

Gregor Mendel Foundation awards Innovation Prize to IPK researchers Nils Stein and Martin Mascher

Berlin/ Gatersleben, 17.11.2022 For years, Prof. Dr. Nils Stein and Dr. Martin Mascher have been among the leading international scientists in the field of cereal genome research. For their work, the two researchers from the IPK Leibniz Institute (IPK) were awarded the Gregor Mendel Innovation Prize by the Gregor Mendel Foundation at a ceremony in Berlin today.

The Gregor Mendel Foundation's specifications for the Innovation Award are short and to the point: the award, which went to Prof. Dr Nils Stein and Dr Martin Mascher from the IPK in Berlin today, is given for knowledge that benefits. "And with the decoding of the complex genomes of wheat, barley and rye, the two IPK scientists have developed methods and strategies to capture and describe the genetic diversity of these crop species and make it available to interested users," said the Gregor Mendel Foundation.

"This is an important contribution to research and practical breeding. Your work has great potential to accelerate the development, approval, promotion and use of, for example, climate-adapted varieties," said Marlehn Thieme, President of Deutsche Welthungerhilfe, in her laudation. "The accessibility, availability and affordability of approved, improved varieties that are tolerant even under *low input conditions* and difficult environmental influences and deliver an acceptable yield and are rich in micronutrients (zinc, iron), can achieve sustainable success," said Marlehn Thieme.

"This award is a great honour for us and we take it as an incentive to continue our joint work," said Dr. Martin Mascher, also referring to the enormous technological progress, for example in high-throughput sequencing. "Today we can tackle research questions that were unthinkable to answer 20 years ago, or even five years ago."

The next steps, he said are the deeper genomic characterisation of our cereal collections, with a focus on landraces from around the world and related wild species of the cultivated cereals. "In the future, other crop species such as protein and forage crops will also be the subject of our genomic research. We are convinced that the digitisation of gene banks, and in particular digital sequence information, can multiply the value of crop diversity preserved in gene banks."

Meanwhile, Prof. Dr. Nils Stein once again paid tribute to Gregor Mendel's achievements. "As one of the pioneers of classical genetics, he naturally played a major role in the fact that modern genome research now plays such a central role in medical diagnostics and in modern plant breeding," the IPK researcher explained. "It is impossible to imagine biology, medicine and breeding without genome research. Access to so-called pangenome

Press Release

Scientific Contact Prof. Dr. Nils Stein Tel.: +49 39482 5522 stein@ipk-gatersleben.de

Dr. Martin Mascher Tel.: +49 39482 5243 mascher@ipk-gatersleben.de

Media Contact Christian Schafmeister Phone: +49 39482 5461 schafmeister@ipk-gatersleben.de information will be taken for granted by future generations of researchers as an important data basis."

The IPK scientist also emphasised that the Federal Ministry of Education and Research had already recognised at the beginning of the millennium that genomics creates an important data basis for innovations. This, he said, had resulted in long-term support for cereal genome research in Germany. "And today I am pleased that cereal genome research is perceived as an important contribution to plant breeding."

The award ceremony took place during a ceremony with which the Gregor Mendel Foundation honoured the founder of systematic plant breeding and modern biology on the occasion of his 200th birthday. With his tireless research, Mendel produced revolutionary findings according to his motto "Do not research without doubt, do not doubt without research" and thus laid the foundation for the development of plant genetics as well as for food security and peace in Europe.

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The two award winners Dr. Martin Mascher (left) and Prof. Dr. Nils Stein with Prof. Maria von Korff Schmising, Deputy Chair of the Gregor Mendel Foundation.

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