

The Rhyniophytoid found from the Lower Devonian of Guangxi: South China

With the financial supports from the National Natural Science Foundation of China and State Key Laboratory of Palaeobiology and Stratigraphy, Nanjing Institute of Geology and Palaeontology (NIGP), Chinese Academy of Sciences (CAS), Prof. Xu Honghe, NIGP, CAS and his colleagues Xue J-Z, Peking University and Wang Q, Beijing Institute of Botany, CAS, recently discovered the fertile structure showing rhyniophytoid's affinities from the Lower Devonian of Guangxi, South China, which was published in *Historical Biology: An International Journal of Paleobiology* (2015, 27: 294—298).

Rhyniophytoids are thought to be one of the most original vascular plant groups which were firstly found from the Rhynie chert Lagerstätte, Aberdeenshire, Scotland and from then, this group was rarely reported elsewhere around the world. The study on rhyniophytoid from China was carried out through re-examinations to specimens previously assigned to zosterophylls from the Lower Devonian of Guangxi. The newly-discovered plant is small-sized, dichotomously branched, with terminal single sporangium, showing similarities to the genus *Aberlemnia* and being also comparable to some mesofossil morphotypes of the early land plants from the Early Devonian (Lochkovian) Old Red Sandstone floras. This study adds new data to the generally zosterophyll-dominated Early Devonian flora of South China and sheds some lights on the palaeophytogeography of rhyniophytoids.

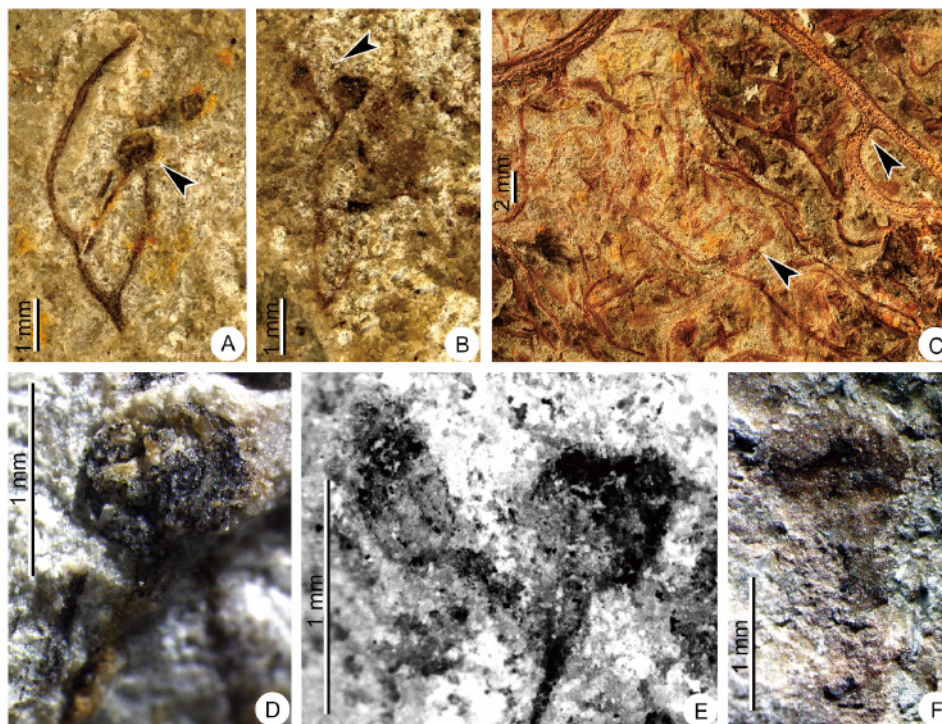


Figure Rhyniophytoid from the Lower Devonian of Guangxi, South China. (A) Dichotomously branching axis with a terminal sporangium. This specimen was previously thought to be the rhizoid of *Zosterophyllum sinense* Li et Cai. (B) An axis, on the same slab with the axis in A, showing dichotomously branching axis with terminal sporangia. (C) Dense plant remains, showing an axis of a zosterophyll (left arrow) and numerous thinner axes of the rhyniophytoid. (D—F) Close-up views of terminal sporangia in (A—C) (arrows in (A) and (B), right arrow in (C)).