

VARIABLE PLANT DENSITY PRECISION MAIZE SOWING – UNI AGRO FOOD LTD., DIGITAL MAP-BASED PLANTING – COST-BENEFITS techcoachproject.eu

MAIN CHALLENGE/ OBJECTIVES

The main challenge is the high investment cost of the technology, the data demand, and the lack of expertise. The goal is to reduce labor and input costs, optimize yield, and increase sustainability.

MAIN RESULTS/ OUTCOMES

Precision seeding reduced the use of seeds and fertilizers, improved yield stability, and decreased soil stress. The investment is economical for areas over 10 hectares; it is not recommended for smaller fields.

PRACTICAL IMPLICATIONS / RECOMMENDATIONS

Before introducing the technology, it is advisable to assess the heterogeneity of the field and to apply it on areas of at least 10 hectares. Soil sampling, collection of previous yield data, and NDVI data are necessary. Implementing the system requires significant investment (monitor, control unit, software) as well as expert support. The return comes from reduced input use and more stable yields. The technology can also be applied to other arable crops and under similar agro-ecological conditions. Successful adaptation requires close cooperation between farmers and advisors, as well as continuous data collection and analysis.

Pilot implementation can start with clearly defined objectives, for example reducing fertiliser use, improving seeding accuracy, or identifying yield variability within the field. Regular comparison between treated and untreated zones can help farmers evaluate the real benefits of the technology. Correct calibration and data interpretation strongly influence the success of the system in the farm management.

GEOGRAPHICAL LOCATION

Mosonmagyaróvár, Győr-Moson-Sopron County, Hungary

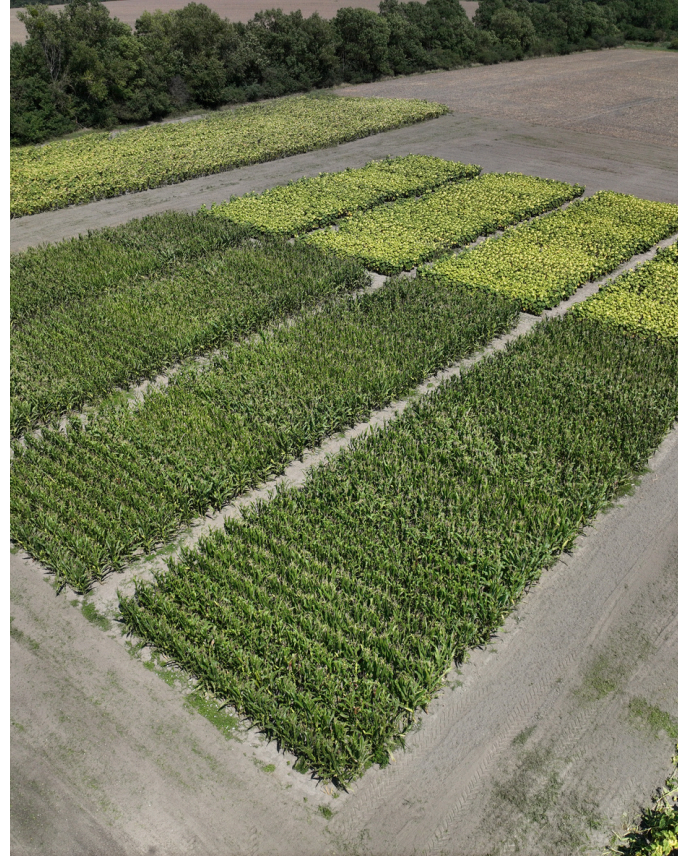


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FURTHER INFORMATION

Based on the company's experience, the technology can be successfully adapted in farms with similar conditions.



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