

**PAYING HOMAGE TO ACADEMICIAN CONSTANTIN TOMA
ON HIS 85th BIRTH ANNIVERSARY**

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I have to confess I am really moved in my attempt of presenting the life trajectory of the distinguished personality of professor Constantin Toma, starting from his first steps up to the eminence he reached today. Suitable words are difficult to find, so that I shall let his accomplishments illustrate this approach, hoping indeed that the young ones will be guided by this path in their efforts to reach the same professional and human height.

Academician Constantin Toma was born on November 19, 1935 in Gugești, county of Vaslui, son of a farmer who cultivated a small surface of land strictly for supporting the family, in parallels working as a furrier, an important handicraft in all villages, especially in winter.

He spent his childhood in the patriarchal atmosphere of the traditional Romanian inter-war village, characterized by modest economic stability, in which each family used to work “till dawn at sunset”, thus earning a modest but quiet living; unfortunately, the outbreak of the second World War undermined this idyllic life, mainly by the fact that – with all valid men sent to the front – the whole rural economy had to be continued, at all costs, by old people and women – an

extremely difficult period, characterized by continuous deprivations and efforts made for mere survival. In the end of the war, the economic and social disaster was followed by the great draught of the year 1946, which brought about famine and diseases, causing numerous victims, especially in the region of Moldova. More than that, in 1947, when only 12 year-old, Constantin loses his father, the entire family – formed of six children – remaining only with the mother, who had to face incredible burdens and who had to guide and care for all of them with stoicism and endless efforts.

In such a climate of poverty and uncertainties, the child of those days, the academician of today, came to understand that the only way of facing the burdens of life was work, perseverance, seriousness and sobriety.

He begins his first school years in 1943, in his native village, then in the small town of Huși. In the year 1950 he is admitted, following a severe exam, to the “Cuza Vodă” Lyceum of Huși, a reputed institution, with a dedicated teaching staff, animated by high cultural interests, who strived to transmit to their pupils the esprit of hard work, seriousness and perseverance in their professional training, as well as a distinguished social education. Along all his secondary school years, he acted as a diligent youth, dedicated to learning and to his cultural formation. In 1953, after passing a severe admittance exam, he is enrolled as a student of the Faculty of Natural Sciences – at the “Alexandru Ioan Cuza” University of Iași.

As a student, he continued to face numerous material difficulties, yet, with the enthusiasm of his youthful years, he remained confident in his own powers, and continued to work and again work hard.

During all his 5 years of university studies, he never missed a lecture, a laboratory work, the practice hours in the open or the scientific circles of his colleagues, while also participating to extra-school activities, eager to enlarge his cultural and social horizon.

As he himself declared more than once, in various occasions, the young student had reputed professors as mentors and models, who taught him strictness, professional abnegation and objective exigency, a lesson of life he later on, in his turn, applied in his future university didactic career, with his students.

In the end of the university years, in 1958, professor Constantin Burduja, head of the discipline of Plant Morphology, who appreciated the results obtained by his very special student, invited him to apply for the position of university preparer, so that, after the examination he passed, starting with October 1, 1958, Constantin Toma began his didactic career; one year later, he was promoted university assistant, and in 1966 – lecturer.

From his first years of didactic career, he won students attention by his professional abnegation, limpidity of lectures, always accompanied by a very rich illustrative didactic material and a lot of drawings, guiding them with patience and understanding along the difficult paths of learning: assimilation of the numerous botanical terms, utilization of the microscope for the discovery of the invisible

structural universe of plants, mastering of the technique of microscopic preparations obtaining.

In the year 1962, he becomes a candidate for a PhD degree at the University of București, his PhD thesis, supervised by the reputed professor Ion T. Tarnavschi, and entitled “A morpho-anatomic (comparative, ontogenetic, ecologic and experimental) study of all species of *Coronilla*, *Onobrychis* and *Trifolium* from the flora of Romania”, being publicly defended in 1969.

In the new position of Doctor in Biology, C. Toma elaborated an impressive number of scientific studies, recognized at both national and international level, which brought to him, in the year 1972, the position of associate professor; there followed, in 1978, in a period when the scientific titles were rarely offered, and quite often on the basis of political and not on competence criteria, the position of full professor, a promotion supported by his personal scientific achievements, recognized both in the country and abroad.

