

***IN MEMORIAM* – ACADEMICIAN CONSTANTIN TOMA –
FOUNDER OF SCHOOL AND SCULPTOR OF SOULS**

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On September 8th 2020, Constantin Toma, member of the Romanian Academy, sadly passed away – our *Professor* – the one who, for more than four decades, has held the *Plant anatomy and morphology* university lecture for the first year students. The *Magister* was always impeccable and prepared to generously unloose the mysteries of life sciences. Hundreds of students asked him to give the celebratory speech for completing the studies or for the *Alma Mater Iassiensis* meetings. Many of those who had the opportunity to meet him considered him the exemplary *Professor*, from whom they have learned the important role a Teacher plays in society, but most of all, how much we have to appreciate *Biology – the science of life*, and also the people around us and the places we belong to.

Academician Constantin Toma devoted his life to Iași – the University City, educating numerous generations of students and perfecting several institutions, through difficult to measure researches and performant and well-prepared disciples.

Our *Professor*, plant morphologist and anatomist, founded in Iași, six decades ago, the most renown Romanian *School of plant anatomy and morphology*,

which he led based on permanently adapted modern principles, with scientific accomplishments worthy of the most prestigious discoveries of contemporary botany.

The scientific results of the *School of plant anatomy and morphology* of Iași are unique by the diversity of the themes approached, materialized in original studies regarding 50 varieties and 800 wild and cultivated plant species belonging to 90 botanical families (ferns, gymnosperms and angiosperms). Worth mentioning is the particular focus put on studying the alimentary and medicinally important taxa, as well as the melliferous and fodder plants belonging to the *Fabaceae*, *Lamiaceae*, *Rosaceae*, *Poaceae* and *Chenopodiaceae* families.

The researched plant material was collected from natural habitats, from over 600 locations, from both wild, spontaneous flora and the greenhouses of Romanian botanical gardens, *in vitro* plant cells and tissues micropropagation laboratories, arboretums, dendrological parks, experimental and agricultural fields, agronomical and horticultural research stations. The field and laboratory activities involved complex studies regarding plant diversity, special status taxa, chorology, phytosociology, phenology and phytotherapy. The microscopic and ultramacroscopic researches focused on plant cytology, embryology, histochemistry, plant cell and tissues cultures, ecological and taxonomical anatomy, carpology and plant reproduction biology, xylotomy and phytochemistry.

The research group founded by academician Constantin Toma gathers specialists from the Faculty of Biology and the “Anastasiu Fătu” Botanical Gardens of the “Alexandru Ioan Cuza” University of Iași, from the Institute of Biological Research of Iași, the “Stejarul” Biological Research Center of Piatra Neamț and also from the “Ion Borcea” Natural Sciences Museum Complex of Bacău.

The scientific work of academician Constantin Toma includes 21 monographies and atlases published by prestigious publishing houses, 14 courses and handbooks for students, 12 research studies with scientific reviewers and 480 original papers issued in national and international journals.

Most scientific papers are published in collaboration with his *disciples*, now acknowledged specialists in their fields, and target the following research trends:

Comparative histology and anatomy – the scientific contributions include original aspects regarding the taxonomy and phylogeny of several species belonging to different genera and botanical families: Rodica Rugină, Mihaela Niță (1958–2005), Tamara Moțiu (1939–2008), Irina Berciu, Ramona Galeș, Irina Gostin, Camelia Ifrim, Ana-Maria Popa, Anca Mereacre, Daniela Dorin, Lăcrămioara Ivănescu, Angela Toniuc, Irina Stănescu, Marius-Nicușor Grigore, Naela Costică, Anca Aiftimie-Păunescu, Eliza Ghiuru, Lidia Adumitresei, Luminița Huțanu, Marinela Afemei and Daniel Maftei;

Experimental morphology and anatomy – studies that show the influence of chemical fertilizers on some fodder plants belonging to *Fabaceae* and *Poaceae* families (Mihaela Niță and Irina Gostin); the influence of gamma radiations, alkaloids and mutagenic chemical compounds on medicinal plants (Maria

