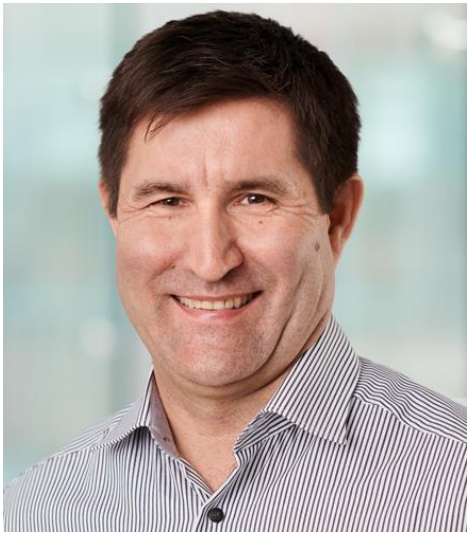
PROFESSOR
VIKTOR KORZUN

DOCTOR HONORIS CAUSA

UNIVERSITATIS STUDIORUM NATURALIUM LUBLINENSIS

LUBLINI, DIE VICESIMO TERTIO MENSIS APRILIS
ANNO DOMINI BIS MILLESIMO VICESIMO QUARTO



PROFESSOR

VIKTOR KORZUN

RECTORIS MAGNIFICI ORATIO

The title of doctor honoris causa was introduced over 600 years ago at the University of Oxford to honor people with great scientific authority and express their recognition in the scientific community. This is the highest scientific dignity that the University Senate can award to particularly meritorious people. The ceremony of awarding the title of doctor honoris causa is always a great celebration for the University, which is an expression of the highest formal recognition for people particularly distinguished in their fields. This prestigious title is awarded primarily to researchers closely cooperating with our University. It ennobles both the awarded person and the University. Awarding this honorable title is also an expression of gratitude and thanks to the Honorary Doctor for his scientific work and research achievements as well as cooperation with the University of Life Sciences in Lublin.

Professor Viktor Korzun belongs to an outstanding group of scientists, geneticists, and plant breeders recognized and valued all over the world. He is also a world-famous director, organizer, manager, and one of the most outstanding creators and practitioners in the field of genomic selection in one of the largest plant breeding companies in the world – KWS. Appreciating the long-term cooperation of Professor Viktor Korzun with our University, especially with the Doctoral School and the Institute of Plant Genetics, Breeding and Biotechnology, as well as other research centers in Poland, the Senate of the University of Life Sciences in Lublin decided to award the Professor with the honorable title of doctor honoris causa.

Currently, Professor Viktor Korzun has the position of Global Lead Scientific Affairs at KWS SAAT SE & Co. KGaA. In his career, he integrates scientific activity with practice. He is a member of numerous international associations and groups focused on plant breeding, a visiting professor at the most prestigious universities in the world, and

a member of the Scientific Advisory Boards of many universities and scientific institutes.

Professor Viktor Korzun was born in 1964 in Lysca in the Pinsk district of Belarus. After graduating from secondary school, he began studying at the Belarusian Agricultural Academy in Gorki and graduated with a degree in the field of agronomy. In 1994, he defended his doctoral thesis at the Institute of Genetics and Cytology, National Academy of Sciences of Belarus in Minsk. In 2019 he obtained a postdoctoral degree in biological science in the field of plant breeding and plant genetics in Federal Research Center, N. I. Vavilov All-Russian Institute of Plant Genetic Resources in Sankt-Petersburg. He was a visiting researcher at the Leibniz Institute for Plant Genetics and Crop Plant Research (IPK), Gatersleben, Germany, and in the Cambridge Laboratory, John Innes Centre for Plant Science Research, Norwich, UK in 1992–1996. In 1996–1999 he did postdoctoral research at the Leibniz Institute of Plant Genetics and Crop Plant Research in Gatersleben. After finishing his work at IPK in Gatersleben in 1999, he started working in practical breeding at KWS in Germany as the Head of Cereals Breeding Technologies. Since 2018 he has been working as the Global Lead Scientific Affairs at KWS SAAT SE & Co. KGaA.

The scientific work of Professor Viktor Korzun is devoted to the development and use of genomic and molecular genetic technologies for the genetic mapping of economically valuable traits, the study of genetic resources, and the selection of cereal crops such as wheat, rye, and barley. Together with his team, he developed molecular genetic technologies and molecular marker maps to identify genotype-phenotype associations and determine the structural and functional organization of genomes for the three most important cereal crops. He participated in research including the development of the first genetic map of common wheat using SSR markers, which became the basis for molecular genetic mapping of wheat traits. The research team he led was the first to fully decode the rye genome and create the first large-scale set of SNP markers. They were successfully used to create a high-resolution molecular genetic map of the rye genome and obtain high-

performance SNP chips that became the basis for subsequent research in molecular genetics and breeding of rye. As the first one, he justified the genomic selection method for selecting barley genotypes for malting characteristics. Of great importance is his research on the development of molecular markers for key genes of cereal resistance to various pathogens, as well as the productivity and quality of wheat, rye, and barley grains. Noteworthy is also his involvement in the determination of genes for restoring pollen fertility in winter rye.

The application to award Professor Viktor Korzun an honorary doctorate of the University of Life Sciences in Lublin, submitted by the Faculty of Agrobioengineering, was supported by the Discipline Council of Agriculture and Horticulture and the academic community of other faculties of our University. Fully appreciating the great merits in the field of research, implementation, and organization, as well as cooperation with the University of Life Sciences in Lublin, the Senate of our University awarded the professor the title of doctor honoris causa. By awarding this honorable academic title, our University expresses its thanks and gratitude to Professor Viktor Korzun.

Dear Honorable Doctor Honoris Causa of the University of Life Sciences in Lublin, on this important and solemn day, please accept the best wishes for all prosperity, health, and success in further research work, and a lot of satisfaction and joy in your personal and family life.

Prof. dr hab. Krzysztof Kowalczyk

Rector of the University of Life Sciences in Lublin

Q.F.F. F.Q.S.

SUMMIS AUSPICIIS SERENISSIMAE REI PUBLICAE POLONORUM
ATQUE
IN NOMINE UNIVERSITATIS RERUM NATURALIUM LUBLINENSIS
NOS

CHRISTOPHORUS KOWALCZYK
DOCTOR HABILITATUS, SCIENTIARUM AGRARIARUM PROFESSOR
IN UNIVERSITATE RERUM NATURALIUM LUBLINENSI PROFESSOR ORDINARIUS
ET EIUSDEM HOC TEMPORE RECTOR MAGNIFICUS

BARBARA KOŁODZIEJ
DOCTOR HABILITATUS, SCIENTIARUM AGRARIARUM PROFESSOR
IN UNIVERSITATE RERUM NATURALIUM LUBLINENSI PROFESSOR ORDINARIUS
HOC TEMPORE FACULTATIS AGROBIOINGENIARIAE DECANUS SPECTABILIS

ALEXANDRA BADORA
DOCTOR HABILITATUS, SCIENTIARUM AGRARIARUM PROFESSOR
IN UNIVERSITATE RERUM NATURALIUM LUBLINENSI PROFESSOR ORDINARIUS
PROMOTOR RITE CONSTITUTUS
IN

DOMINUM CLARISSIMUM

VICTOREM KORZUN

SCIENTIARUM AGRARIARUM PROFESSOREM SCIENTIARUM AGRARIARUM DOCTOREM HABILITATUM SOCIETATUM MULTARUM
ET CONSILIORUM SCIENTIARUM PRAESIDEM ET SOCIUM MODERATOREM IN REBUS AD SCIENTIAS DOCTRINASQUE PERTINENTIBUS
EXCELLENTEM PRO REBUS AD DOCTRINAM PERTINENTIBUS IN PRAEMIIS EXIMIIS HONORIBUSQUE TRIBUTIS LAUREA DONATUM
COOPERATORUM EDITIONUM MULTORUM PERIODICORUM SCIENTIFICORUM INTERNATIONALIUM SOCIUM PRO EIUS SUCCESSIBUS
ET MERITIS PRAECIPUE PERSCRUTATOREM QUI EFFECTIBUS SUIS AD SCIENTIAS AGRARIAS EXCOLENDAS IN GENETICA
ET GENOMICA PLANTARUM CULTARUM ATQUE IN INVESTIGATIONIBUS MOLECULARIBUS MECHANISMORUM RATIONUM
RESPONSORUM PLANTARUM AD CAUSAS CONTURBATIONEM EFFICIENTES PERTINENTIBUS ET IN
FRAGMENTORUM DNA DISCERNENDO MULTUM VALUIT NEC NON DE CULTU PLANTARUM CONIUNCTO CUM EVOLUTIONE
ET APPLICATIONE SELECTIONIS GENOMATIS BENE MERITUM QUI COOPERATIONEM AD DOCTRINAM PERTINENTEM
CUM UNIVERSITATE SCIENTIARUM NATURALIUM LUBLINENSI EXCOLEBAT

IN EUNDEM VIRUM DOCTUM MULTA OBSERVANTIA REVERENTIAQUE GRANDI DIGNUM
EX DECRETU FACULTATIS AMPLISSIMIQUE SENATUS

DOCTORIS HONORIS CAUSA

UNIVERSITATIS RERUM NATURALIUM LUBLINENSIS

NOMEN ET DIGNITATEM, IURA ET PRIVILEGIA CONTULIMUS

IN EIUSQUE REI FIDEM HOC DIPLOMA SIGILLO UNIVERSITATIS NOSTRAE ET PROPRIIS NOSTRIS
SUBSCRIPTIONIBUS SANCIENDUM CURAVIMUS

PROF. DR HAB. ALEXANDRA BADORA
PROMOTOR

PROF. DR HAB. BARBARA KOŁODZIEJ
DECANUS

PROF. DR HAB. CHRISTOPHORUS KOWALCZYK
RECTOR

DATUM LUBLINI, DIE VICESIMO TERTIO MENSIS APRILIS ANNO DOMINI BIS MILLESIMO VICESIMO QUARTO

COMMEMORATIVUM DECANI ORATIO

The ceremony of conferring the title of doctor honoris causa is a great celebration for the University and especially for the Faculty of Agrobioengineering. In this way, we express the highest formal recognition for those of great merit for scientific, cultural, social, or political life. This prestigious title is mostly bestowed on the researchers closely cooperating with our University, thus including them in the community of the most prominent representatives of all sciences. This award ennobles both the distinguished Doctor Honoris Causa and our University.