His almost permanent presence in the laboratories and the availability to dialogue with all those asking for answers to difficult professional questions explained the great number of students attending the laboratory of vegetal anatomy and morphology, who prepared their leaving school diploma, master or PhD thesis works, as well as of the secondary school teachers interested in obtaining their didactic degrees.

Along 46 years, he delivered 12 lectures in various domains of vegetal biology. His basic course as full professor, since 1972 up to the year of his retirement, 2005, was that of “*Morphology and anatomy of plants*”, however, along all this time, he also taught courses of: *Vegetal cytology*, *Evolutive strategies in the vegetal kingdom*, *Vegetal morphogenesis*, *Floral architecture*, *Pollination and fecundation in Angiosperms*, *Biogeography*, *Xylotomy*, *Biology and Ecology*. All these lectures, supported by practical papers, have been continuously updated, following the new progress registered in the domain, in which a special part is represented by his own scientific investigations, materialized in more than 480 original studies published in various prestigious national and international journals of the field, 21 monographs, treatises and books of maps, 120 papers devoted to the history of biology (anniversary and commemorative portraits), over 100 popularization works, 38 reviews and 10 university courses. Two of these treatises and two of their chapters have been published at SPRINGER Publishing House, and two of his courses – at the Publishing House of the Romanian Academy.

Apart from the theoretical lectures and laboratory works, the summer practice stages in the open were always expected with enthusiasm by both his students and younger colleagues. As a punctilious leader, he organized and coordinated the summer stages for 46 series of students in various regions of Romania, from the Black Sea up to the heights of the Carpathians and from the Danube Delta up to the Ceahlău Mountain, wonderful occasions for teaching applied botanics in nature, in a highly relaxing and pleasant manner. During such stages, he used to recapitulate

all subjects approached during the year in his courses and laboratory works; the active and composed professor, always ready to interactive dialogue, captivated his students by the manner of discussing the notions of interdependence among the multiple natural factors known as acting upon the plants and vegetation of some region. Equally, the long trips organized all over the country were an opportunity to visit numerous cultural and historical objectives, museums, memorial places, historical sites and monuments, natural reservations, botanical and zoological gardens, monuments of nature, which decisively contributed to enlarging students cultural horizon.

Starting with the year 1988, professor Constantin Toma became a PhD scientific supervisor for Botanic works. Accordingly, he guided the elaboration of 35 theses of various didactic representatives and researchers, most of them recognized nowadays as reputed specialists in Botanic in both Romania and abroad. Since the year 2005, he acts as executive manager of the PhD School within the Faculty of Biology of Iași, in charge with the selection of the candidates for a doctor degree to the admittance exam, with the scientific quality of the PhD theses, periodical presentation of reports, according to the individual preparation stages, selection of official reviewers in PhD commissions and also with the elaboration of some research projects approaching the actual tendencies registered in the domain.

With a view of increasing the qualitative level of the scientific works he guided, in the year 1990 he organized the laboratory of electronic microscopy, for which he obtained two – transmission and scavenging – microscopes; also, he assured specialization stages, in laboratories of our country and also of Europe, for two young coworkers, members of the didactic staff of the university, for acquiring the new techniques and methods of electronic microscopy. The studies initiated in this laboratory include PhD theses, diploma works, papers of secondary school teachers interested in obtaining their didactic degrees, original scientific investigations. Another initiative of acad. Toma was the creation, in Iași, in 1992, of the first laboratory for *in vitro* tissue cultures, for didactic and research scopes.

In his morpho-anatomical-histological investigations, he developed and favoured a relationistic approach among structure, functions and environment, outlining their practical importance in numerous domains. By the new holistic research concept, by the constant, large number of investigators, by the acquisition of the necessary material endowments, and by granting optimum conditions for the elaboration of scientific works, acad. Constantin Toma established in Iași an authentic vegetal morpho-anatomical-histological school, unanimously recognized by both Romanian and foreign specialists of the field.

