Proceedings of the XIth International Symposium on Fossil Cnidaria and Porifera, Liège, Belgium, August 19-29, 2011: Preface

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The XIth symposium of the "International Association for the Study of Fossil Cnidaria and Porifera" was held in Liège, Belgium, from August 19th to 29th, 2011. The choice of organizing the meeting in Belgium was made in 2007 during the General Assembly of the International Association for the Study of Fossil Cnidaria and Porifera in Saint-Peterbourg. The organizing committee composed of colleagues from the universities of Liège and Toulouse made tremendous effort to ensure both the scientific and social success of the meeting.

During the 5 days of the meeting, the University of Liège welcomed 103 participants from 27 countries. 101 abstracts associated with 65 oral presentations and 33 posters covering a wide range diversity of topics in time, space and subject were presented. The organizing committee had chosen to mix the session, alternating contributions of young scientists with those of established colleagues. The main discussed theme concerns the Rugosa (34 oral and poster contributions, Fig. 1), followed by the Scleractinia (30 contributions), reefs (11), general topics (10), the Stromatoporoids and Tabulata (both 6 contribution), and two devoted to the Archaeocyatha. In term of stratigraphic distribution, the Devonian and Carboniferous faunas were the most discussed (22 contributions for each), followed by the Cainozoic (13), the Holocene (9), the Cretaceous and Ordovician-Silurian (both 6 contributions), the Jurassic (4), the Cambrian (2) and one contribution for the Permian and Triassic faunas.

Thanks to a brilliant idea of J. Sorauf a special historical session was organized to remind the contribution of the great Fossil Cnidaria and Porifera researchers of the past and their heritage to the current science. It was a great success and ten talks were devoted respectively to Maria Różkowska, Masao Minato, Dorothée Le Maître, Genevieve Termier, James Alloiteau, Marius Lecompte, Jean-Gabriel Lafuste, Patrick Sutherland, William Sando and to Dorothy Hill. These tributes are combined in the paper by Sorauf et al. opening this volume of proceedings.

The organizing committee awarded in 2011 the first Henri Milne Edwards Medals to Françoise Debrenne (Muséum national d'Histoire naturelle de Paris, France) and John Jell (University of Queensland, Australia) for their major and longlasting contributions to the study of corals and archaeocyaths. Both are deeply thanked for their work. This medal is offered as the gratitude mark to specialists of fossil Cnidaria and Porifera from the scientific community. The Best Poster Award was attributed by vote of the participants of the symposium. The 2011 laureate is Luke Nothdurft (Queensland University of Technology) for its poster entitled: Skeletal fusion of clonal fragments in *Acropora*. The figure illustrating the cover of this volume is extracted from this poster.

Three geological field trips were organized; two presymposium and one post-symposium. The first pre-symposium field-trip was devoted to the Givetian and Frasnian of Southern Belgium (Boulvain et al. 2011) and particularly to the type area of the two stages. Sections in the Meuse and Vesdre valleys showing the upper Frasnian succession were studied before moving south to observe the reefal facies of the Givetian in the Ourthe and Lesse valleys and along the type section in the Meuse Valley at Givet. The reefal successions of the Frasnian were examined in the Rochefort, Frasnes-les-Couvin and Philippeville areas.

During the second pre-symposium field-trip entitled "Classical Devonian and Carboniferous sites in the Ferques area, Boulonnais, Northern France" (Mistiaen et al. 2011), the participants examined outcrops of reefal Devonian facies near Ferques and well weathered fossiliferous blocks (Devonian and Carboniferous in age) along the sea shore. The Carboniferous formations were observed in Rinxent and near the Napoléon Quarry. Some classical outcrops of the Cretaceous chalk were observed at the Cap Blanc Nez.