Professor Viktor Korzun is among the most widely recognized internationally scientists in the area of genetics and breeding of cereals. Over the course of almost 40 years of professional work, mainly at IPK Gatersleben in Germany, he has gained recognition and authority not only in the scientific community but also among a wide range of agricultural practitioners at home and abroad. The overall contribution of Professor Korzun to knowledge on crop biology and genetics and the impact of his findings on the biological progress in agriculture is of utmost importance, placing them on par with the most widely recognized researchers worldwide performing their investigations at the cross-section of basic plant science and modern plant breeding. For many years, Professor Korzun has been cooperating with Polish research groups and institutions, including the Institute of Plant Genetics, Breeding and Biotechnology from the University of Life Sciences in Lublin. Despite his great commitment to scientific and didactic work, dr hab. Viktor Korzun also found time for organizational activities, he was a member of the organizing committees of many international conferences, including EWAC – The European Cereals Genetics Cooperative – EUCARPIA Cereals Section Conference organized in 2015 in Lublin, and served as a board member for many years as a member

of the External Stakeholder Council of the Faculty of Agrobioengineering, or as a lecturer at the Open Seminars.

Accepting this title is an honor for us and a sign of deep gratitude. On this occasion, I wish the Professor all the best for his continued professional activity, satisfaction with the challenges he undertakes and health, and prosperity in his personal life.

Prof. dr hab. Barbara Kołodziej

Dean of the Faculty of Agrobioengineering

CENSUS

Professor Dariusz Grzebelus, Ph.D.
Department of Plant Biology and Biotechnology
Faculty of Biotechnology and Horticulture
University of Agriculture in Krakow

A review of Doctor Viktor Korzun's professional achievements in relation to the procedure of awarding the title of doctor honoris causa by the University of Life Sciences in Lublin

It is my great honor and privilege to write a review of the achievements of Dr. Viktor Korzun upon invitation of Prof. Krzysztof Kowalczyk, the Rector of the University of Life Sciences in Lublin.

Dr. Korzun is among the most widely recognized internationally scientists in the area of genetics and breeding of cereals, with a spectacular record of fundamental research achievements documented by an ever growing list of seminal publications, followed by implementation of the reported findings in the improvement of crops. Thus, his professional activity combines basic and applied research, serving mankind by providing means for genetic progress in agriculture and securing food availability.

Professional career of the Honorary Doctorate Candidate

Dr. Viktor Korzun obtained his Ph.D. title in plant genetics in the Institute of Genetics and Cytology, Academy of Sciences in Belarus in 1992. After graduation, he worked as a visiting scientist and a post-doc in John Innes Centre for Plant Science Research, Norwich, UK and

the Leibnitz Institute of Plant Genetics and Crop Plant Research (IPK) in Gatersleben, Germany. In 1999, he took a position of the Head of Cereals Breeding Technologies at KWS, Germany. From 2018 he fulfills the function of Global Lead Scientific Affairs at KWS SAAT SE & Co. KGaA.

He has participated in a number of professional activities, serving as a project evaluator of a range of EU-funded research programs, he was a member of the Scientific Steering Committee of German Plant Research Program, and the Scientific Coordination Committee of the International Wheat Initiative. He coordinates the European Cereals Genetics Co-operative (EWAC) and chairs the Rye Group, Cereals Section of EUCARPIA. He has served as a member of advisory boards of the Centre for Biotechnology and Agricultural Research of the Palacky University in Olomouc, Czech Rep.; John Innes Centre, Norwich, UK; the State Seed Breeding Institute, University of Hohenheim, Stuttgart, Germany; and the Czech Ministry of Education. He is a member of editorial boards of five internationally reputed journals and reviewed for 47 journals. He participated in the organization of nine international conferences serving as a member of organizing committees.

Importantly, relations of Dr. Korzun with Polish research groups and institutions have been long-lasting, rich and fruitful. In the course of his career, he has been collaborating with the Plant Breeding and Acclimatization Institute (IHAR–PIB) in Radzików, the Institute of Plant Genetics, Polish Academy of Sciences in Poznań (IGR–PAN), the West Pomeranian University of Technology in Szczecin, and last but not least, the University of Life Sciences in Lublin.

Research achievements of the Honorary Doctorate Candidate

Throughout his professional career he published 125 original research reports and review papers in leading international scientific journals. My personal selection of ten amongst the most highly significant papers in Dr. Korzun's extraordinary portfolio is provided below. He performed his investigations in collaboration with a great number of

international institutions and research groups supervised by highly reputed leaders. Most of his work was published in journals specializing in plant genetics and breeding, where, among others, he provided major contributions to genetic mapping of cereals, structural organization of cereal genomes, structure and function of agriculturally important genes and their effects on phenotype, as exemplified by the first SSR-based genetic map of wheat and RFLP-based map of rye. These tools were further refined and used in functional studies, for instance to characterize wheat and rye genetic resources, to investigate chromosomal substitutions in wheat, to identify genetic markers linked to genes and QTLs governing plant reaction to abiotic and biotic stressors, and to develop the reference genome of rye.

He has been supported by institutions financing research in Germany and UK, realizing more than twenty nationally funded research projects, as well as the EU-funded research and education projects, namely FP6, FP7, and Marie Skłodowska-Curie actions.

V. Korzun made significant efforts to disseminate the results of his research. He wrote nine monographs or chapters, provided presentations upon invitation on ninety-one conferences and symposia and lectured on twenty-three universities worldwide.

Achievements of the Honorary Doctorate Candidate in crop improvement

The results reported by Dr. Korzun were of immense significance, as they allowed development of more efficient methods for selection of stress-tolerant breeding materials of cereal crops. On the applied side, he has been a co-author of four patents.

The most significant achievements of Dr. Korzun in the field of plant breeding considered the use of molecular markers to broaden the genetic base of heterotic populations of rye, facilitating hybrid breeding and extending the area of cultivation, the identification of genetic determinants and mechanisms of wheat resistance to Fusarium head blight, *Septoria tritici* blotch, and eyespot disease. He also revealed mechanisms of race-specific resistance to powdery mildew in barley, soil-

borne cereal mosaic virus (SBCMV) and wheat spindle streak mosaic virus (WSSMV). More recently, high-throughput tool facilitating selection, i.e. 600K SNP-chip for rye, developed using the reference sequence data, was introduced to rye breeding, enabling efficient creation of high-yielding and environmentally adapted hybrid cultivars. Also, nuclear pollen fertility restorers in rye were mapped and PCR assays for their simple identification were developed and implemented in practice.

Beside those major leaps briefly described above, Dr. Korzun provided many more significant findings and practical applications. Relying on his deep knowledge on fundamental plant biology coupled with perfect recognition of technical advances in breeding of cereal crops, he was able to successfully modify crop improvement strategies to cope with challenges imposed by climatic changes, in order to ensure food security worldwide.

List of ten most influential publications of the Honorary Doctorate Candidate

1. Röder M.S., V. Korzun, K. Wendehake, J. Plaschke, M.-H. Tixier, P. Leroy, M.W. Ganal: A microsatellite map of wheat. Genetics, 1998, 149, 2007–2023.
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3. Korzun V., S. Malyshev, A.V. Voylokov, A. Börner: A genetic map of rye (*Secale cereale* L.) combining RFLP, isozyme, microsatellite and gene loci. Theor. Appl. Genet., 2001, 102, 709–717.
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8. Reynolds M., O.K. Atkin, M. Bennett, M. Cooper, I.C. Dodd, M.J. Foulkes, C. Frohberg, G. Hammer, I.R. Henderson, B. Huang, V. Korzun, S.R. McCouch, C.D. Messina, B.J. Pogson, G. Slafer, N.L. Taylor, P.E. Wittich: Addressing research bottlenecks to crop productivity. Trends Plant Sci., 2021, 26, 607–630.
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Conclusion

The overall contribution of Dr. Korzun to knowledge on crop biology and genetics and the impact of his findings on the biological progress in agriculture are of utmost importance, placing them in par with the most widely recognized researchers worldwide performing their investigations at the cross-section of basic plant science and modern plant breeding. For all of those who had a chance to collaborate with

him, I am sure it was a great lesson and a deeply satisfying experience. His impact on crop genetics and plant breeding has been prominent and his name is surely well-known to anyone professionally involved in plant research and crop improvement.

