Professor Dr. Mihai MITITIUC (1937–2020) – successor of mycological research in Iași



On January 3rd, 2020, Professor Mihai MITITIUC, scientific personality of the Faculty of Biology, "Alexandru Ioan Cuza" University of Iaşi, passed away.

In over 40 years of academic activity he proved an outstanding tenacity, responsibility, and a special organizational capacity. His remarkable scientific contributions in the study of fungi, recommend him as the successor of prestigious names belonging to the Mycology School of Iași: Ion C. Constantinescu, Alexandru Popovici, Constantin Sandu-Ville, Alexandru Lazăr, Constantin Dobrescu, Adrian Volcinschi, Mircea Hatman and Mihai Toma.

Professor Mihai Mititiuc was born on March 16th, 1937, in Sinăuții de Jos village (now part of

Mihăileni commune), Botoșani county, in a family of respected countrymen, with great love for the land.

In 1944, he started the primary school in his village, and after this he attended the Medium School of Boys in Dorohoi (now "Grigore Ghica" Highschool), which he graduated in 1955. After the baccalaureate he enrolled at the Faculty of Natural Sciences-Geography of "Alexandru Ioan Cuza" University of Iaşi, which he graduated as valedictorian in 1960.

Starting with 1964 he was accepted for doctoral studies at the Faculty of Biology, University of Bucharest, having the privilege to collaborate with a great personality of the Romanian mycology – professor dr. docent Olga Săvulescu. His PhD thesis – *Contribution to the knowledge of micromycetes and macromycetes from Ponoare and Frumoasa natural reserves* (*Suceava county*) held in 1968, represents a reference work in the field, the results of his research correlating aspects regarding the specific taxonomical diversity of the plant communities of the two reserves with the ecology of several species of micro- and macromycetes. The doctoral committee of his thesis included noteworthy personalities from the field: professor dr. docent Constantin Sadu-Ville (corresponding member of the Romanian Academy), professor dr. docent Traian Ştefureac and dr. docent Vera Bontea, who all appreciated with high grades professor Mihai Mititiuc's research.

His thesis includes important taxonomic, ecological and chorological data regarding 460 species of fungi: 430 species of micromycetes on 305 plant hosts and 30 species of macromycetes. Also he described for the first time in Romania 39 new species of micromycetes and 37 known species and mentioned on 86 new plant hosts.

The species Ascochyta petrakii Sandu-Ville et Mititiuc, Phoma camelinae Sandu-Ville et Mititiuc identified on plant hosts from Frumoasa Reserve and Sphaerotheca săvulescui Sandu-Ville, Phyllosticta salviae Sandu-Ville et Mititiuc and Rhabdospora

anthemidis Sandu-Ville et Mititiuc identified on host plants from Ponoare Reserve are considered new for science.

The results of his microstationary research revealed the influence of humidity on the combinations fungi-plant host: Septoria tormentillaea–Potentilla erecta, Capnodium salicinum–Filipendula ulmaria, Cytoplacosphaeria rimosa and Napicladium arundinaceum–Phragmites communis. He also mentions the presence and frequency of 30 species of micromycetes in the following phytocoenoses: Festucetum vallesiacae, Stipetum capillatae și Agropyretum repentis.

These results were published in 12 scientific articles, published between 1965 and 1972 in national and international journals, such as: *Sydowia, Boletim da Sociedade Broteriana, Nowa Hedwigia, Mycopathologia et Mycologia applicata*, and *Feddes Repertorium*. His collaborations were also materialized in over 250 scientific articles published in specialized journals belonging to the Romanian Academy, Romanian universities, and volumes of national and international conferences. These papers include relevant research regarding the taxonomy and ecology of micro- and macromycetes, structural, physiological, and biochemical modifications induced by pathogenic fungi.

The research regarding the taxonomy of fungi, included in international data bases, specialized journals and conference volumes reveal exceptionally results that led to the discovery of 35 species of micromycetes new for science.

Professor Mihai Mititiuc begun his university career in 1960, by preparing and teaching the laboratories for the *Plant morphology and anatomy* course. Starting with 1962, as university assistant, he was also responsible for the laboratories of several other courses, such as: *Biology of plant pathogens*, *Phytopathology*, *Plants Protections* and Biogeography and for the students enrolled in the Biology and Geography departments. He also prepared a *Botany* course dedicated to foreign students in the preparatory year, for the Faculty of Pharmacy. His teaching capabilities were appreciated both by colleagues and students, giving him the opportunity to occupy, by contest, all the didactic degrees, up to the rank of university professor.

Consistent with the principles, proving abilities, initiatives and new approaches, with unmistakable in style and collaboration manner, he contributes, as professor, to the formation of numerous generations of biologists, who he accompanied in Carpathians forests and meadow, in the Danube Delta or in several reserves in Dobrogea, cultivating the passion and dedication towards the discovery and preservation of nature.

