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TYPE SPECIMENS FROM THE CASSIAN BEDS IN THE COLLECTION OF THE NHM VIENNA

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With 2 Figures and 1 Table

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Introduction

The collection of the Natural History Museum Vienna (NHMW) contains abundant material from the Triassic deposits cropping out in the vicinity of St. Cassian, South Tyrol (Italy). In total the collection contains more than 50 drawers of material including numerous types and figured specimens. Unfortunately, most of the material is accompanied by vague locality information only, being attributed to "St. Cassian" or "Stuores Mergel". We have reason to assume that the majority of these specimens come from the region of the Carnian candidate type section at "Stuores Wiesen" in the neighbourhood of Pralongià, SW of San Cassiano. Numerous other localities, however, are documented in the collection as well (Tab. 1).

Origin of the collection

Most of the Cassian Bed specimens of the NHMW were collected during the 19th century. Major acquisitions were made in 1842 (donated by the physician Rinna von Sarenbach, Vienna), 1847 (bought from the mineral dealer Dr. Baader, Heidelberg), 1864 (donated by the Geological Survey of Austria, Vienna), 1865 (exchange with L. Liebner, Innsbruck), 1884 (bought from collectors J. Ninz, J. Ploner and B. Canins, St. Cassian) and 1897 (bought from collector J. Ploner, St. Cassian). A few additional specimens were acquired in the early 20th century from the heirs of Austrian fossil collectors (1926: Dr. Heinrich, Bischofshofen; 1928: Carl Eckhart, Vienna).

Research history

In the 1860s Gustav Carl Laube (* 9.1.1839 Teplitz, Bohemia; † 12.4.1923 Prag) was briefly employed at the Hof–Mineralienkabinett in Wien (today the Natural History Museum Vienna) and at the k. & k. Polytechnisches Intitut, a precursor of the Vienna University of Technology. During this time he studied the material of the Cassian Beds housed at these institutions, as well as the material kept at the Geologische Reichsanstalt (today the Geological Survey of Austria). Comparing these specimens with Münster's type material housed in Munich (at the Bavarian State Collection for Palaeontology) he critically revised the complete invertebrate fauna of the Cassian Beds, synonymising many of the species previously established by Münster and Klipstein. His results were published in a series of papers in the Denkschriften der k. & k. Akademie der Wissenschaften during the years 1865 to 1870.

Laube's material and additional Cassian specimens present in the NHM Vienna collection formed the basis for many subsequent studies (Fig. 1). These focussed mainly on the gastropod fauna of the Cassian Beds, e.g. Kittl (1891, 1892, 1894), Bandel (1991, 1992, 1993a, b, 1994, 1995) and Schwardt (1992).

Cassian bed type material

Currently the NHM Vienna collection contains 162 holotypes, 16 paratypes, 96 syntypes, 502 figured specimens and 40 lots of reference specimens from the Cassian Beds (Fig 2A). Most of the types and reference specimens are gastropods (544 lots), followed

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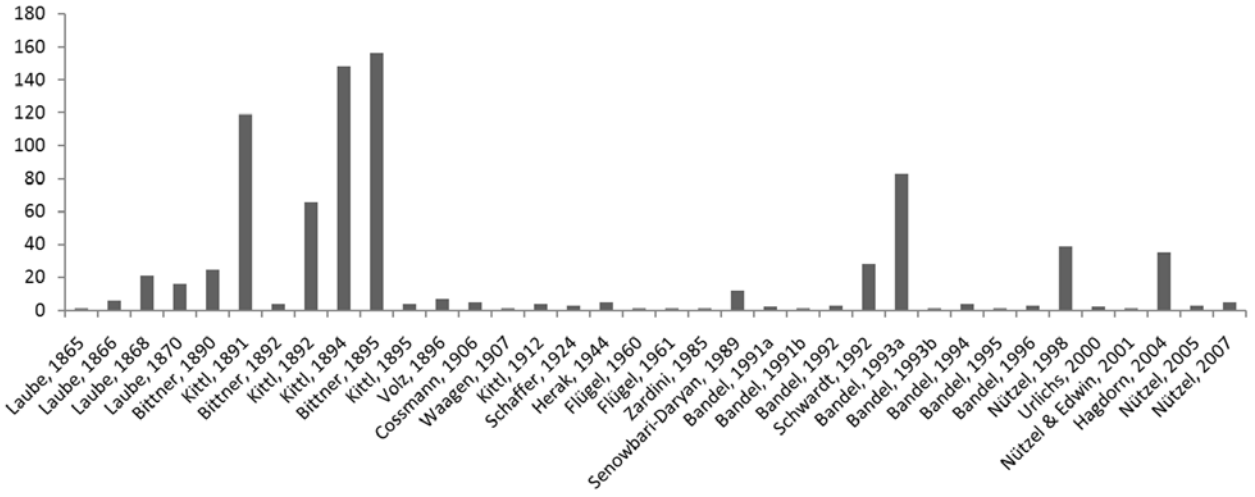

Fig. 1: Number of type and figured specimens in the NHMW collection per publication.

