# In memoriam Sister Edita, Marija Šolić, PhD (1946 – 2021)

Marija Šolić was born on August 26, 1946, in Brštanovo, Klis municipality, now in Split Dalmatia County, Croatia. Her parents, Petar and Luca, had nine children. Two of them did not survive the Second World War when their parents lived in Slavonia. After the war, the parents returned to Brštanovo, where the youngest daughter, baptized Marija, was born.

Marija completed primary school in her birthplace, and in 1963 joined the order of the School Sisters of St. Francis, in 1965 she took her vows as a nun, choosing religious name Edita. She was to use this name, along with the baptized name of Marija, until the end of her life. In 1966 Sister Edita was sent to the Franciscan convent in Makarska, where she was employed at the Malacology Museum. Soon she became the associate of Jure Radić OFM, PhD, the founder of the Museum in Makarska, working with him on the establishment of the Mountain and the Sea Institute and forming scientific collections of marine mollusk shells (malacological collection), collections of fossil mollusks and other invertebrates, as well as live and herbaria plant collections.

The arrival of Sister Edita in Makarska was a watershed moment for her. There she became Jure Radić's active associate, his diligent pupil, which opened up to her new horizons in the sphere of nature in general, especially of Mt. Biokovo with Makarska at its foot, and the sea on the coast of which Makarska lies. Craving for knowledge and Radić's initiative led her to further education. The most obvious way was to take studies in biology. However, as Sister Edita did not have a certificate of secondary education, she needed to take the entrance exam for university. She passed this exam on 26 September 1972 at the Department of Biology, Faculty of Science, University of Sarajevo. In the academic year 1972/73 she was enrolled as a part-time student in the year one of the Biology Department studies, in the group Environment Conservation. This also enabled her to become a permanent employee at the Malacology Museum in Makarska as an assistant curator.

As an employee of the Museum, she was requested to come to Sarajevo from time to time and attend lectures and practical lessons organized for part-time students. That was not an easy part of Sister Edita's life, but with great efforts and her great wish for knowledge, she successfully graduated on 24 August 1980. She completed her diploma thesis



Fig. 1. Marija Edita Šolić (1946 – 2021).

"Significant Biokovo plants with special emphasis on their protection" under the supervision of Professor Radomir Lakušić at the Department of Biology, and defended it with the best grade (10). She earned the title BSc in Biology – Environmental Conservation.

In the academic year, 1981/82 Sister Edita continued her education at the Department of Biology of the Faculty of Science in Sarajevo, within the two years of graduate studies in Ecology. Her graduate studies were approved by the Postgraduate Council, based on previously completed pregraduate studies and published works. She completed all the exams of the postgraduate curriculum with an average grade of 9.2. Her master's thesis was titled "Chorologic-ecological and phenologic-morphological differentiation of Biokovo's endemic Centaureas from subgenus *Acrolophus* (Cass.) Dobr.-Kov.". The thesis was written under the mentorship of Radomir Lakušić. Having successfully defended the master's thesis on 30 May 1986, she was awarded the degree of MSc in Biology – Field of Ecology.

While still pursuing her education, Marija Edita Šolić worked with Jure Radić in the Malacology Museum and the Mountain and the Sea Institute. She helped to take care of the existing, and to create new mollusk collections, as the Museum received more and more new material through exchange and donations. That helped her get knowledge in malacology and museology, so she advanced to the position of museum curator. She was constantly engaged in the presentation of the already renowned museum displays to numerous visitors, domestic and foreign, as she was fluent in scientific English, Italian, and German. A great number of pupils and students visited the Museum as a place of knowledge and a source of education, and Sister Edita played a special role during those visits. She had to the gift of conveying knowledge and made great use of it with these groups of visitors. In the Institute she worked on the acquisition and processing of literature, exchange of publications, on keeping extensive correspondence with associates of the Institute, and also worked with the herbarium.

Along with work in the institute, Sister Edita did extensive field research on Mt. Biokovo. On these occasions she would replace her habit with a mountaineering outfit and gear, always wearing a big backpack in which she would bring live plant material for the experiments in the Institute's small botanic garden. She would also bring carefully collected specimens for the Institute's herbarium as well as for her own research. Her backpack would often contain material collected for the scientific research of her colleagues from universities and institutes in Croatia and neighboring countries, and further afield. She processed collected plant material, classified it according to scientific criteria, and stored it in the Herbarium. She became the curator of the Herbarium, which was established in 1963, and which after several years was recognized and registered as the Herbarium of the Biokovo Area (Index Herbarium ID: 124939, MAKAR). The Herbarium contains carefully prepared vascular plants and algae, ca. 25,000 exsiccations. Plant material in the Herbarium is mostly from Mt. Biokovo, but there are also specimens from all over Dalmatia.

