

## Assistant Professor Ljerka Regula-Bevilacqua – Croatian botanist. On the occasion of her seventieth birthday



The unusual and devoted professional life of Associate Professor (*dozent*) Dr Ljerka Regula-Bevilacqua has been divided among interests in pure science, professional affairs and the popularisation of science, for more than 50 years never far away from the place she has loved best: the Botanical Garden of the Faculty of Science in Zagreb. Until recently she was also a horticulture teacher at the Faculty of Science, where she supervised many undergraduate dissertations, making an immense contribution to the development of Croatian horticultural and botanical sciences, and where she still participates in many projects and ongoing business. Although retired for several years, hardly a day goes by in which she does not take a quick tour of the Garden, and then, seeing everything is in place, sitting at a desk piled high with books and herbarium materials.

Born in Zagreb, on April 11, 1934 to her father Antun Bevilacqua and mother Leopoldina (nee Rolich), Ljerka Bevilacqua fell in love with the Croatian flora and vegetation quite early, together with her older sister, Branka, also to become a botanist. Ljerka Bevilacqua attended both elementary and high school in her home town, graduating from the Eighth Real Gymnasium in 1953. In the academic year 1953/54 she enrolled in the Biological Department of what is today the Faculty of Science, University of Zagreb, where she discovered a real gift for research and a good eye for plant determination, and an especial interest in geobotany; while still a student she participated in the mapping of the flora of the Križevci District, directed by famous Croatian botanist Academician Stjepan Horvatić, whose disciple she was. She graduated on June 29, 1959, with a dissertation on the flora and vegetation of the Samoborsko prigorje from Mt Plešivica to Jaska, work on which she had been supervised by Professor Horvatić.

After finishing her studies, Ljerka Bevilacqua, now with the degree of BSc, was offered a very promising post at the Institute for Medical Research and Occupational Health, of the Yugoslav (later Croatian) Academy of Sciences and Arts, as it then was, which she slightly reluctantly accepted on September 1, 1959, for want of other opportunities. While she worked there quietly and professionally on amoeba research (publishing works co-written with her mentor Dr Yvette Škreb), who would have thought that young Lela was dreaming about something completely different? She even enrolled in the postgraduate course, with Professor Zvonimir Devidé as her mentor. But, at the first opening, in 1961 she took the brave step, of quitting this respectable and promising career in the Institute, becoming a

lowly (and greatly underpaid), half-time Botanical Garden technical assistant – a position which required less than a high-school education at the time! She explained to her shocked family, colleagues and friends then, as she does today, that research into flora and the cultivation of plants was all that she ever wanted to do with her life. Amoeba just did not fit in.

Since that April 1, 1961, Ljerka Bevilacqua – soon to take the name of Regula in addition, on marrying fellow botanist Ivan Regula, a long-serving professor of plant physiology at the Faculty of Science – has worked for practically forty-five years in the same Botanical Garden, of the Faculty of Science, University of Zagreb. As early as November 1, 1961, she was promoted, from being a member of the technical staff to the rank of Botanical Garden assistant, and after getting her MSc, on November 21, 1965, she was promoted to the rank of Senior Assistant, as of September 27, 1972.

On April 20, 1978 Ljerka Regula-Bevilacqua defended her doctoral dissertation entitled »The Vegetation of Mt Strahinščica in Hrvatsko Zagorje« (mentor Professor Stjepan Horvatić, and subsequent to his death, Professor Ljudevit Ilijanić). On the retirement of long-time Botanical Garden director Dr Sala Ungar, she became manager of the Botanical Garden, a post which she held for 12 years (July 1, 1978–March 1, 1990). On April 8, 1985, Dr Regula-Bevilacqua was appointed Professional Consultant in the Botanical Garden, and on June 1, 1993, advanced one step higher, obtaining the rank of Senior Professional Consultant, the highest rank obtainable in the Faculty in the professional stream.

In parallel with devotedly supervising the Garden, Dr Regula-Bevilacqua was conducting horticulture classes for biology students, writing original scientific, review and popular papers, books and course notes, and making numerous field trips while studying the flora and vegetation of the Croatian inland and Mediterranean areas. Over the years, Dr Regula-Bevilacqua became one of the generation's top five experts in Croatian flora in its finest details, working side-by-side with professors Ljudevit Ilijanić, Ivo Trinajstić and Ljerka Marković.

