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1852 - 2022



UNIVERSITY OF
AGRONOMIC SCIENCES
AND VETERINARY MEDICINE
OF BUCHAREST

26/03 - 01/04/2023
(including travel days)

Spring School Harmonizing South Eastern European countries skills for a pesticides-free environment

Greener for better!

USAMV, Bucharest, Romania

Learning, Teaching, Training Activities
(LTT) - C6

Co-funded by the
Erasmus+ Programme
of the European Union



About the Spring School

The Spring School "Harmonizing South Eastern European countries skills for a pesticides-free environment" is a 5-day (+ 2 travel days) mobility for students at all levels (bachelor, master and PhD) and early career researchers, that will take place at University of Agronomic Sciences and Veterinary Medicine of Bucharest (USAMV Bucharest) between 27 - 31 March 2023.



Participants will acquire specific knowledge and skills on:

- *sustainable use of pesticides*
- *ways of reducing pesticides residues*
- *methods of analysis of pesticides residues*
- *banned pesticides and their stories*
- *chemical pesticides free horticulture*



The call for application is OPEN!

Deadline: 17 March 2023

Topics and objective

The Spring school will enhance the knowledge and skills of students and early career teaching staff in pesticide-free horticulture topic, as:

- reduction of pesticides residues,
- quantification of residues present on food matrices,
- alternatives to chemical pesticides, etc.,

All these will allow you to better address the demands of food producers, processors and retailers and certification bodies acting in the field of organic farming and quality standards, e.g. Global GAP, and increase your chances on the labor market.

The registration form is available at
<https://forms.gle/6tb6FEdTHEjusVFE8>



Is this event for you?

Why should you invest your time in our Spring School?



according to OECD (2016) young people today struggle in the labor market



unemployment is generally higher among young people than prime age adults



youth who work tend to have poorer-quality jobs (temporary contracts, lower wages) than older workers

Did you think to the top 10 benefits of spring school abroad?

1. Increase self-confidence
2. Develops language skills
3. Satisfy the thirst for knowledge in a specific topic
4. Put emphasis on skills development
5. Stimulate curiosity, creativity and self-reliance
6. Increase the exams outcomes in plant protection field
7. Upgrades the CV with extracurricular activity
8. Intensive and interactive learning environment
9. Source of inspiration on way opening
10. Make new friends and have fun

About the Spring School

Spring School outcome?

The trainees will:

- become more confident on their pesticide related knowledge;
- improve their skills in laboratory analysis for better employability,
- have access to highly specialized jobs, addressing new issues related to the EU Green Deal or
- increase the chances of starting a new business in field of sustainable use of pesticides



All over Europe, more and more institutions are suffering due to "growing mismatch" with labor market. Labor markets are rapidly changing, due to technological advancement, greening, and ageing workforce. Higher education institutions have the responsibility to reduce this gap and prepare the young generations and foster their employability and personal development.

Daily Schedule

| | |
|---------------|--------------|
| 8.30 - 9.00 | Get together |
| 9.00 - 11.00 | Session 1 |
| 11.00 - 11.15 | Coffee break |
| 11.15 - 12.30 | Session 2 |
| 12.30 - 13.30 | Lunch |
| 13.30 - 15.30 | Session 3 |
| 15.30 - 15.45 | Coffee break |
| 15.45 - 17.30 | Session 4 |



** in the days we visit special facilities related to pesticide-free horticulture, some changes might occur*

Program

| Day | Activity | Where |
|------------|---|--|
| March 26th | Arrival in Bucharest. Accommodation. USAMV Campus tour | USAMV |
| March 27th | Lectures on sustainable use of pesticides, banned pesticides, EFSA and pesticides, RASFF, analysis of pesticides residues, pesticide-free horticulture | USAMV |
| March 28th | Field visits for sustainable use of pesticides demonstrations and pesticides residues analysis | Moara Domneasca Research Station and ANSVSA |
| March 29th | Pesticides analysis in fruits and vegetable. Sample preparation | USAMV |
| March 30th | Pesticides analysis in fruits and vegetable. Pesticides analysis using HPLC and GC-MS | USAMV |
| March 31th | Pesticides analysis in fruits and vegetable. Quantification and results analysis | USAMV |
| April 01st | Going back. Farewell | USAMV |

Program

Day 1

Theoretical aspects of pesticide use and the analysis of pesticides residues.

