The palaeontological collection of the Royal Museum for Central Africa

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Summary

The Royal Museum for Central Africa (RMCA) has a small but well-documented collection of fossils, with a strong regional focus. It comprises specimens from most of the known fossil localities of Central Africa, covering a wide range of taxa and geological periods, collected from the late 19th century onward. Through its completeness, the collection offers insights into the variety of fossil occurrences in Central Africa and the history of their discovery. The main regions hosting fossil-bearing deposits are the Atlantic Coast area, the Rift Valley, the Congo Basin, the coal basins of the Eastern DR Congo, and outcrop areas of Neoproterozoic limestone deposits around the Congo Basin. Within the RMCA, early research contributions by Edmond Dartevelle of the Zoology Department were followed in the 1940s to 1970s by an extensive effort of collection valorisation coordinated by Geology Department staff, through studies by external specialists, resulting in a series of publications that contain detailed information about various specimen groups that are part of the RMCA holdings.

Samenvatting – De paleontologische collectie van het Koninklijk Museum voor Midden-Afrika

Het Koninklijk Museum voor Midden-Afrika (KMMA) bezit een kleine maar goed gedocumenteerde verzameling fossielen, met een sterke regionale focus. Ze omvat specimens van de meeste gekende vindplaatsen van fossielen in Centraal Afrika. De specimens werden verzameld vanaf het einde van de 19e eeuw en bevatten resten van een ruime waaier aan

groepen van organismen, uit diverse geologische perioden. Door haar volledigheid biedt de collectie een inzicht in de diversiteit aan fossiel-houdende afzettingen binnen Centraal Afrika en in de geschiedenis van hun ontdekking. De voornaamste zones waar fossielen voorkomen zijn de Atlantische kuststreek, de Riftvallei, het Congobekken, de steenkoolbekkens van de oostelijke DR Congo, en zones waar Neoproterozoïsche kalksteenformaties dagzomen rondom het Congobekken. Binnen het KMMA werd in een vroege periode paleontologisch onderzoek verricht door Edmond Dartevelle van het Departement Zoologie. In de jaren 1940 tot 1970 werd dit gevolgd door inspanningen tot collectie valorisatie door medewerkers van het Departement Geologie, door studies die uitgevoerd werden door externe specialisten, resulterend in een reeks publicaties met gedetailleerde informatie over diverse groepen van specimens die deel uitmaken van de KMMA verzameling.

Résumé – La collection paléontologique du Musée royal de l'Afrique centrale

Le Musée royal de l'Afrique centrale (MRAC) possède une collection paléontologique qui est peu volumineuse mais bien documentée et qui est marquée par un fort focus régional. Elle comprend des spécimens de la plupart des gisements fossilifères connus d'Afrique centrale. Le matériel a été récolté à partir de la fin du 19e siècle et concerne une large gamme de taxons et de périodes géologiques. Par son caractère exhaustif, cette collection donne un aperçu de la diversité des formations fossilifères d'Afrique centrale et de l'historique de leur découverte. Les zones principales de dépôts fossilifères sont la région de la côte atlantique, la vallée du Rift, le Bassin du Congo, les bassins houillers de l'Est du Congo, et les zones où des calcaires néoprotérozoïques affleurent autour du Bassin du Congo. Au sein du MRAC, des études paléontologiques ont d'abord été réalisées par Edmond Dartevelle du Département de Zoologie. Dans les années 1940 à 1970, elles ont été suivies par un effort de valorisation de la collection coordonné par des membres du Département de Géologie, sous forme

d’études par des spécialistes externes, conduisant à une série de publications contenant des informations détaillées concernant divers groupes de spécimens qui font partie de la collection.

Keywords – palaeontology; Central Africa; history of science

Introduction

The Geology Department of the Royal Museum for Central Africa (RMCA) hosts collections of rocks, minerals and fossils, with a strong regional focus on the DR Congo and neighbouring countries. Among these three specimen collections, the paleontological collection has been the least visible to the general public, having never been used extensively for exhibition and never having appeared prominently in publications presenting collection highlights. Nevertheless, the collection is important in comprising specimens from most of the known fossil localities of Central Africa and in being well documented by research publications. The present article covers various aspects of the content and history of the collection, ranging from early acquisitions to recent studies.