Magdalena Zamfirache, Marilena Tudose and Violeta Floria); the influence of pesticides on the morphology and anatomic structure of several weeds and cultivated plants (Rodica Rugină and Mihaela Niță); the effect of atmospheric pollutants on leaf morphology and structure in herbaceous plants (Tamara Moțiu), woody gymnosperms and angiosperms (Lăcrămioara Ivănescu, Angela Toniuc and Anca Aiftimie-Păunescu);

Ecological anatomy – original researches regarding aquatic and marsh plants, arenicolous species and halophytes, heliophytes and sciophytes, endemic and protected taxa (Mihaela Niță, Tamara Moțiu, Lăcrămioara Ivănescu, Marius-Nicușor Grigore and Anca Aiftimie-Păunescu);

Alimentary plants anatomy – studies coordinated by academician Constantin Toma and completed with special scientific accuracy by Naela Costică, Violeta Floria, Lăcrămioara Ivănescu, Mihaela Niță and Angela Toniuc;

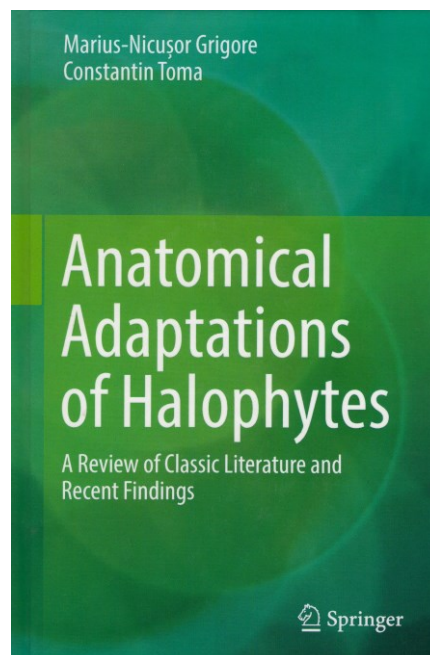
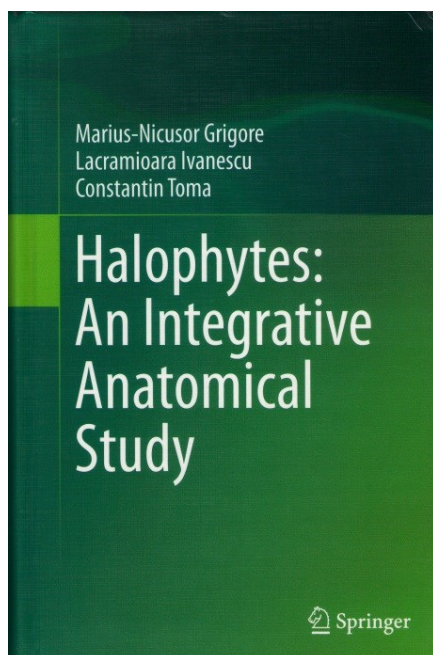
Morphogenesis and embryogenesis – scientific contributions on *Campanulaceae* (Angela Toniuc), *Rosaceae* (Corneliu Tăbăcaru, 1942–2016), *Brassicaceae* (Camelia Ifrim and Angela Toniuc), *Lamiaceae* (Tatiana Onisei, Elvira Gille, Irina Berciu and Irina Gostin), *Euphorbiaceae* (Ramona Galeș);

Blastogenesis – morphological and histological study of plantlets belonging to over 100 species of angiosperms (Georgeta Teodorescu, Angela Toniuc and Camelia Ifrim).

Academician Constantin Toma initiated research themes focused on the interrelations between living organisms – plants and bacteria, actinomycetes and micromycetes (Maria Magdalena Zamfirache); structural modifications induced by pathogenic fungi (Georgeta Teodorescu and Cătălin Tănase); causes of albinism (Camelia Ifrim), structure of semi-parasitic and parasitic plants (Aspazia Andronache and Irina Gostin); anatomic structure of carnivorous plants (Irina Stănescu), cacti (Daniela Dorin and Rodica Rugină) and decorative plants (Liliana Andrici, Rodica Rugină, Camelia Ifrim and Lidia Adumitresei); morphology and structure of nectar glands in fruit trees (Lucia Ifteni and Violeta Florea).

