Project "Improving skills in laboratory practice for agro-food specialists in eastern Europe» (Ag-Lab)

Program Erasmus +, project KA2 n° 586383-EPP-1-2017-1-SI-EPPKA2-CBHE-JP (2017-2978/001-001)

Speciality: Agronomy
Specialization: Laboratory practice

Professional competences / References

General competences

1. Ability to apply results of researches aimed to the development of intensive technologies, to develop scientific background of intensive technologies for crops growing.

2. Ability to justify researches' tasks, to choose methods for experimental work, to treat and to present results of scientific experiments, to implement them into production.

3. Ability to organize and to carry out researches applying modern methods for analysis of soil and plant samples.

4. Ability to edit practical recommendations for applying researches results.

5. Ability to present researches' results in form of reports, publications and public discussions.

6. Ability to apply innovative processes in the agro-industrial complex for planning and carrying out of environment friendly and economically efficient plants growing technologies and soils fertility reproduction for different agro-landscapes.

7. Ability to develop adaptive crops growing systems for agricultural structures.

8. Ability to ensure environmental safety of agro-landscapes and economic efficiency of agricultural crops growing.

Competences for laboratory practice

9. General knowledge in organization and functioning of laboratories (general

requirements for laboratories (GPL), certification and accreditation of laboratories, metrological provision, international standards ISO 17025, ISO 9001, ISO 14001, ISO 45001, validation of methods, biosecurity levels in laboratory, European regulation related to the laboratory practice).

10. Knowledge related to the organization of agro-chemical, seed and other agronomic laboratories (carrying out of seeds field inspection, control of seeds lots creation, packaging and labeling, sampling methods, laboratory analyses of seeds).

11. Knowledge of different methods of laboratory researches in agronomy (spectral analysis methods – emission and absorption, methods of biochemical analyses – centrifugal action, gas and liquid chromatography, PCR, ELIZA).

12. Ability to apply procedures for confirmation of laboratory diagnostic efficiency (internal and cross audit, verification, calibration), quality assurance of laboratory researches (intra and inter-laboratory control).

13. Ability to apply procedures of calibration and verification of measurement equipment.

14. Ability to organize measures for laboratory researches quality insurance at pre-analytical, analytical and post-analytical stages.

15. Knowledge of documents management procedures.