

## ADER 1.4.4. Identification, evaluation, testing, development and validation of analysis methods of nutrients and contaminants from inputs usable in organic agriculture

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WHAT THIS **PROJECT** PROPOSES TO DO

Although the legislation in force (Regulation (EC) No 889/2008) contains fertilizers and soil amendments authorized to be used as inputs in organic farming, currently there are no standardized working methods for their analysis, except for those inputs that are also found in Regulation (EC) no. 2003/2003.

The project proposes to solve the current situation regarding the lack of a methodology for identification, evaluation, testing, development and validation of methods for analyzing nutrients and contaminants from inputs usable in organic farming by implementing sensitive detection methods based on state-of-the-art techniques, similar to the European reference laboratories.

O1. Development of methods for the analysis of nutrients and contaminants from inputs usable in organic farming.

**Nutrient analysis** 

**Macro and microelements - ICP-MS** 

**Trace elements - ICP-OES** 

Elemental analysis - AAS

Elemental analysis - C, N, S



**Contaminant analysis** 

**Heavy metals - ICP-MS** 

Organochlorine pesticides, dioxins, furans - GC-MS **Triazine pesticides – HPLC** 

**Development** of method for the analysis of nutrients / contaminants from inputs usable in organic farming.



OBJECTIVES (%)



Testing the effectiveness of specific inputs for organic farming.

O3. Validation of analysis methods developed for nutrients and contaminants analysis from inputs usable in organic farming.

O5. Development of a good practice the evaluation, testing, development and validation of nutrient and contaminant analysis methods.

WHAT'S NEW?



The project is an innovation for Romania by the fact that it is the first time that a consortium consisting of a university, 3 national research and development institutes and 2 research and development stations in the agricultural field aims to develop a guide of good practices on evaluation, testing, development and validation of methods for the analysis of nutrients and contaminants and the development of a procedure for certification/attestation of inputs usable in organic farming, so as to have a uniform approach and traceability in their evaluation.

## RESULTS





- 2. Evaluation of the effectiveness of specific inputs for organic farming in the experimental fields of fruit trees and fruit bushes, vegetables and field crops.
- 3. Good practice guide on the evaluation, testing, development and validation of methods for nutrients and contaminants analysis.

## **BENEFICIARIES**



- all operators along the food chain: farmers processors consumers;
- all authorities and competent bodies in the field of certification in organic farming;
- the estimated results of the project will substantiate the agri-environment policies developed by MADR and the CAP strategy after 2020, in correlation with the other European partners;
- the Good practice guide for evaluation, testing, development and validation of analysis methods of nutrients and contaminants developed in the project will be made available to the competent authorities as a tool in the organic farming domain.

## COORDINATOR





https://www.qlab.ro/ader-1-4-4/

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**PARTNERS** 











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