Considering all the above, I am honored to fully support the application for awarding Dr. Viktor Korzun the title of doctor honoris causa of the University of Life Sciences in Lublin.

Kraków, February 12, 2024

Professor Henryk Bujak
University of Life Sciences in Wroclaw
Central Center for Research
on Cultivated Plant Varieties in Słupia Wielka

Assessment of the scientific, didactic, and organizational achievements of Ph.D. Viktor Korzun in connection with the proceedings for awarding the title of doctor honoris causa of the University of Life Sciences in Lublin

Viktor Korzun, Ph.D., is a very well-known and respected scientist in the field of genetics and plant breeding. He is a scientist with great intellectual activity, great passion for research and a unique work ethos. The high level of knowledge combined with a great willingness to share it and help other scientists make him, without the slightest doubt, a scientific authority and a personality worthy of the highest respect and esteem. Receiving the title of doctor honoris causa is a great honor and a special distinction in the world of science. The initiation of proceedings by the Senate of the University of Life Sciences in Lublin to award this honorable title to the Ph.D. Viktor Korzun creates a special opportunity to express due recognition and heartfelt gratitude for the unquestionable creative contribution to the discipline, many years of dissemination and organizational work, not only for the broadly understood sector of the economy, which is agriculture, but also for the scientific community and cooperation with many scientific units around the world.

I congratulate this valuable initiative to apply for the award of the highest academic dignity to Ph.D. Viktor Korzun and I thank the Senate of the University of Life Sciences in Lublin for entrusting me with the exceptionally honorable responsibility of assessing the achievements of such an outstanding scientist.

Viktor Korzun was born on January 13, 1964 in Lysca, Belarus. He obtained a master's degree in agriculture in 1986 from the Belarusian Agricultural Academy in Gorki, Belarus. After graduating from 1986 to 1989, he worked as an agronomist on large farms in the Gomel and Brest regions. In 1989, he started working at the Institute of Genetics and Cytology of the Belarusian Academy of Sciences in Minsk, where in 1994 he obtained a doctorate in biological sciences, specializing in plant genetics. In the years 1992–1996, he completed long-term scientific internships at the Leibnitz Institute for Plant Genetics and Crop Plant Research in Gatersleben (Germany) and at the Cambridge Laboratory John Innes Center for Plant Science Research in Norwich (UK). After receiving his doctoral degree, he worked as a full-time researcher from 1996 to 1999 at the Leibnitz Institute for Plant Genetics and Crop Plant Research, in Gatersleben (Germany). Then he joined the breeding company KWS, where he has been working since 1999, initially as the Head of the Cereal Breeding Technology Department, and since 2018 as the Global Lead Scientific Affairs. In 2019, Viktor Korzun obtained his habilitation degree in biological sciences in the field of genetics and plant breeding at the Federal Research Center N. I. Vavilov All-Russian Institute of Plant Genetic Resources (VIR) in Saint Peterburg.

The scientific achievements of Ph.D. Viktor Korzun are impressive and include 173 original works that have been published in renowned journals from the JCR list and 9 chapters in monographs, he is the co-author of four patents and has performed many reviews of articles for renowned scientific journals from the JCR list. The candidate's scientific works represent a very high scientific level, are characterized by a precise definition of the problem being solved, an innovative methodological approach and the ability to clearly formulate conclusions from research results, most of which can be implemented in crop breeding. The scientific activity of Ph.D. V. Korzun focuses on issues related to the creation of genetic mapping technology and molecular structures of genetic maps of the main cereal species. The results of these studies contributed to the intensive development of work aimed at establishing the „genotype-phenotype" association, understanding

the structure of genomes and the structural and functional organization of genes, i.e. problems that could be implemented in practical cereal breeding. He created the first genetic map of common wheat (*Triticum aestivum* L.) using SSR markers, and the publication in which he presented it became the basis for molecular genetic mapping of wheat and is cited over 3,500 times by other researchers in scientific articles. V. Korzun is the author of the first molecular genetic map of rye based on RFLP markers, which at the time of its publication was the best saturated genetic map of the rye genome. This map was then supplemented with isoenzymatic markers, SSR markers and gene sequences and became the basis for much subsequent work on mapping genes and quantitative trait loci (QTLs), controlling important agronomic traits of rye.

The technologies and molecular markers developed by Viktor Korzun have been effectively used to solve a wide range of problems in genetics and plant breeding, especially cereals. The most important directions of conducted research include:

1) Characteristics of genetic resources of wheat and rye.
   The high efficiency of the developed markers and systems was used to determine genetic differences for diploid wheat species and their wild related species, in taxonomic and evolutionary studies, and in studies of the genetic diversity of rye. For the first time, the Candidate used molecular markers to learn about the genetic diversity of heterotic rye populations, which became a key element in using the heterosis effect in the breeding of hybrid varieties and their dissemination in cultivation.
2) Cytogenetic characterization of common wheat materials.
   SSR markers enabled the unambiguous identification of chromosomes from other species in wheat substitution lines.
3) Development of molecular markers for important agronomic traits, genes, and loci of quantitative traits (QTL).
   The candidate developed technologies and molecular systems that enabled the discovery and understanding of the mechanisms of cereal resistance to abiotic and biotic environmental factors. They have found wide application in research on the search for genes of

resistance to dangerous cereal diseases caused by fungal pathogens and viruses, of which I will only mention a few.:

– discovery of the relationship between molecular markers and genes responsible for resistance to Fusarium head blight,
– identification of loci responsible for resistance to infection by *Septoria tritici* and their additive effect in wheat,
– identification of the *Sr3* gene and quantitative trait loci (QTLs) associated with resistance to stem rust in rye,
– detection of marker-resistance association for eye spot (*Pseudocercosporella herpotrichoides*) in wheat,
– identification of 11 barley genes associated with race-specific resistance to powdery mildew in the presence of the *Mlo14* gene,
– identification of QTL rye chromosomes explaining the phenotypic variability of resistance to soil-borne cereal mosaic virus (SBCMV) and resistance to spindle-streak mosaic (WSSMV),
– identification of new loci determining frost resistance in wheat and rye.

4) Development of markers to study allelic variability of genes and their relationship with important agricultural traits of cereals.
Ph.D. V. Korzun for the first time analyzed the pedigree of the *Rht8* gene and its allelic variants in wheat varieties originating from Southern Europe and Mexico (CIMMYT), and the results of this research and the developed molecular marker have found wide application in further research and practical breeding of common wheat around the world.

An innovative approach to mapping the *Rfp1* and *Rfp3* genes responsible for restoring pollen fertility in winter rye hybrids enabled the Candidate to develop markers related to the *Rfp1* pollen fertility restoration gene in rye, which are widely used in breeding rye hybrid varieties with reduced susceptibility to ergot infection (*Claviceps purpurea* [Fr.] Tul.) and with increased volume and stability of yields.

Among the many publications and scientific achievements of Viktor Korzun, what deserves special attention, in my opinion, is a series of works on the construction of increasingly advanced genetic maps of rye, which culminated in participation in an international consortium called The International Rye Genome Sequencing Consortium, which

developed the DNA sequence of the European rye ecotype Lo7. The results of this work, especially participation in the development of the publication entitled "Chromosome-scale genome assembly provides insights into rye biology, evolution and agronomic potential", which was published in the very prestigious journal Nature Genetics in 2021, contributes a lot of new content to the development of the scientific discipline of agriculture, especially rye genetics, and will be able to be effectively used in breeding this species. It should be mentioned that 63 scientists from 13 countries took part in the work of the consortium, and the participation of Ph.D. Viktor Korzun is proof of his professionalism, recognition and recognition of previous achievements in the international scientific community.

The results, including work on sequencing the rye genome, allowed him to develop the first large-scale SNP chip containing over 600,000 markers, which was used in rye breeding for genomic selection. The use of genomic selection allows obtaining new high-yielding hybrid varieties of rye, adapted to changing environmental conditions.

The strategies developed by Ph.D. V. Korzun, based on his own research results, are successively and effectively applied to modern cereal breeding and allow for the successful implementation of the most important breeding tasks, which are new varieties adapted to different levels of agricultural intensification and changing environmental conditions, which contributes to ensuring food security in individual countries and around the world.

Ph.D. Viktor Korzun is distinguished by his ability to harmoniously combine the work of a researcher with the work of a large-scale organizer of scientific life, but also with teaching work. He has conducted and continues to conduct numerous research in cooperation with scientists from many research centers in Germany and abroad. The research projects he implemented prove his great commitment and activity in raising funds for his research. He participated in the implementation of a total of 28 research projects, of which 21 were financed from German funds, one project from British funds, and five projects were financed from European Union funds. The research conducted as part of the

projects results in numerous scientific publications and implementations used directly in plant breeding. International and national cooperation enabled him not only to carry out many interesting, innovative and valuable research for the development of the scientific discipline, but also to publish the results of this work in renowned scientific journals. The candidate is a recognizable scientist in the world of science. He has performed numerous reviews of scientific articles (47 reviews) published in renowned journals from the JCR list with international reach, including those with a high impact factor. He is a member of the editorial boards of renowned journals, including Journal of Molecular Breeding, Applied Botany, Genetics and Breeding, Cereal Research Communication, Plants and Frontiers in Plant Science.