The post-symposium field-trip presented renowned sections of the Uppermost Devonian and Lower Carboniferous strata of Southern Belgium (Poty et al. 2011). The first day was devoted to the Strunian coral-stromatoporoid biostromes, the Devonian-Carboniferous transition and the Tournaisian of the Vesdre, Ourthe and Hoyoux valleys. During the second day, the participant examined the Upper Viséan biostromes of the Hoyoux valley, the Tournaisian strata of the Meuse area, including the Waulsortian buildups, and middle Viséan biostromes and bioherms of the Namur area. The Tournaisian fauna of the type

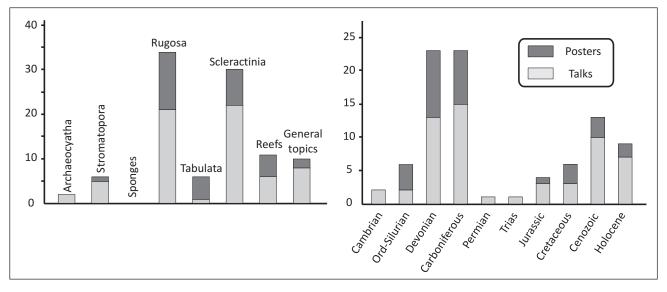


Figure 1. Thematic and time distribution of the contributions for the XIth Symposium on Fossil Cnidaria and Porifera.

area at Tournai was the focus of the third and last day. An atlas figuring the Uppermost Devonian and Lower Carboniferous rugose corals of Southern Belgium (Denayer et al., 2011) is associated to this field guide.

The field-trip guides are published as volume 20 of the Kölner Forum für Geologie und Paläontologie (Aretz & Poty, 2011), and the abstract volume of the symposium as volume 19 of the same journal (Aretz et al. 2011). The present volume of Geologica Belgica includes the 25 contributions accepted for

the proceedings of the symposium after being peer reviewed by specialists. The scientific committee thanks all the colleagues for their intensive and quick work for the review of the manuscripts: Błażej Berkowski, Frédéric Boulvain, Marie Coen-Aubert, Keith Dewing, Owen Dixon, Maria Hecker, Hans-Georg Herbig, Bogusław Kolodziej, Olga Kossovaya, Peter Kruse, Jacob Leloux, Andreas May, Josef Michalik, Elena Moreno Eiris, Bernard Mottequin, Mari-Ann Motus, Ross McLean, Klemens Oekentorp, John Pickett, Sergio Rodríguez, Ian Somerville,



