

Supplementary Note

Supplementary Note 1: Nomenclatural notes on the fossil wood genus *Protoginkgoxylon*

A Jurassic wood providing insights into the earliest step in *Ginkgo* wood evolution

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The genus *Protoginkgoxylon* has an intricate history, which is only partially reported by Zheng and Zhang¹. It was first described by Khudaiberdyev in an unpublished thesis before published in 1971². It is thus not validly published in this work, furthermore, two species being included without designation of a type (ICBN, art. 37.1). Moreover, the protologue includes two names which are both new combinations: *P. dockumense*, based on *Voltzioxylon dockumense* Torrey, which is the type of *Voltzioxylon*^{3, 4}; and *P. catenatum*, based on *Protocupressinoxylon catenatum* Schultze-Motel, which was validly published only much latter⁵. Zheng and Zhang¹ advocated the use of *Protoginkgoxylon* and gave a diagnosis; they selected a type species, *P. benxiense*, based on material from the Early Permian of China. Later, Zheng and Zhang⁶ considered that the name *Protoginkgoxylon* was invalidly published by Khudaiberdyev, and thus proposed the new genus name *Proginkgoxylon* Zheng et Zhang, transferring *Protoginkgoxylon benxiense* to this new genus⁶. However, it should be noted that the ICBN does not forbid the use of previously invalidly published names, although it might be a source of confusions. Therefore, the genus name *Protoginkgoxylon* reported by Zheng & Zhang¹ is validly published, including its type species. The genus *Proginkgoxylon* erected by Zheng et al.⁶ may represent an illegitimate junior synonym of *Protoginkgoxylon* Zheng et Zhang.

References:

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