Viktor Korzun, Ph.D., is a member of many international scientific organizations and associations, in which he holds honorable positions. He is a member of the Scientific Steering Committee of the German Plant Research Program and the International Wheat Initiative, coordinator of the European Cereals Genetics Co-operative (EWAC), chairman of the Rye Group in the Cereals Section of the European Association for Research on Plant Breeding (EUCARPIA), member of the International Advisory Board of the Center for Biotechnology and Agricultural Research, Palacky University (Czech Republic), member of the Scientific Innovation Advisory Board of the Johnn Innes Center (JIC) in Norwich (Great Britain), member of the Scientific Advisory Board of the State Seed Breeding Institute of the University of Hohenheim (Germany) and member of the International Scientific Advisory Committee of the „Towards Next Generation Crops" project financed by the Czech Ministry of Education and the European Union. He also cooperates with scientific units in Poland, including the Institute of Plant Breeding and Acclimatization of the National Research Institute in Radzików, the Institute of Plant Genetics of the Polish Academy of Sciences in Poznań, the Department of Genetics and Plant Breeding of the West Pomeranian University of Technology in Szczecin and the Institute of Plant Genetics, Breeding and Biotechnology of the University of Life Sciences in Lublin.

Even though the candidate works in the private sector, he also has excellent teaching experience. He is invited to conduct a series of classes or guest lectures on subjects related to biotechnology, genetics, genomics and plant breeding at a number of universities. He gave lectures and classes for students at, among others, the Technical University of Munich (TUM), Germany, EPS Graduate School for Experimental Plant Sciences (Netherlands), Universidad de Talca (Chile), The Republic of Indonesia Defense University, Gothenburg University (Sweden), University of Odessa (Ukraine), Ghent University (Belgium), Universidad Politecnica de Valencia (Spain), Cornell University (USA), University of Bologna (Italy), Belarussian Agricultural Academy, Gorki (Belarus), Universita Degli Studu Di Milano (Italy), Moscow Timiryazev Agricultural Academy (Russia), Kiel University (CAU) (Germany), Martin Luther University, Halle (Germany), Institut für Pflanzenzüchtung und Pflanzenschutz, Halle (Germany), International School for Young Scientist "Embryology and biotechnology", Saint Petersburg (Russia).

Despite his great involvement in scientific and teaching work, Ph.D. V. Korzun also found time for organizational activities, he was a member of the organizing committees of nine international conferences: 7th International Scientific Conference "Plant Genetics, Genomics, Bioinformatics and Biotechnology" (PLANTGEN2023), Kazan, Republic of Tatarstan, Russia (2023), International Conference on Rye Breeding and Genetics, Leibniz Institute of Plant Genetics and Crop Plant Research (IPK), Gatersleben, Germany (2021), 5th International Scientific Conference "Plant Genetics, Genomics, Bioinformatics and Biotechnology" (PLANTGEN2019), Novosibirsk, Russia (2019), International Vavilov Conference, "N.I. Vavilov's Ideas in the Modern World", St Petersburg, Russia (2017), EWAC – The European Cereals Genetics Co-operative – EUCARPIA Cereals Section Conference, Lublin, Poland (2015), International Conference on Rye Breeding and Genetics, Wroclaw, Poland (2015), 8th International Wheat Conference, St Petersburg, Russia (2010), EWAC – The European Aneuploid Co-operative, Prague, Czech Republic (2005), EWAC – The European

Aneuploid Co-operative, Norwich, UK (2002). He actively participated in a number of international conferences, where he presented a number of talks (91) demonstrating the results of his scientific work.

The above-presented, by its very nature concise, discussion of the profile of the Ph.D. Viktor Korzun expresses great respect for his unique, original scientific achievements and excellent teaching and organizational achievements, full of creative inventiveness. The doctor is an outstanding creator and committed organizer of scientific and professional life, a worthy example of dedication to his passions for science, agriculture and people. I am deeply convinced that in the field of genetics and plant breeding, Ph.D. Viktor Korzun is an outstanding person and by all means deserving of the title of doctor honoris causa. It is with deep conviction that I recommend Ph.D. Viktor Korzun to the Senate of the University of Life Sciences in Lublin as worthy of being awarded this title.

Wroclaw, February 16, 2024

LAUDATIO A PROMOTORE HABITA

Your Magnificence Rector,
High Senate,
Venerable Excellencies,
Highly Honorable Doctor Honoris Causa,
Ladies and Gentlemen!

I had the great honor of presenting you Professor Viktor Korzun, who today will receive Doctorate Honoris Causa from the University of Life Sciences in Lublin, Poland. Professor Viktor Korzun holds many international, scientific, and organizational positions, namely: Global Lead Scientific Affairs; Evaluator of the EU FP6, FP7 Program, and HORIZON 2020; Coordinator of the European Cereals Genetics Co-operative (EWAC); Chairman of the Rye Group at Cereals Section of the European Association for Research on Plant Breeding (EUCARPIA), and is also a member of many international and scientific advisory boards, among others: Scientific Coordination Committee of the International Wheat Initiative; International Scientific Advisory of the project "Towards Next Generation Crops" funding by the Czech Ministry of Education and EU, since 2023.

The most distinguished Professor, Honorary Doctor, is an outstanding scientist, for whom science is the meaning and goal of life's struggles. Professor Viktor Korzun co-creates science, by living with science and for science. He is the author, or co-author of 125 scientific publications, numerous monographs, and chapters in monographs, as well, as international patents. His Hirsch Index, according to Google Scholar, is 72. Moreover, the Professor's international cooperation is exceptionally extensive, which is manifested, among others, by organizing many international conferences and being invited as a scientist and lecturer to research centers in various countries, including Germany, Italy, France, Great Britain, Spain, the Netherlands, Czech Republic, Hungary,

Ukraine, or Japan, Australia, Indonesia, Mexico, USA. The Honorable Honorary Doctor also cooperates with numerous Polish research centers, including Plant Breeding and Acclimatization Institute (IHAR) in Radzikow; Institute of Plant Genetics, Polish Academy of Sciences in Poznan; Department of Genetics and Plant Breeding in Szczecin, and of course the Institute of Plant Genetics, Breeding and Biotechnology of our University of Life Sciences in Lublin. The Professor is also a member of many editorial groups and a reviewer of publications and studies in numerous international journals.

Honorable Doctor Honoris Causa, Professor Viktor Korzun, can build mutual trust between nations, through scientific cooperation, based on partnership, responsibility for the quality, innovation of scientific research, and mutual understanding between nations. Over the course of 16 years, Professor Viktor Korzun participated in 27 projects, funded by external funds, including 21 from Germany; 1 from the UK; 3 research projects, and 2 training & education projects, from the EU. We can call Professor Viktor Korzun an ambassador of modern technologies, because His achievements, and openness to the wide scientific world bring together both, young and experienced scientists, students, and people of goodwill on all continents. Performing so many honorable and responsible functions in scientific societies, and organizations, our Honorary Doctor honoris causa applies the principle of Louis Pasteur: "Science has no homeland because human knowledge covers the whole world."

Viktor Korzun was born on January 13, 1964, in the town of Lysca, Pinsk district, Brest region, Belarus. His primary school education took place in the same town. He studied in the years 1981–1986 at the Belarusian Agricultural Academy, Gorki in Belarus, specialty: Plant breeding, and received a diploma with excellence note. After graduation, in 1986–1989, he worked as Head of agronomy at large agricultural farms in the Gomel and Brest regions in Belarus. The years 1989–1992 included scientific work on his doctoral thesis in plant genetics, which he completed and defended at the Institute of Genetics and Cytology, Academy of Sciences of Belarus in Minsk. During his further scientific

career (1992–1996), Professor Viktor Korzun was a visiting researcher at the Leibnitz Institute for Plant Genetics and Crop Plant Research, Gatersleben, Germany, and of Cambridge Laboratory, John Innes Center for Plant Science Research, Norwich, UK, and in 1996–1999 he worked as a Postdoctoral researcher at the Leibnitz Institute of Plant Genetics and Crop Plant Research (IPK), Gatersleben, Germany. In the years 1999–2018, he served as Head of Cereals Breeding Technologies, KWS, Germany. Since 2018, Prof. Viktor Korzun has been the Global Lead Scientific Affairs at KWS SAAT SE & Co. KGaA, Germany.

The new Doctor Honoris Causa of the University of Life Sciences in Lublin, Professor Viktor Korzun, is one of the „authorities of our times" sought by the media. The Professor's scientific and research achievements are impressive, and his most important achievements are in the field of plant breeding, related to the use of molecular markers, to expand the genetic base of heterotic rye populations, as well, as to facilitate the breeding of hybrids, and expand the area of cultivation of this plant. These studies are also related to the identification of genetic conditions and mechanisms of wheat resistance to infection of ears with fungi from the Fusarium group, Septoria tritici blotch, and eye spot. Professor Viktor Korzun also discovered the mechanisms of specific breed resistance of barley to powdery mildew, soil-borne cereal mosaic virus (SBCMV), and wheat spindle mosaic virus (WSSMV). He also mapped the genes determining restoration of the fertility of rye pollen, and developed and implemented PCR tests, enabling their simple identification.

