<abstract for oral presentation>

Cambrian coralomorphs: a brief review

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Corals (Anthozoa) are among the most common marine sessile invertebrates throughout the Phanerozoic. Recent molecular clock studies have suggested that the Phylum Cnidaria originated in the Neoproterozoic with having anthozoans differentiated prior to the Cambrian, implying the presence of coral-related organisms in the Cambrian. More than twenty different species have been documented as Cambrian coral-like organisms from various regions including USA, Siberia, Australia and China. However, their systematic positions remain problematic, being collectively known as ‘coralomorphs’. The Cambrian coralomorphs first appeared in the Terreneuvian, and disappeared before the beginning of the Cambrian Epoch 3 (ca. 510 Ma), leaving a significant gap of 30 Ma before the first appearance of tabulate corals in the lowermost Ordovician (ca. 480 Ma). Above all, however, their phylogenetic relationships with other cnidarian-affinity organisms are still contentious. Despite the superficial similarities, the relationship between the Cambrian coralomorphs and tabulate and rugose corals remains unclear. Further studies on the systematics and spatio-temporal distribution of the Cambrian coralomorphs, and the possible discovery of coral-like organisms from the Cambrian Series 3 and Furongian will help elucidate the phylogenetic relationships between the Paleozoic corals and the Cambrian coralomorphs.