The Belgian collections of fossil Cnidaria and Porifera

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The main Belgian collections of fossil Cnidaria and Porifera are housed at the Geology Department of the Liège University and at the Royal Belgian Institute of Natural Sciences (Brussels), respectively. However, it was GOLDPUSS (1826) who collected the first Devonian corals in this country, but these specimens are stored in the Paläontologische Institut of the Bonn University in Germany.

The historical collections of fossil corals curated at the Liège University were gathered chiefly by G. DEWALQUE (1826–1905) and H. FORIR (1856–1907), who were involved in the geological mapping survey of Belgium at the end of the 19th century and at the beginning of the 20th century. Most of these specimens were recovered from the Devonian and Carboniferous marine succession of southern Belgium (Namur-Dinant Basin). These historical collections notably include a huge amount of specimens coming from the historical type area of the Tournaisian Stage, i.e. the Tournai area, which were acquired mainly by purchases. Nonetheless, the core of the coral collections of the Liège University has been made since the 1970’s by E. POTY and his MSc and PhD students (e.g. POTY 1981 and references below, BOLAND 2002), whose research was mostly dedicated to the rugose coral faunas from the Tournaisian and Viséan of the Namur-Dinant Basin. Furthermore, they also constituted an important collection of rugosans, tabulates and heterocorallians containing several thousands of specimens, which were recovered from contemporaneous strata in various parts of the world (e.g. Australia, China [XU 1996], France, Ireland, Poland, Russia, Turkey, etc.). The Devonian collection is less developed and essentially includes material from the Givetian, Frasnian and Famennian of southern Belgium. Accessorily, we can also mention the small collections of Ordovician (Asghill) rugose corals (TOURREUR et al. 1993) from the Sambre-et-Meuse strip (Belgium) and of Jurassic hexacorallians (LEJUNE 1935) from the Belgian Lorraine.

Numerous types and illustrated specimens are stored at the Liège University such as those described by DE KONINCK (1876), SALÉE (e.g. 1910), and, more especially, POTY and his students (e.g. POTY 1981, POTY & BOLAND 1996).

The Royal Belgian Institute of natural Sciences (RBINS) has a very rich collection of fossil corals and stromatoporoids coming mostly from the Devonian of Belgium.

The main part of the Devonian collection of the RBINS was gathered by E. MAILLEUX (1875–1946) and M. LECOMPTE (1902–1970). During the working years of M. LECOMPTE at the Institute, more than 29,000 specimens of stromatoporoids, rugose and tabulate corals were sectioned and converted into thin sections. Moreover, M. LECOMPTE became a famous specialist in tabulate corals and stromatoporoids and he published several monographs on these subjects between 1933 and 1952 (e.g. LECOMPTE 1939, 1951, 1952). He was also the contributor for the chapters devoted to the rugose and tabulate corals in the Traité de Paléontologie directed by J. PIVETEAU in 1952 and for the stromatoporoids in the Treatise on Invertebrate Paleontology edited by R.C. MOORE in 1956.

Some of the Devonian rugose corals stored in the Museum of Brussels were investigated by SORAUF (1967) from the USA and by H.H. TSIEN. The latter, who was attached until 1990 to the Palaeontology Laboratory of the Catholic University of Louvain, first in Leuven, then in Louvain-la-Neuve, published several important papers (e.g. TSIEN 1969, 1978). The collection of tabulate corals studied by M. LECOMPTE was partly revised by TOURREUR (1985) during his PhD thesis. From 1974, detailed field studies allowed M. COEN-AUBERT to constitute a new collection of rugose corals composed of more than 10,000 specimens. They were mostly sampled in the Middle Devonian and the Frasnian of Belgium, but also in the Eifel Hills in Germany, the Holy Cross Mountains in Poland, the Tafilalt and the Ma’dier in Morocco (e.g. COEN-AUBERT 2009). It can be added that during the years 2009 and 2010, some Devonian rugose corals collected
by M. COEN and H.H. TSien and previously stored in the Geological Institute at Louvain-la-Neuve were moved to Brussels.

Carboniferous corals are not so well-represented in collections of the RBINS contrary to their Devonian counterparts. As for the Belgian material, the collection of L. G. de KONINCK (1809–1897) comes mainly from the Tournaisian of Tournai and the Viséan of Visé. Some of these specimens were revised by POTY (1981) who also investigated some rugose corals collected by E. DUPONT and F. DEMANET. Finally, the Devonian and Carboniferous corals collected by CHARLES (1933) in Anatolia (Turkey) are also curated at the RBINS though his study was carried out at the Liège University. Of course, the types and illustrated specimens of all the papers mentioned in the paragraphs about the RBINS are housed in this institution.


