

Accepted Manuscript

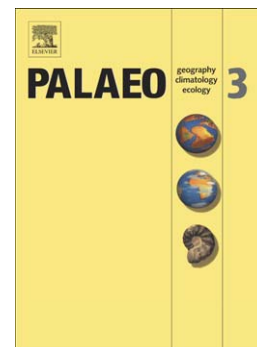
Novel insect traces on a dinosaur skeleton from the Lower Jurassic Lufeng Formation of China

Lida Xing, Eric M. Roberts, Jerald D. Harris, Murray K. Gingras, Hao Ran, Jianping Zhang, Xing Xu, Michael E. Burns, Zhiming Dong

PII: S0031-0182(13)00361-1
DOI: doi: [10.1016/j.palaeo.2013.07.028](https://doi.org/10.1016/j.palaeo.2013.07.028)
Reference: PALAEO 6585

To appear in: *Palaeogeography, Palaeoclimatology, Palaeoecology*

Received date: 10 October 2012
Revised date: 11 July 2013
Accepted date: 29 July 2013



Please cite this article as: Xing, Lida, Roberts, Eric M., Harris, Jerald D., Gingras, Murray K., Ran, Hao, Zhang, Jianping, Xu, Xing, Burns, Michael E., Dong, Zhiming, Novel insect traces on a dinosaur skeleton from the Lower Jurassic Lufeng Formation of China, *Palaeogeography, Palaeoclimatology, Palaeoecology* (2013), doi: [10.1016/j.palaeo.2013.07.028](https://doi.org/10.1016/j.palaeo.2013.07.028)

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.

Novel insect traces on a dinosaur skeleton from the Lower Jurassic Lufeng Formation of China

Lida Xing^{a, b*}, Eric M. Roberts^c, Jerald D. Harris^d, Murray K. Gingras^e, Hao Ran^f, Jianping Zhang^a,
Xing Xu^g, Michael E. Burns^b, Zhiming Dong^g

^a School of the Earth Sciences and Resources, China University of Geosciences, Beijing 100083, China

^b Department of Biological Sciences, University of Alberta, 11455 Saskatchewan Drive, Edmonton, Alberta T6G 2E9, Canada

^c School of Earth and Environmental Science, James Cook University, Townsville, Qld 4811, Australia

^d Physical Sciences Department, Dixie State College, 225 South 700 East, St. George, Utah 84770, USA

^e Department of Earth and Atmospheric Sciences, University of Alberta, Edmonton, Alberta, Canada

^f Key Laboratory of Ecology of Rare and Endangered Species and Environmental Protection (Guangxi Normal University), Ministry of Education, Guilin 541004, China

^g Institute of Vertebrate Paleontology and Paleoanthropology, Chinese Academy of Sciences, Beijing 100044, China

*Corresponding author. Tel.: +86 1 82321827; fax: +86 1 82321827.

E-mail addresses: xinglida@gmail.com (L. Xing).

ABSTRACT: Dense networks of burrow-like traces on the surfaces of bones are preserved on a partial skeleton of a prosauropod dinosaur (cf. *Yunnanosaurus*) from the Lower Jurassic Lufeng Formation in Yunnan, China. The traces, which gently meander across and, in places, shallowly excavate the surfaces of several axial and appendicular skeletal elements (total cumulative length over 29 m) consist of simple burrows, Y-shaped branches, overlapping intersections, and chambers. This unusual network is morphologically most similar to foraging traces of eusocial insects, particularly termites. Comparisons of known continental ichnofossils, demonstrate the novelty of this trace, which thus pertains to a new ichnotaxon, *Taotieichnus orientalis* ichnogen. et ichnosp. nov. *Taotieichnus*

Download English Version:

<https://daneshyari.com/en/article/6350221>

Download Persian Version:

<https://daneshyari.com/article/6350221>

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