

In Memoriam: Prof. Dr. Božidar Ćurčić (1946-2015)



Prof. Dr. Božidar Ćurčić was born on 3rd July in Belgrade, where he graduated in 1969 at the Faculty of Science (Biology). The same year he was posted in the Institute of Zoology, Faculty of Science, University of Belgrade, where he spent his whole university career. During all these years he successfully conducted his fruitful scientific research and lectured at both graduate and post-graduate levels.

Arachnology (above all pseudoscorpions) was the main field of Prof. Ćurčić's scientific research. Some of the earliest scientific papers were dedicated to the study of scorpions, but soon afterwards Prof. Ćurčić focused his studies on pseudoscorpions. Many different aspects of these taxa were the scope of his studies (systematics, taxonomy, developmental biology, evolutionary biology, teratology, biogeography and biospeleology). Almost 45 years of devoted investigations resulted in establishing numerous genera and species, both epigeal, endogean and cave-dwelling, new to science from Serbia (Yugoslavia) and many other countries such as: Montenegro, Macedonia, Bosnia and Herzegovina, Croatia, Greece,

Romania, Bulgaria, Albania, France, USSR, Israel, Afghanistan, Nepal, China, Vietnam, the Philippines, and the USA.

Being a keen biospeleologist Prof. Ćurčić investigated numerous underground habitats (caves, pits) in Serbia and all other republics of the former Yugoslavia except Slovenia and greatly contributed to the better understanding of the cave fauna, primarily pseudoscorpions. These long-lasting investigations resulted in publishing of several monographs – "Cave-Dwelling Pseudoscorpions of the Dinaric Karst" (1988), "New and Little-Known False Scorpions from the Balkan Peninsula, Principally from Caves, Belonging to the Families Chthoniidae and Neobisiidae (Arachnida, Pseudoscorpiones)" (1997), "The Pseudoscorpions of Serbia, Montenegro and the Republic of Macedonia" (2004), and "Cave Fauna of Serbia, Montenegro and Macedonia" (2014).

Bearing in mind the importance of cave protection and conservation of these fragile ecosystems Prof. Ćurčić was the founder of the Center for Biospeleology at the Faculty of Biology, University of Belgrade and NGO Center for Biospeleology of Southeast Europe.

Being a scientist (zoologist) of broad interests, apart from pseudoscorpions, Prof. Ćurčić devoted a part of his scientific investigations to the study of some other arthropod taxa as well (spiders, millipedes, springtails, coleopterans). In collaboration with his younger colleagues from the Faculty of Biology, University of Belgrade he erected several genera and species new to science (seven genera and 32 species of coleopterans; six genera and 16 species of millipedes; one genus and 13 species of springtails) from Serbia, Macedonia, Montenegro, Bosnia and Herzegovina, Greece, Romania, Bulgaria and Croatia.

Apart from lecturing and conducting scientific research, Prof. Ćurčić found time for other important activities as well. He was elected a member of the editorial boards of several domestic and international scientific journals (*Acta zoologica bulgarica*, *Journal of Science - Sofia*, *Acta entomologica serbica*, *Proceedings of the Geographical Institute "Jovan Cvijić"* of the Serbian Academy of Sciences and Arts).

For almost a decade Prof. Ćurčić was the editor-in-chief of the scientific journal "Archives of Biological Sciences" and the Monographs, Institute of Zoology, Faculty of Biology, University of Belgrade. Owing to him the "Archives of Biological Sciences" entered the SCI list.

Prof. Ćurčić lectured at many universities and scientific institutions in many cities worldwide (Ljubljana, Zagreb, Sarajevo, Skopje, Athens, Thessaloniki, Bucharest, Sofia, Paris, Geneva, Florence, Moscow, St. Petersburg, Frankfurt am Main, Boston, Cambridge).

In the course of his investigations devoted to the study of pseudoscorpions, Prof. Ćurčić visited and spent time in research in many scientific institutions such as: CNRS (Moulis); Smithsonian Tropical Research Institute (Barro Colorado, Panama); Museum of Natural History (Paris); Museum of Natural History (London); Russian Academy of Sciences (Moscow); Institute of Zoology, Bulgarian Academy of Sciences (Sofia), to name a few. He collaborated with many colleagues from different countries and institutions (museums, faculties and institutes) and had close professional connections with them. He enabled professional specialisation of his younger colleagues in France, Denmark, and Bulgaria.

During 45 years spent at the Faculty of Biology (Science) Prof. Ćurčić lectured several courses both on graduate and post-graduate levels (Animal Development, Systematics and Phylogeny of Invertebrates, Human Embryology, Pedozoology) in the Institute of Zoology and became the Head of the Department of Animal Development, the position which he held successfully for nine years.

At the same time Prof. Ćurčić held many important professional positions at the Faculty of Biology and the University of Belgrade. He was the Director of the Institute of Zoology, Head of the Department of Animal Development at the Institute of Zoology, President of the Council, Vice Dean and President of the Executive Council at the Faculty of Biology, to name a few.

