

WHEAT BREEDING INFORMATION SYSTEM

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The paper will describe the information system developed for the wheat breeding research carried out in Martonvásár. The aim of the technology is to combine all the breeding and field experimentation data available to the research staff into a single system and to provide IT support for certain activities. The system is extremely efficient in perfecting the management of modern wheat breeding projects, as it allows the size of the research projects to be increased (even in the case of staff reductions), facilitates the organisation of group activities, ensures complete data consistency, and processes the results to provide data characterising the performance level of the research project.

The most important components in the package facilitate automated data collection based on barcodes, the production of various types of lists and outputs, the organisation of complex field experimentation and breeding activities, the establishment and supervision of a complete range of pedigree and gene bank registers, the exchange of basic breeding stock and the registration of the relevant address lists, and the running of statistical programs suitable for the preparation of basic analyses.

Using the new technology outlined in the paper, applied informatics has become an important tool in the organisation of research activities, and in making data processing and evaluation more efficient and cost-saving.

The users of this system will primarily be the scientists, technicians and manual workers involved in wheat breeding and field experimentation.