The significant results regarding the ecological anatomy of several plant species were gathered in valuable monographies published by prestigious national and international publishing houses. These volumes, unique in the Romanian scientific literature, being cited in numerous articles and papers, brought to their authors prestigious Romanian Academy Awards:

Halofite: studiu anatomic integrativ / Halophytes: an integrative anatomical study (Marius-Nicușor Grigore, Lăcrămioara Ivănescu and Constantin Toma, 2014) and *Adaptări anatomice ale halofitelor/ Anatomical adaptations of halophytes* (Marius-Nicușor Grigore and Constantin Toma, 2017), both published by the prestigious German *Springer* Publishing House;



Structuri secretoare de săruri la halofite – o abordare integrativă/ Salt secreting structures of Halophytes – an integrative approach, Romanian Academy Publishing House (Marius-Nicuşor Grigore and Constantin Toma, 2010);

Masivul Călimani: studii ecologice și de biodiversitate/ Călimani Massif: ecological and biodiversity studies, Alma Mater Publishing House, Cluj-Napoca (coordinated by Toader Chifu, Alexandru Manoliu and Constantin Toma, 2008);

Țesuturile secretoare și substanțele volatile din plante/ Secretory tissues and volatile compounds of plants, “Alexandru Ioan Cuza” University Publishing House, Iași (Ioan Burzo and Constantin Toma, 2013);

Influența poluanților atmosferici asupra structurii plantelor / The influence of atmospheric pollutants on plants' structure, “Andrei Șaguna” Publishing House, Constanța (Lăcrămioara Ivănescu and Constantin Toma, 2003);

Simbioza în lumea vie/ Symbiosis in the living world, “Alexandru Ioan Cuza” University, Iași (Maria Magdalena Zamfirache and Constantin Toma, 2000);

Morfologia și anatomia plantelor cultivate/ The morphology and anatomy of cultivated plants, Ceres Publishing House, București (Valeriu Zanoschi and Constantin Toma, 1985).

He also paid special attention to aspects regarding the history of biology, paying homage to the scientific work of his professors and of other national and international personalities with remarkable contributions in this field. He published, as only author or in collaboration, 120 papers that reveal interesting facts about the history of biology, and 100 papers promoting life sciences.

On special occasions, such as anniversaries or commemorative events, during his university lectures or at scientific meetings, he proudly and emotionally talked about his mentors – Professors: Constantin Burduja, Constantin Papp and Ion T. Tarnavski, Academicians: Olga Necrasov, Petre Jitariu, Cristofor Simionescu, Valeriu D. Cotea, Alexandru Ciubotaru and Ion Toderaş, worldly known savants: Charles Darwin, Katherine Essau, Vera Alexeeva Podubnaia-Arnoldi and Emil Racoviţă, colleagues from Romania or Republic of Moldova: Valeriu Zanoschi, Toader Chifu, Marin Andrei, Gabriela Şerbănescu-Jitariu, Boris T. Matienco, Georgeta Filipescu, Ionel Andriescu, Georgeta Fabian-Galan, Octăviţa Ailiesei, Gheorghe Acatrinei, Ioan Burzo, Corneliu Zolyneak, Aurel Ardelean, Aurelia Brezeanu and Ionel Miron, or his students who, in time, became acknowledged professors or researchers: Gheorghe Mustaţă, Ioan Băra, Mihail Isac, Angela Toniuc, Rodica Rugină, Alisa Donose-Pisică, Alexandrina Murariu, Gogu Ghiorghiş and Tatiana Şesan.

Moreover, in 2015, he published at the “Alexandru Ioan Cuza” Publishing House the volume entitled *Biologi de altădată și de azi/ Biologists of yesteryear and today*, dedicated to several personalities who essentially contributed to the development of biological sciences.

Also memorable are the articles that evoke his native village, Gugeşti, and the of his remarkable teachers from the “Cuza Vodă” Highschool of Huşi, or the conferences organized by the “Mihai Ralea” Municipal Library of Huşi, in collaboration with historian Constantin Clit, former colleagues and students.