Overview

The collection currently consists of about 19000 registered specimens, which is a very modest number in comparison with collections of natural history museums and of institutes that have a palaeontology department, which the RMCA never did. Founded in 1898, as *Musée du Congo*, the RMCA originally comprised a general Natural Sciences Department, which was divided into Zoology, Botany, and Geology departments in 1928. At that moment, the fossil collection was assigned to the Zoology Department, but it was transferred to the

Geology Department in 1938. From the late 1940s onward, until the late 1970s, the Geology Department coordinated various initiatives to valorise the collection.

The collection contains specimens that were collected from the late 19th century onward (Table 1). The oldest collection date is 1892, for specimens gathered by Eduard Pechuël-Loesche, a German naturalist who is mainly famous for his participation in the Güssfeldt expedition to Central Africa of the mid-1870s. This is followed by a historically important specimen series collected at Landana (Cabinda, Angola) by Norbert Diderrich, whose activities in Central Africa began with being a member of the Delcomunne expedition to Katanga of 1890-1893. Some of the other early sample series are also linked to major figures in the colonial history of Central Africa, such as Charles Lemaire, who headed an important scientific expedition to Katanga (1898-1902), and Emile Grison, missionary and later titular bishop for a vast region in NE Congo. The list presented in Table 1 ends with the material collected by Joseph Bequaert in 1913, during a first field campaign that was organized specifically for paleontological research.

Key RMCA staff

One of the key RMCA staff members who contributed to the enrichment and study of the fossil collection was Edmond Dartevelle (1907-1956), who first visited the Atlantic coast area of Central Africa in 1933, while affiliated with the *Université Libre de Bruxelles*. He joined the RMCA as member of the Zoology Department in 1936, which he would remain until his untimely death. He returned to Africa in 1937-1938 on an expedition co-sponsored by, among others, the Royal Belgian Colonial Institute (the current Royal Academy for Overseas Sciences) and the Royal Museums of Art and History, collecting large series of fossils but also biological specimens and ethnographic objects. In 1946-1949 he was on temporary assignment with the *Service Géologique du Congo Belge* in Kinshasa, allowing

him to continue fieldwork. His stays in Africa contributed significantly to the growth of the RMCA collection. Part of the material that he collected was studied by himself, concentrating on Bivalvia, Gastropoda, Pisces and Echinoidea. In total, he produced 29 publications on the palaeontology of Central Africa (1934-1959), dealing mainly with the Atlantic Coast area.

A second important figure was Lucien Cahen (1912-1982), who started his career in Katanga in 1937, working for the *Comité Spécial du Katanga*. During the second World War, he was enlisted in the army and based in the Bas-Congo region, where he began a collaboration with the *Service Géologique du Congo Belge*. In 1946, he was recruited by the RMCA, where he later held a long mandate as director-general (1958-1977). Although he published about stromatolites in the 1940s, his major impact on regional palaeontology has been through the promotion of biostratigraphical research, as a contribution to regional geological studies. To this end, various external experts were contacted to study RMCA specimens, and they were given the opportunity to publish their findings in a monograph series of the Museum. In parallel, Cahen was also a strong promotor of absolute age determination studies, for azoic rocks.

Thirdly, Jacques Lepersonne (1909-1997), former Head of the RMCA Geology Department, can be credited with insisting on the importance of keeping representative specimen collections, from which the fossil collection has also benefited, and he clearly had an important role in its valorisation by external experts. He also enriched the collection by field sampling of fossil-bearing deposits of the Rift Valley and the Congo Basin, during periods when he was based in Congo, in the late 1930s and the 1940s.

The various contributions of these three persons are reflected by the species that have been named in their honour (Table 2). Also one genus, *Caheniasaccites*, has been named in tribute to Lucien Cahen (Bose & Kar, 1966).

