, p. 70, Plate LX, Figs 1-3, legend p. 144
Nagybánya	2008.198.3.	Burdigalian	Icacinoxylon sp. ? (No. 16) seu Platanoxylon sp.	AW, p. 70, Plate LX, Figs 1-9, legend p. 144
Budapest, Alsó Matyásföld	2008.114.3.	Helvetian	Icacinoxylon sp. ? (No. 9) seu Platanoxylon sp.	AW, p. 70, Plate LX, Figs 4, 5, legend p. 144
Bicske, homokbánya	2008.105.2.	?	Platanoxylon / Icacinoxylon	none
Csepel-sziget	2008.140.3.	?	Platanoxylon / Icacinoxylon	none
Gyarmány, Bagolykő-hegy	2008.169.1.	?	Platanoxylon / Icacinoxylon	none
Környér, Szécsics dombsó D-ré	2008.178.3.	?	Platanoxylon / Icacinoxylon	none
Lénárd-Daróc	2008.215.3.	Pleistocene (revoked from Helvetian)	Platanoxylon / Icacinoxylon	none
Pestőinc, Sáshegy, Kaviczbánya	2008.255.2.	?	Platanoxylon / Icacinoxylon	none



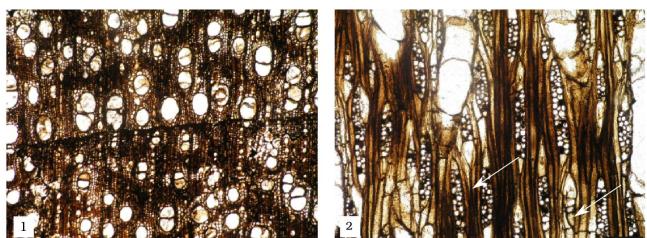
1 – TS, Wood diffuse-porous with solitary vessels or in radial groups, scale bar 0.5 mm.
2 – TLS, 5-multiseriate rays, scale bar 0.5 mm.

"Platanoxylon / Icacinoxylon"



Famous giant silicified pine trunk, originally discovered in 1836. The identification show that two trunks (cellar and footprint site) can be two parts of the same tree.

Laurinoxylon müller-stollii Greguss emend. Süss



1 – TS, Wood diffuse-porous with solitary vessels or in radial groups 2-3, scale bar 0.4 mm.
2 – TLS, 1-3-seriate heterocellular rays with marginal oil cells or mucilage (white arrows), scale bar 0.16 mm.

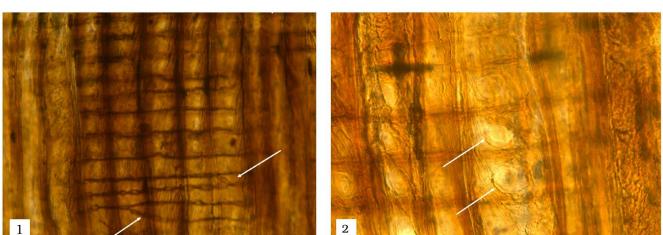
Growth rings present. Wood diffuse-porous with solitary vessels or in radial groups of 2-3; perforation plates simple and sometimes scalariform in narrow vessels; intervacular pits dense alternate; tyloses present. Apotracheal and paratracheal axial parenchyma, 1-3-seriate heterocellular rays with marginal oil cells or mucilage (idioblasts) – see in Greguss (1969).



Trunk lying on the right side of the creek cut

PALEONTOLOGICAL SITE IN IPOLYTARNÓC

Pinuxylon tarnocziense (Tuzson) Greguss



1 – RLS, Ray tracheids with smooth walls (white arrows), scale bar 0.1 mm.
2 – RLS, Detail of cross-field, pinoid pits (white arrows), scale bar 0.05 mm.

Coniferous wood with distinct growth rings and abrupt transition from earlywood to latewood. Pits in radial tracheid walls 1-2-seriate, bordered, circular, biseriate pits with crassulae. Axial parenchyma absent. Vertical and horizontal resin ducts present. Rays uniseriate or rarely partially biseriate. Ray tracheids with smooth walls. Ray parenchyma cells with thin and smooth walls. Cross-field pits pinoid, 1-3 per field – see in Greguss (1967).