The scientific work of academician Constantin Toma required a constant and thorough documentation. He reviewed 38 books, underlining how relevant the scientific researches in the field of botany are.

His documentation stages in Hungary (1966), USSR (1968), Belgium (1971–1972, 1996), Great Britain (1995), France (1972, 1995) and Turkey (1996) allowed him to find out the scientific interests of his foreign homologues and to deepen his knowledge about new research methods and techniques, which he further presented to his collaborators in Iaşi.

I often had the privilege to discover, during long talks with our *Professor*, his numerous scientific and administrative involvements, in which he invested a lot of passion, but which required inevitable sacrifices: Scientific Secretary of the “Alexandru Ioan Cuza” University Senate (1990–1992), Head of Botany Department of the Faculty of Biology (1997–1985; 1990–1996), Vice-Dean (1975–1977), Dean (1989–1990; 1996–2002).

It goes without saying that one of his most daring projects, essential for plant anatomy studies, was the creation of the Photonic and Electronic Microscopy Laboratories. The acquisition of performant photonic microscopes – a transmission electron microscope (TEM) and a scanning electron microscope (SEM) – set the milestone for many research studies regarding the ultrastructure of plant cells, opening new perspectives in the field of cytology. The bachelor, master and PhD theses elaborated in these laboratories provided modern and innovative results, comparable with the ones from other similar national and international institutions.

As manager for numerous research projects, Director of the Institute of Biological Research of Iași (1986–1990), PhD supervisor in the field of Botany (starting with 1988) and Executive Director of the Doctoral School of Biology (2000–2012), he essentially contributed to the reorganization of the scientific and research trends, initializing the certification of an *excellence center* at the Faculty of Biology of the “Alexandru Ioan Cuza” University of Iași.

Our *Professor* decisively contributed to the development of the Botanical Gardens on Copou Hill. Although very young, at only 34, he accepted to supervise the scientific and administrative activities at this institution, by then under full reorganization, pleasantly impressing Professor Ion Creangă, Rector of the University and renowned mathematician.

The establishment of the Botanical Gardens on its present location was initiated by Dr. Emilian Țopa in 1963 and continued by academician Constantin Toma (1970–1973), together with a team of enthusiast young botanists (Maria Lazăr, Elena Marin, Corneliu Tăbăcaru, Florița Diaconescu, Rodica Rugină, Aurora Roznovăț, Angela Toniuc and Georgeta Flenchea) and engineers (Valeriu Movileanu and Ionel Lupu). They started with landslide prevention works on a surface of 66.63 ha, building rockeries, peat bogs and a water basin, as specific habitats for different ecological plant groups. Special attention was given to teaching and practical activities for students, involving new research themes and organizing botanical expeditions for collecting plant material in order to diversify the living collections, the Herbarium and *Flora Exsiccata*.

On several occasions, the *Professor* told me that, starting with his first year as a student he was always present, during the month of October, at the festivities dedicated to our University's *Dies Academici* and at the inauguration of every floral exhibition organized by the Botanical Gardens. Each time, the thoughts of our *Professor* were expressed in emotional words that evoked beautiful memories, especially about the alley of horse chestnuts that he himself planted and cared for. During these speeches he always mentioned his appreciation for the work, skills and commitment of the biologists, engineers and gardeners, expressing his sincere joy that the Botanical Gardens blossoms every season through its people, most of them former students, alumni of the school that he proudly coordinated for decades. During the rest of the year, he was a discreet presence walking along the alleys, among the plants and former colleagues whom he always unconditionally helped and encouraged.

He organized several scientific events and was also invited to many similar national and international manifestations in the Republic of Moldova (1968, 1992, 1994 and 1996), Czechoslovakia (1972), German Democratic Republic (1973, 1975), Greece (1997, 2001 and 2005), Italy (1998), Slovakia (2004), Austria (2005), France (2005), Bulgaria (2007), Mexico (2008), Finland (2008).