Other staff members have contributed to the palaeontology of Central Africa by one or more occasional publications. Léopold de Dorlodot (1879-1932), who was the first curator of the geological collections, published several notes about specimens that were received by the Museum, including a few articles about fossils. Henri Schouteden (1881-1972), a zoologist who was director of the RMCA from 1927 to 1946, published two notes about subfossil molluscs from the Lake Kivu area. In the Wood Biology section, Roger Dechamps (1930-1995) analysed several series of fossil wood specimens, in part from the DR Congo but also from Ethiopia and Libya.

Main regions

Specimens of the RMCA collection primarily come from the five main regions where fossils are known to occur, each with specific associations, geological age, environmental setting, and history of palaeontological research.

Atlantic coast

As the most accessible part of Central Africa, the Atlantic coast was the first region for which fossil occurrences were reported. The earliest publications containing significant palaeontological information are those by Lenz (1877, 1883), reporting on specimens and observations collected by the Güssfeldt expedition at Landana and Chiloango in Angola, already with indication of a diverse fauna (Bivalvia, Gastropoda, Cephalopoda, Pisces, Reptilia). This was followed by descriptions of Cephalopoda from Elobi island, Equatorial Guinea (Szajnocha, 1885), Mollusca and Echinoidea from the Benguela area, Angola (Choffat, 1886; Choffat & de Loriol, 1888; Schlumberger, 1888), Bivalvia and Gastropoda from Banana, DR Congo (Dautzenberg, 1887, 1890; Van den Broeck, 1887), and Bivalvia, Echinoidea and Hexacorallia from Gabon (Kossmat, 1893). Most of these studies resulted

from field collecting by German, French and Portuguese groups, who were active in the region well before Belgian interests had developed. One exception is the study of specimens from Banana, which are part of the collections of the Royal Belgian Institute of Natural Sciences.

RMCA specimens are from locations along a long stretch of the Atlantic coast, extending from Bolondo in Equatorial Guinea to Mossamedes in southern Angola, with a majority of specimens coming from the Bas-Congo area and from the Cabinda enclave of Angola. The latter includes the important locality of Landana, where a long high escarpment exposes a layered sequence of fossil-rich deposits. The main RMCA specimen series were collected by Norbert Diderrich at Landana in 1897, by Joseph Bequaert at Landana and elsewhere in 1913, by Edmond Dartevelle at various localities in the 1930s and 1940s, and by C.R. Hoffmann at Vonso in 1939-1940.

The age of the deposits is Cretaceous to Quaternary, with variations in stratigraphical position between localities. These include sites such as Bulu Zambi, Manzadi and Vonso for the Cretaceaous, Landana for the Paleocene-Eocene, and Bololo and Malembe for the Miocene. The deposits comprise a diverse marine fauna, occasionally with washed-in remains of terrestrial organisms. Inland, the so-called *Grès Sublittoraux Series*, containing only plant remains as fossils, is a Lower Cretaceous record of non-marine sedimentation in the region.

Important specimen series include those of the crocodyliform *Congosaurus bequaerti* (Dollo), including a nearly complete skeleton, and of the turtle *Taphrosphys congolensis* (Wood), both from Landana. The collection also includes type material for various species of sharks, rays, cephalopods, bivalves and gastropods. Other notable specimens are mammal remains from Malembe. A large series of foraminifer slides prepared for samples from

offshore borehole localities for petroleum prospection is among the materials whose further treatment is pending.

Rift valley

For the western branch of the East African Rift, some information about subfossil material can be found in early studies of the modern mollusc fauna of the region (e.g. von Martens, 1897). The first note that seems to pertain to the Congolese side of the rift valley is a sample presentation by Passau (1912). An extensive study covering various taxa was conducted by British palaeontologists in the 1920s, reporting on specimens from Uganda (Wayland *et al.*, 1926).

The most significant finds have been made in the region of Lake Albert and Lake Edward, including the Semliki river valley that extends between those basins. The age of the deposits ranges from Miocene to Quaternary, whereas the comparatively minor fossil occurrences around Lake Kivu and Lake Tanganyika are largely limited to the Quaternary.

