

D.M.3.2.4 MODULES OF ALTERNATIVE EDUCATION SYSTEM TO ENCURAGE MECHATRONICS FOR PF

Hungary - Hungarian University of Agriculture and Life Sciences (PP6)







The aim of this activity was to organize alternative education modules to encourage students to learn more about precision farming.

Hungarian University of Agriculture and Life Sciences (PP6) performed this activity in many ways. We contacted with Agricultural Vocational Training Schools, in the same time we introduced new elements in the present curricula and deepened our PF education within the horticultural BSc and MSc and viticulture and oenology BSc and MSc courses. We also introduced the Transfarm4.0 project and importance of the PF technologies on MATE visiting days organized to high school students.

In Hungary there are five Centers of Agricultural Vocational Training in Hungary: Alföldi Center of Agricultural Vocational Training, Southern Center of Agricultural Vocational Training, Northern Center of Agricultural Vocational Training, Kisalföld Center of Agricultural Vocational Training, and Central-Hungarian Center of Agricultural Vocational Training. These Centers offer studies among others in the fields of Agriculture and Forestry, Food industry, Environmental protection and Water management.

We have contacted with the Közép-magyarországi ASZC Soós István Borászati Technikum és Szakképző Iskola

Address: 1221 Budapest, Kossuth Lajos utca 83 Budapest, Hungary

Type: Viticulture and Enology Technical Institute

We held modules for the students studying in the normal and on the correspondence course in the classroom and offered field demonstration in the location of the case study 3 Pilot Action.

During the lectures, the following topics were included:

- Introduction of the Transfarm4.0 project and participants
- General introduction of the precision farming (PF)
- Main aims of the PF
- Elements of PF:
 - o Robotics
 - o **Drones**
 - Remote sensing
 - o **BigData**
 - o Variable rate treatmentsű





• Practical methods in PF

During the classes students showed strong interest in the new technologies and application of the PF in viticulture. During the discussions after the classes, students were mainly interested in the cost benefit relations of the innovations. As teachers of the school were also participating on the lectures, it was possible to evaluate the importance of the PF education in the Technical Institute.

As an important output of the modules MATE Institute of Viticulture and Enology and the Középmagyarországi ASZC Soós István Borászati Technikum és Szakképző Iskola agreed to organize regular modules in the topic of precision viticulture (PV).

According to the discussions, we emphasized that PV methods provide valuable results in terroir research, decreasing the carbon-footprint, variable rate plant protection and variable rate fertilization.



Education modul in Közép-magyarországi ASZC Soós István Borászati Technikum és Szakképző Iskola







Introduction of the Transfarm4.0 project and basics of PF in the visiting day of the MATE Buda Campus.