

A tribute to Pál Mihály Müller

R.H.B. Fraaije, M. Hyžný, J.W.M. Jagt, M. Krobicki & B.W.M. van Bakel

Fraaije, R.H.B., Hyžný, M., Jagt, J.W.M., Krobicki, M. & Van Bakel, B.W.M. A tribute to Pál Mihály Müller. *In*: Fraaije, R.H.B., Hyžný, M., Jagt, J.W.M., Krobicki, M. & Van Bakel, B.W.M. (eds.), Papers in honour of Pál Müller, eminent Hungarian palaeocarcinologist. *Scripta Geologica*, **147**: 1-4, Leiden, September 2014. René H.B. Fraaije, Oertijdmuseum De Groene Poort, Bosscheweg 80, 5283 WB Boxtel, the Netherlands (info@oertijdmuseum.nl); Matúš Hyžný, Naturhistorisches Museum Wien, Burgring 7, 1010 Vienna, Austria, and Department of Geology and Palaeontology, Faculty of Natural Sciences, Comenius University, Mlynská dolina G1, 842 15 Bratislava, Slovakia (hyzny.matus@gmail.com); John W.M. Jagt, Natuurhistorisch Museum Maastricht, de Bosquetplein 6-7, 6211 KJ Maastricht, the Netherlands (john.jagt@maastricht.nl); Michał Krobicki, Polish Geological Institute – National Research Institute, Królowej Jadwigi 1, 41-200 Sosnowiec, Poland, and AGH University of Science and Technology, Mickiewicza 30, 30-059 Kraków, Poland (michal.krobicki@pgi.gov.pl; krobicki@geol.agh.edu.pl); Barry W.M. van Bakel, Oertijdmuseum De Groene Poort, Bosscheweg 80, 5283 WB Boxtel, the Netherlands, and Naturalis Biodiversity Center, P.O. Box 9517, 2300 RA Leiden, the Netherlands (barryvanbakel@gmail.com).

Currently, some 50 palaeontologists worldwide actively contribute to our knowledge of extinct decapod crustaceans, mostly lobsters, anomurans and brachyurans, which is demonstrated by the numerous papers that have been published in recent years. At regular intervals of three years, these palaeocarcinologists meet to discuss ongoing studies. The start of this series of workshops took place at Montecchio Maggiore (Vicenza, northern Italy) in 2000. The most recent meeting in this series, the fifth, was staged at Kraków (southern Poland) in June 2013 (Krobicki, 2014). During the concluding discussion of that workshop, attendees decided that contributions submitted would be guest edited by us for a special issue of *Scripta Geologica*, as a homage to our much respected colleague and good friend, Dr Pál Müller (Budapest), who could not attend due to severe illness. Thanks to timely submission and a swift review process, these proceedings can now appear in print just over a year after the workshop took place.

Contributions to the present issue include an overview of Pál's scientific output (Hyžný *et al.*, 2014a), as well as a range of papers on Late Jurassic to Quaternary anomurans and brachyurans, as follows:

- a new Late Jurassic pylochelid abdominal tergite from southern Poland (Fraaije *et al.*, 2014);
- a new Early Cretaceous frog crab from northwest South America (Luque, 2014);
- a new Late Cretaceous porcellanid from Morocco (Garassino *et al.*, 2014);
- mid- and Late Cretaceous dromioid crabs from western Germany and Iran (Jagt *et al.*, 2014a);
- early Late Cretaceous dynomenids and associated scalpelliform cirripedes from the Czech Republic (Kočová Veselská *et al.*, 2014);
- a new Late Cretaceous family of kiwaiform stem-lineage squat lobsters (Ahyong & Roterman, 2014);
- latest Cretaceous icriocarcinids from North America (Nyborg *et al.*, 2014) and coeval 'odds and ends' amongst decapod crustaceans from the type area of the Maastrichtian Stage (Jagt *et al.*, 2014b);

- early Paleocene crabs from Alabama (Feldmann *et al.*, 2014);
- Eocene carpioids from Louisiana (Schweitzer *et al.*, 2014), majoids from Spain (Artal *et al.*, 2014) and panopeids from northeast Italy (De Angeli & Garassino, 2014);
- a revision of European Cenozoic species of *Calappilia* (Busulini *et al.*, 2014);
- Miocene squat lobsters from the Central Paratethys (Hyžný *et al.*, 2014b), a new xanthid crab from central Europe (Hyžný *et al.*, 2014c) and a new munidopsid anomuran from Cyprus (Fraaije, 2014);
- Pliocene majoids from Japan (Kato *et al.*, 2014);
- and, lastly, Pleistocene freshwater and terrestrial crabs from Sarawak (Ng & Cranbrook, 2014) and coeval crabs and mantis shrimp from Galveston, Texas (Collins *et al.*, 2014).