Professor Viktor Korzun is one of the most internationally recognized scientists in the field of genetics, and cereal breeding, he can boast of a spectacular achievement in basic research, documented by a constantly growing list of groundbreaking publications, and then the implementation of reported discoveries in the form of patents. Thus, his professional activity combines basic and applied research, serving humanity by ensuring genetic progress in agriculture and ensuring access to food in the whole world. The extraordinary portfolio of Professor Viktor Korzun is reflected in the fact, that he conducted his re-

search in cooperation with many international institutions, and research groups, under the supervision of respected leaders. Most of his works were published in journals specializing in genetics and plant breeding. He made significant contributions to the genetic mapping of cereals, the analysis of structural organization of cereal genomes, identification of the structure and function of agriculturally important genes, and their impact on phenotype, and examples of this are the first SSR-based genetic map of wheat, and the RFLP-based map of rye. In addition to these main achievements, Professor Viktor Korzun presented many other significant discoveries and practical applications of his research. Using his deep knowledge of basic plant biology, combined with his excellent understanding of technical advances in plant breeding, our Honorary Doctor has successfully modified crop improvement strategies, to meet the challenges, posed by climate change, and to ensure food security around the world.

The research of the Honorary Doctor honoris causa of the University of Life Sciences in Lublin, Professor Viktor Korzun, concerns not only explaining a coherent, and understandable vision of natural sciences for modern man, but also the application of the results in breeding practice and agriculture. His research achievements not only benefit scientists but above all contribute to maintaining the safety of cereals, as one of the main sources of food. Professor Viktor Korzun's research is largely pioneering, including a genetic map of soft wheat (*Triticum aestivum* L.), using SSR markers, which was created for the first time. This scientific work has over 3,500 citations. For the first time, a molecular map of the rye genetic genome was also created, based on RFLP markers. For the first time, an innovative approach to mapping the *Rfp121*, and *Rfp322* genes (restoration of pollen fertility), was also used in winter rye hybrids. The results obtained, and the developed strategies, combined with the effective use of existing knowledge in modern cereal plant breeding, will enable the successful implementation of the most important tasks of agricultural intensification, in changing environmental conditions and ensuring food security, not only in a single country, but also in the world, in general.

The academic community of the University of Life Sciences in Lublin today pays tribute to an extraordinary, and outstanding man, the world-famous Professor Viktor Korzun, Honorary Doctor honoris causa, on this solemn and special day, honoring him with the highest academic distinction and title. We wish the Professor many further achievements in his scientific work, and organizational activity, in the field of agricultural, and biological sciences, as well, as all the prosperity, and development of a further wonderful scientific career, and a lot of health and satisfaction in your personal life.

Prof. dr hab. Aleksandra Badora

CURRICULUM VITAE

Professor Viktor Korzun

Business address	KWS SAAT SE & Co. KGaA Grimsehlstr. 31, 37574 Einbeck, Germany
E-mail	viktor.korzun@kws.com
Webpage	http://www.kws.com
Job position	Global Lead Scientific Affairs

Education

- Diploma in Agronomy, Belarusian Agricultural Academy, Gorki, Belarus, 1986
- PhD in Plant Genetics (Dr. biological science), Institute Genetics and Cytology, Academy of Sciences of Belarus, Minsk, Belarus 1994.
- Habilitation in Plant Breeding and Plant Genetics (Dr. Dr. biological science), Federal Research Center, N. I. Vavilov All-Russian Institute of Plant Genetic Resources (VIR), Sankt Peterburg, 2019.

Experience/Career

- Student of Belarusian Agricultural Academy, Gorki, Belarus, speciality Plant breeding, Diploma with excellence, 1981–1986.
- Head of agronomy at large agricultural farms, Gomel and Brest regions, Belarus 1986–1989.
- PhD in plant genetics, Institute Genetics and Cytology, Academy of Sciences of Belarus, Minsk, Belarus, 1989–1992.
- Visiting research worker of the Leibnitz Institute for Plant Genetics and Crop Plant Research, Gatersleben, Germany and of Cambridge Laboratory, JI Centre for Plant Science Research, Norwich, UK, 1992–1996.
- Postdoctoral research worker at the Leibnitz Institute of Plant Genetics and Crop Plant Research (IPK), Gatersleben, Germany, 1996–1999.
- Head of Cereals Breeding Technologies, KWS, Germany 1999–2018.
- Global Lead Scientific Affairs, KWS SAAT SE & Co. KGaA, Germany, since 2018.

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Activities

- Evaluator of the EU FP6, FP7 Program and HORIZON 2020 and Marie Skłodowska-Curie Actions and national research programs in various countries, since 2006
- Member of Scientific Steering Committee of German Plant Research Program, BMBF, 2008–2016
- Scientific Coordination Committee of the International Wheat Initiative, 2012–2018
- Coordinator the European Cereals Genetics Co-operative (EWAC), since 2012
- Chairman Rye Group at Cereals Section of the European Association for Research on Plant Breeding (EUCARPIA), since 2010
- Member of the International Advisory Board of the Centre for Biotechnology and Agricultural Research, Palacky University, Czech Republic, 2010–2014
- Member of Scientific Innovation Advisory Board at JIC, Norwich, UK, since 2019
- Members of the Scientific Advisory Board of the State Seed Breeding Institute of the University of Hohenheim, Stuttgart, Germany, since 2021
- Members of the International Scientific Advisory of the project "Towards Next Generation Crops" funding by the Czech Ministry of Education and EU, since 2023

Patents

Wilde P., V. Korzun, J. Menzel, R. Zhou, N. Stein, B. Hackauf: Restorer plant (DE102015016445A), 2017, WO2017109012A1, 2017.
Wilde P., V. Korzun, J. Menzel, R. Zhou, N. Stein, B. Hackauf: Restorer plants (EP3393234A1), 2018, EA201891223A1, 2018.
Wilde P., V. Korzun, J. Menzel, R. Zhou, N. Stein, B. Hackauf: Restorer plants (US2019136245A1), 2019.

Patent applications

Pidon H., A. Habekuss, N. Wedler, K. Oldach, A. Maasberg-Prelle, V. Korzun, N. Stein: Utilization of a Barley Yellow Dwarf Resistance (*BYDV*) gene to mediate resistance to viruses and other diseases such as rusts in barley and related crops (EP application).

Collaboration with Polish scientific centers

- Plant Breeding and Acclimatization Institute (IHAR), Radzikow, Poland, since 2002

Bauer E., V. Korzun. Molecular breeding in cereals. Proceedings of the 5th International Triticale Symposium, 30 June – 5 July, 2002, Radzikow, Poland, 81–88.

Lukaszewski A.J., K. Rybka, V. Korzun, S.V. Malyshev, B. Lapinski, V, And R. Whitkus. Recombinants of rye chromosome 2R with wheat induced by the ph1b mutation. Genome, 2004, 47, 36–45.

- Institute of Plant Genetics, Polish Academy of Sciences, Poznan, Poland, since 2003

Korzun V. Molecular markers and their applications in crop genetics and cereals breeding. XII Confrence Worskshop on "Microscopic fungi – host resistance genes, genetics and molecular research" Poznan, Poland, 4–5 April 2003, 13–20.

Korzun V. Molecular markers and their applications in cereals breeding. 4 April 2003, Institute of Plant Genetics, Polish Academy of Sciences, Poznan, Poland (invited talk).

- Department of Genetics and Plant Breeding, Agricultural University Szczecin, Szczecin, Poland, since 2009

Hackauf B., B. Truberg, H. Wortmann, F.J. Fromme, P. Wilde, J. Menzel, V. Korzun, S. Stojalowski. Minimazing ergot infection in hybrid rye by a smart breeding approach. In: F. Feldmann, D.V. Alford, C. Furk (eds.). Crop Plant Resistance to Biotic and Abiotic Factors, 2009, 439–450.

- Institute of Plant Genetics, Breeding and Biotechnology, University of Life Sciences in Lublin, since 2015

Korzun V., E. Byrne. Cereals genomics and molecular breeding – strong support for modern varieties development. Proceeding of the 16th International EWAC Conference, 24–29 May 2015, Lublin, Poland, p. 57.

Börner A., A.J. Worland, C.N. Law, V. Korzun, E.K. Khlestkina, T.A. Pshenichnikova, S. Chebotar, S. Landjeva, B. Kobiljski, E. Pestsova, S.V. Osi-

pova, A.F. Balint, A. Giura, K. Kowalczyk, M. Agacka-Moldoch, M.R. Simon, A.M. Castro, Y. Chesnokov, N. Tikhenko, M.A. Rehman Arif, M. Nagel, K. Neumann, S. Navakode, U. Lohwasser, M.S. Röder: EWAC – the past 25 years (1991–2015). In: A. Börner, K. Kowalczyk (eds.). Proceedings of the 16th International EWAC Conference, 24–29 May 2015, Lublin, Poland (2016), 15–26.
Korzun V. (invited talk). Public-Private-Partnership in plant research and plant breeding, 2nd International PhD Student's Conference at the University of Life Sciences in Lublin, Poland with a title Environment – Plant – Animal – Product, 19–20 April 2023, University of Life Sciences in Lublin, Poland.