In 1992, as its president, he organized the second edition of the *National Congress of Biology*, a scientific event gathering over 300 national and international participants. The first edition of this event had Emil Racoviță (Cluj-Napoca, 1928) as

patron and, until the present day, there was no other initiative to further organize and resume such a congress.

The personality of academician Constantin Toma is gloriously recalled by colleagues and collaborators in many journals, books and dictionaries that reveal biographic aspects regarding his life and professional carrier, recognition of his entire scientific work, academic and social activities: Mititelu D., 1993 – in: *Buletinul Grădinii Botanice din Iași (Bulletin of the Botanical Garden of Iași)*, **4**: 261–262; Mititelu D., 1980–1993 – in: *Studii și Comunicări, Muzeul de Științe Naturale din Bacău (Studies and Communications, Natural Sciences Museum of Bacău)*: 235–241; *Dicționarul specialiștilor – Who’s Who în știința și tehnica românească (Dictionary of specialists – Who’s Who in Romanian science and technique)*. Technical Publishing House, București, volume I, 1986; Ardelean A., Mohan Gh., 1994 – in: *Istoria biologiei în date (The history of biology in dates)*. All Publishing House, București: 778–813; Codreanu Th., 1995 – in: *Istoria Hușilor (The history of Huși)*. Porto Franco Publishing House, Galați: 295–296; *Dicționarul Personalitățile României contemporane. Nemuritorii. Academicieni români (Dictionary of contemporary Romanian personalities. Immortals. Romanian academicians)*. Rompres Publishing House, București, 1995: 301–303; *Dicționarul biologilor români (Dictionary of Romanian biologists)*. Medingraf Publishing House, București, 1996. 1st edition: 1117–1118, 2nd edition: 971–999; *Membrii Academiei Române (1866–1966). Mic Dicționar (Members of the Romanian Academy (1886–1966). Brief dictionary)*. ”Petre Andrei” Academic Foundation Publishing House, Iași, 1996: 363; *Membrii Academiei Române (1866–1999). Dicționar (Members of the Romanian Academy (1886–1999). Dictionary)*. Publishing House of the Romanian Academy, București, 1997: 529; Andrei M., 1997–2007 – in: *Natura. Biologie, seria III (Nature. Biology, 3rd series)*, **49**, 1: 240–244; Ghiorghită G., 1997 – in: *Studii și Cercetări Științifice, Universitatea „Vasile Alecsandri” din Bacău, seria Biologie (Studies and Scientific Research, “Vasile Alecsandri” University of Bacău, Biology series)*, **12**: 82–85; Șerbănescu-Jitariu Gabriela, Filipescu Georgeta, 2000 – in: *Analele Științifice ale Universității „Alexandru Ioan Cuza” din Iași, secția II, a, Biologie vegetală (Scientific Annals of “Alexandru Ioan Cuza” University of Iași, section II a, Vegetal Biology)*, **41**: 161–164; Cotea V., 2000 – in: *Cercetări Agronomice în Moldova (Agronomical Researches in Moldova)*, Iași, **3–4**: 173–179; Cotea V., 2000 – in: *Revue Roumaine de Biologie, série Biologie végétale (Romanian Journal of Biology, Plant Biology series)*, **45**, 2: 199–206; Cotea V., 2002 – in: *Profiluri în timp (Profiles over time)*. Cantes Publishing House, Iași: 268–275; *Dicționarul ilustrat Who’s Who al României (Illustrated dictionary – Who’s Who in Romania)*, Montreal, 2003; *Actualitatea academică (Current Academics)*, INEAA, București, 2003, year III, no. 1: 56; Zamfirache Maria-Magdalena, Tănase C., 2005 – in: *Analele Științifice ale Universității „Alexandru Ioan Cuza” din Iași, secția II, a, Biologie vegetală (Scientific Annals of “Alexandru Ioan Cuza” University of Iași, section II a, Vegetal Biology)*, **51**: 141–142; Mărghitean I., Mancaș I., 2006 – in: *Membrii Academiei Române*