RMCA holdings include an early series collected by Max Delpierre in 1930 and a large number of specimens obtained during field campaigns by Jacques Lepersonne in 1938-1940. Other notable series were collected during the Ganda-Congo expedition of 1960 and the Baker Centenary Expedition of 1963, deposited at the RMCA after their study by Achilles Gautier (Gautier, 1970).

The fossils are mainly mollusc and fish remains, the latter dominated by vertebrae of *Lates* species. Also reptile and mammal remains, as well as fossil wood material, are present in the collection.

Congo Basin

The presence of fossils in the Congo Basin was first mentioned in short notes by Cornet (1908, 1909), presenting finds of fish remains from the Kilindi and Kindu areas that were next studied by Leriche (1910, 1911). Around the same time, ostracod and phyllopod remains were determined for the Kisangani and Sangula areas (Ball & Shaler, 1910) and next for the region between Kisangani and Ubundu (Leriche, 1913). Another notable contribution is the work of Hussakof (1917), defining *Lepidotes congolensis* (Hussakof) as a new fossil fish species for specimens that were collected at the St Gabriel mission post near Kisangani by the American Museum Congo Expedition of 1909-1915.

Most of the mentioned localities are in the eastern part of the DR Congo, where outcrops along the Congo, Lualaba and Lomami rivers have remained a source of fossil-bearing specimens. The only exception is Sangulu, located in the Kasaï region. More to the west, fossils have also been collected in the Kwango region, including the major fish-fossil locality of Kipala. The age of the deposits, at least in outcrop, is mainly Middle Jurassic to Quaternary, and the environment is continental freshwater to brackish. In the Kisangani area, a calcareous interval known as the Songa limestone, with abundant fossil fish remains, was interpreted as recording a marine incursion at some stage (e.g. de Saint-Seine & Casier, 1962).

The RMCA collection comprises the specimens from Kilindi and Kindu that were studied by Leriche. It also includes a large series collected by Grison at the St Gabriel mission post in 1912, containing *Lepidotes congolensis* (Hussakof) remains that were not yet described as such at that time. Other Congo Basin series were collected in the 1930s by Edmond Polinard (Forminière), in 1948 by Jacques Lepersonne (RMCA), and in the 1950s by A.L. Lombard (*Syndicat pour l'Etude Géologique et Minière de la Cuvette Congolaise*). In 1951, Pierre de Saint-Seine of the *Muséum National d'Histoire Naturelle*, Paris, collected fish fossils during an expedition organized specifically for this purpose by the RMCA. Samples containing ostracod and phyllopod remains have been extracted from cores that part of the

RMCA rock collection, obtained during prospection for cement-industry development, hydrocarbon exploration and other activities by various companies. A unique specimen for the region is an isolated find of a pterosaur bone at Bibanga, NE Kasaï, described by Swinton (1948).

Coal basins

Although they are strictly part of the Congo Basin, the areas with Carboniferous to Permian formations containing plant remains are regarded here as a separate entity. Fossil-bearing deposits of this type were first reported for Kongolo, North Katanga, by Mathieu & Cornet (1911) and studied by Seward (1931). The discovery of this relatively minor occurrence was followed by that of the coal deposits of the Lukuga basin, around Kalamie at Lake Tanganyika (Mercenier, 1913; Jamotte, 1929, 1931), where coal was mined at some stage. This was followed by the discovery of the Luena coal basin, south of the Upemba depression in more central parts of the former Katanga Province (Cambier, 1930; Jamotte, 1933). Abundant isolated plant remains were next found at various localities in the Walikale Territory of the Nord-Kivu province (Boutakoff, 1933; Renier, 1933).

The material from Kongolo that was studied by Seward (1931) is part of the collections of the Royal Belgian Institute of Natural Sciences. The oldest RMCA holdings date from the 1930s, with specimens collected in the Lukuga area by Pierre Golenvaux, in both the Lukuga and Luena areas by André Jamotte, and in Walikale by Nicholas Boutakoff. Another series was collected by Mahendra Bose, who conducted an RMCA field campaign to obtain additional samples in the Luena area in 1959.

