

AGENDA & PROGRAM

International Conference

Regenerative agriculture. An innovative approach towards mitigation of climate change through multi-tier learning (REGINA)

3rd October (Thursday), 2024

08:30 – 9:00 Registration („Menedzsment Campus 001” Hall, at Széchenyi István University, Győr, Egyetem tér 1, 9026 Hungary)

9:00 – 9:30 Welcome and opening speeches

Palkovics László Amand: Conference opening

University professors, Széchenyi István University, Department of Plant Sciences

Honvári Patrícia: REGINA Project introduction: aims and results in a nutshell

Project manager (Széchenyi István University), college associate professor (Budapest Business University)

9:30 – 10:30 PLENARY SESSION

(Chair: Szörényiné Kukorelli Irén)

09:30 – 09:50: Keynote Speaker 1.

Abdul M. Mouazen:

Multi-Sensor Data-Fusion approach for Precision Management of Farming Input Resources

Senior full professor, Department of Environment, Ghent University (Belgium)

Abstract

Traditionally, soil conditions and crop characteristics are determined by a limited number of samples that are analysed in the laboratory. Increasing the number of samples, necessary to characterise the within-field variability, is prohibited by the extra effort, time and costs involved. Proximal and remote sensing tools have been shown to be useful sensing technologies for mapping the spatial variability necessary for decision support of variable rate applications. This talk aims at presenting recent findings about the potential of selected sensing technologies and their data fusion for optimising variable rate applications in arable crop production. Results for variable rate applications of both simulation and field experiments carried out more than 10 years in different European and associated countries are reported. Results showed, in the top majority of cases, that compared to the traditional uniform rate applications, variable rate applications increase crop yield, and profitability, while reduce environmental impact by reducing the amount of agrochemicals. It is recommended to promote the adoption of key proximal and remote sensing technologies and fusion modelling in an integrated decision support system as the agronomic, economic and environmental benefits are promising.

Abdul M. Mouazen is a Senior Full Professor in precision soil and crop management and a group leader of Precision SCoRing Group, at Ghent University, Belgium. He has a background in the application of engineering principles to soil and water management, with specific applications in soil dynamics, tillage, traction, compaction, mechanical weeding, soil remediation and management. He has over 20-

year experience in the use of proximal soil sensing technologies for precision agricultural applications. He is the co-chairman of the working group on proximal soil sensing (WG-PSS) under international union of soil science (IUSS). Abdul has coordinated or is coordinating several major projects and is a partner in several other national and international projects. Abdul carried out research and was a staff member of several Universities in Syria, Hungary, Belgium, UK and Lithuania. Abdul is a member of Editorial Boards of Soil & Tillage Research, Soil Research, Biosystems Engineering, Remote Sensing, Soil Systems and Geomatics. He has published over 260 peer-reviewed papers in WoS journals, with a h-index of 50.

09:50-10:10: Keynote Speaker 2.

Wojciech Kniec:

Social aspects of regenerative agriculture. Changing perception of farming, farmers and food in contemporary societies

Professor of Rural Sociology, Head of Department of Social Ecology, Institute of Sociology,
Nicolaus Copernicus University (Poland)

Abstract

Regenerative agriculture (Reg.Ag.) is a paradigm shift in food production, which is led by many drivers, including changes in consumers' attitudes, but also by farmers themselves. As social idea and at the same time business strategy is based on the fundamental assumption to respect and work with the environment rather than downgrading it. Besides its ecological and economical dimension it is also a social phenomenon. It can be analysed within the broader framework of what farming is/was perceived as by the general society and what is the ideal type of farmer. The evidence from social research give us interesting and inspiring view of regenerative agriculture as "mission oriented" or "smart strategy". Regenerative agriculture has received significant attention from producers, retailers, researchers, and consumers, as well as politicians and the mainstream media. As such it is a part of the debate on the future of farming in general. But it is worth to notice, that Reg.Ag. is the product of social change in farming. This includes changes of values and norms of growing number of farmers into the system of more sustainable farm practices. It should be honestly admitted, that it is a form of „social contract" between humans and the nature. Indeed - when we realise, that food security could not be ensured on a long term basis by more and more intensive agriculture, then the only way is to promote rational use of natural resources in order to achieve regeneration effect. As such from farmers' side Reg.Ag. could be treated as rational strategy to achieve farm's durability through long-term accessibility of resources, such as fertile soil, water, biodiversity and so on. On the other hand widespread of sustainable lifestyles among food consumers generates different forms of pressure on farmers to dismiss industrial ideology of farming and introduce more holistic, long-term strategies that promise e.g. rapid carbon sequestration at global scale – for good of society. Last but not least - Reg.Ag. should also be analysed as normative shift from perceiving farmers as 'bad guys' (responsible for reducing biodiversity, degrading soil by erosion and excess fertilisers, over-using water catchments and lowering water quality, destroying traditional rural landscape etc.) towards "good guys", "future keepers", "real friends of the nature".

