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ABSTRACTS

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Tertiary floras of Northern Thailand: charcoalified conifer wood

Investigations have been made of charcoalified wood fragments from the remains of a presumed ancient forest fire at Li Basin, Lamphun Province, Northern Thailand, and thought to be of Late Oligocene or Miocene age. The wood fragments are situated on a thick layer of lignite in the Ban Pu Subbasin of the Li Basin, one of many Tertiary basins extending from Northern Thailand, along the Malay Peninsula, to Java and Sumatra. All wood fragments observed are from conifers. The wood occurs as thin, tangentially compressed fragments, up to approximately 3 cm long. Tracheids are long and slender (>1.7 mm length by 21- 58 micrometers width). Bordered pits are arranged in a single row or rarely in 2 opposite rows on radial and tangential walls of the tracheids. Axial parenchyma and resin canals were not observed. Rays are uniseriate, homocellular, reach a height of >40 cells, consist of parenchyma cells, and lack ray tracheids. Crossfields show one bordered pit in the tracheid wall, bordered pits not occurring in the ray cells. Presence or absence of annual rings could not be determined. The wood is assigned to the form genus Podocarpoxylon, with possible affinity to Podocarpaceae. The presence of these charcoalified remains may indicate a period in which the ligniteforming swamp dried, at least locally, and supported a grove of conifers subject to forest fire.