

Supplementary Information

Title: Exceptional appendage and soft-tissue preservation in a Middle Triassic horseshoe crab from SW China

Authors: Shixue Hu^{1,2*}, Qiyue Zhang^{1,2}, Rodney M. Feldmann³, Michael J. Benton⁴,
Carrie E. Schweitzer⁵, Jinyuan Huang^{1,2}, Wen Wen^{1,2}, Changyong Zhou^{1,2}, Tao Xie^{1,2},
Tao Lü^{1,2}, Shuigen Hong⁶

1 Chengdu Center of China Geological Survey, Chengdu 610081, China

2 Chengdu Institute of Geology and Mineral Resources, Chengdu 610081, China

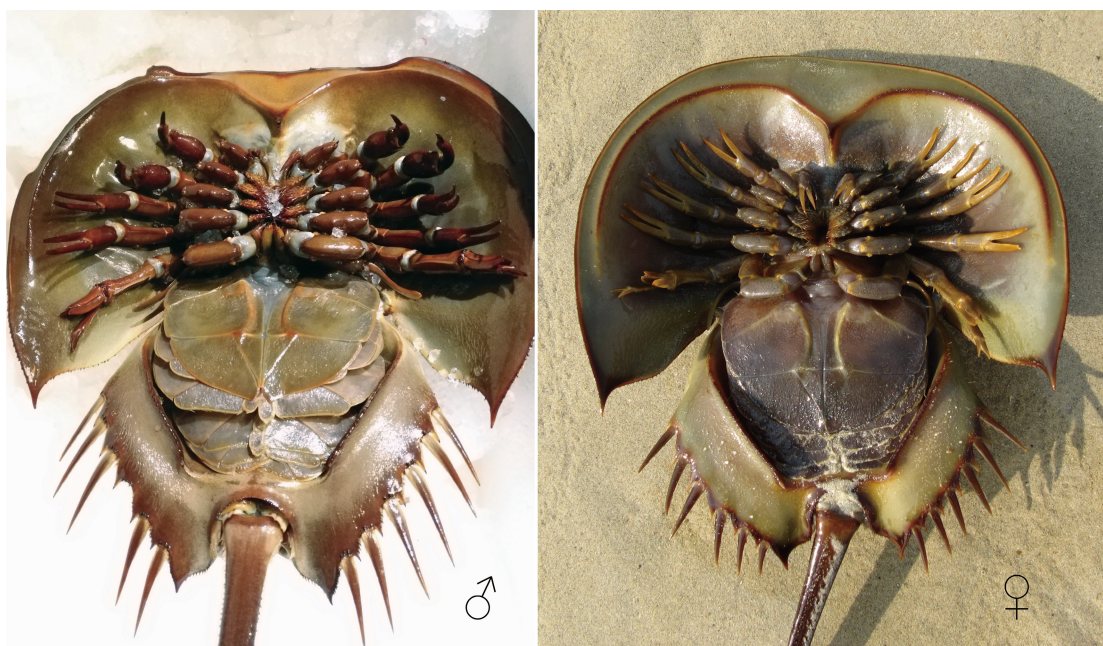
3 Department of Geology, Kent State University, Kent, OH 44242, USA

4 School of Earth Sciences, University of Bristol, Bristol BS8 1RJ, UK

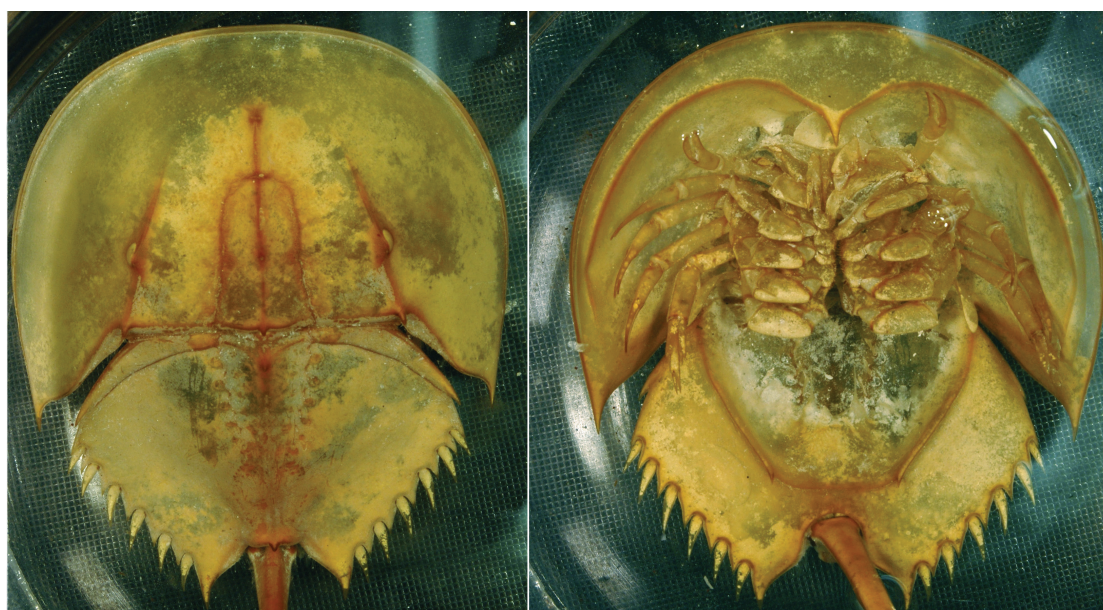
5 Department of Geology, Kent State University at Stark, 6000 Frank Avenue NW, North Canton,
OH 44720, USA

6 Institute of Neuroscience, Xiamen University, Ximang 361005, China

* Correspondence and requests for materials to Shixue Hu (hushixue@126.com)



Supplementary Figure S1 Ventral view of male (left) and female (right) of extant *Tachypleus tridentatus*.



Supplementary Figure S2 Dorsal and ventral view of extant male *Carcinoscorpius rotundicauda*. Opisthosomal appendages and related tissues were removed.



Supplementary Figure S3 Reconstruction of *Yunnanolimulus luopingensis*. A, male individual in dorsal view; B, male individual in ventral view; C, female individual in ventral view. The opercula are not shown in ventral view in order to present the gill lamellae. Illustration by Qingtao Chen.