

A revaluation of rhipidocystid echinoderms based on a new flattened blastozoan from the Upper Ordovician of Maryland, USA

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A new rhipidocystid echinoderm from the Upper Ordovician Chambersburg Formation in western Maryland (USA) is here described based on four exquisitely preserved specimens. Specimens of *Durhamicystis americana* gen. et sp. nov. preserve both thecal sides and the oral area, with identification of major apertures including peristome, periproct, gonopore, and hydropore. This allows orientation of this species and proper comparison across all rhipidocystids. *Durhamicystis americana* has a large theca composed of ten marginal plates with only two basals on the posterior side, two ambulacra and seven large oral plates with brachioles attached either on orals or smaller flooring plates. Rhipidocystids include taxa with lateral flattening along the BC-DE axis (i.e., *Rhipidocystis*) and others along the anterior-posterior A-CD axis (i.e., *Durhamicystis*, *Neorhipidocystis*, and *Petalocystites*) suggesting rhipidocystids may be paraphyletic.

Key words: Echinodermata, Blastozoa, Rhipidocystidae, Paleozoic, Chambersburg Formation, North America.

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