Then, in 1994, a strange event happened: in a still inexplicable governmental decision (which is still valid), all promotions obtained in the professional or technical stream were rescinded, and after 35 years of dedicated work, 15 years of teaching and all the scientific and professional papers and books published, the November of 1961 reappeared in Dr Regula-Bevilacqua's life: she was, with other Garden staff-members, reduced from the highest to the lowest rank, for since that period there has been only one grade in the non-academic stream, which is Technical (Garden) Associate, with of course the »appropriate« salary scale.

In order to compensate for this evident discrimination, the Faculty of Science promoted Dr Regula-Bevilacqua to a purely scientific grade (which she had repeatedly declined in the past, wishing to stay and work in the Garden). This was done in stages: first she became an assistant, and then associate professor (*dozent*), the position in which she was finally retired on October 1, 1999. From that time until October 1, 2004, she continued to work as a part-time teacher of botany at the Faculty of Science.

The purely **scientific work** of Dr Regula-Bevilacqua has been oriented to the flora and vegetation of Croatia, concerning which she has published 24 papers and taken part in and delivered addresses to 13 scientific conferences. With the research she has carried out, she has completed the knowledge of the distribution of various plant species in Croatia, among which is *Salvia peloponnesiaca*, a new species for the Croatian flora, which Dr Regula-

-Bevilacqua discovered on the island of Mljet. In the Mediterranean region of the Adriatic coast, she most of all investigated the flora and vegetation of the island of Korčula, the Pelješac Peninsula, and the island of Mljet, for which a plant geography analysis of the whole of the vascular flora known to date was made. In the inland area of the country, Dr Regula-Bevilacqua made her most detailed investigations into Hrvatsko Zagorje, where on Mt Strahinščica an inventory of the flora resulted, as well as a complete analysis of the plant geography.

In papers on vegetation, she published definitive works on the plant sociology and ecological characteristics of vegetation of the acidophilic forests of the class *Quercetea robori-petrae*, then of grassland vegetation of the classes *Molinio-Arrhenateretea* and *Festuco-Brometea*, and the ruderal and weed vegetation of the classes *Chenopodietea*, *Bidentetea* and *Artemisietea*. In these investigations it was determined that the vegetation of NW Croatia is very closely akin to the same types of vegetation in the rest of Central Europe, thus characterising in more detail the phytogeographical position of the region. In fact, thus work showed that Hrvatsko Zagorje belongs to a transitional region between the Illyrian province of the Euro-Siberian and the North American region on the one hand, and the Central European province on the other, with which it has more kinship.

As consultant of the one-time Botany Institute of the University of Zagreb, Dr Regula-Bevilacqua worked on scientific research projects such as the *Analytical Flora of Yugoslavia*, *Plant Sociology, Ecology and Bio-Sociology Research into the Ecosystems of Croatia*, and the *Flora of Croatia*, and on the Ministry of Science projects: *Natural History Research into the Region of Makarska* and *Investigations of the Flora of Croatia*. As part of these projects, Dr Regula-Bevilacqua had sabbaticals in Wrocław (Poland), Zurich, and Cambridge, UK.

Dr Regula-Bevilacqua started her work as a **teacher** in academic year 1980/81, when she was confided lectures and exercises in the Horticulture Chair, for students of the 4<sup>th</sup> year of all courses in biology, in the Faculty of Science. In this area she supervised 12 undergraduate dissertations.

Dr Regula-Bevilacqua has always made more of her **professional and technical work** than her activities in pure science, and esteemed it alongside her work in education. She paid much more attention during her working life to professional work and to further training, primarily through a broad range of various obligations and assignments in the Botanical Garden, horticulture in general, and the overall problem area of botanical gardens and their place in the history of modern society, on which she had published some score of papers. Dr Regula-Bevilacqua visited and kept up contacts with many other botanical gardens all round Europe (Austria, Denmark, France, Italy, Germany, Poland, Portugal, the Slovak Republic, Spain, Sweden, Switzerland, the United Kingdom and, of course, all the countries of the former Yugoslavia). She made exceptional contributions to two major projects related to horticultural practice, botanical science and the social component of the planting of gardens: *The Introduction, Acclimatisation and Application of Plants for the Greening of Urban Environments* and *Study of the Indigenous Eco-Types of Ornamental Trees, Shrubs and Herbaceous Plants of the Western Mountain and Coastal Area of Yugoslavia*. To date Dr Regula-Bevilacqua has published about 25 review articles and 115 review and popular science papers about various plant species of indigenous and introduced flora in various