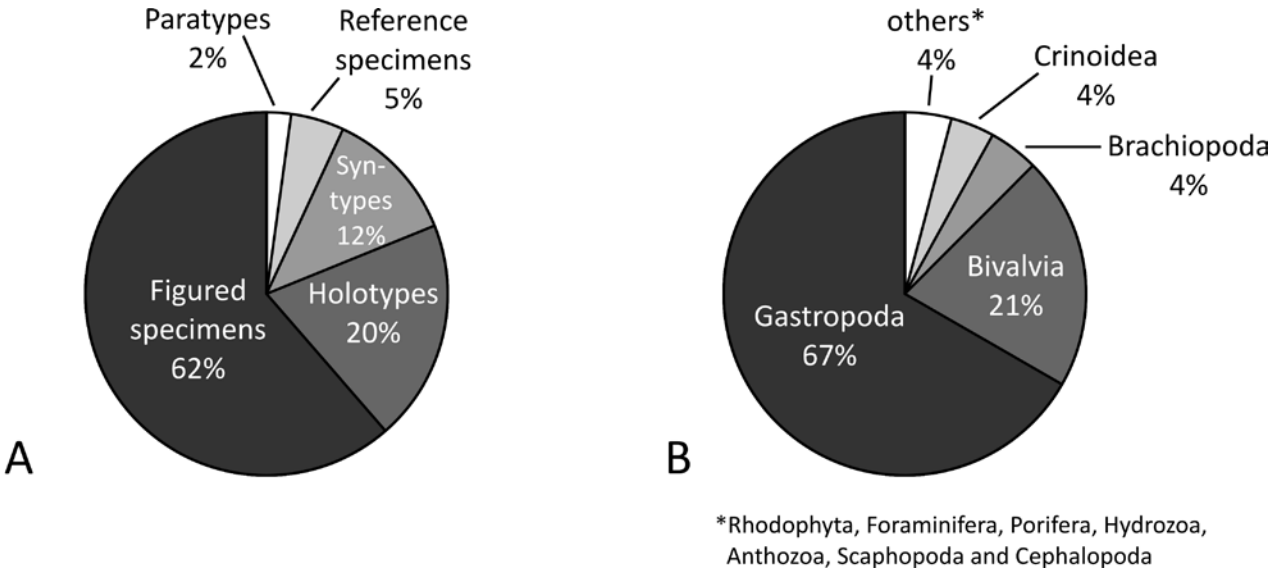

Fig. 2: Proportions of type figured and reference specimens (A) and their systematic provenance (B).

by bivalves (171 lots), crinoids (35 lots), brachiopods (32 lots), sponges (16 lots) and other groups (18 lots) (Fig. 2B). Additionally, abundant non–type material from the Cassian Beds is available for study at the NHM Vienna. Although some of the latter have been determined, the large majority remains unstudied so far.

Information on the type and reference specimens is available via the OeTyp–Website (http://www.oeaw.ac.at/oetyp/palhome.htm). The OeTyp–Project is a joint effort of the Austrian Academy of Sciences (Commission for the Palaeontological and Stratigraphical Research of Austria) and the Natural History Museum Vienna to provide data on palaeontological types, figured specimens and reference material in Austrian collections. Currently the database contains more than 70,000 animal and plant fossils. Regular updates are provided as further published fossil material is included.

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Cassian bed localities in the NHMW collection
Andráz-Piere
Coldo Oi
Covara
Falzarego
Grones
Heilig Kreuz
La Fraina
Livinalongo, near Buchenstein (Castell-Berg)
Poroloi
Pré di Medesch, near Lavarella
Prelongei
Preromang
Ridma
Romerlo, near Cortina
Schlern
Schluderbach
Seelandalpe
Set Sass
St. Cassian
St. Vigil
Stern
Stuores, near Badia
Tofana
Valparola
Wengen

Tab. 1: List of Cassian bed localities represented in the NHM collection. The names are provided as stated on the labels. Localities represented by single or very few specimens only are not listed.

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