The fossils range from stem and leaf imprints to spores and pollen, the latter preserved in series of palynological slides. The only other fossil type in the RMCA collection are trace

fossils or pseudofossils known as *Guilielmites*, as described by Mortelmans (1957) for the Luena basin.

Neoproterozoic limestone outcrop areas

Stromatolites have been recognized in all main regions of Central Africa where Late Precambrian limestone is part of the bedrock. The earliest mention of limestone that is clearly stromatolitic seems to be by de Dorlodot (1921), presenting specimens from the Ituri region. Most early reports date from the 1940s, when Neoproterozoic stromatolites were first described for Katanga (Jamotte, 1944; Jamotte & Vanden Brande, 1944), western Congo-Brazzaville (Dartevelle, 1945), and the Kasaï region (Polinard, 1948). These occurrences cover four of the main areas with Neoproterozoic limestone, including a large zone in the north of the DR Congo and a western zone extending across the Bas-Congo region. A fifth zone is located in SE Burundi and neighbouring parts of Tanzania.

RMCA series date mainly from the 1940s, at least those collected by André Jamotte in Katanga, by Jacques Lepersonne in the Bas-Congo region, and by Maurice Sluys in Ituri. Most specimens from the Kasaï were collected by Paul Raucq in the 1950s.

Outside the main regions

Some fossil occurrences can not be clearly assigned to one of the main regions that have been considered up to now. One example from the RMCA collection are warthog remains from a cave in the Lubudi area (Van Straelen, 1924). The collection also includes assumed cephalopod remains from Bilati, Nord-Kivu (Passau, 1941, 1945) and from Nyongwe, Rwanda (Polinard, 1950), both from formations whose age and type make the presence of such fossils highly unlikely. They were re-investigated by Miller (1951), discarding the initial

interpretation of the belemnite-shaped specimen from Rwanda but accepting the possibility that the specimen from the DR Congo might be a pyritic internal mould of a cephalopod shell.

Collection valorisation

Before 1946, some studies of fossil specimens of the RMCA collection were already published in one of the series of the *Annales du Musée du Congo Belge*, including one volume with contributions about mollusc, reptile and fish remains from Landana, and a three-volume publication by Dartevelle and Casier about fish remains from the Atlantic coast area, of which the final part appeared in 1959, after the series had been discontinued (Dartevelle & Casier, 1943, 1949, 1959).

A great effort in collection valorisation began after the arrival of Lucien Cahen as staff member in 1946. From that moment onward, various experts were invited to study specific fossil groups, aimed primarily at biostratigraphic dating and palaeoenvironmental reconstruction. This resulted in 44 volumes of the *Sciences Géologiques* series of the *Annales du Musée Royal du Congo Belge* and the *Annales du Musée Royal de l'Afrique Centrale*, containing 77 contributions about the palaeontology of Central Africa, typically with greater length and more illustrations than allowed by other types of publications. The authors were mainly Belgian and French, but other nationalities are represented as well (Table 3). Several studies were contributed by researchers of the Birbal Sahni Institute of Palaeobotany, Lucknow, India. These contacts developed through Ove Høeg of the University of Oslo, who was initially invited to study the RMCA fossil plant collections and who suggested a collaboration with Mahendra Bose of the Lucknow institute, who was in Oslo as a visiting scientist during that period. Following an initial joint publication (Høeg & Bose, 1960), the study of fossil plant material from the DR Congo was continued for several years by Bose and colleagues at Lucknow.