Wojciech Kniec is professor of rural sociology at the Nicolaus Copernicus University, Torun, Poland, chief of Social Ecology Department. Researcher involved in both international and national scientific projects on local development, rural development and food studies. Author of more than 70 books and scientific articles. Coordinator of research projects, including "Alternative Agro-Food Networks", "Agriculture and Common Goods", "Local Partnerships in Poland", "Social Capital on Rural Areas in Northern Poland", "Food Cooperatives in Northern Poland" etc. Expert of Polish National Center for Agricultural Advisory Service, Expert of Polish Rural Municipalities Association. expert of EU Committee of the Regions. At the moment engaged in research projects on Community Supported Agriculture in the context of endogenous rural development. President of Local Action Group "Podgrodzie torunskie".

10:10-10:30 Discussion, Questions & Answers

10:30 – 11:30 PANEL 1: Theory & concept of Regenerative Agriculture

(Chair: Marco Napoli)

10:30 – 10:45

Rok Mihelic: Soil regeneration following conservation agriculture principles

University of Ljubljana, Biotechnical Faculty (Slovenia)

10:45 – 11:00

Uszkai Andrea: Knowledge transfer organizations and networks for promoting sustainable agriculture in Hungary

Research fellow, HUN-REN CERS Institute for Regional Studies (Hungary)

11:00 – 11:15

Giovanni Sordi & Alessio Mariotti: Tenuta di Alberese: an example of sustainable agriculture, history and tradition in Central Italy

Director of Terre Regionali Toscane & Agronomist at Tenuta di Alberese (Italy)

11:15-11:30 Discussion, Questions & Answers

11:30 – 11:45 Coffee break with small snacks

11:45 – 13:15 PANEL 2: Education in Regenerative Agriculture (REGINA Project Results)

(Chair: Honvári Patrícia)

11:45 – 12:00

Demetris Mylonas: Transnational survey results on Regenerative Agriculture

Euracademy Association (Greece)

12:00 – 12:15

Beke Dóra: Learning Methodology of REGINA

Széchenyi István University (Hungary)

12:15 – 12:30

Marco Napoli: Learning content for university education, experiences of a pilot testing

University of Florence (Italy)

12:30 – 12:45

Tamara Urbancic: Experiences of the pilot testing and learning materials on SGLZS Postojna

Project coordinator, SGLZS Postojna (Slovenia)

12:45 – 13:00

Gyulai Kovács Andrea, Ravasz László: Experiences of the pilot testing and learning materials in Veres Péter Secondary School

Veres Péter Secondary School (Hungary)

13:00-13:15 Discussion, Questions & Answers

13:15 – 14:45 PANEL 3: Practical side of Regenerative Agriculture (farmers' presentation and experiences)

(Chair: Rok Mihelic)

13:15 – 13:30

*Hajzser Máté: Rábapordányi Agricultural Ltd.'s path towards sustainability
Agronomist, Rábapordányi Mezőgazdasági Zrt. (Hungary)*

13:30 – 13:45

*Ioanna Michail: Regenerative farming practices. An example of Greek olive orchards.
PhD candidate, Aristotle University of Thessaloniki (Greece)*

13:45 – 14:00

*Katie Kearns: Practical Challenges and Opportunities of Regenerative Agriculture; REGINA
findings on The Irish Farmer Perspective
MSocSc, Rural Development Officer, SECAD Partnership CLG (Ireland)*

14:00 – 14:45 Panel Discussion with the Presenters

14:45-15:00: Experiences of the day, theory & practice of Regenerative Agriculture

(Chair: Honvári Patrícia)

15:00 Closing the conference/ open-end & networking

Late lunch served