

Foreword

The higher education of economics and agriculture in Debrecen started 150 years ago. The historical roots of our institution reach back to the middle of the 19th century. In the 1850s, the wise leaders of the city of Debrecen realised that the development of agriculture is the sole opportunity which can make the region of the Tisza River and the Trans-Tisza region the most valuable pantry of the nation. Due to the generous support of the citizens of Debrecen, as well as the enthusiastic work of scientist and teachers, the National Higher Education Institute of Farming was established on 22nd October 1868 as the first agricultural higher education institution of the Great Hungarian Plain.

Our responsible predecessors knew that educated minds and well-prepared farmers were needed to cultivate our lands, a treasure provided by nature. Following several restructurings, the first agricultural higher education institution in the Trans-Tisza region was established under the name of the Agricultural Academy of Debrecen on the Böszörményi street in 1953. As a result of the gradual extension of education, the College of Agricultural Sciences was established in 1962, followed by the Agricultural University of Debrecen in 1970, along with the University Faculty of Agricultural Sciences of Debrecen, as well as the College Faculty of Irrigation and Land Development of Szarvas. As a further extension, the College Faculty of Agricultural Machinery of Mezőtúr was annexed in 1972, the Karcag Research Institute in 1976 and the Nyíregyháza Research Institute in 1992. The human willpower and the desire to create resulted in a modern university which became one of the scientific agricultural centres of the Trans-Tisza region and the whole country. Due to the unique image and traditions of the university, the graduated students of this institution obtained rich professional skills and practical experience and, as a result, they managed to reach the goal which was dreamt up once: to make the Trans-Tisza region one of the most valuable region of the Hungarian agriculture. As a result of the long and challenging work, our university has developed into an educational institution which serves manifold and diverse duties and opens up a wide range of opportunities with its co-sciences. Several thousands of graduated students transfer their obtained knowledge into the cities and villages of the region, while managing the everyday life and development of agricultural production.

The University of Debrecen was established on 1st January 2000, which represented a new beginning in the life of the institution. The Agricultural University of Debrecen was a significant and the oldest constituent of the University of Debrecen. Within the cooperational

framework, our knowledge can be constantly improved and we can build a modern university which the Hungarian nation needs.

High standard research work is one of the main requirements of high quality education. The novel findings obtained at the institution are communicated in various publications and journals, forming an integral part of education and consultancy and, as a result, they are being used by agricultural practice in a short amount of time.

The institution has a wide range of Hungarian and international cooperation. The overwhelming majority of its research and development activities are performed in collaboration with Hungarian enterprises. The demand for highly qualified agricultural professionals will increase in the future, as the modernisation of the production structure, the development of new agricultural structures and the provision of the indispensable human resources are necessary for the development of agriculture.

We celebrate the 150th anniversary of the higher education of economics and agriculture in Debrecen with the event called Agricultural Science Days in the Trans-Tisza Region. The programme titled "*Challenges of agriculture in Hungary*" is the legal successor of the renowned Sámuel Tessedik Science Days. The speakers of the plenary session include academics Prof. Péter Horn, Prof. Miklós Mézes, Prof. Miklós Neményi, Prof. Tamás Németh, Kálmán Rajkai and Prof. Dr. András Szöllősi-Nagy. The eight scientific conferences encompass the main areas of modern precision agriculture, including animal sciences, crop sciences, land use, horticultural sciences, soil science and agrochemistry, environmental and water management, precision agriculture, food sciences, agronomy and rural development. The conference "*Challenges of agriculture in Hungary*" of the Agricultural Science Days in the Trans-Tisza region will include presentations from **93** renowned teachers and researchers. The peer-reviewed *volume* of the journal *Acta Agraria Debreceniensis* will be made up of the *outstanding presentations of the conference*.

We express our sincere gratitude to the authors, editors and reviewers of this volume, as well as everyone who contributed to this publication.

We recommend this volume to those who have any connection with the Faculty of Agricultural and Food Sciences and Environmental Management of the University of Debrecen, as well as the University of Debrecen, its legal predecessor, to celebrate its development and achievements together.

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