By the late 1970s, most specimen series had been studied and both Cahen and Lepersonne had retired. Since that time, valorisation of the collection has continued but at a slower pace. Studies were initiated by external researchers rather than by the RMCA, and the work was less focussed on biostratigraphy issues. The studies consisted of the revision of material for specific species or localities, and of descriptions of previously undocumented or poorly documented material. The *Annales du Musée Royal de l'Afrique Centrale* were no longer a forum for publication of the results of these studies. Examples include a re-analysis of available specimens of *Congosaurus bequaerti* (Dollo) (Jouve & Schwarz, 2004) and *Taphrosphys congolensis* (Wood) (Pérez-García et al., 2020), which had both been the subject of earlier studies (e.g. Swinton, 1950; Wood, 1975). Other examples are studies of mammal remains (e.g. Pickford, 1986) and snake remains (Folie *et al.*, 2021) from Cabinda. By far the most productive has been Louis Taverne, who has published about 35 articles on fossil fish remains from the coastal region and the interior of Central Africa that are based on RMCA specimens, including about 20 articles that appeared after 1980. Palaeontological research has also continued using specimens of the RMCA rock collection, as in the dinoflagellate study by Steeman et al. (2020).

Organisation of the collection

Because of their intrinsic importance, type specimens and specimens that have been figured in publications are stored in a separate series of drawer cabinets. For several fossil groups, this selection also includes specimens that are mentioned in publications without being figured, as well as specimens that have been the subject of fossil-find reports lacking detailed palaeontological information (e.g. Sekirsky, 1954) and specimens of exceptional importance (e.g. *Congosaurus* material). This brings together the specimen series with the greatest visibility, which are most frequently consulted. For some publications, mostly about molluscs,

ostracods and phyllopods, non-figured mentioned specimens are stored together with unpublished material, to have easier access by locality. The type and figured specimens are arranged by high-level taxon, and next chronologically by publication, in some cases grouped by main region.

The remainder of the collection consists of specimens that have not been described in print, although they were often seen and identified during the study of all RMCA holdings for the groups to which they belong. This part of the collection is arranged by high-level taxon and next by main region, stratigraphic position, locality, collector, and registration number, and in some cases by species. Unregistered specimens are stored with or near registered sample series from the same or similar source.

In recent years, the content of the entire collection has been verified and rearranged, resulting in an organisation that is quite different from the one that existed before (see Lepersonne, 1975). At the same time, all information contained in hand-written registers has been entered into a database system, and specimen-specific references have been verified and added. The creation of on-line access to these data is currently being prepared. Unregistered specimens, amounting to several thousands, have been inventoried, pending their formal addition to the collection.

Conclusions

The fossil collection of the RMCA is modest in volume but scientifically important, presenting a good record of fossil occurrences in Central Africa. Its nature is closely related to the history of fossil discoveries and descriptions for the region, and it allows a discussion of some aspects of collection building and valorisation. The content of the collection is well documented by past studies, and it remains available for further research.

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Table1. RMCA specimen series with oldest collection dates.

Year	Collector	Region
1882	Eduard Pechuël-Loesche	Bas-Congo
1897	Norbert Diderrich	Landana (Cabinda)
1901	Alphonse Cabra	Bas-Congo
1901	Charles Lemaire	Katanga
1905	Alexandre Bourguignon	Bas-Congo
1907	Paul Van der Maesen	Kilindi (Maniema)
1911	Emile Grison	St Gabriel mission post (Tshopo)
1912	Hans Henrik Horneman	Oviatuku (Tshopo)
1913	Jacques de Briey	Bas-Congo
1913	Joseph Bequaert	Landana (Cabinda)

Table 2. Species named in tribute of key RMCA staff members.