For the good development of student's field works he elaborated as only author or in collaboration, 11 books, 6 chapters in monographies and 4 university manuals. These volumes were dedicated both to students, PhD candidates, and for specialists in the field of natural sciences, forestry, agriculture, human and veterinary medicine and contained critically analyzed information regarding the state of the art in the specific field, completed with personal mycological research regarding the structure, function, taxonomy and ecology of fungi and vascular plants. The scientific content is very well documented and argued, including new data concerning different categories of fungal spores, fungal reproduction and phylogeny, the role of fungi as bioindicators for different substrates and habitats, and their importance in the ecosystem's stability.

Professor Mihai Mititiuc was also involved in the formation of young specialists in the field of mycology and phytopathology and starting with 1991 he was assigned PhD coordinator for the fundamental domain of *Natural Sciences*, *Biology* domain, *Botany* specialization, successfully coordinating 22 PhD thesis.

For the good development of the didactic and research activities he organized in 1993 the Mycology and Phytopathology Laboratory within the Vegetal Biology Department.

His special professional training and his exceptionally organizational capacity recommend him as director of the Botanical Garden (1990-2007). Under his management the specific infrastructure of this institution was accordingly developed: three new greenhouses, utility spaces and a thermal power plant were built, together with the reorganization of the scientific sections. In a period with numerous economical and social problems he managed to keep the integrity of the largest botanical garden in Romania, being permanently helped by the management of "Alexandru Ioan Cuza" University of Iași.

He always supported the publication of the Botanical Garden of Iaşi, another constant preoccupation being collecting fruits and seeds for the *Index Seminum et Sporarum*, biological material belonging to common or rare plant species, which was offered in exchange to other similar institution from Romania or abroad, or entered in the inventory of the Botanical Garden of Iaşi. Since working on his PhD thesis in the Ponoare-Bosanci and Frumoasa-Moara (Suceava county) Nature Reserves, Professor Mihai Mititiuc contributed to the diversification of the herbarium collections belonging to the Faculty of Biology, "Alexandru Ioan Cuza" University of Iaşi, where he deposited no less than 2731 herbarium sheets: 2658 sheets with micromycetes, 20 sheets with macromycetes and 53 sheets with vascular plants. He had an important contribution in elaborating several volumes within the series *Flora Moldaviae et Dobrogeae Exiccata* edited by the Botanical Garden of Iaşi: *Centuria II* (1970), *Centuria III* (1972), *Centuria IV* (1974), *Centuria V* (1981), *Centuria VIII* (1994) and *Centuria IX* (2005), for the last two being co-editor, along with biologists Ion Sârbu and Adrian Oprea.

Moreover, he decisively contributed to the enrichment of plant collections from the Botanical Garden of Iaşi, he initiated collaborations with similar national and international institutions and supported the organization of several floral exhibitions and scientific events such as the anniversary symposiums celebrating 140 years (1996) and 150 years (2006) from the foundation of the first Romanian botanical garden, offering honorary medals and excellency diplomas to several personalities from the field of Botany and Mycology.

His organizational capacity, working strength and perseverance made him fit to manage non-governmental organizations (Romanian Mycological Society and Association of the Botanical Gardens from Romania), scientific societies and editorial boards of several journals: editor in chief of Bulletin of "Anastasie Fătu" Botanical Garden of Iași, member in the editorial board of Scientific Annals of "Alexandru Ioan Cuza" of Iași, Vegetal Biology Series and Botanical Contributions of "Alexandru Borza" Botanical Garden of Cluj-Napoca; member in the National Academy Committee for granting PhD titles of Republic of Moldova; member in the Romanian Biological Sciences Society; member in the Association of Romanian Scientists; member in the "Ștefan Lupașcu" Foundation for Science.

Professor Mihai Mititiuc coordinated for 12 years (1995-2007), as president, the activity of the *Romanian Mycological Society*. Through the projects and specific activities, he continued the initiatives of the founder of this society, Professor Mihai Toma. Moreover, he was involved in the organization of the 12th edition of the National Mycological Symposium and the 2nd National Biology Congress, held in Iaşi, in 1992.

His biographical data, the recognition of his scientific merits and also appreciation on the activities Professor Mihai Mititiuc supported and organized were mentioned by Ion Popescu-Sireteanu (1994) in Siretul, vatră de istorie și cultură românească (Siretul, Romanian history and culture hearth), by Aurel Ardelean and collaborators (2000) in Dicționarul biologilor români (Dictionary of Romanian biologists), by Petru Bejinariu (2003) in Biologi de seamă din Bucovina (Famous biologists from Bukovina), in the "Grigore Ghica" Highschool's from Dorohoi Monography, by Liviu Călcâi in the 3rd volume Cu materialul clientului (With the client's material).

Professor Mihai Mititiuc constantly showed great initiatives and established successful collaboration, contributing to the formation of well-prepared disciples, who continue the tradition of mycological research in Iaşi and other national and international institutions.

Professor Mihai Mititiuc's personality will always last in the memory of his collaborators and students who valued and respected him.

May God light his way and soul for an eternal life in heaven!

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