Memberships of editorial boards (5)

- Associate Editor for the Journal Molecular Breeding, Springer, since 2008
- Associate Editor the Proceedings on Applied Botany, Genetics and Breeding, since 2018
- Associate Editor the Cereal Research Communications, Budapest, Hungary, 2016–2019
- Section Board Member of the Plants (MDPI), Plant Genetics, Genomics and Biotechnology, 2020–2022
- Associate Editor in Frontiers in Plant Science, Section Plant Breeding, since 2021

Referee for scientific journals (47)

Acta Agriculturae Scandinavica, Biotechnology Advances, BMC Plant Biology, BMC Genetics, BMC Plant Biology, Cellular & Molecular Biology Letters, Cereal Research Communications, Crop Breeding and Applied Biotechnology, Crop Science, Crop and Pasture Science, Euphytica, Field Crop Research, Frontiers in Genetics, Frontiers in in Plant Science, Genetic Resources and Crop Evolution, Genetics, Genetics and Molecular Biology, Genetika, Genome, Heredity, Journal of Agricultural Science, Journal of Microbiology, Biotechnology and Food Sciences, Journal of Agricultural Science and Technology, Journal of Agronomy and Crop Science, Journal of Experimental Botany, Journal of Applied Genetics, Journal of Genetics, Journal of Phytopathology, Journal of Plant Physiology, Molecular Breeding, Molecular Ecology, Molecular Genetics and Genomics, Phytopathology, New Phytologist, Plant Biology, Plant Breeding, Plant Cell Reports, Plant Genome, Plant Sci-

ence, Plants, PLoS One, Scientific Reports, The Plant Genome, Theoretical and Applied Genetics, Trends in Plant Science, Trends in Biotechnology

Organisation of international conferences (9)

- 7th International Scientific Conference "Plant Genetics, Genomics, Bioinformatics and Biotechnology" (PLANTGEN2023), Kazan, Republic of Tatarstan, Russian Federation, 11–14 July 2023, 420 participants, Organising Committee.
- International Conference on Rye Breeding and Genetics, Leibniz Institute of Plant Genetics and Crop Plant Research (IPK), Gatersleben, Germany, 21–22 June 2021, Organising Committee.
- 5th International Scientific Conference "Plant Genetics, Genomics, Bioinformatics and Biotechnology" (PLANTGEN2019), Novosibirsk, Russia, 24–29 June 2019, Organising Committee.
- International Vavilov Conference, "N. I. Vavilov's Ideas in the Modern World", St Petersburg, Russia, 20–24 November 2017, 412 participants, Organising Committee.
- EWAC – The European Cereals Genetics Co-operative – EUCARPIA Cereals Section Conference, 24–29 May 2015, Lublin, Poland, 47 participants, Organising Committee.
- International Conference on Rye Breeding and Genetics, Wroclaw, Poland, 24–26 June 2015, 81 participants, Organising Committee.
- 8th International Wheat Conference, St Petersburg, Russia, 1–4 June 2010, 650 participants, Organising Committee.
- EWAC – The European Aneuploid Co-operative, Prague, Czech Republic, 27 June – 1 July 2005, 33 participants, Organising Committee.
- EWAC – The European Aneuploid Co-operative, Norwich, UK, 1–6 July 2002, 47 participants, Organising Committee.

Invited oral presentations (91)

- Korzun V.: Application of genetics and genomics research in innovative plant breeding. Plant Genetics, Genomics, Bioinformatics and Biotechnology (PlantGen), Kazan, Republic of Tatarstan, Russian Federation, 11–14 July 2023 (online).

- Korzun V.: Future challenges and innovations. 6th Conference of Cereal Biotechnology and Breeding (CBB6), jointly organized by EUCARPIA Cereals Section, 3–5 November 2021, Budapest, Hungary.
- Korzun V.: Rye genomics and breeding: bridging the gap. EUCARPIA RYE, 21–22 June 2021 (online).
- Korzun V.: Molecular breeding in cereals – current achievements and perspectives. 6th PlantGen, 14–18 June 2021, Novosibirsk, Russia (online).
- Korzun V.: KWS Plant Breeding R&D in the light of future bioeconomy. 5th PhD Day NRW "Future Bioeconomy, 6 October 2020, Colone, Germany (online).
- Korzun V.: Molecular breeding in cereals – current achievements and perspectives. International Gamow Conference, 13 August 2020, Odessa, Ukraine (online).
- Korzun V.: Genetics and molecular breeding in cereals – current stage and perspectives. 7 February 2020, FIZ, Kazan, Russia.
- Korzun V.: New breeding strategies and bioinformatic tools in cereals, 5th Conference on Cereals Biotechnology and Breeding, 4–7 November 2019, Budapest, Hungary.
- Korzun V.: Application of genetic and genomic research in cereals. Seminar at the Consiglio Nationale delle Ricerche, Instituto di Bologia e Biotecnologia Agraria, 9 September 2019, Milano, Italy.
- Korzun V.: Application of Genetic and Genomic Research in Cereals. Seminar at the CREA, 3 September 2019, Fiorenzuola d'Arda, Italy.
- Korzun V.: Cereals genomics, genetics and molecular breeding – strong support for modern plant breeding. VII Congress and Associate Symposiums of Vavilov Society of Geneticists and Breeders on the 100th Anniversary of the Department of Genetics of Sankt-Petersburg State University, St Petersburg, Russia, 18–22 June 2019.
- Korzun V.: Application of genetic and genomic research in cereals. National Genetics Institute (NIG), 20 May 2019, Mishima, Japan.
- Korzun V.: Application of genetic and genomic research in cereals. Kihara Institute for Biological Research, 13 May 2019, Yokohama, Japan.
- Korzun V.: Application of genetic and genomic research in cereals. Institute of Crop Science, National Agriculture and Food Research Organization (NARO), 8 May, 2019, Tsukuba, Japan.
- Korzun V.: Application of genetic and genomic research in cereals. Fukui Prefectural University, 3 May 2019, Fukui, Japan.

- Korzun V.: Application of genetic and genomic research in cereals. Graduate School of Science and Technology, Niigata University, 25 April 2019, Niigata, Japan.
- KorzunV.: Modern possibilities of genetics and genomics in cereal breeding. VII Baltic Genetics Congress, 26 October 2018, Riga, Latvia.
- Korzun V.: Bridging genomics & genetics in modern plant breeding. Universidad Politecnica de Valencia, 4 October, 2018, Valencia, Spain.
- Korzun V.: Cereals genomics, genetics and molecular breeding – solid support for modern plant breeding. Istituto di Biologia e Biotecnologia Agraria, 20 July 2018, Milano, Italy.
- Korzun V.: Cereals genomics, genetics and molecular breeding – strong support for modern plant breeding. CREA, 18 July 2018, Fiorenzuola d'Arda, Italy.
- Korzun V.: Bridging the Gap between Wheat Research and Breeding. Wheats & Women International Conference, 14–15 June 2018, Rome, Italy.
- Korzun V.: Future important breeding targets. 2nd Wheat International Workshop, 22 March 2018, Clermont-Ferrand, France.
- Korzun V.: Cereals genomics & genetics – strong support for modern breeding. Wheat breeding and genetics food safety – seminar and workshop. 6 March 2018, Agricultural Institute Osijek, Croatia.
- Korzun, V.: Genomics and molecular breeding in cereals. 21 November, 4th International Vavilov Conference N.I. Vavilov`s Ideas in the Modern World, 20–24 November 2017, Vavilov Institute, St Petersburg, Russia.
- Korzun V.: The "Golden Gate Bridge" between Research and Breeding. 16 October 2017, TSL, John Innes Centre, Norwich, UK.
- Korzun V.: Genomics and molecular breeding in cereals. Green for Good V International Conference, 19–22 June 2017, Olomouc, Czech Republic.
- Korzun V.: Genomics and molecular breeding in rye. International Seminar on Rye Breeding, 23 May 2017, Tatar Scientific Research Institute of Agriculture, Kazan, Russia.
- Korzun V.: From marker-assisted selection (MAS) to genomic selection (GS) – strong support for modern barley breeding. 12th IBGS, 26–30 June 2016, Mineappolis, USA.
- Korzun V.: Genomics and molecular breeding in cereals, ExpoSEED, 7–8 June 2016, Fiourenzuola, Italy.
- Korzun V.: Cereals genomics, genetics and molecular breeding – strong support for modern varieties. CerealPath, Dublin, Irland, 27 January 2016.