Year	Name	Category
Edmond Dartevelle		
1945	*Ginglymostoma dartevellei* (Casier)	Pisces
1951	*Eutrephoceras dartevellei* (Miller)	Cephalopoda
1953	*Pervinquieria dartevellei* (Sornay)	Cephalopoda
1963	*Palaeochorus dartevellei* (Hooijer)	Mammalia
1965	*Diplomystus dartevellei* (Casier)	Pisces
1959	*Eupatagus daradensis* (Lambert) var. *dartevellei* (Roman & Gorodiski)	Echinoidea
1979	*Ostrea (Cymbulostrea) dartevellei* (Freneix)	Bivalvia
2019	*Cabindachanos dartevellei* (Taverne et al.)	Pisces
2021	*Geniohyus dartevellei* (Tabuce)	Mammalia
Lucien Cahen		
1951	*Deltoidonautilus caheni* (Miller)	Cephalopoda
1952	*Leptolepis caheni* (de Saint-Seine & Casier)	Pisces
1953	*Pervinquieria caheni* (Sornay)	Cephalopoda
1957	*Glossocardi (Tortucardia) caheni* (Dartevelle & Freneix)	Bivalvia
1959	*Pristis caheni* (Dartevelle & Casier)	Pisces
1960	*Walikalia cahenii* (Hoeg & Bose)	Plantae
1967	*Bairdestheria caheni* (Defretin-Lefranc)	Phyllopoda
1970	*Carapoxylon cahenii* (Lakhanpal & Prakash)	Plantae
1972	*Boutakoffiaspora cahenii* (Jain & Sah)	Plantae
1976	*Eoknightia caheni* (Taverne)	Pisces
1979	*Trisidos caheni* (Freneix)	Bivalvia
Jacques Lepersonne		
1959	*Iridina lepersonnei* (Adam)*	Bivalvia
1959	*Myliobatis lepersonnei* (Dartevelle & Casier)	Pisces
1963	*Stegolophodon lepersonnei* (Hooijer)	Mammalia
1967	*Pseudestheria lepersonnei* (Defretin-Lefranc)	Phyllopoda
1970	*Dryoxylon lepersonnei* (Lakhanpal & Prakash)	Plantae
1970	*Viviparus lepersonnei* (Gautier)	Gastropoda
1972	*Boutakoffiaspora lepersonnea* (Jain & Sah)	Plantae
1973	*Pisidium lepersonnei* (Gautier & Van Damme)	Bivalvia
1975	*Sindacharax lepersonnei* (Greenwood & Howes)	Pisces
1976	*Kipalelops lepersonnei* (Taverne)	Pisces
2014	*Congophiopsis lepersonnei* (Taverne)	Pisces

* not valid

Table 3. First authors of RMCA-specimen studies that appeared in the *Annales du Musée Royal de l'Afrique Centrale, Sciences Géologiques*, between 1948 and 1979.

Name		Institute*	Category
Edmond Dartevelle	BE	RMCA	Bivalvia, Gastropoda, Echinoidea
Louis Taverne	BE	RMCA	Pisces
Edgar Casier	BE	RBINS	Pisces
William Adam	BE	RBINS	Bivalvia, Gastropoda
René Marlière	BE	U. Mons	Ostracoda, Phyllopoda
Pierre Piérart	BE	U. Mons	Plantae
Achilles Gautier	BE	U. Gent	Bivalvia, Gastropoda
Philippe Brébion	FR	MNHN	Mollusca
Jean-Pierre Chevalier	FR	MNHN	Hexacorallia
Claude Davadie	FR	MNHN	Cirripedia
Pierre de Saint-Seine	FR	MNHN	Pisces
Suzanne Freneix	FR	MNHN	Mollusca
Jean Roman	FR	MNHN	Echinoidea
Sylvie Secrétan	FR	MNHN	Decapoda
Jacques Sornay	FR	MNHN	Cephalopoda
Jeannine Bertrand-Sarfati	FR	U. Montpellier	stromatolites
Simone Defretin-Lefranc	FR	U. Lille	Phyllopoda
Maurice Lys	FR	U. Orsay	Foraminifera
Nicolas Grekoff	FR	IFP	Ostracoda
Mahendra N. Bose	IN	BSIP	Plantae
R.K. Kar	IN	BSIP	Plantae
Hari K. Maheshwari	IN	BSIP	Plantae
Rajendra N. Lakhanpal	IN	BSIP	Plantae
Dirk A. Hooijer	NL	RMNH	Mammalia
William E. Swinton	UK	BM	Reptilia
Arthur K. Miller	US	S.U. Iowa	Cephalopoda
Ove A. Høeg	NO	U. Oslo	Plantae

* RBINS Royal Belgian Institute of Natural Sciences, MNHN Muséum National d'Histoire Naturelle, IFP Institut Français du Pétrole, BSIP Birbal Sahni Institute of Palaeobotany, RMNH Rijksmuseum van Natuurlijke Historie (currently Naturalis), BM British Museum