

## **Triassic to Cretaceous fossil wood studies of China: Diversity variations and paleoclimate implications**

**Wang, Yongdong<sup>1,\*</sup>, Tian, N.<sup>2</sup>, Jiang, Z.<sup>3</sup>, Yang, X.<sup>4</sup>, Ding, Q.<sup>5</sup>**

- 1) *State Key Laboratory of Palaeobiology and Stratigraphy, Nanjing Institute of Geology and Palaeontology, Chinese Academy of Sciences, Nanjing, China, \*E-mail: ydwang@nigpas.ac.cn*
- 2) *College of Paleontology, Shenyang Normal University, Shenyang, China*
- 3) *Chinese Academy of Geological Sciences, Beijing, China*
- 4) *Nanjing Institute of Geology and Palaeontology, Chinese Academy of Sciences, Nanjing, China*
- 5) *Shenyang Geological Center, China Geological Survey, Shenyang, China*

As an important component of plant remains, fossil wood plays a significant role in understanding the floral composition and evolution of plants in the geological past. Fossil wood is also one of the significant proxies for terrestrial palaeoclimate and palaeogeographical reconstruction in earth history. Diversified fossil wood has been documented from the Mesozoic deposits in China after a long time of investigations. During the past few years, many new fossil wood materials were reported from a variety of horizons in some fossil localities, including Sichuan, Chongqing, Yunnan, Xinjiang and Liaoning provinces, ranging from Triassic to the Cretaceous, providing significant references for reconstructing the Mesozoic palaeoclimate. In this study, we summarize the recent advances in fossil wood studies of Triassic to Cretaceous in China. Particularly, the new discoveries of fossil wood from the Upper Triassic in Sichuan of southern China, the Jurassic Yanliao Biota and the Early Cretaceous Jehol Biota in western Liaoning are reviewed with emphasis on the diversity variations, palaeoclimate perturbations and tempo-spatial distribution of the Mesozoic wood in China. The future research directions of Mesozoic fossil wood in China are further discussed.