- Korzun V.: Cereals genomics, genetics and molecular breeding – strong support for modern varieties Kazan (Volga region) Federal University, Russia, 11 December 2015.
- Korzun V.: Molecular markers and their applications in cereals breeding, Kazan (Volga region) Federal University, Russia, 10 December 2015.
- Korzun V.: Genomics and molecular breeding in rye – current view and future development. Kazan (Volga region) Federal University, Russia, 10 December 2015.
- Korzun V.: Cereals genomics and genomic selection – new time of modern cereals breeding. The 3rd Conference of Cereal Biotechnology and Breeding (CBB3), 2–4 November 2015. Berlin, Germany.
- Korzun V.: Cereals genomics, genetics and molecular breeding – strong support for modern varieties development, 20 October 2015, INRA, Toulouse, France.
- Korzun V.: Cereals genomics, genetics and molecular breeding – strong support for modern varieties development. 8 October 2015, INRA, Clermont Ferrand, France.
- Korzun V.: Genomics and molecular breeding in rye – current view and future development. The EUCARPIA International Conference on Rye, 23–26 June 2015, Wroclaw, Poland.
- Korzun V.: Increasing and coordinating public and private funders' support for wheat research. The EXPO 2015 "Feeding the Planet, Energy for Life", 3 June 2015, Milan, Italy.
- Korzun V.: Cereals genomics and genomic selection – new era of modern cereals breeding. EWAC–EUCARPIA Cereals Section International Conference, 24–29 May 2015, Lublin, Poland.
- Korzun V.: Genomics and molecular breeding in cereals – current view and future development University of Florida, IFAS Agronomy Department Seminar, Gainesville, USA, 16 October 2014.
- Korzun V.: Genomics and molecular breeding in cereals – current view and future development. Cornell University, Ithaca, USA, 7 October 2014.
- Korzun V.: Classical & molecular cereals breeding in Europe: current stage and perspectives. October 2013, Brisban.
- Korzun V.: Molecular and Classical wheat breeding in Europe: current stage and perspectives, 12th IWGS, 10 September 2013, Yokohama.
- Korzun V.: Green biotechnology and molecular breeding: achievements and perspectives. 2nd International Seminar on "Cutting Edge Science & Technologies towards Food, Environment and Health – Focus: Civil Society", 2–4 September 2013, Göttingen.

- Korzun V.: From genotype to phenotype – new dimension in cereals breeding. Society of Experimental Biology (SEB) Annual Main Meeting 2–6 July 2013, Valencia Spain.
- Korzun V.: Cereals Breeding: yesterday, today and tomorrow. 5th StatSeq Workshop, 24–26 April 2013, Helsinki.
- Korzun V.: From genotype to phenotype – new dimension in barley breeding, GPZ meeting, 25–26 February 2013, Quedlinburg, Germany.
- Korzun V.: New technology supporting cereals germplasm development for resistance to biotic and abiotic stresses. International Conference "Biotechnology and Plant Breeding – Perspectives towards food security and sustainability", 10–12 September 2012, Radzikow, Poland.
- Korzun V.: Molecular markers for future germplasm development: current status and perspectives, 19th EUCARPIA General Congress, 21–24 May 2012, Budapest, Hungary.
- Korzun V.: Molecular and classical breeding in barley in Europe: current status and perspectives. 11th International Barley Genetics Symposium, 16–20 April 2012, Hangzhou, China.
- Korzun V.: Molecular and classical breeding in cereals: competition or cooperation? EWAC, 2011
- Korzun V.: Molecular breeding in cereals: current status and perspectives, 21st International Triticeae Mapping Initiative (ITMI), 5–9 September 2011, Mexico City, Mexico.
- Korzun V.: Biotechnology and Molecular Breeding in Small Grain Cereals: Achievement and Perspectives. Olomouc Biotech 2011 "Plant Biotechnology: Green for Good", 20–21 June 2011, Olomouc, Czech Republic.
- Korzun V.: Marker assisted selection in cereals breeding and what we have learn from Bioexploit. Bioexploit final meeting, 15–16 February 2011, Wageningen, the Netherland.
- Korzun V.: Green biotechnology and molecular breeding: achievements and perspectives. International Conference on Genetics and Biotechnology, 25–29 October 2010, Minsk, Belarus.
- Korzun V.: Exploiting allelic and phenotypic diversity for frost tolerance in winter rye. EUCARPIA Rye, 2010, Minsk, Belarus.
- Korzun V.: Application of marker assisted selection in cereals. Bioexploit technology workshop on Marker Assisted Selection: from discovery to application, 9–10 February 2010, Wageningen, the Netherland.
- Korzun V.: Introgression of two QTLs from exotic source in adapted European wheat. 6th CWFHB meeting, 1–4 November 2009, Ottawa, Canada.

- Korzun V.: Molecular breeding, green biotechnology and world population – challenges in the future. Word Grain Forum, 6–7 June 2009, St Petersburg, Russia.
- Korzun V., E. Ebmeyer, J. Großer and P. Wilde: Application of marker assisted selection in cereals. Bioexploit Science Meeting, 31 March – 1 April 2009, Wageningen, the Netherlands.
- Korzun V.: Application of molecular marker in cereals breeding. 19th International Triticeae Mapping Initiative – 3rd Cost Tritigen, 31 August – 4 September 2009, Clermont-Ferrand, France.
- Korzun V.: Molecular markers and their applications in cereal breeding – from breeders' point of view. TritiGen COST meeting "Triticeae genomics for the advancement of essential European crops, 1–3 2007, Tenerife, Spain.
- Korzun V.: Using genetic diversity for crop improvement – few examples from research and breeding in small grain cereals. ICARDA, 17 September 2007, Aleppo, Syria.
- Korzun V.: EUREKA CEREQUAL project on Fusarium head blight – result and perspectives. CIMMYT Fusarium Head Blight Workshop on the Global Fusarium Initiative for International Collaboration, 14–17 March 2006, El Batan, Mexico.
- Korzun V.: Marker assisted selection – a fast track to increase genetic gain in cereals breeding – a few examples of successful application. Keygene, 30 May 2007, Wageningen, the Netherland.
- Korzun V.: Marker assisted selection – a fast track to increase genetic gain in cereals breeding. European Cereals Genetics Co-operative (EWAC), 6–10 May 2007, Istanbul, Turkey.
- Korzun V.: Molecular marker assisted cereal breeding. Conference "Plant Nutrition meets Plant Breeding", 26–28 September 2006, University of Hohenheim, Stuttgart, Germany.
- Korzun V.: Molecular markers and their applications in cereals breeding. 3 April 2006, Rothamsted Research Institute, Harpenden, UK.
- Korzun V.: Molecular breeding in cereals – advantages and perspectives. Philip Morris International, 5 January 2006, Neuchatel, Swiss.
- Korzun V.: What is restriction today: genotype or phenotype. European Wheat Aneuploid Co-operative (EWAC), 27 June – 2 July 2005, Prague, Czech Republic.
- Korzun V.: Cereals breeding & genomics – bridging together. 11th International Conference for Renewable Resources and Plant Biotechnology, 6–7 June 2005, Poznan, Poland.

- Korzun V.: Cereals breeding and genomics – bridging together. International Scientific Conference on Molecular Genetics, Genomics and Biotechnology, Minsk, 26 November 2004.
- Korzun V.: Methodik zur Bestimmung in den wesentlichen abgeleiteten Sorten. Symposium "Möglichkeiten und Grenzen der Analyse und Bewertung der genetischen Vielfalt in der Land-, frost und Fischereiwirtschaft", 27 September 2004, Mariensee.
- Korzun V.: Molecular markers and their applications in cereals genetics and breeding. Workshop "Marker assisted selection – a fast track to increase genetic gain in plant and animal breeding", 17 October 2003, Turin, Italy.
- Korzun V.: Molecular markers and their applications in cereals breeding. 4 September 2003, 10 IWGS, Italy.
- Korzun V.: Molecular markers and their applications in cereals breeding. 4 April 2003, Institute of Plant Genetics, Polish Academy of Sciences, Poznan, Poland.
- Korzun V.: Molekulare Züchtung: Stand und Perspektive. GFP-Workshop "Forschung gestaltet Zukunft", 30–31 January 2002, Bonn.
- Korzun V.: Molecular markers and their applications in crop genetics and cereals breeding. 13 December 2002, John Inne Centre, Norwich, UK.
- Korzun V.: Anwendung der Molekulargenetik in Getreidezuchtbetrieb – Stand und Ausblick. Fachkolloquien 2002/2003 der Abteilung PZ der LBP Freising, 29 October 2002, Freising.
- Korzun V.: Used of molecular markers in cereals breeding. Inter. Workshop "Application of molecular Markers in studies on plants", 25–29 September 2002, Warsaw, Poland.
- Korzun V.: EWAC heritage – waiting for new application. European Wheat Aneuploid Co-operative (EWAC), John Innes Centre, 1–6 July 2002, Norwich, UK.
- Korzun V.: Molekulare Züchtung: Stand und Perspektive. GFP-Workshop, 30–31 January 2002, Bonn, Germany.
- Korzun V.: Anwendung molekularer Marker in der Getreidenzüchtung. 9 Arbeitstagung AG Molekure Marker, 25–26 September 2001, Halle, Germany.
- Korzun V.: A molecular linkage map of rye (*Secale cereale* L.). EUCARPIA Rye Meeting, Plant Breeding and Acclimatization Institute, Radzikow, Poland, 5 July 2001.
- Korzun V.: Gene, genome and comparative mapping in cereals. Department of Plant Science. University of Adelaide, Adelaide, Australia, 7 June 1999.

