

Professor Dr. Miran Vardjan *May 1, 1919 – †October 15, 2005



On October 15, we lost Dr. Miran Vardjan, professor emeritus of plant physiology in the Biology Department of the Biotechnical Faculty of the University of Ljubljana.

Miran Vardjan was born in *Lož na Notranjskem*, Slovenia, on May 1, 1919. He graduated from high school just in time to be drafted and sent to the battle fields of the Second World War. He ended up as a prisoner of war, followed by detention camps. When peace was restored, he passed his teacher's examination and worked in small village schools, for a number of years. After work, he attended the Academy of Pedagogy in Ljubljana to qualify for the position of a high-school teacher of biology and chemistry. This earned him appointments at high schools in *Ljubljana* and nearby *Litija*, including several terms as a headmaster. Still, what he

was really striving for was a research career. He thus became an after-work student at the University of Ljubljana and, in 1955, earned a bachelor's degree in biology from the Faculty of Natural History. He then joined its botany department, as an assistant of Professor Ernest Mayer, and defended his Ph. D. thesis, in 1959. In the following year, he was appointed assistant professor and head of the newly founded chair of phytophysiology.

To link Slovenian plant physiology to the international research community, professor Vardjan spent some time in foreign laboratories, first in Tübingen with professor E. Bünning and then in Gif-sur-Yvette with professor J. P. Nitsch. These visits sparked his interest in the hormonal control of plant growth and development, a subject which kept fascinating him, throughout his research career.

After returning to Ljubljana, Dr. Vardjan successfully advanced through the academic ranks and, in 1978, was elected full professor at his home institution which, in the mean time, had been renamed Faculty of Biotechnology. He also played a leading role in departmental politics, including a two-year term as a department head.

Professor Vardjan's main field of teaching, both at the undergraduate level and at the graduate school, remained plant physiology, including special courses on the regulation of plant development, but he also covered plant ecology. As a former school teacher, he was particularly enthusiastic about organizing courses in continuing education for high-school teachers. He also designed significant improvements to the biology curriculum at Slovenian schools.

Professor Vardjan's research remained focused on the physiology of plant development. In one of his first publications which appeared in the *Bulletin de la Societé Botanique de France*, he discussed the roles of auxins and cytokinins in the regeneration processes of Endive (*Cichorium endivia* L.). Of particular interest is his work on the change of geotropic

orientation when the flower of Kenilworth ivy (*Linaria cymbalaria* Mill.) is fertilized and the fruit is initiated. Further phytohormone-related publications include research on the gibberellins and cytokinins in the xylem sap of Birch (*Betula pendula* Roth) and experiments on the influence of cytokinins on the formation of leaf 'embryos' in *Bryophyllum daigremontianum* A. Berger. In addition to these topics, professor Vardjan was keenly interested in the regulation of seed dormancy and germination. He found very deep dormancy in the seeds of *Gentiana symphyandra* Murb., while the, generally light, dormancy of Silver Fir (*Abies alba* Mill.) seeds depended on the site of collection and the growing season. His studies on the effect of scarification and on the role of endogenous growth regulators and enzymes, and of the resins located in the testa – to mention just some of the topics covered – are significant steps towards understanding the mechanisms of dormancy, their significance in the life cycles of the above species, and the processes initiating germination.

Professor Vardjan also authored several textbooks. In a number of articles in the popular-scientific journal *Proteus*, he communicated his excitement about plant biology to the general public. Equally interesting were his contributions in radio broadcasts and on television.

He actively participated in the work of a number of international professional organizations, such as the International Association for Plant Tissue Culture and the Societé Botanique de France. Most importantly, he was among the founders of the former Yugoslav Society of Plant Physiologists and served as its president. When the Society was transformed into a federation of state societies, he played a leading role in the Slovenian Society of Plant Physiologists. In recognition of his professional accomplishments and his services to the regional research community, he was elected honorary member of the Slovenian and Croatian Societies of Plant Physiologists and received a number of medals and awards by the University, the city of Ljubljana and the State of Slovenia.

Professor Vardjan retired from his university position, in 1981, but remained an active plant biologist and a helping friend to his former colleagues. His second love was the arts, and he also was a knowledgeable philatelist.

Zvonimir Devidé