Figure 2. XIth International Symposium on Fossil Cnidaria and Porifera, 22-26 August 2011, Liège, Belgium. Picture of the congress participants. From back left to front right: 1: Valentin Fischer (Be); 2: Mari-Ann Motus (Ltu); 3: Tomas Suttner (Aut); 4: Erika Kido (Aut); 5: Paweł Wolniewicz (Pol); 6: Francis Baldwyns (Be); 7: Eric Bouchez (Be); 8: Christoph Iven (Ge); 9: Madhi Badpa (Ir); 10: Daniel Ungureanu (Rom); 11: Jacob Leloux (Nld); 12: Vassil Zlatarski (USA); 13: Peter Kruse (Aus); 14: Edwin Lord (USA); 15: Joel Stake (USA); 16: Kenneth Johnson (UK); 17: John Pickett (Aus); 18: Bernard Lathuillière (Fr); 19: Bruno Mistiaen (Fr); 20: Cyrille Prestianni (Be); 21: Sandrine Delculée (Be); 22: Asuka Sentoku (Jap); 23: Cristianno Ricci (It); 24: Jean-Claude Rohart (Fr); 25: Mélanie Gretz (CH); 26: Victor Ogar (Ukr); 27: Shaahin Zaman (Ir); 28: Sergio Rodríguez (Sp); 29: Ian Somerville (Ire); 30: Ismail Said (Sp); 31: Ross McLean (Can); 32: Brian Rosen (UK); 33: Paul Sartenaer (Be); 34: Agostina Vertino (It); 35: Nadhiezda Santodomingo (UK); 36: Michaela Bernecker (Oma); 37: George Stanley (USA); 38: Yves Plusquellec (Fr); 39: Fokko Van Hulten (Ndl); 40: Jill Darrel (UK); 41: Emilie Pinte (Fr); 42: ???; 43: Adeline Dutrieux (Be); 44: Lin Wei (Chi); 45: Bernard Hubmann (Aut); 46: Yoichi Ezaki (Jap); 47: Makoto Kato (Jap); 48: Luke Nothdurf (Aus); 49: Jaroslaw Stolarski (Pol); 50: Ann Bud (USA); 51: Francesca Bossellini (It); 52: Jerzy Fedorowski (Pol); 53: Adeline Kerner (Fr); 54: Maria Hecker (Rus); 55: Miss. Ospanova (Taj); 56: Narima Ospanova (Taj); 57: Dieter Weyer (Ge); 58: Yohan Cornet (Be); 59: Julien Denayer (Be); 60: Weihua Liao (Chi); 61: Xiaojuan Wang (Chi); 62: Xiangdong Wang (Chi); 63: Bogusław Kolodjziej (Pol); 64: Hannes Löser (Mex); 65: Hans-Georg Herbig (Ge); 66: Mrs Kato (Jap); 67: Katarzyna Janiszewska (Pol); 68: Błażej Berkowski (Pol); 69: Gregory Webb (Aus); 70: James Sorauf (USA); 71: Natsuko Adachi (Jap); 72: Isao Niikawa (Jap); 73: Carden Wallace (Aus); 74: ???; 75: Markus Aretz (Fr); 76: John Jell (Aus); 77: Satomi Ueda (Jap); 78: Firuza Salimova (Taj); 79: Firdaus Karimova (Taj); 80: Klemens Oekentorp (Ge); 81: Marie Coen-Aubert (Be); 82: Edouard Poty (Be); 83: Mrs. Niikawa (Jap); 84: Françoise Debrenne (Fr); 85: Ewa Roniewicz (Pol); 86: Galina Melnikova (Taj); 87: Elzbieta Morycowa (Pol); 88: Olga Kossovaya (Rus); 89: Antony Wright (Aus).



Figure 3. Some pictures of the symposium and the field trip. A: Field trip n°3 in the Uppermost Devonian and Carboniferous of Southern Belgium, the group in the Namur Citadelle (back: Julien Denayer, Sandrine Delculée, Valentin Fischer; mid: Lin Wei, James Sorauf, Fokko Van Hulten, Edouard Poty, Jerzy Fedorowski, Yoichi Ezaki, Dieter Weyer, Olga Kossovaya, Ian Somerville, Shaahin Zaman, Madhi Badpa; front: Markus Aretz, Jean-Claude Rohart, Błażej Berkowski, Victor Ogar). B: Luke Nothdurft, Best Poster Award laureate. C: Coffee break during the symposium. D: John Jell and Françoise Debrenne, both awarded with the Henri Milne Edwards Medal for their major contributions on the study of the fossil Cnidaria and Porifera. E: The Organizing Committee and the staff (from left to right: Edouard Poty, Markus Aretz, Julien Denayer, Florie Robert, Yohan Cornet, Marie Heren, Adeline Dutrieux, Valentin Fischer, Sandrine Delculée, Nicolas Lepers and Cyrille Prestianni). F: Closing Ceremony: "*So, it's finished*!".

James Sorauf, George Stanley, Gregory Webb, Dieter Weyer, Pawel Wolniewicz, Anthony Wright and Graham Young.

As stated above, the first contribution to this volume of proceedings is the paper on our "mentors" by Sorauf et al. reporting the great heritage of the past corals masters: James Alloiteau, Dorothy Hill, Marius Lecompte, Masao Minato and Maria Różkowska.

Kerner introduces the Archaeocyatha computer program used as a determination key for the identification of archaeocyathids.

Ospanova discusses the taxonomical rank of the Heliolitida as an order by comparing the morphology of several Ordovician genera and species from Central Asia.

Sorauf & Kissling report the presence of the solitary rugose coral *Streptelasma* sp. anchored within colonies of *Paleofavosites prolificus* from the Silurian of Ohio.

May & Rodríguez describe the stromatoporoids and rugose corals association from the Pragian reefal limestone of Zújar (S. Spain) and introduce one new species of *Martinophyllum*.