A range of new genera and species are introduced in these papers, most of which are dedicated to Pál Müller, as a token of appreciation of his decapod crustacean work.

Acknowledgements

We thank the following colleagues, arranged in alphabetical order, for assisting us in the review process: Shane T. Ahyong, Alessandra Busulini, Stephen K. Donovan, Alessandro Garassino, Danièle Guinot, Hiroaki Karasawa, Sebastian Klaus, Adiël A. Klompmaker, Colin McLay, Enrique Macpherson, Joseph Mendoza, Tohru Naruse, Torrey Nyborg, Karen E. Schnabel, Àlex Ossó, Roger W. Portell, Cristina M. Robins, Guenter Schweigert, Carrie E. Schweitzer, Giuliano Tessier and Francisco J. Vega.

References

- Ahyong, S.T. & Roterman, C.N. 2014. Pristinaspiniidae, a new family of Cretaceous kiwaiform stem-lineage squat lobster (Anomura, Chirostyloidea). *In*: Fraaije, R.H.B., Hyžný, M., Jagt, J.W.M., Krobicki, M. & Van Bakel, B.W.M. (eds.), Proceedings of the 5th Symposium on Mesozoic and Cenozoic Decapod Crustaceans, Krakow, Poland, 2013: A tribute to Pál Mihály Müller. *Scripta Geologica*, **147**: 125-133.
- Artal, P., Van Bakel, B.W.M. & Onetti, A. 2014. A new inachid crab (Brachyura, Majoidea) from the middle Eocene of the provinces of Barcelona and Girona (Catalonia, Spain). *In*: Fraaije, R.H.B., Hyžný, M., Jagt, J.W.M., Krobicki, M. & Van Bakel, B.W.M. (eds.), Proceedings of the 5th Symposium on Mesozoic and Cenozoic Decapod Crustaceans, Krakow, Poland, 2013: A tribute to Pál Mihály Müller. *Scripta Geologica*, **147**: 153-161.
- Busulini, A., Beschin, C. & Tessier, G. 2014. A re-evaluation of extinct European crabs referred to the genus *Calappilia* A. Milne-Edwards in Bouillé, 1879 (Brachyura, Calappidae). *In*: Fraaije, R.H.B., Hyžný, M., Jagt, J.W.M., Krobicki, M. & Van Bakel, B.W.M. (eds.), Proceedings of the 5th Symposium on Mesozoic and Cenozoic Decapod Crustaceans, Krakow, Poland, 2013: A tribute to Pál Mihály Müller. *Scripta Geologica*, **147**: 193-219.
- Collins, J.S.H., Garvie, C.L. & Mellish, C.J.T. 2014. Some decapods (Crustacea; Brachyura and Stomatopoda) from the Pleistocene Beaumont Formation of Galveston, Texas. *In*: Fraaije, R.H.B., Hyžný, M., Jagt, J.W.M., Krobicki, M. & Van Bakel, B.W.M. (eds.), Proceedings of the 5th Symposium on Mesozoic and Cenozoic Decapod Crustaceans, Krakow, Poland, 2013: A tribute to Pál Mihály Müller. *Scripta Geologica*, **147**: 309-329.
- De Angeli, A. & Garassino, A. 2014. A new genus and species of panopeid crab, *Zovocarcinus muelleri* (Decapoda, Brachyura), from the Eocene of Zovo di Bolca, Verona (northeast Italy). *In*: Fraaije, R.H.B., Hyžný, M., Jagt, J.W.M., Krobicki, M. & Van Bakel, B.W.M. (eds.), Proceedings of the 5th Symposium on Mesozoic and Cenozoic Decapod Crustaceans, Krakow, Poland, 2013: A tribute to Pál Mihály Müller. *Scripta Geologica*, **147**: 185-191.