originari din județul Vaslui (Members of the Romanian Academy from Vaslui county), Multimedia International Publishing House, Arad: 239–241; Mititiuc M., Toniuc Angela, 2006 – in: *Grădina Botanică din Iași. File de istorie (Botanical Garden of Iași. History pages)*, Publishing House of the “Alexandru Ioan Cuza” University, Iași: 52–59; Bejenaru M., 2006 – in: *Natura și cercetarea biologică în Bucovina, (Nature and biological research in Bukovina)*. Monitorul Oficial Publishing, Suceava: 188–192; Bodea S., 2008 – in: *Viața de pretutindeni (Life everywhere)*, Viața Arădeană Publishing House, Arad, no. 1–5: 36–39; Enache I. C., 2008 – in: *Boțești – Gugești. Monografie (Botești-Gugești. Monography)*, PIM Publishing House, Iași: 280; Moraru Gh., 2008 – in: *Alma Mater Hussiensis*, Ștefan Lupașcu Publishing House, Iași: 103–118; *Enciclopedia personalităților din România (Encyclopedia of Romanian personalities)*, 3rd edition, Hubners Who is Who, Oradea, 2008; Obreja Al., Pogânceanu P., Pruteanu-Isăcescu I., Ciubotaru M., 2009 – in: *Gugești – Vaslui. Preliminariile unei istorii (Gugești-Vaslui. Preliminaries of a history)*, Cronica Publishing House, Iași: 312–315; *Dicționar enciclopedic (Encyclopedic dictionary)*. Volume VII: T–Z, Encyclopedic Publishing House, București, 2009; Matei P., 2010 – in: *Școala din Gugești – Vaslui (1872–2010). Cartea amintirilor și împlinirilor Gugești – Vaslui (1872–2010) (Book of memories and fulfillments Gugești – Vaslui (1872–2010))*, Cronica Publishing House, Iași: 21–24; Ivănescu Lăcrămioara, 2010 – in: *In Honorem – Profesorului Constantin Toma la a 75^a aniversare (In Honorem – Professor Constantin Toma on his 75th birthday)*, Graphis Publishing House, Iași: 115–122; Toniuc Angela, 2010 – in: *In Honorem – Profesorului Constantin Toma la a 75^a aniversare (In Honorem – Professor Constantin Toma on his 75th birthday)*, Graphis Publishing House, Iași: 123–131; Trelea S., 2010 – in: *Analele Bucovinei (Annals of Bukovina)*, year XVIII, 1: 282–287; Adumitresci Lidia, Cojocariu Ana, 2010 – in: *Journal of Plant Development, Grădina Botanică din Iași (Botanical Garden of Iași)*, 17: 150–151; Ciubotaru Al., 2010 – in: *Revista Botanică, Academia de Științe a Republicii Moldova, Chișinău (Journal of Botany, Academy of Sciences, Republic of Moldova, Chișinău)*, 2, 1: 13–17; *Dicționarul membrilor Academiei Române (Dictionary of members of the Romanian Academy)*. Romanian Academy Publishing House, București, 2010; Ciubotaru Al., 2011 – in: *Analele Științifice ale Universității „Alexandru Ioan Cuza” din Iași, secția II, a, Biologie vegetală (Scientific Annals of “Alexandru Ioan Cuza” University of Iași, section II a, Vegetal Biology)*, 57, 1: 91–94; Ciubotaru Al., 2011 – in: *Revista Botanică, Academia de Științe a Republicii Moldova, Chișinău (Journal of Botany, Academy of Sciences, Republic of Moldova, Chișinău)*, 3, 3: 197–200; Ardelean A., Cachiță Dorina, Turcuș Violeta, 2011 – in: *Natura. Biologie, seria III (Nature. Biology, 3rd series)*, 53, 1: 7–8; Zamfirache Maria-Magdalena, 2011 – in: *Natura. Biologie, seria III (Nature. Biology, 3rd series)*, 53, 1: 9–11; Andrei M., 2011 – in: *Natura. Biologie, seria III (Nature. Biology, 3rd series)*, 53, 1: 12–13; Cristurean I., 2011 – in: *Natura. Biologie, seria III (Nature. Biology, 3rd series)*, 53, 1: 14–17; Matei P., 2012 – in: *Nasc și la Gugești oamenii. Portrete (People are also born in Gugești. Portraits)*, Cronica Publishing