Lecturers are specialists from:

- National Sanitary Veterinary and Food Safety Authority, Bucharest;
- Association of Plant Protection Industry in Romania;
- Hungarian University of Agriculture and Life Sciences;
- Directorate of Plant Protection Central Research Institute from Ankara;
- University of Forestry, Sofia;
- USAMV Bucharest.

Day 1 – Monday 27 March

| | |
|-------------------------------------|--|
| 8 ³⁰ - 9 ⁰⁰ | Registration and Coffee, TBC |
| WELCOME | |
| 9 ⁰⁰ - 9 ¹⁰ | Prof. dr. Florin STĂNICĂ , Vice-rector of USAMV Bucharest <i>Transnational exchange of good practices and knowledge to promote education. The importance of ERASMUS+ collaborations</i> |
| 9 ¹⁰ - 9 ²⁰ | Roxana CICEOI , Project Coordinator, USAMV Bucharest <i>Enhancing practical skills of horticulture specialists to better address the demands of the European Green Deal</i> |
| 9 ²⁰ - 9 ³⁰ | Liliana BĂDULESCU , Coordinator of the Research Center for food quality and agricultural products, USAMV Bucharest <i>The quality of agricultural products and pesticides</i> |
| LECTURES | |
| 9 ³⁰ – 10 ⁰⁰ | TBC, AIPROM – Association of Plant Protection Industry in Romania <i>Agrochemical research and development. Registering plant protection products in the EU. Pesticide market</i> |
| 10 ⁰⁰ – 10 ³⁰ | Arzu AYDAR , Directorate of Plant Protection Central Research Institute (TR) <i>Sustainable Use of Pesticides: Easing the way for a chemical-free horticulture" (Movie Presentation and Open Discussion)</i> |
| 10 ³⁰ – 11 ⁰⁰ | Okray OREL , Directorate of Plant Protection Central Research Institute (TR) <i>Sustainable use of pesticides. Drone Spraying.</i> |
| 11 ⁰⁰ – 11 ³⁰ | Coffee break |
| 11 ³⁰ – 12 ⁰⁰ | Eszter TAKÁCS , Hungarian University of Agriculture and Life Sciences (HU) <i>Gliphosate – The story behind the scenes</i> |
| 12 ⁰⁰ – 12 ³⁰ | Mária MÖRTL , Hungarian University of Agriculture and Life Sciences (HU) <i>Neonicotinoids. Influences of pesticides on food quality.</i> |
| 12 ³⁰ – 12 ⁴⁵ | Discussions and questions |
| 12 ⁴⁵ - 14 ⁰⁰ | Lunch break |
| 14 ⁰⁰ – 14 ³⁰ | Monica Mariana NEAGU , Director of the Directorate for Food Safety of Non-Animal Origin products, National Sanitary Veterinary and Food Safety Authority, Bucharest, Romania <i>Rapid Alert System for Food and Feed</i> |
| 14 ³⁰ – 15 ⁰⁰ | Simona RADULESCU , EFSA Focal Point Romania, National Sanitary Veterinary and Food Safety Authority <i>Sampling of food products of non-animal origin for mycotoxin testing</i> |
| 15 ⁰⁰ – 15 ³⁰ | Oana Crina BUJOR-NENITA and Violeta Alexandra ION , Research Center for food quality and agricultural products, USAMV Bucharest <i>Analytical methods for Pesticide residue analysis</i> |
| 15 ³⁰ - 15 ⁴⁵ | Coffee break |
| 15 ⁴⁵ - 16 ¹⁵ | Rumen Tomov , University of Forestry, Sofia <i>Use of biological control agents - market and trends</i> |
| 16 ¹⁵ - 16 ⁴⁵ | Zhelyu Avramov , Dean of University of Forestry, Sofia <i>Use of natural substances as non-chemical approaches for pest management</i> |
| 16 ⁴⁵ - 17 ¹⁵ | Ciceoi Roxana, USAMV <i>European chemical Pesticide Free Agriculture in 2050</i> |
| 17 ¹⁵ – 17 ³⁰ | Discussions and conclusions of the day |