- Feldmann, R.M., Schweitzer, C.E. & Portell, R.W. 2014. Crabs (Decapoda, Brachyura) from the lower Paleocene of Alabama, USA. *In*: Fraaije, R.H.B., Hyžný, M., Jagt, J.W.M., Krobicki, M. & Van Bakel, B.W.M. (eds.), Proceedings of the 5th Symposium on Mesozoic and Cenozoic Decapod Crustaceans, Krakow, Poland, 2013: A tribute to Pál Mihály Müller. *Scripta Geologica*, **147**: 135-151.
- Fraaije, R.H.B. 2014. A new shallow-marine muidopsid (Anomura, Galatheoidea) from the upper Miocene in the Maroni-Psematismenos Basin of Cyprus. *In*: Fraaije, R.H.B., Hyžný, M., Jagt, J.W.M., Krobicki, M. & Van Bakel, B.W.M. (eds.), Proceedings of the 5th Symposium on Mesozoic and Cenozoic Decapod Crustaceans, Krakow, Poland, 2013: A tribute to Pál Mihály Müller. *Scripta Geologica*, **147**: 233-239.
- Fraaije, R.H.B., Krzemiński, W., Van Bakel, B.W.M., Krzemińska, E. & Jagt, J.W.M. 2014. A new type of pylochelid sixth abdominal tergite (Anomura, Paguroidea) from the Upper Jurassic of Poland. *In*: Fraaije, R.H.B., Hyžný, M., Jagt, J.W.M., Krobicki, M. & Van Bakel, B.W.M. (eds.), Proceedings of the 5th Symposium on Mesozoic and Cenozoic Decapod Crustaceans, Krakow, Poland, 2013: A tribute to Pál Mihály Müller. *Scripta Geologica*, **147**: 21-25.
- Garassino, A., De Angeli, A. & Pasini, G. 2014. A new porcellanid genus (Crustacea, Decapoda) to accommodate the Late Cretaceous *Paragalathea africana* Garassino, De Angeli & Pasini, 2008, from southeast Morocco. *In*: Fraaije, R.H.B., Hyžný, M., Jagt, J.W.M., Krobicki, M. & Van Bakel, B.W.M. (eds.), Proceedings of the 5th Symposium on Mesozoic and Cenozoic Decapod Crustaceans, Krakow, Poland, 2013: A tribute to Pál Mihály Müller. *Scripta Geologica*, **147**: 117-123.
- Hyžný, M., Van Bakel, B.W.M., Fraaije, R.H.B., Jagt, J.W.M., Krobicki, M. & Magyar, I. 2014a. A tribute to Pál Müller; his life, career and scientific output. *In*: Fraaije, R.H.B., Hyžný, M., Jagt, J.W.M., Krobicki, M. & Van Bakel, B.W.M. (eds.), Proceedings of the 5th Symposium on Mesozoic and Cenozoic Decapod Crustaceans, Krakow, Poland, 2013: A tribute to Pál Mihály Müller. *Scripta Geologica*, **147**: 9-20.
- Hyžný, M., Gašparič, R., Robins, C.M. & Schlögl, J. 2014b. Miocene squat lobsters (Decapoda, Anomura, Galatheoidea) of the Central Paratethys – a review, with description of a new species of *Muidopsis*. *In*: Fraaije, R.H.B., Hyžný, M., Jagt, J.W.M., Krobicki, M. & Van Bakel, B.W.M. (eds.), Proceedings of the 5th Symposium on Mesozoic and Cenozoic Decapod Crustaceans, Krakow, Poland, 2013: A tribute to Pál Mihály Müller. *Scripta Geologica*, **147**: 241-267.
- Hyžný, M., Van Bakel, B.W.M. & Guinot, D. 2014c. *Etisus evamuelleriae*, a new xanthid crab (Decapoda, Brachyura) from the Middle Miocene of Austria and Hungary. *In*: Fraaije, R.H.B., Hyžný, M., Jagt, J.W.M., Krobicki, M. & Van Bakel, B.W.M. (eds.), Proceedings of the 5th Symposium on Mesozoic and Cenozoic Decapod Crustaceans, Krakow, Poland, 2013: A tribute to Pál Mihály Müller. *Scripta Geologica*, **147**: 221-231.
- Jagt, J.W.M., Van Bakel, B.W.M., Fraaije, R.H.B. & Neumann, C. 2014a. New data on mid-Cretaceous dromioid crabs (Crustacea, Decapoda, Brachyura) from northwest Germany and southwest Iran. *In*: Fraaije, R.H.B., Hyžný, M., Jagt, J.W.M., Krobicki, M. & Van Bakel, B.W.M. (eds.), Proceedings of the 5th Symposium on Mesozoic and Cenozoic Decapod Crustaceans, Krakow, Poland, 2013: A tribute to Pál Mihály Müller. *Scripta Geologica*, **147**: 35-47.
- Jagt, J.W.M., Fraaije, R.H.B. & Van Bakel, B.W.M. 2014b. Decapod crustacean 'odds and ends' from the Maastrichtian type area (southeast Netherlands, northeast Belgium). *In*: Fraaije, R.H.B., Hyžný, M., Jagt, J.W.M., Krobicki, M. & Van Bakel, B.W.M. (eds.), Proceedings of the 5th Symposium on Mesozoic and Cenozoic Decapod Crustaceans, Krakow, Poland, 2013: A tribute to Pál Mihály Müller. *Scripta Geologica*, **147**: 95-115.
- Kato, H., Nakashima, R. & Yanagisawa, Y. 2014. Two new species of the genus *Hyas* Leach, 1814 (Majoidea, Oregoniidae) from the Pliocene of northeast Japan. *In*: Fraaije, R.H.B., Hyžný, M., Jagt, J.W.M., Krobicki, M. & Van Bakel, B.W.M. (eds.), Proceedings of the 5th Symposium on Mesozoic and Cenozoic Decapod Crustaceans, Krakow, Poland, 2013: A tribute to Pál Mihály Müller. *Scripta Geologica*, **147**: 269-287.
- Kočová Veselská, M., Kočí, T. & Kubajko, M. 2014. Dynomenid crabs (Decapoda, Brachyura) and stalked barnacles (Cirripedia, Scalpelliformes) from upper Cenomanian-lower Turonian nearshore, shallow-water strata in the Bohemian Cretaceous Basin, Czech Republic. *In*: Fraaije, R.H.B., Hyžný, M., Jagt, J.W.M., Krobicki, M. & Van Bakel, B.W.M. (eds.), Proceedings of the 5th Symposium on Mesozoic and Cenozoic Decapod Crustaceans, Krakow, Poland, 2013: A tribute to Pál Mihály Müller. *Scripta Geologica*, **147**: 49-81.

