



## **THE ESZTERHÁZY KÁROLY CATHOLIC UNIVERSITY PROJECT HAS BROUGHT STATE-OF-THE-ART TECHNOLOGY TO THE EGER WINE REGION**

**The project entitled Supporting grape producers with digital tools to develop their approach to precision agriculture led by the Italian-Hungarian international consortium led by the Catholic University Eszterházy Károly (2021-2-HU01-KA210-ADU-000051077) funded by the European Community under Small-Scale Partnerships in Adult Education has come to an end.**

Viticultural and oenological education and research have a centuries-old tradition in Eger. The Catholic University Eszterházy Károly is an innovative and service institution built on 250 years of tradition, where, in addition to high-quality work, it is also essential to seek answers to research questions and set goals that are meaningful and can be used effectively both theoretically and practically. It is equally important for researchers to address current issues of concern to winegrowers and winegrowers in coordination and dialogue with industry actors.

This philosophy is reflected in the recently concluded GrapePRODIGI project, in which the Italian-Hungarian international consortium led by the University of Eger was involved in the development of digital tools and technologies used in viticulture. In collaboration

with the University of Padua, the Italian company CET Electronics s.n.c. and the Association of Wine Laboratories Eger, remotely controlled sensors have been installed in the vineyards. The device is located in the Síkhegy vineyard. It is no coincidence that it is considered one of the vineyards with the finest volcanic substrate in the wine region, with a large cultivated area of almost 60 hectares.

The device measures and records all important weather factors, such as temperature, relative humidity, soil moisture or wind speed, all of which vineyards and winegrowers may need. During the work, a cartographic base was created which, in addition to the weather data and other data collected by the sensors, shows the interventions carried out and thus serves as a basis for the research and management of the vineyard. In addition to the map, a 3D camera was used to monitor the growth of the vine shoots, any damage caused by ice or wildlife, as well as the absorption and current amount of material to be treated. Thanks to this, it is also possible to determine exactly when and in what quantity plant protection products should be applied to the plant.

Following two years of joint work, which received funding of 60,000 euros, a freely accessible web portal was also created, where the application of innovative tools in viticulture is presented.