As Sister Edita gained a deeper and deeper knowledge of nature in general, especially of the plant kingdom, which was of her utmost interest, education at a higher level and the attainment of a doctorate became her next goal. She acquired her doctoral degree in natural sciences – field of biology at the Faculty of Science of the University of Zagreb on July 14, 1993. The title of her doctoral thesis was "Floristic-ecological features of the coastal slopes of Mt Biokovo ". In the thesis committee were Ernest Mayer (Slovenian Academy of Science and Arts, Ljubljana), and Ljudevit Ilijanić and Milan Meštrov (Faculty of Science, University of Zagreb).

With the rescript issued by the Ministry of Science, Technology and Informatics of the Republic of Croatia of 17 July 1991 Sister Edita was entered in the Register of Researchers as an associate researcher in a scientific field of biology. She attained the rank of scientific assistant in the field of biology on 17 December 1992, and upon the decision of the Ministry of Science of the Republic of Croatia was entered in the Register of Researchers on 11 February 1993.

In parallel to her progress in scientific research work in the field of biology, she also advanced in the field of museology. She began her museology career as an assistant curator, continued as curator (1993), to become a senior curator in 1999.

Marija Edita Šolić continuously worked on obtaining new knowledge and skills, occasionally with academician Ernest Mayer (Slovenia), at the Faculty of Science in Sarajevo (Bosnia and Herzegovina), at the Faculty of Science and the Croatian Natural History Museum in Zagreb, and with Čedomil Šilić, PhD, at the National Museum of Bosnia and Herzegovina in Sarajevo. Doctor Šolić also consulted numerous scientists from various scientific institutions home and abroad.

There is a long list of plant genera in which she did researche on one or more species. Here are some of them: *Abies, Allium, Centaurea, Edraianthus, Echinops, Fagus, Iris, Juniperus, Lilium, Narcissus, Olea, Salvia, Satureja, Stachys, Sternbergia, Teucrium, Thymus,* etc.

Marija Edita Šolić had various fields of interest in her scientific work in biology: morphology, systematics, chorology, autecology, synecology, and others, connected with the kingdom of plants in the first place. Interesting enough, and not frequent among botanists, is the fact that she also studied and was highly knowledgeable about malacofauna of marine mollusks, especially of the Adriatic Sea. Thus she was fully competent to work on the conservation of marine and terrestrial ecosystems.

The scientific problems Dr Šolić was working on were numerous and various. A great number of her papers were about Mt. Biokovo floristic endemism, and about the vegetation of this mountain. She studied the chorology of numerous species, their morphological and physiological characteristics, systematic-taxonomical problems, as well as the possibilities for and necessities of their conservation. She joined the team of Professor Sonja Šiljak-Yakovlev (Faculté des Sciences d'Orsay, Universié Paris-Saclay, France), and Professor Milka Maksimović (Department of Chemistry, Faculty of Science, Sarajevo), which allowed her to gain new and modern knowledge in the fields of cytogenetic, evolutionary systematics, and biochemical characteristics of plants, namely the microscopic level of species she already knew very well on a macroscopic level. Together they went very often to the field to collect material from Biokovo and wider area for further laboratory research.

Marija Šolić materialised her rich knowledge in scientific and professional papers. She published alone or in coauthorship in different domestic and foreign periodicals, as well as in presentations and reports at symposia, congresses, and other conferences. It could be generally concluded that her scientific and professional opus was comprehensive. Over the period from 1978, when as a student she published her first paper, to 2021 when she died, she published dozens of papers.

As M. E. Šolić possessed very good organizational skills, she was trusted with membership in the organizational committees of the following scientific conferences: the Second (1983), Third (1987), and Fourth (1992) Scientific Conference on the Nature of Biokovo held in Makarska; Congress Natural History Researches of the Biokovo Area, held



**Fig. 2.** Marija Edita Šolić during the fieldwork on Mt Komovi, Montenegro, 26 May 2007 (Photo: D. Šoljan).

in Makarska in 1993 (where she also was the congress secretary); 14th International Symposium on Biospeleology (Makarska, 1999).

Most of the proceedings from the mentioned conferences were published in the journal Acta Biocovica, whose editor-in-chief was Jure Radić, with Sister Edita Šolić being his first assistant. She was a member of the editorial board over the period 1983-2001. After Radić's death in 1990 Nikola Tvrtković, PhD, became editor-in-chief. From 1997 to 2001 Edita Šolić was the editor of the journal.

In February 2002 she signed an employment contract with the Institute of Oceanography and Fishery in Split, Croatia, where she was employed as associate for maintaining and upgrading floristic and faunistic collections. The contract was mutually terminated on 31 December 2010, when she retired.

She also was active in the popularization of biological science and ecology. She was invited to give lectures to audiences of different ages and educational levels, to children in kindergarten, pupils in primary and secondary schools, university students, and to all those who had an interest in nature and its conservation. The lectures showed her great knowledge of the Biokovo nature, with a sound knowledge of ecology supporting it. She always drew on her great knowledge and acted as activist for nature conservation using scientific arguments. Frequently, she was invited as a guest in radio and television programs, when the topic of discussion was nature conservation for the benefit of future generations. Thus she strongly and recognizably acted in the local community and further afield. Her life was one of sustained care for a healthy environment, for natural resources, both marine and terrestrial, for cohabitation with nature. She was an uncompromising supporter of the nature

conservation of Mt. Biokovo (one of the centers of endemism), and Makarska with the surroundings as the nucleus of natural and social resources. In those efforts, she did not always meet with the understanding and support of some fellow citizens from the local authorities. Lack of understanding was often related to the forced development of tourism, frequently at the expense of natural resources.

