

Echinoderm model systems, homology, and phylogenetic inference: Comment and reply to Paul (2021)

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Understanding the phylogenetic relationship among derived blastozoans has been a goal of researchers since phylogenetic methodologies were first applied to Paleozoic echinoderms. Paul (2021) proposed a new “pan-dichoporites” group to circumscribe early Paleozoic blastozoans. Unfortunately, this work includes many inaccuracies, non-reproducible analyses, and nonstandard method choices that confuse rather than advance the understanding of echinoderm paleobiology. Herein, we focus on key aspects of philosophy, methodology, and data reproducibility the publication of Paul (2021) raises that need to be addressed and considered by echinoderm researchers as they assess the concept of pan-dichoporite echinoderms.

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