Along the years, his ample and constant didactic and scientific activity came to be recognized and appreciated by reputed academic institutions of Romania and Republic of Moldova, which awarded him numerous prizes and distinctions, such as: *member of the Romanian Academy* since the year 1991; *full member of the*

Academy of Ecology of the Republic of Moldova since 1995; *honorary member of the Academy of Sciences of the Republic of Moldova* since 2011; the “*Emanoil Teodorescu*” *Prize of the Romanian Academy* (1978, 2000, 2002, 2016); *Professor emeritus* (2006); *Chevalier of the “Teaching Merit” Order and Medal* (2004); *Professor of Merit* (1982); *Doctor Honoris Causa of the University of Bacău* (2005); *Doctor Honoris Causa of the “Vasile Goldiș” University of Arad* (2008); *Doctor Honoris Causa of the University of Oradea* (2009); *Doctor Honoris Causa of the “Apollonia” University of Iași* (2010). All these high positions acknowledge, beyond any doubt, the contribution brought by Constantin Toma to the development of the university education and science in Romania, and also the high esteem expressed by the academic institutions of the Republic of Moldova.

Apart from his didactic and scientific functions, acad. Toma was elected, in several positions, in the management structures of the “*Alexandru Ion Cuza*” *University of Iași*: *university chancellor, deputy dean, dean, scientific secretary, head of department, manager of the Institute of Biological Researches, manager of the “Anastasiu Fătu” Botanical Gardens of Iași*, after the retirement of the reputed botanist Emilian Țopa. In such a position, he was actively and busily involved for almost four years, with all his energy and skills, in the elaboration of new development projects, arrangement of new sections, building up of new greenhouses, collecting new plants from all regions of the country, establishment of new international relations promoting the exchange of rare seeds for enriching the existing collections with plants from all over the world. In all these initiatives, he was supported by a carefully selected team of researchers, technicians and workers, all young and dedicated to their work in the Botanical Gardens.

At national level, he was member of the National Council for Academic Evaluation and Accreditation (1994–2005), member of the Biology Commission of the National Council for University Titles, Diplomas and Certificates Attestation (1995–2005).

Another domain in which he was actively involved was his participation to the management staff of several journals and publications, both as editor, member of the Editorial Boards and scientific reviewer of numerous volumes and studies of his field. For example, mention should be here made of the positions of: *deputy editor of the Romanian Journal of Plant Biology – The Romanian Academy*; *editor-in-chief of the journal Analele Științifice ale Universității “Alexandru Ioan Cuza” of Iași, Vegetal biology series*; *manager of the COLUMNA (CRIFST) journal – Romanian Academy*; *member of the Council of the Romanian Academy Publishing House*; *member of the Research Board of Advisors of the American Biographical Institute*; *president of the Subcommission of Natural Monuments of Moldova*.

Few people have the privilege of enjoying the esteem and appreciation of their fellow citizens and of their colleagues and collaborators. Academician Constantin Toma is one of them as, in the year 2011 he became “*Honorary Citizen*” of *Boțești commune, county of Vaslui, to which his natal village, Gugești,*

belongs, and in 2019 he received the title of “*Honorary Citizen*” of the Iași city, where he has worked for 67 years. Apart from the esteem expressed by these titles, they also contribute to increasing the prestige of the localities reminding of the name of academician Constantin Toma.

At the noble age of 85 years, after having faced several attempts and challenges of life, prof. Constantin Toma may consider himself a vanquisher; his personal qualities, the persevering work and tenacity for attaining the scientific objectives had in view propelled him towards the highest university and academic positions. A reliable colleague, with much ceremony on all occasions for all his coworkers and students, a discoverer, a creator and a guide of values, appreciated and esteemed as a reputed scholar and man of science, gifted and scrupulous researcher, unanimously recognized by his Romanian and foreign colleagues, acad. Toma remains a model of professional abnegation for both the present and future generations.

An impressive personality, even-tempered, strict in all his undertakings, a reputed representative of the Romanian school of Botany, an example of professional conduct, professor Constantin Toma is and will remain a symbol of the University of Iași.

For all major contributions brought to the development of Botany in Romania, to the Romanian research and education efforts, I pay my homage to acad. C. Toma, wishing him “LA MULȚI ANI!” and a health condition permitting him to continue the scientific projects, to further guide his young collaborators for the continuous advance of Romanian Botany at both national and international level.