

# **ECONOMIC ANALYSIS OF PRECISION CULTIVATION OF AUTUMN RAPESEED**

**Árpád Ferencz<sup>1\*</sup>, Levente Komarek<sup>1</sup>, Anita Csiba<sup>1</sup>, Zuzsanna Deák<sup>2</sup>**

<sup>1</sup>University of Szeged Faculty of Agriculture, Institute of Economics and Rural Development

<sup>2</sup>Óbuda University, Department of Business Development and Infocommunications

\*corresponding author: ferencz.arpad@szte.hu

By utilizing precision plant cultivation systems, we can maximize resources and minimize wastage and loss. To make this well-functioning system possible, the continuous recording and accurate data collection of the production site is essential. All of this requires a change of attitude not only on the part of developers and machine manufacturers, but also on the part of farmers, so that the data can become readily available decision support information without external help. In our research, we aim to present the economic analysis of the production of autumn rapeseed with precision technology. We are investigating an agricultural company whose crop production can be considered a leader in the application of precision technologies on a national level. The idea that the more intense a crop production system is, the greater the benefit of using site-specific technology - is fully realized at the company under consideration. In our work, we present the elements of the precision technology used in rapeseed cultivation. Based on this, we calculate the costs and the income available with rapeseed cultivation. We determine results with and without subsidies, which can provide information on the actual income-generating capabilities. Among the performance indicators, we determine the unit cost, efficiency and profitability of rapeseed growing. Using a technological and economic approach to production, we highlight the possibilities of a more economical and profitable production.