

Paper Number: 1134

A new locality of the Burgess Shale-type fauna from the Lower Cambrian Shuijingtuo Formation in Changyang, Hubei, South China

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Lower Cambrian Burgess Shale-type fossil Lagerstätten have been reported from some localities of southern China during the last few decades. Such fossil assemblages have long served as fossil treasure houses to explore the Cambrian explosion. Recently, a new locality from Shuijingtuo Formation of Changyang, Hubei has been found, representing the north part of Yangze Platform in China (Fig. 1a). The stratigraphical horizon of the Shuijingtuo assemblage is equal to Chengjiang fauna and can be correlated into Cambrian Stage 3.



The fossils are excellently preserved, revealing the anatomy of soft parts and containing valuable phylogenetic information. The present investigations of the new fauna revealed the presence of arthropods (Fig. 1c), annelids, priapulids, cnidarians, brachiopods, sponges and algae, and some problematic taxa. The fossiliferous strata consist of stacked couplets of thin event and background mudstone layers; the best soft-bodied fossils preserved in distinct event (light in colour) mudstone layers (Fig. 1b). The new locality indicates a much wider distribution of Burgess Shale-type fauna during the Lower Cambrian.

Figure 1: New locality in Shuijingtuo Formation

of Changyang, Hubei, China.