magazines and other papers (for example in *Priroda*, *Hortikultura*, *Ekološki glasnik*, *Kaj*, *EuroCity*, *Vrt*, *Naša flora*, *Hrvatska vodoprivreda*, and the *Gärtnerisch-botanischer Brief*) and even today she is still busily writing and publishing. Among the fifty or so other articles, reviews and surveys, 23 works of a biographical character particularly stand out, pride of place being held by those concerning botany teachers at the University of Zagreb. Thus the Croatian Botany Association thus proposed to Dr Regula-Bevilacqua that she might like to publish a book on the big names of Croatian botany, to be put out by the Association itself, which she accepted with satisfaction, remarking that she just »had to find a little time«. And so far she has written three books, has been the co-author of another five, and prepared one two-part set of course materials. She has delivered communications to 13 conferences from the profession.

Dr Regula-Bevilacqua is a **member** of no fewer than 10 professional societies and eight other non-professional associations (but never any political!): i.e. the Croatian Biological Society since 1959, Croatian Ecological Society since 1973, the Landscape and Horticultural Society since 1978, the Eastern Alps and Dinaric Society for Vegetation Research since 1983, and the Croatian Botanical Society since 2002; and, for example, the Croatian-Japanese Society, the *Kajkaviana* Association, the Friends of the Zagreb Philharmonic Orchestra, and others.

For achievements in her work and her endeavours in various areas, Dr Regula-Bevilacqua has received several **commendations**, five Acknowledgements, and a Memorial Certificate and Charter of the city of Krapina for her performance in the investigation of the flora of the area.

Over the years, Dr Regula-Bevilacqua has performed numbers of duties in the Administration and Executive committees of the Faculty, and carried out a number of different assignments within the Administrative Committee of the Croatian Section of the Association of Ecologists of Yugoslavia. In 1968, the Croatian Natural History Association elected her a representative for the Republic Committee of the campaign for the »Aesthetic Development of the Educational Institutions of Croatia« and from 1979 she was representative of the Faculty of Science in the same committee. Between 1978 and 1982 she was a representative in the *Tree of Youth* Assembly. She was a member of the Scientific Council for the Protection of the Nature of Croatia in the Croatian Academy of Sciences and Arts (1994–1998) and in March 1996 the Faculty of Science elected her a member of the Council for the Commemoration of the 210 Years of the Existence of Drawing Schools in Croatia. Today she is a member of the Editorial Board of *Priroda*, the oldest ecological journal in the world.

Dr Regula-Bevilacqua has given over thirty public lectures, and taken part in very many radio and television broadcasts, has been leader and member of commissions of the programme entitled Science to Youth. She has single-handedly put on three exhibitions: in Zagreb City Museum, about the Botanical Garden to mark the centenary of its founding (1989 – and in the same year organised a three day celebration to mark the same occasion); the Wild Flora of Strahinščica in Krapina, to mark the 8<sup>th</sup> centenary of the foundation of the City (1993) and in the lobby of the Croatian Academy an exhibition about Academician Stjepan Horvatić, marking the 100<sup>th</sup> anniversary of his birth (1999). She also played an active part in several other exhibitions, such as *Science and the Croats*, *Drawing in Science*,

and this year's exhibition on the occasion of the 115<sup>th</sup> anniversary of the foundation of the Botanical Garden of the Faculty of Science.

There is no retirement program capable of keeping Dr Regula-Bevilacqua away from her interests: she is still very active in writing and publishing technical and popular, horticultural and botanical papers in Croatian journals and newspapers. She took part also in the latest edition of the »Red Book of Croatian Flora« and »Endemic Plants of the Croatian Flora«. However, maybe the best example of her inexhaustible energy is her recent cheerful involvement in the very extensive and – even for much younger field researchers – physically challenging international *Karst Ecosystems Conservation* (KEC) project, where I have had the pleasure to accompany her, and continue to learn a lot from her wide experience, immense insight into the Croatian flora, and unusual vigour of spirit. Having had the honour to have been one of Dr Regula's students and disciples for 15 years, on this occasion I would like to congratulate Dr Ljerka Regula-Bevilacqua on her seventieth birthday, on behalf of all of her colleagues, friends and students, and to pay tribute to her for her outstanding contributions during almost half of the century of dedicated work.

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