The lobopod *Onychodictyon* from the Lower Cambrian Chengjiang Lagerstätte revisited

Jianni Liu, Degan Shu, Jian Han, Zhifei Zhang, and Xingliang Zhang

Acta Palaeontologica Polonica 53 (2), 2008: 285-292 doi:<http://dx.doi.org/10.4202/app.2008.0209>

Onychodictyon ferox, from the Lower Cambrian Chengjiang Lagerstätte, is a worm-like armored lobopod with 10 pairs of dorsal plates and a pair of probable sensory appendages (“antennae”). Newly discovered complete specimens show that *Onychodictyon* is represented by two species: *O. ferox* with a “head” bearing a pair of dorsal “antennae” and a trunk with 11 pairs of limbs, whereas *O. gracilis* has a blunt anterior end without any appendages and a trunk with 12 pairs of limbs. Because of the close resemblance of the “antennae” of *O. ferox* and those of the lobopod *Miraluolishania*, they are considered to be homologous structures. The “antennae” of Cambrian lobopodians are proposed to be homologous with the arthropod antennulae.

Key words: Lobopodia, Arthropoda, antennae, Cambrian, Chengjiang Lagerstätte, Yunnan

Jianni Liu [eliljn@nwu.edu.cn], Jian Han [elihanj@nwu.edu.cn], Zhifei Zhang [elizf@nwu.edu.cn], and Xingliang Zhang [xlzhang@pub.xaonline.com], Early Life Institute and Key Laboratory for Continental Dynamics of the Ministry Education, Northwest University, Xi'an, 710069, China; Degan Shu [elidgshu@nwu.edu.cn], Early Life Institute and Department of Geology, Northwest University, Xi'an, 710069, China, School of Earth Sciences and Resources, China University of Geosciences (Beijing), 100083, China.

This is an open-access article distributed under the terms of the Creative Commons Attribution License (for details please see creativecommons.org), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.