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CORALS OF THE TYPE LOCALITIES OF THE UPPER CRETACEOUS GOSAU-GROUP: FINSTERGRABEN, HOFERGRABEN, SCHATTAU (AUSTRIA). A PRELIMINARY REPORT

KORALLEN DER TYPUSLOKALITÄTEN VON DER OBERKRETAZISCHEN GOSAU-GRUPPE: FINSTERGRABEN, HOFERGRABEN, SCHATTAU (ÖSTERREICH). EIN VORLÄUFIGER BERICHT

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ZUSAMMENFASSUNG

Im Rahmen jüngst begonnener Untersuchungen mit dem Ziel, stratigraphische, sedimentologische und paläontologische Aspekte auf zu arbeiten, wurden die Typuslokalitäten Finstergraben, Hofergraben und Schattau der Gosau-Gruppe neu beprobt. Das vorliegende Paper gibt eine erste Aufstellung der Neuaufsammlungen der Korallenfaunen von den Typuslokalitäten.

ABSTRACT

Recently, the type localities of the Gosau-Group Finstergraben, Hofergraben, and Schattau, have been the subject of stratigraphical, sedimentological, and palaeontological studies. The present paper gives a first insight in the newly collected coral faunas of the type localities.

I. INTRODUCTION

Corals from the Austrian Gosau-Group have been the subject of numerous studies since their first documentations by Goldfuss (1826-33), Sowerby (in Sedgwick, Murchison 1832), and Peters (1852). Reuss (1854) published the first monographic work, followed by extended re-evaluations by Felix (1903) and Oppenheim (1930).

Investigations carried out in more recent years revealed that in many cases type material was lost or the locations where they originated from could not be clearly identified (e.g., Beauvais 1982; Baron-Szabo 2002, and paper on *Dasmiopsis* in this volume). As a result, the taxonomic concept of a number of genera and species and their stratigraphic range have remained unclear. As a part of an on-going study carried out by the Geological Survey of Austria (Geologische Bundesanstalt Wien) the type localities of the Gosau-Group have been re-examined, focusing on their stratigraphy, sedimentology, and palaeontology. They are located in the vicinity of Gosau village. Stratigraphically, they are assigned to the Coniacian/Santonian boundary. For more information see papers on the stratigraphy and type localities of the Gosau-Group by e.g., Hradecká, Lobitzer, and ###vábenicka, in this volume.

The purpose of the present paper is to give a first insight in the coral faunas of the type localities of the Gosau-Group, documenting material which could be used as neotypes in the future. Final assignments with detailed descriptions and illustrations of the material is in preparation (Baron-Szabo, in prep.)

II. CORALS OF THE FINSTERGRABEN (FG)

The Finstergraben is located at the western rim of Gosau village. The coral assemblage consists of the following taxa:

FG:

Actinacis sp., *Aulosmilia aspera*, *Cunnolites polymorphus*, *Cunnolites* sp., *Phyllosmilia* sp., *Placosmilia* sp.

III. CORALS OF THE HOFERGRABEN (=Sattelgraben) (HG 2, HG 3, HG 5, HG 5A)

The Hofergraben (=Sattelgraben) is located southeast of Gosau village. Four collecting sites (HG 2, 3, 5, and 5A) were sampled. The coral assemblages consist of the following taxa:

HG 2:

Aulosmilia aspera, *Cunnolites polymorphus*, *Cunnolites* sp., *Diploctenium* sp., *Flabellosmilia bisinuatum*, *Phyllosmilia* sp., *Placosmilia* sp.

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HG 3:
Acrosmilia sp., *Aulosmilia aspera,* (?)*Balanophyllia* sp., *Cunnolites polymorphus, Cunnolites* sp., *Dictuophyllia* sp., *Diploctenium* sp., *Phyllosmilia* sp., *Placosmilia* sp., (?)*Plesiofavia* sp., *Pleurocora* sp., *Polytremacis* sp.
HG 5:
Actinacis sp., *Actinastrea* sp., *Agathelia asperella, Astraraea* sp., *Aulosmilia aspera, Cladocora* sp., *Columastrea striata, Columactinastrea* sp., *Cunnolites polymorphus, Cunnolites* sp., *Dasmiopsis lamellicostatus,* (?)*Dendrarea* sp., *Dictuophyllia* sp., *Diploctenium* sp., (?)*Elephantaria* sp., *Flabellosmilia bisinuatum,* (?)*Fungiastrea* sp., *Heterocoenia* sp., *Hydnophora* sp., *Lophomeandra* sp., *Peplosmilia* sp., *Phyllosmilia* sp., *Placosmilia* sp., (?)*Plesiofavia* sp., *Pleurocora* sp., *Polytremacis* sp., *Synastrea* sp., *Thamnoseris* sp.
HG 5A:
Agathelia asperella, (?)*Cladocora* sp., *Columactinastrea* sp., *Cunnolites* sp., *Diploctenium* sp., *Heterocoenia* sp., *Hydnophora* sp., (?)*Peplosmilia* sp., *Phyllosmilia* sp.

IV. CORALS OF SCHATTAU (Schattau 2, Schattau 3, Schattau 3A, K&S 7)

The corals of Schattau were collected from outcrops along the Schattau forestry road ("Schattau-Forststrasse") which is located about 4 km east of Gosau village.
Schattau 2:
Columactinastrea sp., *Cunnolites polymorphus, Cunnolites* sp., *Diploctenium* sp., *Flabellosmilia bisinuatum, Lophomeandra* sp., *Phyllosmilia* sp., *Placosmilia* sp., *Thamnoseris* sp.
Schattau 3:
Actinacis sp., *Columactinastrea* sp., *Cunnolites* sp., *Orbignygyra tenella, Placosmilia* sp., *Pleurocora* sp., (?)*Thamnoseris* sp.
Schattau 3A:
Agathelia asperella, Aulosmilia aspera, Hydnophora sp.
Schattau K&S 7:
Astraraea sp., *Calamophylliopsis simonyi, Columastrea striata, Cunnolites* sp., *Diploctenium* sp., *Flabellosmilia bisinuatum,* (?)*Meandrophyllia* sp., *Placosmilia* sp., *Polytremacis* sp., *Synastrea* sp.

V. APPENDIX 1: LITERATURE

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