



Dr. Viktor Korzun
KWS SAAT SE & Co. KGaA Einbeck, Germany

Dr. Viktor Korzun will present a lecture with the title
“Application of Genetic and Genomic Research in Cereals Breeding”.

Biography: Viktor Korzun has his BS in Agronomy & Breeding from the Belarussian Agricultural Academy and a PhD in Plant Genetics from the Institute of Genetics and Cytology, Academy of Sciences of Belarus.

- He was visiting scientist at Cambridge Laboratory, John Innes Centre for Plant Science Research, Norwich, UK and postdoctoral researcher at the Institute of Plant Genetics and Crop Plant Research, Gatersleben, Germany before he moved in 1999 to KWS as Head of Cereals Breeding Technologies.
- From 2018 he has his current role as Global Lead Scientific Affairs with focus on national and international collaboration, relationships with worldwide leading universities and institutions and support of young talented scientists in plant breeding related research.
- Viktor Korzun has more than 30 years' experience in development and application of molecular markers and novel breeding technologies in cereal crops. He has authored 174 full publications in high-ranking scientific journals and books, including abstract and short communications > 600 publications (**h-index is 73**, <https://scholar.google.com/citations?user=RxTM094AAAAJ&hl=de&oi=ao> on 07.12.2022) and is an Associate Editor of the Journal Molecular Breeding.
- Dr. Viktor Korzun is a Member of Scientific Innovation Advisory Board at John Innes Centre (JIC) <https://www.jic.ac.uk/>, Norwich, UK and a Members of the Scientific Advisory Board of the State Seed Breeding Institute of the University of Hohenheim, <https://lsa.uni-hohenheim.de/> Stuttgart, Germany.

KWS SAAT SE & Co. KGaA: KWS is one of the world's leading plant breeding companies. Over 5,000 employees in more than 70 countries generated net sales of around €1,82 billion in the fiscal year 2022/2023. KWS has operated independently for 165 years, focusing on plant breeding and the production of seed for corn, sugarbeet and other crops. KWS supports farmers by improving yield and plants' resistance to diseases, pests and stress. KWS invested more than €290 million last fiscal year in R&D. As plant breeders we strive to solve the increasing plant pathogen challenges.

More information: www.kws.com . Follow us on Twitter® at https://twitter.com/KWS_Group .

