

Microfossils from the Precambrian-Early Cambrian, Chengjiang, China

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The Maotianshan, Ma'anshan, and Xiaolantian sections are part of the Chengjiang Fossil Site in Chengjiang County, Yunnan Province, China, and represent the most important record of Early Cambrian fauna. Already over 200 species belonging to 16 phyla have been discovered, mainly from the Yu'anshan Member. However, there is little documentation about the microfossils, such as the small shelly fossils (SSFs) in the Zhongyicun Member (earliest Cambrian) and acritarchs in the Xiaowaitoushan Member (latest Precambrian; Ediacaran). Rock samples from the Yu'anshan Member at Maotianshan were obtained in 2016, and contained fossil animals such as

Isoxys, *Yunnanocephalus*, and *Waptia*. In 2017, a much more comprehensive suite of samples was collected from the Xiaolantian section across the Cambrian-Precambrian boundary (every 1m) and from the Xiaowaitoushan Member (every 2 to 5m), representing a section about 150m in length along the footpath. Over 80 well-preserved fossil specimens were also obtained from the Ma'anshan shale section, consisting largely of the fossil animal genera *Kunmingella*, *Eoredlichia*, *Maotianshania*, and *Ambrolinevitus* and the algal genus *Yuknessia*. There is evidence that the deposition of these assemblages represents rapid downslope burial.