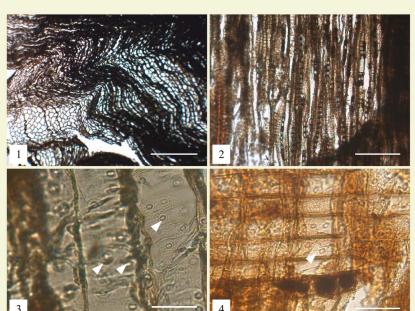
FOSSIL STUMPS FROM BÜKKÁBRÁNY

Description of five fossil trunks from Bükkábrány newly installed in the visitor centre of the Ipolytarnóc Fossils Nature Reserve

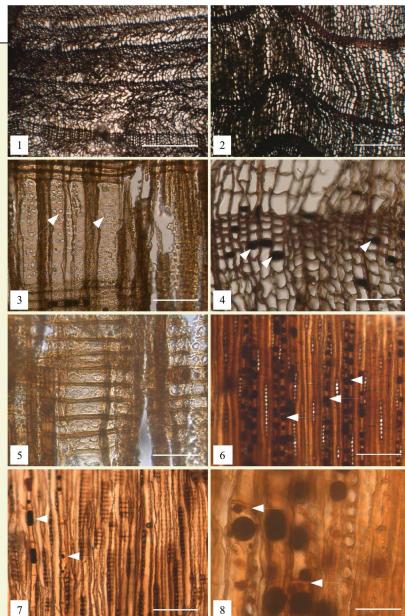
Glyptostroboxylon rudolphii Dolezych & Van der Burgh

Sample no. 1

Coniferous wood with distinct growth rings and gradual transition from earlywood to latewood. Axial parenchyma present. Radial tracheid walls with loosely spaced pits in 1-2 (less commonly 3) vertical rows, crassulae sometimes present. Ray parenchyma cells with thin and smooth walls. 1-3 "glyptostroboid" cross-field pits per field, sometimes also taxodioid or rare cupressoid – see in Gryc & Sakala (2010)



1 – TS, gradual transition between early and late wood, scale bar 0.5 mm.
2 – TLS, uniseriate rays, scale bar 0.2 mm.
3 – RLS, uni- and iseriate pits (white arrows) on radial wall of tracheids, scale bar 0.05 mm.
4 – RLS, glyptostroboid or cupressoid cross field pits (white arrows), scale bar 0.05 mm.



1 – TS, sample Bü 03, abrupt transition between early and late wood, scale bar 0.5 mm.
2 – TS, sample Bü 04, abrupt transition between early and late wood, scale bar 0.5 mm.
3 – RLS, sample Bü 03, bi- triseriate bordered pits on radial wall of tracheids with frequent crassulae (white arrows), scale bar 0.1 mm.
4 – TS, sample Bü 04, diffuse axial parenchyma (white arrows), scale bar 0.1 mm.
5 – RLS, sample Bü 03, taxodioid cross filed pits, scale bar 0.05 mm.
6 – TLS, sample Bü 03, axial parenchyma (white arrows), scale bar 0.2 mm.
7 – TLS, sample Bü 03, axial parenchyma with dark resin substance (white arrows), scale bar 0.2 mm.
8 – TLS, sample Bü 04, smooth transverse end walls of axial parenchyma cells (white arrows), scale bar 0.05 mm.

Taxodium germanicum (Greguss) Van der Burgh

Samples no. Bü 2-5

Coniferous wood with distinct growth rings and abrupt transition from earlywood to latewood. Axial parenchyma present with smooth transverse end walls. Pits in radial tracheid walls 1-3-seriate, bordered, circular with frequent crassulae. Ray parenchyma cells with thin and smooth walls. 1-3 taxodioid cross-field pits per field, arranged mostly in one horizontal row – see in Gryc & Sakala (2010).

Position of five stumps in the wooden house, entrance is from the area in front of the Visitor Centre (N points roughly to the north); circles are not proportional to the diameter of the stems.

Acknowledgements

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References

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