"Marija Sister Edita Šolić, PhD, remained faithful to the profession and conclusions of the first scientific conference on the nature of Biokovo area, which already then clearly formulated problems that Makarska would face within the years to come. Upon the proclamation of the Nature Park to continue with the preparation of the terrain for a higher level of conservation of Mt. Biokovo, the preservation of its flora garden in a natural ambiance, to conduct research into water and the sea bed, preserve forests, downsize to a minimum any polluting industrial development, with urgent solutions for wastewaters in the entire Makarska area..." (In memoriam: Dr. Sc. Marija s. Edita Šolić, dobitnica Nagrade Grada Makarske, www.makarska.hr, 3.11.2021.).

Although Marija Edita Šolić in her active struggle for leaving nature to the future generations in the best possible state often experienced lack of understanding on the part of and disappointments from the local community, she also received understanding and acknowledgments for that struggle. She received the Silver Plaque for the exceptional achievements and merits in the promotion of the Croatian economy in 1992 (awarded by the Croatian Chamber of Commerce - Regional Chamber Split), award of the Biokovo Croatian Mountaineering Association in 1996, the Annual Award and recognition of the achievements in the fields of environment conservation and biological and environmental diversity (1997). At the formal assembly of the City Council, on the occasion of the Day of Makarska in 1998, she was awarded the City Prize for merits in scientific research into the flora and fauna of Mt. Biokovo, the sea, and the coast, and conservation and protection of nature.

Along with scientific, professional, and educational work in the field of nature, Sister Edita lived her religious life, for which she decided in the early days and which lasted for 57 years. Even before becoming an educated biologist, Sister Edita was a nun and remained so until the end of her life. In Makarska, she lived in the nunnery of the School Sisters of St. Francis at the Franciscan Convent. The closing of the nunnery in 1999 was a critical moment in her life, as continuation of her life in Makarska was came into question, as did her work at the Mountain and the Sea Institute, the Herbarium, the Malacology Museum, the Natural Botanical Garden in Kotišina, the Biokovo Nature Park. The only thing that remained was to address the Provincial Board in Split and the General Board in Rome with a request that she be allowed to stay in Makarska. The request was granted and she was permitted to live outside the convent community and stay in Makarska, living and working at the Mountain and the Sea Institute.

The overview of Sister Marija Edita Šolić's life and work tells undoubtedly that she was an exceptional person in ma-

ny ways. In the first place, she was a nun, devoted to the faith in God she received in the religious Catholic family, deciding in her early days on a religious life. Yet, that calling did not prevent her from understanding and practising, within permitted and strict limits, the life of people who are not in a religious community. She knew how to balance between those two ways of living, being freely active on both tracks, in their fullness and clarity.

She helped her friends, acquaintances, and all those who needed help in spiritual and material spheres as much as she could. I had the honor of being her friend for over 50 years. Our friendship started the day when we first met in Sarajevo, on the occasion of her preparations for the entrance exam at the Biology Department of the Faculty of Science. Those were precious moments of her preparing for the exams and happiness for its successful pass and her eligibility for studying biology. Our cooperation and friendship continued during her further education until she earned the Master's degree. The war period in the 1990s made the work on her doctoral thesis in Sarajevo impossible.

Many events in human lives cannot be foreseen. So, it was unforeseen that mentor of my doctoral thesis, Professor Radomir Lakušić, would give me, as the subject of a thesis, research in the endemic taxa of the genus Edraianthus from Mt Biokovo. My task, among other things, was to conduct extensive field research in a mountain I was not at all familiar with. I needed help, and I unconditionally received it from my longtime friend, Sister Edita. Every time I went to the field over the years, in different seasons, I went with her. Often with us was Jure Radić, who had an excellent knowledge of the mountain, from the foot to the peak, from the littoral to the inland side. He also was an excellent connoisseur of the Biokovo flora and the sites where I could collect interesting and necessary floristic material, as well as information on habitats. Our fieldwork frequently started before sunrise, ending after sundown, at twilight. I felt very thankful to both of them for the engaged effort, energy, time, but also for the opportunity to become familiar with them in the moments when they, with prayers and liturgical chants, celebrated God and His creation seen in the beauty of the sky, rocks, sea, watched from the heights of the mountain, of flora and fauna. These are unforgettable events in my life.

Sister Edita did not accept boundaries among people, she connected with people of different educations, religious and ideological beliefs, not caring about their origins or possessions. Most important for her was their wish and intention to become acquainted with nature and protect it, and she wanted to help them with that. Thus she made a wide range of acquaintances and a great number of friends. She met all of them with a wide smile and open arms. Because of all this, a great emptiness will remain after her departure, on October 31 of this year, and the sincere if sad memories of all those who knew and were close to her.

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