Program

Day 2

Day 2 – Tuesday, 28 March

Field trip

Research center for study of food quality and agricultural products – USAMV of Bucharest

8⁰⁰ – 8¹⁵ Gathering of participants. USAMV Bucharest, 59, Marasti Blvd

9⁰⁰ – 13⁰⁰ Visit and SUP *on site* at Moara Domneasca Research Station

13⁰⁰ – 14³⁰ Lunch break

14³⁰ – 17⁰⁰ Visit and pesticides analysis at ANSVSA

Day 3

Day 3 – Wednesday, 29 March

Practical Training

9⁰⁰ – 12³⁰ Pesticides analysis in fruits and vegetable. Sample preparation. Session I (O. Bujor, V. Ion)

12³⁰ – 13³⁰ Lunch break

13³⁰ – 16³⁰ Pesticides analysis in fruits and vegetable. Sample preparation. Session II (O. Bujor, V. Ion)

16³⁰ – 17⁰⁰ Discussions and conclusions of the day

Day 4

Day 4 – Thursday, 30 March

Practical Training

9⁰⁰ – 12³⁰ Pesticides analysis in fruits and vegetable. Pesticides analysis using HPLC (O. Bujor, V. Ion)

12³⁰ – 13³⁰ Lunch break

13³⁰ – 16³⁰ Pesticides analysis in fruits and vegetable. Pesticides analysis using GC-MS (O. Bujor, V. Ion)

16³⁰ - 17⁰⁰ Discussions and conclusions of the day

Program

Day 5

Day 5 – Friday, 31st March

Lectures

Research center for study of food quality and agricultural products – USAMV of Bucharest

- 9⁰⁰ – 10³⁰ Pesticides analysis on HPLC - results interpretation (O. Bujor, V. Ion)**
- 10³⁰ – 10⁴⁵ Coffee break**
- 10⁴⁵ – 12³⁰ Pesticides analysis on GCMS - results interpretation (O. Bujor, V. Ion)**
- 12³⁰ – 14⁰⁰ Lunch break**
- 14⁰⁰ – 14³⁰ Use of cultural approaches for pest management (Vera Petrova, UF Sofia,)**
- 14³⁰ – 15⁰⁰ Plants protect plants (Milena Yordanova, UF Sofia)**
- 15⁰⁰ – 15³⁰ Agrohhomeopathy for plant protection (I. Rindasu)**
- 15³⁰ – 16⁰⁰ Open discussions of the 5 days training and brainstorming (R. Ciceoi, L. Bădulescu)**
- 16⁰⁰ – 17⁰⁰ Certificates awarding. Closing of the training (R. Ciceoi, L. Bădulescu)**

*For the lunch break, preorders at Reforma 9 restaurant can be made in the previous evening (please contact the Romanian ULO).

<https://reforma9.business.site/>

Availbe budget

Only 16 places available

The budget covers 7 days, of which:

- 5 days are for training (27-31 March)
- 2 days for the travel (26 March and 01 April)