- Krobicki, M. 2014. The 5th Symposium on Mesozoic and Cenozoic Decapod Crustaceans, Kraków/Poland, 24-27 June 2013; a brief report. *In*: Fraaije, R.H.B., Hyžný, M., Jagt, J.W.M., Krobicki, M. & Van Bakel, B.W.M. (eds.), Proceedings of the 5th Symposium on Mesozoic and Cenozoic Decapod Crustaceans, Krakow, Poland, 2013: A tribute to Pál Mihály Müller. *Scripta Geologica*, **147**: 5-8.
- Luque, J. 2014. A new genus and species of raninoidian crab (Decapoda, Brachyura) from the Lower Cretaceous of Colombia, South America. *In*: Fraaije, R.H.B., Hyžný, M., Jagt, J.W.M., Krobicki, M. & Van Bakel, B.W.M. (eds.), Proceedings of the 5th Symposium on Mesozoic and Cenozoic Decapod Crustaceans, Krakow, Poland, 2013: A tribute to Pál Mihály Müller. *Scripta Geologica*, **147**: 27-34.
- Ng, P.K.L. & Cranbrook, Earl of. 2014. Fossil brachyuran crabs from the Jambusan Caves (Bau, Sarawak), collected by A.H. Everett in 1878-1879. *In*: Fraaije, R.H.B., Hyžný, M., Jagt, J.W.M., Krobicki, M. & Van Bakel, B.W.M. (eds.), Proceedings of the 5th Symposium on Mesozoic and Cenozoic Decapod Crustaceans, Krakow, Poland, 2013: A tribute to Pál Mihály Müller. *Scripta Geologica*, **147**: 289-307.
- Nyborg, T., Ossó, À. & Vega, F.J. 2014. A new species of icriocarinid crab (Crustacea, Portunoidea) from the uppermost Cretaceous of California, USA: palaeobiogeographic implications. *In*: Fraaije, R.H.B., Hyžný, M., Jagt, J.W.M., Krobicki, M. & Van Bakel, B.W.M. (eds.), Proceedings of the 5th Symposium on Mesozoic and Cenozoic Decapod Crustaceans, Krakow, Poland, 2013: A tribute to Pál Mihály Müller. *Scripta Geologica*, **147**: 83-93.
- Schweitzer, C.E., Feldmann, R.M. & Stringer, G.L. 2014. *Neozanthopsis americana* (Decapoda, Brachyura, Carpilioidea) from the middle Eocene Cane River Formation of Louisiana, USA and its associated teleost otoliths. *In*: Fraaije, R.H.B., Hyžný, M., Jagt, J.W.M., Krobicki, M. & Van Bakel, B.W.M. (eds.), Proceedings of the 5th Symposium on Mesozoic and Cenozoic Decapod Crustaceans, Krakow, Poland, 2013: A tribute to Pál Mihály Müller. *Scripta Geologica*, **147**: 163-183.