13 MAIN PUBLICATIONS:

1. **Korzun V.**, G. Melz and A. Börner / RFLP mapping of the dwarfing (*Ddw1*) and hairy peduncle (*Hp*) genes on chromosome 5 of rye (*Secale cereale* L.) // *Theor. Appl. Genet.*, 1996. – 92. – P. 1073-1077.
2. Röder, M. S., **V. Korzun**, K. Wendehake, J. Plaschke, M.-H. Tixier, P. Leroy and M. W. Ganal / A microsatellite map of the wheat genome // *Genetics*, 1998. – 149. – P. 2007-2023.
3. **Korzun, V.**, S. Malyshev, A.V. Voylokov and A. Börner / A genetic map of rye (*Secale cereale* L.) combining RFLP, isozyme, microsatellite and gene loci // *Theor. Appl. Genet.*, 2001. – 102. – P. 709-717.
4. Bauer E., T. Schmutzer, I. Barilar, M. Mascher, H. Gundlach, M. M. Martis, S. O. Twardziok, B. Hackauf, A. Gordillo, P. Wilde, M. Schmidt, **V. Korzun**, K.F.X. Mayer, K. Schmid, C.-C. Schön, U. Scholz / Towards a whole-genome sequence for rye (*Secale cereale* L.) // *Plant. J.*, 2017. – 89. – P. 853-869.
5. Miedaner T., **V. Korzun**, E. Bauer / Genomics-based hybrid rye breeding // In *Applications of Genetics and Genomics Research in Cereals* // Genomics Miedaner T., V. Korzun (Eds.) // Woodhead Publishing Series in Food Science, Technology and Nutrition // Elsevier – 2018.- P.329-344.
6. Rabanus-Wallace T. M., B. Hackauf, M. Mascher, T. Lux, T. Wicker, H. Gundlach, M. Báez, A. Houben, K. F.X. Mayer, L. Guo, J. Poland, C. J. Pozniak, S. Walkowiak, J. Melonek, C. Praz, M. Schreiber, H. Budak, M. Heuberger, B. Steuernagel, B. Wulff, A. Börner, B. Byrns, J. Čížková, D. B. Fowler, A. Fritz, A. Himmelbach, G. Kaithakottil, J. Keilwagen, B. Keller, D. Konkin, J. Larsen, Q. Li, B. Myśków, S. Padmarasu, N. Rawat, U. Sesiz, B. Sezgi, A. Sharpe, H. Šimková, I. Small, D. Swarbreck, H. Toegelová, N. Tsvetkova, A. V. Voylokov, J. Vrána, E. Bauer, H. Bolibok-Bragoszewska, J. Doležel, A.Hall, J. Jia, **V. Korzun**, A. Laroche, X.-F. Ma, F. Ordon, H. Özkan, M. Rakoczy-Trojanowska, U. Scholz, A. H. Schulman, D. Siekmann, S. Stojalowski, V. Tiwari, M. Spannagl, N. Stein / Chromosome-scale genome assembly provides insights into rye biology, evolution, and agronomic potential // *Nature Genetics*, 2021. – 53.– P. 564–573.
7. 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 in Plant Science*, 2021. – 26.– P. 607-630.
8. Zhao Y., P. Thorwarth, Y. Jiang, N. Philipp, A.W. Schulthess, P.H. G. Boeven, C. F. H. Longin, M. Gils, R. Schachschneider, J. Schacht, E. Ebmeyer, **V. Korzun**, E. Kazman, Vilson Mirdita, Jost Dörnte, Stefan Kontowski, Ralf Horbach, Hilmar Cöster, J. Holzapfel, A. Jacobi, L. Ramgraber, C. Reinbrecht, N. Starck, P. Varenne, A. Starke, F. Schürmann, M. Ganal, A. Polley, S. Beier, U. Scholz, T. Würschum, R. Schmidt, J. C. Reif / Big data strategies for predicting grain yield of hybrids in wheat // *Science Advances*, 24 September 2021
9. Hackauf B., T. Rabanus-Wallace, **V. Korzun** / Mapping of genes and QTL rye // *The Rye Genome* // Rabanus-Wallace T., N. Stein (Eds.) // *Compendium of Plant Genomes* // Springer Nature Switzerland AG – 2021.- P.135-180. <https://doi.org/10.1007/978-3-030-83383-1>.
10. Joanna Melonek J., **V. Korzun**, B. Hackauf / Genomics of self-incompatibility and male-fertility restoration in rye // *The Rye Genome* // Rabanus-Wallace T., N. Stein (Eds.) // *Compendium of Plant Genomes* // Springer Nature Switzerland AG – 2021. - P.181-212. <https://doi.org/10.1007/978-3-030-83383-1>.
11. **Korzun V.**, M. L. Ponomareva, M. E. Sorrells / Economic and academic importance of rye // *The Rye Genome* // Rabanus-Wallace T., N. Stein (Eds.) // *Compendium of Plant Genomes* // Springer Nature Switzerland AG – 2021.- P.1-12. <https://doi.org/10.1007/978-3-030-83383-1>.
12. Schulthess A.W., S.M. Kale, F. Liu, Y. Zhao, N. Philipp, M. Rembe, Y. Jiang, U. Beukert, A. Serfling, A. Himmelbach, J. Keilwagen, J. Fuchs, M. Oppermann, S. Weise, P. H. G. Boeven, C. F. H. Longin, S. Kollers, N. Pfeiffer, **V. Korzun**, N. Stein, M. Mascher, J. C. Reif / GiPS: Genomics-informed parent selection uncovers the breeding value of wheat genetic resources // *Nat. Genet.* 54 (2022) 1544-1552. <https://dx.doi.org/10.1038/s41588-022-01189-7>
13. Pidon H., B. Ruge-Wehling, T. Will, K. Fischer, A. Habekuß, N. Wedler, K. Oldach, A. Maasberg-Prelle, **V. Korzun**, N. Stein / Fine-mapping of *Ryd4Hb*, a major resistance gene to Barley yellow dwarf virus from *Hordeum bulbosum* // *Theor Appl Genet* 2024, 137:60, <https://doi.org/10.1007/s00122-024-04542-y>