



OBITUARY
PROFESSOR DR. IMRE HORVÁTH

We are deeply grieved to bring to the knowledge of readers of the *Acta Biologica Szegediensis* that Professor Dr. IMRE HORVÁTH, Academic Doctor of the biological sciences, Head of the Department of Botany in the Attila József University, departed on 16 September, 1979, at the age of 53. We lost in him the renowned teacher of the Hungarian botany, the prominent organizer of the university training of biologists, the excellent researcher of plant ecology, the active devotee of the environmental and nature conservation, a successful organizer of science of the town Szeged and Hungary.

IMRE HORVÁTH was born in Hódmezővásárhely on 4 September 1926, in a humble artisan family, full of quiet love. From his native town, with an excellent secondary-school diploma, he got to the University in Szeged, where he was admitted as a student reading biology-geography. Working hard at his studies, he participated in the youth-movements of the day, as well, and already as a youth leader he gained experience as an organizer and leader. In 1950, he graduated in natural history — geography; becoming a qualified secondary-school teacher.

As an undergraduate, he got a hard-working, good master. Under Professor PÁL GREGUSS, at the Department of Botany, he acted as an undergraduate assistant, charged with, and having an opportunity to join in, the research work into the xylotomy of Pinaceae.

As a young graduate, he got to the Hungarian Academy of Sciences, reorganized in that time, where he worked in different spheres, among others like as a special secretary, a head of a department of the National Postgraduate Degree Granting

Board, as well. He could only continue more effectively his research work for a higher degree as an aspirant — begun by him already earlier — in 1954. The leader of his aspirant work was Academician REZSŐ Soó, professor of Budapest University. But he did not leave in lurch pines, either, during these works. In 1958, he defended his thesis for a candidate's degree, entitled Theoretical problems of growing pine seedlings, with success.

From 1956, he worked as a research worker in Szeged, in the Institute of Climatology. From Professor RICHARD WAGNER he learned how to operate the meteorological measuring instruments, became acquainted with methods and importance of measuring microclimate, as well as with the climatic and microclimatic factors, having an effect on plants.

In 1958, he was appointed to reader in the institute of Botany of the University of Agricultural Sciences in Gödöllő. Parallel, he was also the section secretary of the Academy of Sciences in biology. He learned, how to deal with several people, different kinds of teaching and research works.

When he was appointed to Szeged, on the Chair of Botany of the Attila József University, in 1965, first as a reader and head of the department, then — after obtaining the degree of Academic Doctor in biological sciences — as professor of university, after what had gone before, he was in possession of all the knowledge, connections, organizational experiences, ideas, and perspective plannings, which — creating a fresher atmosphere — could for a long time give a new profile to the Department of Botany, which had been in possession of other national and international scientific connections.

It was a new colour in his teaching that he wanted, with success, to give ecology a stronger accent than it was in the time of his predecessor. Instead of a plant geography of overwhelmingly coenological aspect until then, more up-to-date autecological points of view of environmental and nature conservation came into prominence in teaching the subject plant- ecology, resp. environmental biology.

In the Botanical Gardens of the Attila József University, he vigorously began to develop the spontaneously formed parts of the garden, to mechanize horticulture, in order to develop the garden, apart from the points of view of the instruction, into a scenic spot, a basis of foreigners visiting the place. He provided the garden with a laboratory, glass- and foil-houses, concrete paths and lighting, in increasing it by about one-third part, by means of grants. There he introduced, with help and co-operation of his co-workers, among others some didactic collections. But he could, unfortunately, not live to see all of these growing up.

The Botanic Gardens of our University became during IMRE HORVÁTH's short direction, lasting not even for 14 years, an important basis of instruction and education in the southern part of the Great Hungarian Plain, which is indispensable for the botanical instruction in the University, spectacular for tourists and the inhabitants of Szeged, and important both in its content and esthetically.

When IMRE HORVÁTH came to Szeged as a professor, the preferred domain of his research work was to investigate into the effect of light upon plants, the dry-matter production of plants, their growth and development. He also obtained the degree of Academic Doctor in biological sciences with his thesis entitled. The effect of the spectral composition of light on the organic-matter production (1968). Initially, he made his experiments with foil tents, electric discharge tubes mounted into thermostats. Later on, his laboratory was built in the Botanic Gardens according to his

plans, and the phytotron with four air-conditioning chambers. IMRE Horváth made the phytotron of the Botanic Gardens suitable for carrying out almost every experiment that was performed abroad with phytotrons of several millions value, being not only a designer but also the mechanic of his instrument. In the self-designed phytotron, he carried out experiments in connection with his investigations into the effect of the spectral composition of light, the change in light energy, the different light-dark rhythms on plants. In his research work, although its basic-research character is not questionable, he was led by practical points of view, as well. He was led by the aim of achieving a larger organic-matter output, a faster ontogenetic cycle, a richer production of useful matters.

The research into the connections between light effect and dry-matter production and the investigation into the methodologies connected with photosynthesis induced him to participate in two themes of the COMECON and he was the coordinator of these themes in Hungary, to international satisfaction.

Owing to his ecological activity, and as a result of the death of the zoologist Professor GÁBOR KOLOSVÁRY, he took the lead of Tisza research. As a good organizer, he organized the research work, which hardly exceeded the frames of Department until then, being mostly limited to some summer expeditions, on a broader basis. As a result of his activity, the Tisza research today embraces the complex biological and hydrological investigation into the whole of the Tisza valley. He could convince the Soviet party in the north and the Yugoslav one in the south and draw them into this work. The biological research into the Tisza today keeps in evidence about fifty researchers. Their activity was published in the annual Tisza-Research Conferences, organized by IMRE HORVÁTH, and in the journal *Tiscia*, compiled by him.

Within the Tisza Research, there were some problems that turned his interest towards the works of environmental and nature conservation. He patronized, investigated more than one area, made these declare protected or to be a protected site, nature conservation area. These were destined for preserving some ancient parts of his beloved Great Hungarian Plain for Posterity, which parts have been and are sentenced to a slow decease owing to Tisza control, no or inadequate treatment, the modern agricultural technology, eutrophication due to an unjustified too much fertilization, without a reconstruction and an effective protection.

His activity is indicated by more than 100 scientific publications, science- and education-political papers, a university lecture note, but his true element was action, a series of actions. This was the life of Professor IMRE HORVÁTH and his life-work, uncompleted and all the same rich in results. We mourn in him the at present still immeasurable organizing individuality of educating work, of ecology and of nature conservancy of the Tisza region.

Dr. PÁL SIMONCSICS

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