Prof. Ćurčić was a fellow and a member of numerous domestic and foreign scientific societies – Royal Entomological Society, American Arachnological Society, Russian Arachnological Society, British Arachnological Society, Japanese Arachnological Society, Council of the European Association of Arachnologists, Swiss Zoological Society, Serbian Biological Society, Entomological Society of Serbia, etc. He was the President of the Serbian Biological Society and the Entomological Society of Serbia.

Throughout his university career Prof. Ćurčić was both the founder and the leader of several domestic and international scientific projects sponsored by the Serbian Ministry of Education, Science and Technological Development, Macedonian Ministries of Culture and Ecology, Bulgarian Academy of Sciences and Serbian Academy of Sciences and Arts.

Although deeply involved in numerous scientific and professional activities Prof. Ćurčić managed to find time for assistance and support to his younger associates and colleagues. He was mentor of 23 MSc and PhD theses.

In the course of his prolific teaching and scientific career Prof. Ćurčić was the author and co-author of 28 textbooks, 18 monographs and more than 600 scientific papers. He was also the editor of 20 monographs.

As a token of recognition to many years of his fruitful scientific research and his outstanding contribution to zoology, several new invertebrate taxa to science – one genus and six species were named after him (*Curcicia* Ćurčić & Brajković, 2003, *Neobisium bozidarcurcici* Dimitrijević, 2009, *Svarogosoma bozidarcurcici* Makarov, Mitić & Ćurčić, 2003, *Magdelainella bozidarcurcici* Ćurčić & Brajković, 2002, *Schizmohetera curcici* Makarov, 2001, *Belgrandiella bozidarcurcici* Glöer & Pešić, 2014, *Serbiella curcici* Lučić, 2001).

Fifteen years ago Prof. Ćurčić was elected as a foreign member to the Bulgarian Academy of Sciences in Sofia. Prof. Ćurčić also was the Chairman of the MAB (Man and Biosphere) Committee, Commission of Serbia for UNESCO.

Besides his continuous scientific research Prof. Ćurčić had many other versatile interests and devoted part of his free time to literature, history, ethnology and art. His sound knowledge on ancient (Greek, Roman and Slavic) mythology enabled him to name many pseudoscorpion species new to science after gods and deities.

It seldomly happens that someone's name is so closely associated with the study of a certain group of animals. The name of Prof. Dr. Božidar Ćurčić is inseparably connected with the study of pseudoscorpions in Macedonia.

The pseudoscorpion fauna (both epigeal and cavernicolous) of Macedonia is without any doubt insufficiently investigated. On the basis of the present knowledge, only 45 species belonging to six families are presently known in Macedonia. Of these six families, the Neobisiidae family is the most numerous, with 21 known species (47% of all known species in the country).

During several decades of his fruitful scientific career, Prof. Dr. Božidar Ćurčić erected 25 pseudoscorpion species new to science from Macedonia (11 chthoniid and 14 neobisiid species). These 25 species represent 56% of all known pseudoscorpion species populating Macedonia.

In 1972 Prof. Ćurčić erected the first new species to science from Macedonia (*Chthonius macedonicus* Ćurčić, 1972), and almost four decades later the last one – *Neobisium anaisae* Ćurčić & Lemaire, 2009.

In 1997 the monograph entitled „New and Little-Known False Scorpions from the Balkan Peninsula, Principally from Caves, Belonging to the Families Chthoniidae and Neobisiidae (Arachnida, Pseudoscorpiones)“ was published. In this monograph nine chthoniid species new to science from Macedonia were established. Several years later (in 2004) another monograph dealing with Macedonian pseudoscorpion fauna was published – „The Pseudoscorpions of Serbia, Montenegro and the Republic of Macedonia“.

Furthermore, in 2008 „Advances to Arachnology and Developmental Biology – Papers Dedicated to Professor Božidar P. M. Ćurčić“ was published, the monograph containing scientific papers by eminent zoologists, colleagues and friends of Prof. Ćurčić from a number of countries including Macedonia.

Prof. Dr. Božidar Ćurčić had a fruitful and long-lasting scientific cooperation with his Macedonian colleagues from numerous scientific institutions (e.g., Dr. Ognenka Popovska-Stanković, Dr. Ljupčo Grupče, Dr. Svetozar Petkovski, Branislava Mihajlova, MSc, Snežana Stanković-Jovanović, MSc, Emilija Stojkoska, to name a few).

Prof. Dr. Božidar Ćurčić had a very successful cooperation with his colleagues from Macedonia, mostly from the Macedonian Museum of Natural History in Skopje. He was the founder and the leader of several scientific projects that were financed by the Macedonian Ministries of Culture and Ecology. As the result of these investigations numerous scientific papers were published, broadening the knowledge of the biodiversity of many arthropod groups in Macedonia. Some of the results of the investigations of the pseudoscorpion fauna from Macedonia were published in the „Fragmenta balcanica“ scientific journal published by the Macedonian Museum of Natural History in Skopje.

