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Early Norian (Triassic) corals from the Northern Calcareous Alps, Austria, and the intra-Norian faunal turnover

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The first description of early Norian coral fauna from the Northern Calcareous Alps (Dachstein Plateau and Gosaukamm), Austria, is presented: 31 scleractinian species from 24 genera (including three corals not formally determined), and three hexanthiniarian species belonging to two genera. The stratigraphical position of the main part of the fauna discovered in the South Dachstein Plateau at the Feisterscharte is determined by means of the conodont *Epigondolella quadrata* (Lacian 1); single finds are from the horizons with *Epigondolella triangularis* and *Norigondolella navicula* (Lacian 3), and one close to the horizon with *Epigondolella* cf. *multidentata* (Alaunian 1). Rare corals from the Gosaukamm are from the Lacian 1 and Alaunian. Five species are described as new: *Retiophyllia vesicularis, Retiophyllia aranea, Margarosmilia adhios, Hydrasmilia laciana*; one new genus and species from the family Coryphylliidae, *Margarogyra hirsuta*; one new genus and species, *Thamnasterites astreoides*, cannot be assigned to a family. Two hexanthiniarian species, *Pachysolenia cylindrica* and *Pachydendron microthallos*, known exclusively from the Tethyan lower Norian, represent stratigraphically valuable species. Aregularly porous coral from the family Microsolenidae, *Eocomoseris*, which up to now has only been known from the Jurassic and Cretaceous, is here identified from the Triassic strata (originally described as *Spongiomorpha* [*Hexastylopsis*] *ramosa*). Predominant taxa show solitary and phaceloid (pseudocolonial) growth forms and an epithecal wall; pennules–bearing corals are common. Carnian genera and genera typical of the Lacian and Lacian–early Alaunian prevail; a hydrozoan genus *Cassianastraea* has also been encountered as well as a scleractiamorph coral, *Furcophyllia septafindens*). The faunal composition contrasts with that of well known late Norian–Rhaetian ones, the difference being observed not only at the generic but also at the family level. The post–early Norian change in coral spectrum documents the turnover of the coral fauna preceding that at the Triassic/Jurassic boundary.

Key words: Scleractinia, Hexanthiniaria, corals, taxonomy, faunal turnover, Norian, Triassic, Alps, Dachstein, Tethys.

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