

In quest of cyrtocrinid origins: Evidence from Late Triassic ossicles from the Tatra Mountains

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We report cyrtocrinid (Crinoidea) ossicles from the Rhaetian (Late Triassic) of the Tatra Mountains (southern Poland). The columnals are high, the facets are covered with thick crenulae and the latera are concave. Such features of symplectial articulation and latera distinguish them from the columnals of other Triassic crinoids (i.e., millericrinids and encrinids) and therefore we consider they belong to Cyrtocrinida. The oldest representatives of cyrtocrinids were known from the Early Jurassic, therefore the presented material constitutes the oldest world record of these crinoids to date. We speculate that perturbations related to the global mid-Carnian extinction combined with predation intensity observed in the Middle-Late Triassic have been involved in early origin of Cyrtocrinida.

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