During his scientific career Prof. Dr. Ćurčić undertook many cave explorations in Macedonia. These investigations resulted in establishing numerous caver-

nicolous pseudoscorpion taxa new to science and pointed out to the richness of pseudoscorpion biodiversity in Macedonia. Hopefully, some younger zoologists (arachnologists) will, in a due time, proceed the scientific investigations of pseudoscorpions and in such a way continue the work of Prof. Dr. Božidar Ćurčić. It would be a pity not to continue further investigations of this group of arachnids in Macedonia and the surrounding areas. With such richness and variety of karst forms in Macedonia, without any doubt, many pseudoscorpion taxa new to science are waiting to be erected.

On the ground of the present knowledge, 21 neobisiid species are known from Macedonia, 14 species pertain to the *Neobisium* Chamberlin, 1930 genus and eight species to the genus *Roncus* L. Koch, 1873. In 1938 Dr. Jovan Hadži erected the first *Roncus* species from Macedonia – *R. parablothroides* Hadži, 1938. Several decades later, Prof. Dr. Božidar Ćurčić established two additional cavernicolous *Roncus* species new to science (*R. lychnidis* Ćurčić, 1984 and *R. jaoreci* Ćurčić, 1984), and in the years to follow he erected all other Macedonian pseudoscorpion species pertaining to this genus, too. Additionally, seven species of the genus *Neobisium* were established from 1974 to 2009. Of all known neobisiid species from Macedonia (21), Prof. Dr. Božidar Ćurčić erected 14 ones, i.e., almost 67%.

Family Chthoniidae is on the second place by the number of known species in Macedonia. Presently 17 chthoniid species are known from Macedonia and 65% of these species were erected by Prof. Dr. Božidar Ćurčić (11 species).

Prof. Dr. Božidar Ćurčić was keen on Macedonia, spending many of his holidays in various places in the country. Of these, Ohrid was his most favorite. Even when on holidays, he often took the opportunity to collect the scientific material. Some of the species new to science were sampled at that time (e.g., *Neobisium korabense*, *Roncus lychnidis*).

Prof. Dr. Božidar Ćurčić did not limit his studies solely to investigation of the pseudoscorpion fauna of Macedonia. Together with his colleagues he contributed to the better understanding of the biodiversity of some other arthropod groups that inhabit Macedonia. He erected six species of diplopods, coleopterans and springtails new to science.

The list of arthropod species from Macedonia described by Prof. Dr. Božidar Ćurčić

Class Arachnida

Order Pseudoscorpiones

Family Chthoniidae

- Chthonius (Chthonius) macedonicus* Ćurčić, 1972
- Chthonius (Ephippiochthonius) kupalo* Ćurčić, 1997
- Chthonius (Ephippiochthonius) lychnidis* Ćurčić, 1997
- Chthonius (Chthonius) ognjanka* Ćurčić, 1997
- Chthonius (Chthonius) ohridanus* Ćurčić, 1997
- Chthonius (Globochthonius) perun* Ćurčić, 1997
- Chthonius (Chthonius) radigost* Ćurčić, 1997
- Chthonius (Ephippiochthonius) vid* Ćurčić, 1997
- Chthonius (Chthonius) vodan* Ćurčić, 1997
- Chthonius (Chthonius) zmaj* Ćurčić, 1997
- Chthonius (Ephippiochthonius) lagadini* Ćurčić & Rađa, 2011

Family Neobisiidae

- Neobisium princeps* Ćurčić, 1974
- Neobisium korabense* Ćurčić, 1982
- Neobisium golemanskyi* Ćurčić & Dimitrijević, 2001
- Neobisium maksimodorovici* Ćurčić & Dimitrijević, 2002

- Neobisium vladimirpantici* Ćurčić, 2004
- Neobisium tzarsamueli* Ćurčić & Dimitrijević, 2006
- Neobisium anaisae* Ćurčić & Lemaire, 2009
- Roncus jaoreci* Ćurčić, 1984
- Roncus lychnidis* Ćurčić, 1984
- Roncus dazbog* Ćurčić & Legg, 1994
- Roncus kikimora* Ćurčić & Legg, 1994
- Roncus rujevit* Ćurčić & Legg, 1994
- Roncus veles* Ćurčić & Legg, 1994
- Roncus stankokaramani* Ćurčić & Dimitrijević, 2001

Class Diplopoda

Order Polydesmida

Family Polydesmidae

- Brachydesmus zlatiborpetrovici* Ćurčić & Makarov, 2002

Order Julida

Family Julidae

- Typhloiulus giganteus* Ćurčić & Makarov, 2002

Class Insecta

Order Collembola

Family Tomoceridae

- Tomocerus skopjensis* Ćurčić & Lučić, 2001

Family Entomobryidae

- Heteromurus (Verhoeffiella) constantinellus* Ćurčić & Lučić, 2007

Order Coleoptera

Family Carabidae

- Tapinopterus macedonicus* S. Ćurčić, Waitzbauer, Zolda, B. Ćurčić & Mihajlova, 2008

Family Leiodidae

- Petkovskiella henrikenghoffi* S. Ćurčić & B. Ćurčić, 2005

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