

***BTPATH HAYKH | OBITUARIES***

**In Memoriam of George Fedak**

On June 11, 2025, George (Yurii Dmytrovych) Fedak, an outstanding Ukrainian and Canadian scientist, geneticist, and breeder, and one of the executive editors of the journal "Plant Breeding and Seed Production," passed away.

He was born on December 28, 1940, in the province of British Columbia, into a family of immigrants from Galicia who arrived in Canada at the beginning of the 20<sup>th</sup> century. He received a Bachelor's degree with honours in Crop Science in 1963 and a Master's degree from the University of Saskatchewan in 1965. In 1969, George Fedak earned his Ph.D. in Cytogenetics from the University of Manitoba, and in 1970, he received a postdoctoral fellowship at Agriculture and Agri-Food Canada in Ottawa.

Professor George Fedak made fundamental scientific and practical contributions in fields such as: wide (inter-specific and inter-generic) hybridization of plants, search for and introduction of new genes from wild species into breeding, molecular genetics and molecular cytology, Quantitative Trait Loci (QTL) in doubled haploid populations from tissue culture, pyramiding of disease resistance genes, etc. He developed state-of-the-art methods for plant haploid production and studies of haploid populations using molecular markers, methods for preserving embryo viability (embryo rescue) in wide crosses, and induction of chromosomal recombinations in callus culture. His theoretical studies were directly implemented in breeding practice, resulting in several Canadian barley varieties created with his participation. Through wide crosses, he developed unique genetic plasma, which was used in breeding programs for Fusarium resistance.

George Fedak authored over 200 scientific papers published in renowned scientific journals and eight chapters in collective monographs. He was an expert for the Genetics Society of Canada and the Committee on Plant Genetic Resources, and the research coordinator for the genetic mapping of barley chromosome 7 for the International Barley Genetic Coordination Committee. Dr. Fedak served as a professor at the Universities of Manitoba and Guelph, a scientific supervisor for Ph.D. students, and a reviewer of doctoral dissertations for the Universities of



Laval, Guelph, Manitoba, and McGill, the Swedish University of Agricultural Sciences, and the Ministry of Education of China. He was also a member of the Research Support Committee for Barley and Oats, the Ontario Wheat Producers, and others.

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Dr. Fedak's work was highly recognized by prominent Canadian governmental institutions. He received a certificate from Agriculture and Agri-Food Canada for exceptional scientific and technological research on the "Oat Genome Project" funded by the Quaker Oats Co. foundation, and an award for exceptional research and innovation as a member of the Oat Genome Mapping Project. The scientist's merits in genetics were highly appreciated with a Presidential Award from the Genetics Society of Canada.

In 2018, he was awarded the Vernadsky Gold Medal by the National Academy of Sciences of Ukraine for outstanding achievements in natural, technical, and socio-humanitarian sciences. In 2023, Agriculture and Agri-Food Canada named an oat variety "AAC Fedak" in his honor.

The high international authority and recognition of George Fedak are evidenced by his invitations to serve as Co-Chair at international barley genetic symposia held in Edinburgh, Scotland, UK (1981); Okayama, Japan (1986); and Helsingborg, Sweden (1992). George Fedak was also an expert and consultant for the globally renowned organization, IAEA/FAO, on the use of radiation mutagenesis to obtain plant mutations suitable for use in agriculture. The scientist was repeatedly an honorary guest at international symposia held in the USSR (in Moscow, Kharkiv, and Leningrad (now Saint Petersburg)) and later in independent Ukraine (in Kyiv, Kharkiv, and Odesa). George Fedak maintained close ties with the scientific community of Ukraine. He was a member of the editorial boards of several

Ukrainian scientific journals and provided substantial informational support to Ukrainian biologists by regularly supplying them with important scientific periodicals, such as the journals "Genome" and "Canadian Journal of Plant Pathology."

For many years, Dr. Fedak served as an Associate Editor for the well-known scientific journal "Genome," a member of the Editorial Boards of "Wheat Information Service" and the international scientific journal "Cytology and Genetics" published in Ukraine, one of the executive editors of our collection "Plant Breeding and Seed Production," and a member of the Editorial Board of "Plant Genetic Resources," also published by the Yuriev Plant Production Institute of NAAS of Ukraine.

George Fedak was proud of his Ukrainian descent and was a true patriot of Ukraine, providing all possible support to the country and its people. The bright memory and invaluable scientific legacy of George Fedak will forever remain the heritage of Ukraine and the entire world.

**V. V. Kyrychenko, R. L. Bohuslavskyi**

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