House, Iași: 89–107; *Dicționarul personalităților din România. Biografii contemporane (Dictionary of Romanian personalities. Contemporary biographies)*, Eco-Europa Publishing House, Romanian Biographic Institute, București, 2012–2013; Mustață Gh., Mustață Mariana, 2014 – in: *Personalități ale biologiei românești și universale (Personalities of Romanian and universal biology)*, Academia Oamenilor de Știință Publishing House, București: 729–734.

The volume *In Honorem – Professor Constantin Toma at his 75th birthday* (coordinated by Lăcrămioara Ivănescu and Maria Magdalena Zamfirache), published at Graphis Publishing House of Iași, comprises 400 pages and 40 illustrations. Its first chapter includes touching autobiographic aspects that reveal our *Professor's* incredible tenacity and perseverance expressed in everything he accomplished. Moreover, the volume includes original notes on several processes and phenomena regarding plants diversity, abstracts of his disciples research themes, remembrances of those to whom he gave a part of his spirit and a precious example of rigor, passion and respect for truth and well-done things.

In the same volume, members of the Romanian Academy, university professors and researchers from prestigious institutions and former students recall him in their written thoughts, memories and dear appreciations: V. Cotea, C. Antal, L. Șoitu, Gabriela Șerbănescu-Jitariu, M. Andrei, Rodica Rugină, V. Cristea, G. Ghiorghită, T. Chifu and M. Mititiuc, Maria-Magdalena Zamfirache, Gh. Mustață, I. Andriescu, A. Ardelean, Dorina Cachiță, Violeta Turcuș, Georgeta Teodorescu, Nița Nedea, Elvira Gille, N. Ștefan, M. Varvara, Anca Sârbu, Naela Costică and Anișoara Stratu, A. Oprea, N. Papadopol, Aurelia Brezeanu and Gh. Brezeanu, Octăvița Ailiesei, I. Miron, I. Tiță, Alexandrina Murariu, Liana-Doina Toma, Georgeta Filipescu, Aurora Blesneac, Silvia Străjeru, Dana Constantinovici, Gianina Comănescu, Georgeta Mihăilă, V. Lovin, Gh. Moraru, I. Lazea, Violeta Floria, Smaranda Vântu, Profira Vidrașcu, Paulina Anastasiu, Marinela Wagner, Luminița Bejenaru, Camelia Ifrim, Aspazia Băeșu, Aspazia Rezuș, Nicoleta Paraschiv, Lidia Adumitresci, Anca-Narcisa Neagu, Ada-Manuela Lăzărescu, Larisa Mușat-Moisoiu and Mariana Huțanu.

As a token of recognition of our *Professor's* merits, he was awarded the *Emanoil Teodorescu* Prize of the Romanian Academy for the paper entitled „Étude histo-anatomiques des cotyledons de certaines Légumineuses (*Onobrychis* Adans., *Coronilla* L., *Trifolium* L.)”/ “Hysto-anatomical studies of the cotyledons belonging to certain legumes (*Onobrychis* Adans., *Coronilla* L., *Trifolium* L.), published in *Adansonia* journal (Paris). In the year 2000, he received the same award for a work co-authored with Rodica Rugină – *Anatomia plantelor medicinale/ The anatomy of medicinal plants*, Romanian Academy Publishing House (1998); in 2002, for a collaboration with Maria-Magdalena Zamfirache to the study *Simbioza în lumea vie/ Symbiosis in the living world*, “Alexandru Ioan Cuza” University of Iași Publishing House (2000); in 2016, for *Halophytes – An Integrative Anatomical Study*, Springer Publishing House (2014), elaborated together with M. N. Grigore and Lăcrămioara Ivănescu.

He was also awarded the *Doctor Honoris Causa* title of the “Vasile Alecsandri” University of Bacău (2005), “Vasile Goldiș” Western University of Arad (2008), University of Oradea (2009) and “Apollonia” University of Iași (2010).