- Korzun V.: Gene, genome and comparative mapping in cereals. Department of Genetics and Biotechnology, University of Tras-os-Montes and Alto Douro, Vila Real, Portugal, 15 September 1998.
- Korzun V.: Gene, Genome and Comparative Mapping in Cereals. Brown Bag Seminar, International Maize and Wheat Improvement Centre (CIMMYT), Mexico, 4 September 1998.
- Korzun V.: Wheat microsatellites: development and practical application for plant genetics and plant breeding. Brown Bag Seminar, International Maize and Wheat Improvement Centre (CIMMYT), 2 September 1998, Mexico.
- Korzun V.: Wheat microsatellites: practical applications for plant genetics and breeding. VIR, St Petersburg, Russia, 16 July 1998.
- Korzun V.: Wheat microsatellites – development and applications. NIAB, Cambridge, UK, 1 July 1998.
- Korzun V.: Current status of development and application of wheat microsatellites. International Symposium and Training Course on Molecular Plant Genome Analysis, 21 June – 3 July 1998, Gödollö, Hungary.

Teaching – lectures at the universities (23)

- Korzun V.: Application of genetic and genomic research in cereal breeding. Graduate Program in Agriculture and Breeding "Crop Genomics" at the Technical University of Munich (TUM), Germany, 6 February 2022 (online).
- Korzun V.: Genomics & genetics in modern plant breeding (on example of cereals). EPS Graduate School for Experimental Plant Sciences, the Netherland, 31 May 2022.
- Korzun V.: Application of genetics and genomics research in cereals. Instituto de Ciencias Biologicas, Universidad de Talca, Chile, invited lecture (online), 29 April 2021.
- Korzun V.: Application of genetic and genomic research in cereal breeding. Graduate Program in Agriculture and breeding "Crop Genomics" at the Technical University of Munich (TUM), Germany, 13 August 2021 (online).
- Korzun V.: Applications of genomics and genetics research in cereals. Guest lecture. Undergraduate Program in Biology. Faculty of Military Mathematics and Biology. The Republic of Indonesia Defense University, 26 July 2021 (online).

- Korzun V.: Application of genetic and genomic research in cereals. Biological Session of Conference named by G.A. Gamow. "The Importance of G. Gamow's Ideas for Biology of the 21st Century", Odessa, Ukraine, 17 August 2021, invited lecture (online).
- Korzun V.: Molecular Breeding in Cereals – current achievements and perspectives. XX Russian Young Scientists Conference, Moscow, Russia, 27 October 2020 (online).
- Korzun V.: Application of genetic and genomic research in cereals. Gothenburg University, 28 April 2022.
- Korzun V.: Genomics & genetics in modern plant breeding (on example of cereals). Ghent University master students in Plant Biotechnology, Ghent, 17 March 2022 (online).
- Korzun V.: Connecting genomics and genetics in modern plant breeding. ITMO, St Petersburg, 26 January 2022 (online).
- Korzun V.: Connecting genomics & genetics in modern plant breeding. ISA-CSIC, Cordoba, Spain, 21 September 2018.
- Korzun V.: Linking genomics, genetics and molecular markers in modern cereals breeding. Inst. De Biologia Molecular y Celular de Plantas (IBMCP), Universidad Politecnica de Valencia, Valencia, Spain, 14 September 2018.
- Korzun V.: Linking genomics, genetics and molecular markers in modern cereals breeding. Cornell University, USA, 4 September 2018.
- Korzun V.: Cereals genomics, genetics and molecular breeding – solid support for modern plant breeding. Department of Agricultural and Food Sciences (DISTAL), University of Bologna, 23 July 2018, Italy.
- Korzun V.: Modern plant breeding. Belarussian Agricultural Academy, Gorki, Belarus, 2 September 2017.
- Korzun V.: Genomics and molecular breeding in cereals. Universita Degli Studu Di Milano, Italy, 7 July 2017.
- Korzun V.: Molecular breeding in wheat. Lectures (6 hours) in IAMZ-CIHEAM, 8–9 May 2016, Zaragoza, Spain.
- Korzun V.: Application of molecular markers in cereals breeding. AgroBioTech-2013, Moscow Timiryazev Agricultural Academy, Moscow, 14 July 2013.
- Korzun V.: Molecular breeding in rye. Kiel University (CAU), Kiel, 2011.
- Korzun V.: Molekulare Züchtung und Biotechnologie in Getreide – Aktueller Stand der Technik und Perspektiven für die Zukunft. Martin Luther University, Halle-Saale, Germany, 19 June 2009.

- Korzun V.: Cereals biotechnology, genomics and breeding. 1st International school for young scientist "Embryology and biotechnology", 4–9 December 2005, St Petersburg, Russia.
- Korzun V.: Nutzung von DNA- Marker für die Pflanzenzüchtung, Kolloquien Pflanzenzüchtung und Pflanzenschutz, Institut für Pflanzenzüchtung und Pflanzenschutz, Halle/S, 28 January 1998.
- Korzun V.: Wheat microsatellites: practical applications for plant genetics and breeding. Plant Breeding Seminar, Cornell University, Ithaca, USA, 2 September 1997.

External funding

Title	Duration	Project number
National, GERMANY		
BulbOmics: Harnessing virus resistance from *Hordeum bulbosum* for sustainable barley breeding using „GenOmics"	15.10.2016 30.11.2019	2818201415
SHAPE: Structural genome variation, haplotype diversity and the barley pan-genome – Exploring structural genome diversity for barley breeding	01.11.2016 31.10.2019	031B0190C
Genbank 2.0: Genomics-based exploitation of wheat genetic resources for plant breeding	01.11.2016 31.10.2019	031B0184E
FusResist: Genome-based analysis of the wheat/fusarium pathosystem for the development of healthy food and feed products	01.07.2015 30.06.2018	031B001E
InnoGrain-Malt: Securing malting quality and yield stability of barley through genomics – based precision breeding	01.01.2012 31.12.2014	0315960A
VALID: Validation and identification of important marker/trait associations for traits of agronomic importance towards the development of improved wheat varieties	01.10.2011 30.09.2014	0315947C

Title	Duration	Project number
ExpResBar: Exploiting genetic variation for resistance to important pathogens in barley	01.04.2010 31.03.2013	0315702D
HYWHEAT: Genomics – based prediction of hybrid performance in wheat	01.07.2011 30.06.2014	0315945A
BarleyFortress: Targeted exploitation of basal defense genes for pathogen resistance in barley	01.08.2011 30.06.2014	0315955
TransBulb: A genomics-assisted approach to tap the potential of the secondary gene pool for sustainable barley breeding	01.01.2012 31.12.2014	0315966
SEEDSET: Developing drought tolerant and nitrogen use efficient barley lines with improved seed set and yield during anthesis/post-anthesis	01.02.2011 31.01.2014	511-06.01-28-1--45.041-10
RYE SELECT: Genome-based precision breeding strategies for rye	01.10.2011 30.09.2014	0315946
GRAIN: Development of barley lines with increased yield and improved grain quality under drought stress during grain filling	01.07.2007 30.06.2011	0315041
RYE FROST: Description of the genetic and phenotypic diversity of frost tolerance in winter rye	01.10.2007 31.12.2010	0315062
GENOBAR: Genome-wide approach to associate genetic diversity with agronomically important traits in barley	01.01.2008 31.12.2010	0315066
CEREHEALTH: Ensuring sustainable food and feed production	01.05.2007 30.04.2010	0313992
GABI TILL: Extension and application of the GABI-TILLING platform for functional analysis of crop genes	01.09.2007 31.08.2010	0315052G
GABI-KANADA: Reduction of Fusarium toxin content in wheat with a genomic approach	01.04.2006 31.03.2010	0313711E
GABI MALT: An integrated approach to the genetic and functional dissection of malting quality in barley	01.08.2004 30.09.2008	0313125
GABI-BRAIN: BREEDING AND INFORMATICS	01.10.2004 31.12.2007	0313126A
EUREKA: Research Strategies towards Improving	01.01.2001	0312559

Title	Duration	Project number
Wheat Quality by Resistance to Fusarium Head Blight (FHB)	31.12.2005	
National, UK		
LINK: Controlling Soil-borne wheat mosaic virus in the UK by developing resistant wheat cultivars	2003-2006	2616 - DEFRA
EU research projects		
BIOEXPLOIT (FP6): Project full title: Exploitation of natural plant biodiversity for the pesticide-free production of food	2005-2009	FP6-513959
TriticeaeGenome (FP7): Genomics for *Triticeae* improvement	2008-2012	FP7-212019
AdaptaWheat (FP 7): Genetics and physiology of wheat development to flowering: tools to breed for improved adaptation and yield potential	2012-2015	FP7-289842
EU training & educations projects		
ExpoSEED (MSCA-RISE): Exploring the molecular control of seed yield in crops	2015-2019	691109
CEREALPATH (MSCA-ITN-ETN) training in innovative and integrated control of cereal diseases	2015-2019	674964

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ET COMMENTATIONUM SELECTARUM

Original publications

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4. Korzun V., H.-J. Balzer, A. Balzer, H. Böumlein, A. Börner. Chromosomal location of three wheat sequences with homology to pollen allergen encoding, DNA replication regulating, and DNA (cytosine-5)-methyltrasferase genes in wheat and rye. Genome, 1996, 39, 1213–1215.
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Monographs (chapters in monographs)

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