

Accepted Manuscript

Cupressaceae fossil remains from the Paleocene of Carneyville, Wyoming

Long Li, Jian-Hua Jin, Steven R. Manchester

PII: S0034-6667(17)30101-X
DOI: doi:[10.1016/j.revpalbo.2017.12.003](https://doi.org/10.1016/j.revpalbo.2017.12.003)
Reference: PALBO 3923

To appear in: *Review of Palaeobotany and Palynology*

Received date: 5 May 2017
Revised date: 23 December 2017
Accepted date: 23 December 2017



Please cite this article as: Li, Long, Jin, Jian-Hua, Manchester, Steven R., Cupressaceae fossil remains from the Paleocene of Carneyville, Wyoming, *Review of Palaeobotany and Palynology* (2018), doi:[10.1016/j.revpalbo.2017.12.003](https://doi.org/10.1016/j.revpalbo.2017.12.003)

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Cupressaceae fossil remains from the Paleocene of Carneyville, Wyoming

Long Li^{a,b}, Jian-Hua Jin^{a*}, Steven R. Manchester^b

^a State Key Laboratory of Biocontrol, Guangdong Key Laboratory of Plant Resources, and School of Life Sciences, Sun Yat-sen University, Guangzhou, 510275, China

^b Florida Museum of Natural History, University of Florida, Gainesville, FL, 32611-7800, USA

* Corresponding author. *E-mail address*: lssjjh@mail.sysu.edu.cn (Jian-Hua Jin).

ABSTRACT

Conifer remains including petrified wood resembling *Sequoia*, and leafy shoots and seed cone scales of *Glyptostrobus* (Cupressaceae s.l.) were found in the late Paleocene Fort Union Formation (Tongue River Member) in the Powder River Basin of Wyoming, northwestern USA. These findings indicate either a wider distribution of both *Sequoia* and *Glyptostrobus* in the late Paleocene compared with narrow habitat of modern genera, or possibly that *Glyptostrobus*-like cones were borne on trees with wood resembling that of *Sequoia*. The well-preserved wood is assigned to the new species *Sequoioxylon carneyvillense* sp. n. while the cone fragments and foliage are assigned to *Glyptostrobus europaeus* (Brongniart) Unger. Wood anatomical features of extant cupressaceous genera including *Glyptostrobus*, *Metasequoia*, *Sequoia*, *Sequoiadendron* and *Taxodium* were studied to provide more information for the identification of fossils.

Keywords: late Paleocene, *Sequoioxylon*, *Glyptostrobus*, Wyoming, Cupressaceae, Fort Union Formation

Download English Version:

<https://daneshyari.com/en/article/8916635>

Download Persian Version:

<https://daneshyari.com/article/8916635>

[Daneshyari.com](https://daneshyari.com)