

Environmentally friendly and profitable agricultural production at the same time? It's possible!

KITE Zrt. decided 10 years ago to dedicate a significant part of its innovation resources to the development of precision farming based on digital data. Now the company is presenting the results achieved at the European Precision Management Conference.



"Precision technologies and the related digital content greatly contribute to raising the living standards of the countryside," says László Hadászi, Innovation Director of KITE Zrt. Precision farming based on data takes into account environmental protection and sustainability without compromising the efficiency of agricultural production and its ability to generate income.

"**KITE Zrt.** considers extremely important that, as the main sponsor and professional speaker of this forward-looking scientific conference on precision farming, it can help the now urgent digital transition of agriculture. The European Precision Farming Conference is looking for the future of agriculture, and we are very proud that Hungary is now hosting the event, and KITE Zrt. can present what kind of steps it has taken in the last 10 years to modernize agriculture", **László Hadászi** emphasized.

European precision summit in Hungary

During the conference, it is expected that various innovations developed in scientific workshops will be introduced, for which KITE Zrt. is looking for opportunities for practical implementation and integration into the current precision technology system. In addition, scientific consultation provides an opportunity to establish a number of international relations.

The program of the event is available here: <https://www.ecpa2021.hu/program/>

Precision innovations of KITE Zrt.

Over the last 10 years, several major advances have been made in the digitization of agriculture and the transition to precision. These improvements are in line with the provisions of the Green Deal, which by 2030 could completely rewrite agricultural technologies. The reform of the Common Agricultural Policy is already under way, and while European farmers can count on patience in terms of introducing stricter conditions, now it is time to lay the foundations for sustainable agriculture.

The aim of KITE Zrt. is to make sure that the transition to environmentally friendly and sustainable agriculture is not accompanied by giving up on the profitability and efficiency of production.

It was the first significant step in the line of innovations to redesign the cultivation technology of the dominant plants in field crop production.



Today, full precision technology has been developed for crops occupying more than 91% of the area of the arable land in Hungary: everything from basic cultivation to harvesting can be carried out with precision tools and approaches. A good example is the emergence of sorghum cultivation, for which precision technology can be applied very well: it can be produced with the same machine system as used for maize and cereals, and it does not even require a change in machine systems at the seed drill level. It can be sown with a wide row spacing, and the rows can be well separated from the spaces in between. Site-specific differentiation and positioning of input materials is well feasible and the plant responds well to them.

The next milestone was the development of a data collection system, one of the most important features of which is that the use of the system does not generate any additional costs for the producer. Data collected and processed with appropriate data management technology:

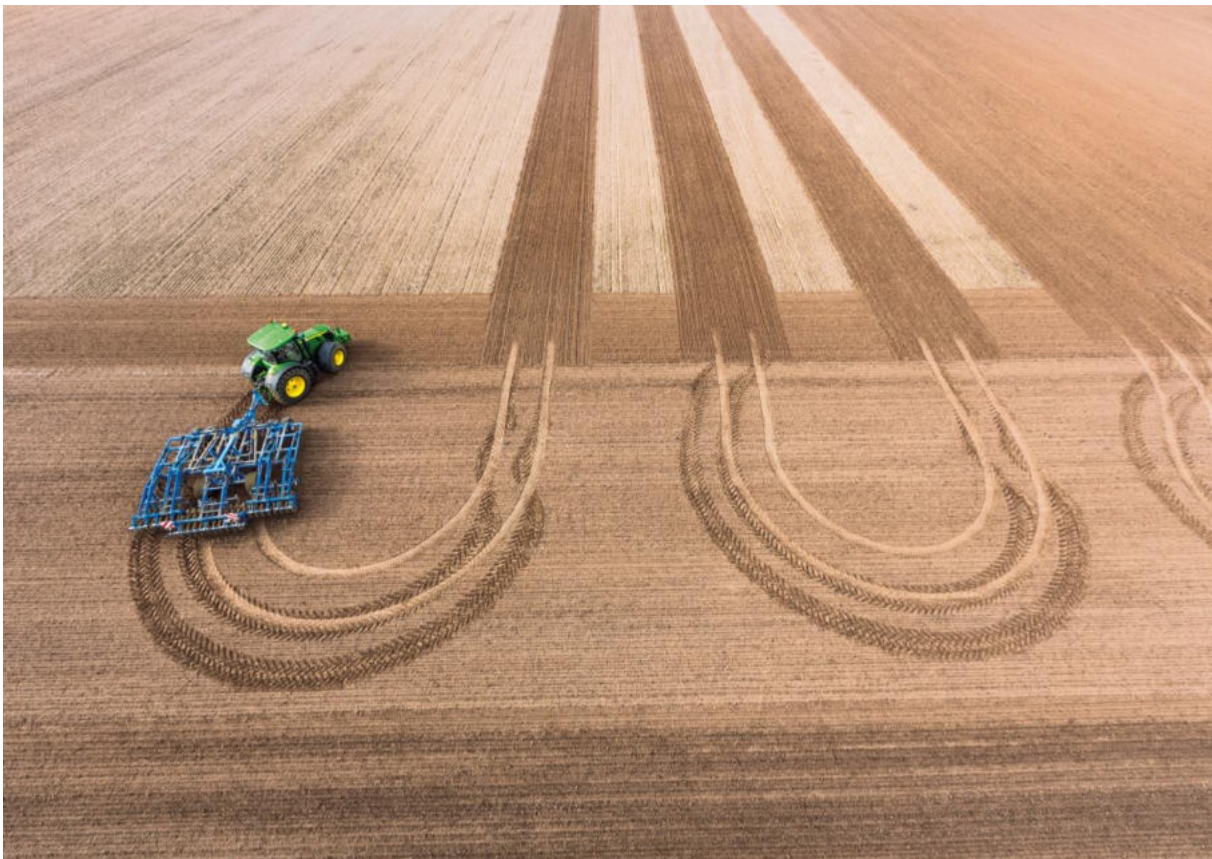
- site-specific soil data,
- free available satellite imagery
- data directly from power machines,
- free access to meteorological data based on a 200-piece meteorological station base.

Authentic data is the basis of precision farming, and KITE Zrt. has created a database that continuously provides site-specific data to the farmer.

A significant result is that by the end of 2020, the company has also developed the background needed to automate the processing of a large number of GIS data.

With its [Precision Management System \(PGR\)](#) developed by KITE Zrt., the company won the **Hungarian Agricultural Innovation Award in 2020**.

The result of the innovation: in 2010, KITE Zrt. put into operation its own RTK network, which was a condition for the development of precision technology systems. As a result, in 2020, nearly 2,500 machines used precision signals, for a total of 1.5 million hectares. Along with the machines using the RTK signal, the importance of expert advice by KITE Zrt. also increased. In January 2020, the Precision Management System itself was introduced. Today, nearly 20 digital applications are available in the agricultural services market.



What will the future bring?

Environmentally friendly and sustainable agriculture is in the interest of all of us. Meeting expectations, on the other hand, is a challenge for farmers. The planned restrictions on the use of pesticides and fertilizers and the reduction of the use of input materials all point in the direction of conscious, precision farming based on the use of digital data. In addition, a drastic increase in the area of organic farming is one of the European plans, which is expected to lead to the development of state-of-the-art technical solutions, such as a weeding robot equipped with cameras.

These challenges can only be met by putting the latest technological innovations into practice while maintaining the income-generating capacity of agriculture. We can learn about these innovations at the ECPA conference.