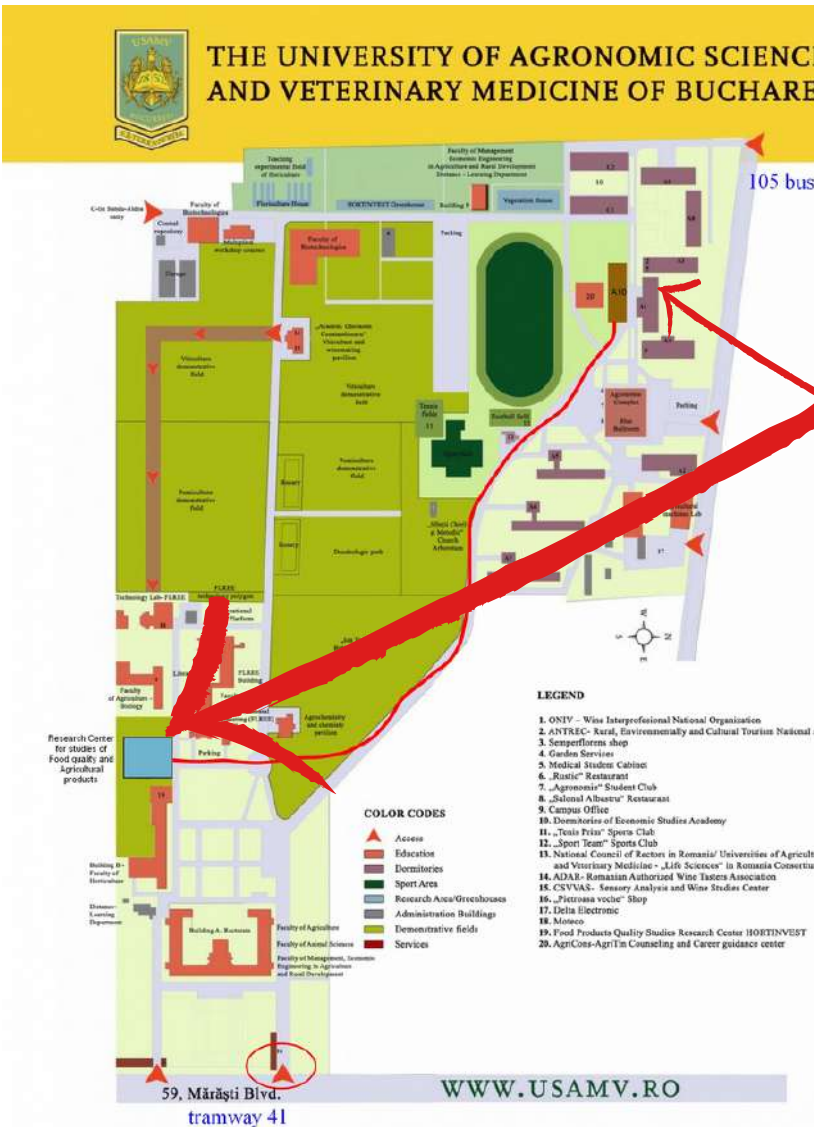
Travel allowance - 180 EUR/person (lump sum)

Individual support - 58 EUR/day (lump sum), meaning 406.00 EUR/person (for accomodation, internal transfers and meals).

Reimbursement rules

Trainees will receive their travel allowance and individual support the first day of the training. Payment of the lump sum for travel is based on the original travel ticket (flight, train, bus or fuel receipt). Presenting an online reservation is a plus. The return ticket will be sent scanned, by email, by the University Liaison Officer (ULO - Rumen Tomov-Bulgaria, Mörtl Mária- Hungary, Oana Venat-Romania, Arzu Aydar-Turkey) and the original will be kept by the ULO. Payment of living allowance lump sum is based on the presence list and the certificate of attendance.

Accommodation

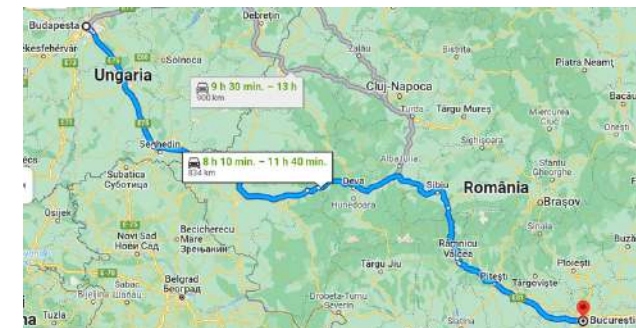


- In the campus, at 5 minutes walk distance from courses place, there is the A10 hostel, that charges 32 Euro/night for one double room in single occupancy (16 Euro/person if you share the room)
- the costs will be paid in lei
- cash withdrawal points are in the campus
- USAMV team will be there to assist you.



