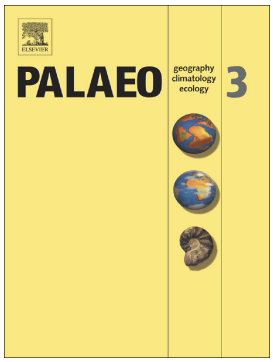

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Platy corals from the Middle Triassic of Upper Silesia, Poland: implications for photosymbiosis in the first scleractinians

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Abstract

Coral patch reefs from Middle Triassic (upper Pelsonian–lower Illyrian) strata in the Upper Silesia region of southern Poland (Germanic domain of the Peri-Tethys) are rare examples of the first scleractinian buildups. The shallowing-upward succession in the Tarnów Opolski quarry records a transition from sponge to coral patch reefs interbedded with bioclastic limestones. Coral pillarstones built by thin, branching *Volzeia szulci* are succeeded by platy *Pamiroseris silesiaca* constructing two platestone layers, each up to 50 cm thick. Serial sections through platestones revealed flat to undulose growth form of *P. silesiaca*. The maximum observable dimension of the coral plates is 24 cm wide (typically up to 12 cm), while thickness of most plates is 1–1.5 cm. Coral plates are interlayered with crinoidal wacke- to packstone and microbialites, which are locally important component of the platestone. Platy corals grew in a shallow, turbid-water environment with changing, but dominantly moderate hydrodynamics. Net sedimentation was low, as indicated by the epibionts encrusted to the