In 1982, he was elected *Highlighted Professor* and in 2004 he received the *Medal of Merit for Education, in the rank of knight*.

His colleagues’ appreciation essentially contributed to his recognition as *Professor Emeritus* by the Senate of the “Alexandru Ioan Cuza” of Iași.

His decisive role in the development of natural sciences and in educating young researchers is materialized in the invitations addressed to join prestigious national and international scientific societies, in various positions: *Honorary President of the Romanian Biological Sciences Society, President of the International “Ștefan Lupașcu” Foundation for Science and Culture – Iași Branch, Founding member of “August Treboniu Laurian” Foundation – Botoșani, Founding member of the Christian Pedagogues Association, Member of the Romanian Phytotherapy Society, Member of the Botanical Society of France, Member of the International Society for Medicinal and Aromatic Plants*.

Moreover, he was a member in the *National Council for Academic Evaluation and Accreditation* (1994–2005) and in the *Biology and Biochemistry Committee* of the *National Council for Attesting Titles, Diplomas and University Certificates* (1995–2005).

His keen interest in obtaining accurate scientific results, in publishing and translating them into international languages contributed to the inclusion and maintenance of several national journals in prestigious international data bases. Thus, as Chief Editor of the *Scientific Annals of the “Alexandru Ioan Cuza” University of Iași, Vegetal Biology Series*, he established high standards both in selecting the members of the Editorial Board and in reviewing the articles submitted to publication. He always stated how important this journal is for the history of biology in the first modern Romanian University and how grateful should be the present generation for the opportunity of continuing this century-old tradition.

Acad. Toma was also Chief Editor of Romanian Academy’s journal *Romanian Journal of Biology – Plant Biology*, and member of the editorial board of several national and international journals.

His remarkable scientific activity and his important contributions in developing the Romanian biological higher education, undisputedly led to his appointment as corresponding member (1991) and then as full member of the Romanian Academy (2012).

Within the Iași Branch of the Romanian Academy, in 1990 he was elected President of the Natural Monuments Subcommittee and between 2000 and 2012 he was its Scientific Secretary.

For over three decades, the Natural Monuments Subcommittee organizes field applications and workshops in the protected areas of Moldova and

collaborates with local administrations for promoting the conservation of priority habitats and monument trees, identifying new special protected areas for plants, thus contributing to the preservation of important species and natural reservations. This activity was carried out with competence and passion, taking us with him during the field applications, in order to identify the local problems and find the right solutions.

For more than five decades he was also involved in organizing many botanical expeditions and excursions during which he exceptionally presented us the local settings, using new and modern approaches for nature exploration.

In 2019, in collaboration with specialists from the Environmental Protection Agency of Iași, he published a well-documented album dedicated to the *Monument-trees - cultural ambassadors of Iași county*, where he expressed in wise words the nature, history and traditions enthusiast's creed: *...knowing and promoting these living natural monuments, with their history, tales and legends is an opportunity to get closer to nature, which we are a part of, to respect and protect it, taking over its vitality, vigor, tenacity and verticality, in our way, along the time, with good and less good, as an obstacle course which we have to overcome with perseverance, tenacity and hope.*

His constant presence within the community and his support towards all projects regarding this native village and the city of Iași impressed the local administrations and all members of the urban society, so that, in 2011, he was awarded the title of *Honorary Citizen* of Boțești commune, Vaslui county (commune and county which include Gugești, his native village).

In 2019, during a sumptuous ceremony at Roznovanu Palace, he was elected *Honorary Citizen* of Iași, for his remarkable scientific contributions, for educating many generations of students and researchers, but also for the development of Iași University Center.

For all he accomplished, with professionalism and commitment, he asked nothing in return; he only enjoyed the happiness of the others, for whom he always found the words they need and the ideas they seek. He carefully prepared the generation shift, convinced that, with his disciples, *Biology* will always have a bright future in Iași.

Through tenacious *work*, he proved that you can conquer all, through his *becoming* he honored the memory of his parents and professors and through all of these he will always remain in the mind and soul of people who cherished, respected and appreciated him!