Wolniewicz compares seven stromatoporoid species from the Devonian of Poland and Belgium in order to show the taxonomic confusion leading to the wrong estimation of the palaeobiodiversity.

Berkowski & Weyer describe *Hamaraxonia*, a pseudocollumelate rugose coral genus from the middle Eifelian of Morocco based on the species *H. africana* and they discuss the terminology, morphology and origin of the columella and pseudocolumella.

Plusquellec et al. describe two new species of the solitary rugose coral *Angustiphyllum* from the Middle Devonian of Armorica and discuss their life strategy.

Coen-Aubert reviews the upper Frasnian massive rugose corals in Belgium and describes two new species of *Frechastraea*: *F. coeni* and *F. glabra*, two common taxa marking the base of the upper Frasnian in the Namur-Dinant Basin.

Denayer et al. describe the coral occurrences from the Lower and Middle Famennian strata of Belgium. They also expose the post-crisis context of these poorly diversified but morphologically highly variable association.

van Hulten presents new data for the reconstruction of the Devonian and Mississippian reef complex of the North Sea and the comparison with the contemporaneous reef complexes of Alberta (Canada) and Caspian area.

Hecker reviews several colonial rugose coral genera from the Viséan of the Urals and Donetz Basin that were described under different names but belonging all to the genera *Dorlodotia* and *Ceriodotia*.

Hecker describes the tabularium particularities (axial cones, biform tabulae) of *Lonsdaleia* and supposes that the genus forms the root of *Cystolonsdaleia* characterized by such a tabularium.

Somerville et al. provide an analysis of the rich and diverse late Viséan coral fauna from the Tabainout mud-mound complex in the Khenifra region of Central Morocco.

Denayer describes the corals of a microbial-spongebryozoan-coral bioherm in the Taurides (South Turkey) and discuss the palaeoecological context and the palaeobiogeographical affinity of this coral fauna.

Lin et al. provide an overview on the rugose coral fauna from the upper Viséan and Serpukhovian of the Yashui section (South China).

Ogar gives an overview of the Carboniferous reefs of the Donets Basin and highlights specific reef communities for individual time slices.

Fedorowski & Bamber discuss the paleobiogeographic significance of Bashkirian rugose corals from Arctic Canada, surprisingly composed of common Late Viséan to Serpukhovian taxa.

Rodríguez & Bamber review several genera belonging to the family Geyerophyllidae that were supposed to be colonial. These colonial corals being, in fact, composed of gregarious, solitary corals, true colonies are unknown in the Geyerophyllidae. Kossovaya et al. introduce the new genus *Sloveniaxon* form the Permian of Slovenia as an homeomorph of *Cyathaxonia* and discuss its affinity with the Carboniferous and Permian *Cyathaxonia*-like corals.

Zlatarski & Stake present a summary of the last 3 centuries of researches on corals and explain the major steps that occurred in the study of this famous group.

Melnikova & Roniewicz describe the coral association from the Late Triassic and Early Jurassic of the Pamir Mountains (central Asia) and the figure the appearance pattern of taxa following the Triassic/Jurassic boundary.

Löser exposes statistical methods helping to species identification, based on measurements on Cretaceous plocoid coral genus *Stelidioseris*.

Wallace presents the diversity of living and fossils genera belonging to the Acroporidae in the Caribbean.

Nothdurft & Webb discuss the incorporation of coral macro-fragments in *Acropora* colonies and the relationship with the host colonies in case of living clonal fragments, living non clonal fragments and dead fragments.

The organizers of the XIth Symposium on Fossil Cnidaria and Porifera thank the team who worked in front and behind the scene before, during and after the symposium, for the field-trips and for the edition of the proceedings volume (Figs 2-3). Financial and logistic support from Geologica Belgica, University of Liège, University of Köln, La Ville de Liège, Fond National pour la Recherche Scientifique (FNRS), Carmeuse s.a., and the International Association for the Study of Fossil Cnidaria and Porifera are greatly acknowledged.

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