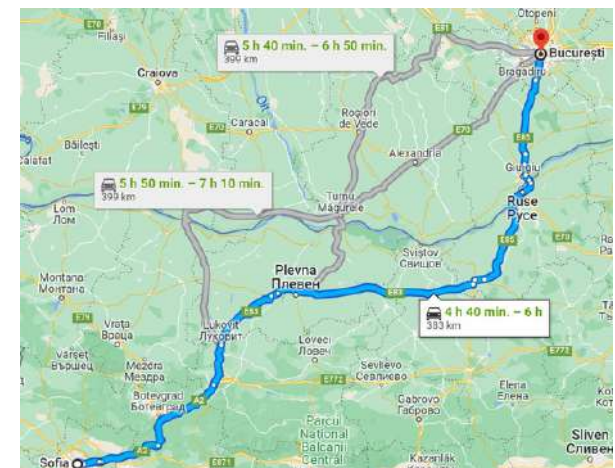
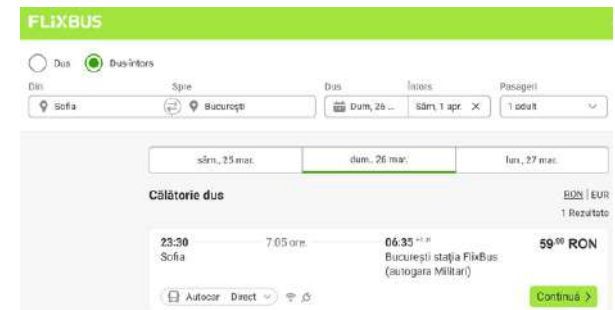
Travel from Budapest

- Travel from Budapest to Bucharest is possible by flight, overnight train, day train, flibus or personal car. The journey time can vary between 9 -20 hours, except the flights. Tickets start from 29 EUR.
- The overnight train is comfortable and the recommended way of travel. It offers couchettes for 4 or 6 persons per compartment with ticket fares from 39 EUR, sleeper compartments for one to three travellers with ticket fares from 55 EUR. The departure time in Budapest is 19:10 and the arrival time in Bucharest is 12:30.
- Beside the overnight train there is a comfortable air-conditioned Intercity train which run at daytime. Ticket fares start from 29 EUR. The departure time in Budapest is at 07:10 and the arrival time in Bucharest is 23:59.
- As third option there is the overnight train "Dacia Express". It offers sleeper compartments as well with shower and toilet. The departure station of the train is Vienna (Austria), therefore the arrival time in Bucharest is very late the next day at 16:00. The departure time in Budapest is 23:10. You can board the train already one hour earlier.
- For the Flixbus, check at <https://global.flixbus.com/bus-routes/bus-budapest-bucharest>
- For personal car, keep in mind that you should fuel in Budapest, when starting the journey and after crossing Romanian border. We will need the original fuel receipt, keep them safe.



Travel from Sofia

- Travel from Sofia to Bucharest by direct train.
- The journey time is 9:40 hours. The ticket fare is 161 RON (33 EUR).
- The departure time in Sofia is 07:20. In off-season (October to May) you have to change trains in Ruse (Bulgaria). Arrival time in Ruse is 13:20. Departure time in Ruse is 14:15. You can save money if you split your ticket booking: buy one ticket for Sofia to Ruse and a second ticket for Ruse to Bucharest.
- For the Flixbus, check at <https://global.flixbus.com>. The journey takes 7 hours and costs around 12 Euro/way.
- For personal car, keep in mind that you should fuel in Sofia, when starting the journey and after crossing Romanian border. We will need the original fuel receipt, keep them safe.
- Non-direct flights might be available at prices below the lump sum of 180 EUR/person.



WHY USAMV?



Because we are leaders in higher education, with unique and varied curricula.



Because food security has a major social and economic impact.



For the numerous jobs available immediately after graduation at national or international level.



Because climate change brings unprecedented challenges and opportunities for the agricultural sector.



Because we need to produce food in a sustainable way while protecting the environment.



4000+

Places in modern hostels/university dormitories



~45 ha

Most beautiful campus in Romania



Teaching and research spaces, two unique teaching and experimental stations, namely Pietroasa-Istrița and Moara Domnească.

About Research Center for Studies of Food Quality and Agricultural Products

The Research Center is the newest research infrastructure of University of Agronomical Sciences and Veterinary Medicine of Bucharest, as a result of the project POSCCE ID_931, SMIS-NSRF, code 14051.

This modern *state-of-the-art* research and development infrastructure brings together 13 research laboratories, newly created, equipped at the highest European standards, with 200 equipment and a glass research greenhouse, completely automated, with self-control functions. These laboratories are:

1. Laboratory of integrated fruit growing
2. Laboratory of molecular virology
3. Laboratory of plant multiplication
4. Laboratory of diagnosis and plant protection
5. Laboratory of post-harvest technologies
6. Laboratory of agrochemistry
7. Laboratory of management, IT and econometry
8. Laboratory of sensorial analysis
9. Laboratory of physico-chemical analysis
10. Laboratory of microscopy and plant anatomy
11. Laboratory of plant physiology
12. Laboratory of molecular plant biology
13. Laboratory of molecular plant physiology



The Research Center goal is to develop a multidisciplinary, interdisciplinary and transdisciplinary scientific approach, with open access to the quality services for agri-food products, from the ecosystem level to the molecular level with control points on the production/processing/storage chain, and in the context of the circular bioeconomy.

[www.qlab.ro](http://www qlab.ro)



About Hort4EUGreen Project

Hort4EUGreen is a 36 months project aiming to train European higher education graduates and its teaching staff by enhancing their practical skills in key areas related to Europe Green Deal, e.g., nutritional quality of food, pesticide analysis, urban horticulture, biodiversity monitoring. The aim is to increase the young generations' employability and personal development and reduce the "growing mismatch" with labor market.

Projects outputs



Learning, Teaching, Training Activities

European Green Deal implications in horticulture learning, teaching and training activities
USAMV Bucharest

Contribution of the European Green Deal for development of horticulture in Bulgaria.

Short-term joint staff training events

1. Challenges of sustainable use of pesticides - Ankara
2. Present and future in pesticide residues analysis, Budapest
3. Current status and perspectives of urban horticulture, Sofia
4. Relation between nutritional quality of foods and pesticides, Bucharest

Intensive training

1. Intensive training on pesticide residues analysis – Budapest

Summer schools

1. "Harmonizing South Eastern European countries skills for "a pesticides-free environment" Summer School – USAMV Bucharest
2. Urban Horticulture – UF Sofia



We target higher employability chance for the master and doctoral students, by including new "requested by the market" topics in the already recognized master programs and by enhancing students' skills and knowledge in respect to the new Green EU policy!



Partners

Partners Romania



Universitatea de Științe Agronomice și Medicină Veterinară din București,
University of Agronomic Sciences and Veterinary Medicine of Bucharest

Bulgaria



Lesotekhnicheski Universitet,
University of Forestry, Sofia

Hungary



Magyar Agrár- és Élettudományi Egyetem,
Hungarian University of Agricultural and Life Sciences

Turkey



Zirai Mucadele Merkez Arastirma Enstitusu Mudurlugu,
Directorate of Plant Protection Central Research Institute, Ankara



Contact US

Local Organisers

Roxana CICEOI, roxana.ciceoi@qlab.usamv.ro

Violeta ION, violeta.ion@qlab.usamv.ro

Oana BUJOR, oana.bujor@qlab.usamv.ro

Liliana BADULESCU, liliana.badulescu@qlab.usamv.ro

University Liaison Officers (ULO)

Rumen Tomov-Bulgaria, rtomov@yahoo.com

Mörtl Mária- Hungary, mortl.maria@uni-mate.hu

Arzu Aydar-Turkey, arzuaydar@yahoo.com

Oana Venat-Romania, oana.venat@qlab.usamv.ro

