



ICOAS '18

6th International Conference on
Organic Agriculture Sciences

DYNAMIC DEVELOPMENTS IN ORGANIC RESEARCH

Strengthening
partnerships across
Europe and
beyond

PROGRAMME

7 – 9 November 2018
Esterházy Palace
Eisenstadt, Austria



Scientific Conference, Day 1

08:00 – 09:00 ● Registration, Welcome Coffee

Reception &
Gartensaal

09:00 – 09:30 ● Opening of ICOAS

Haydnsaal

Urs Niggli, Director FiBL

09:30 – 10:30 ● Key Note Speakers

Haydnsaal

- **Anette Schneegans**, European Commission DG AGRI
- **Alfred Grand**, Organic Farmer and Director Vermigrand

10:30 – 11:00 ● Coffee Break

Gartensaal

11:00 – 12:30 ● Parallel Sessions I

Haydnsaal

1.1 Organic crop production I

Chair: Magdaléna Lacko-Bartošová, Slovak University of Nitra, SK

- Impact of non-plough tillage in long-term trials – Results of the first crop rotation in organic farming, **Peer Urbatzka**, Bavarian State Research Center for Agriculture (LfL), DE
- Linking mulch application and fertilization with organic soybean and buckwheat production, **Srdjan Šeremešić**, University of Novi Sad, RS
- Efficacy of different mechanical impacts on weed growth, **Arnd Verschwele**, Julius Kühn-Institut (JKI), DE
- Development and performance of new maize

Empire Saal

1.2 Farm diversification and socio-economic challenges in organic agriculture

Chair: Christian Vogl – University of Natural Resources and Life Sciences (BOKU), AT

- Success and failure factors of crop diversification across Europe, **Dóra Drexler**, Hungarian Research Institute of Organic Agriculture (ÖMKi), HU
- Organic wild plant commercialization as a deepening form of farm diversification in Austria, **Christoph Schunko**, University of Natural Resources and Life Sciences (BOKU), AT
- Employment effects relating to organic market development in Eastern Europe – The case of Ukraine, **Tobias Eisenring**, Research Institute of Organic Agriculture (FiBL), CH

Moreau Saal

1.3 Sustainable livestock production and animal husbandry

Chair: Werner Zollitsch – University of Natural Resources and Life Sciences (BOKU), AT

- A comparison of human edible feed conversion efficiency between organically and conventionally managed livestock, **Stefan Hörtenhuber**, Research Institute of Organic Agriculture (FiBL), AT
- Reducing particle length of the forage improves feed utilization efficiency in organic dairy cows, **Andreas Haselmann**, University of Natural Resources and Life Sciences (BOKU), AT

Moreau Saal
(Parallel Session I, 1.3)

- Opportunities for farming in alpine countries – pathways to truly grassland-based beef and milk production in Austria and Switzerland, **Rainer Weisshaidinger**, Research Institute of Organic Agriculture (FiBL), AT

12:30 – 14:00 ● Lunch Break

Gartensaal

14:00 – 15:30 ● Parallel Sessions II

Haydnsaal

2.1 Pathways to phase-out contentious inputs

Chair: Ulrich Schmutz – Coventry University, UK

- Replacement of Contentious Inputs in Organic Farming Systems (RELACS) – a comprehensive Horizon 2020 project, **Veronika Maurer**, Research Institute of Organic Agriculture (FiBL), CH
- Pathways to phase-out contentious inputs from organic agriculture in Europe – Research overview and preliminary results, **Ulrich Schmutz**, Coventry University, UK
- Lessons learned from phase-outs – the case of the peat phase-out in the United Kingdom, **Judith Conroy**, Coventry University, UK

Empire Saal

2.2 Poster Session I

See list of posters (Page 31)

Moreau Saal

2.3 Development of local markets I

Chair: Toralf Richter – Research Institute of Organic Agriculture (FiBL), CH

- How to improve collection of data on organic agriculture in the countries of Central and Eastern Europe, **Helga Willer**, Research Institute of Organic Agriculture (FiBL), CH

- Organic farming development in Latvia: perspectives and limitations, **Ligita Melece**, Institute of Agricultural Resources and Economics, LV
- Organic, local fruit and vegetables - strengthening links between consumers and producers across Europe, **Iva Zvěřinová**, Charles University, CZ

15:30 – 16:15 ● Coffee Break

Gartensaal

16:15 – 17:45 ● Parallel Sessions III

Haydnsaal

3.1 Phytosanitary issues in organic farming

Chair: Daniel Lehner, Höhere Bundeslehr- und Forschungsanstalt Raumberg Gumpenstein, AT

- Effects of earthworms and cover crops on plant pathogenic fungi *Sclerotinia sclerotiorum*, **Pia Euteneuer**, University of Natural Resources and Life Sciences (BOKU), AT
- Reduced *Rhizoctonia solani* and *Streptomyces* sp. infection by using combined microbial inoculums on organic potato, **Orsolya Papp**, Hungarian Research Institute of Organic Agriculture (ÖMKi), HU
- Susceptibility of winter wheat- and spelt wheat varieties to common bunt of wheat (*Tilletia caries*) and the need for ecological wheat breeding, **Benno Voit**, Bavarian State Research Center for Agriculture (LfL), DE

Empire Saal

3.2 Sustainability assessment

Chair: Dóra Mészáros, Research Institute of Organic Agriculture (ÖMKi), HU & **Rainer Weisshaidinger**, Research Institute of Organic Agriculture (FiBL), AT

- Sustainability assessment of organic dairy farms in mountainous areas of Austria, **Rainer Weisshaidinger**, Research Institute of Organic Agriculture (FiBL), AT

Empire Saal
(Parallel Session III, 3.2)

- Development of indicators set for assessing sustainability of organic and Conventional farms, **Meenakshi Choudhary**, TERI SAS, IN
- Farm-level sustainability assessments in Hungary: SMART assessments of organic, conventional and permaculture farms, **Dóra Mészáros**, Hungarian Research Institute of Organic Agriculture (ÖMKi), HU

Moreau Saal

3.3 Development of local markets II

Chair: Dóra Drexler, Hungarian Research Institute of Organic Agriculture (ÖMKi), HU

- Mass catering as a driver for Austrian organic agriculture, **Isabella Gusenbauer**, Research Institute of Organic Agriculture (FiBL), AT
- Capacity development strategy to promote organic sector development in Ukraine – the experience with the Leader Approach, **Tobias Eisenring**, Research Institute of Organic Agriculture (FiBL), CH
- Transdisciplinary development of organic agriculture through participatory research: Case of Armenia, **Astghik Sahakyan**, International Center for Agribusiness Research and Education (ICARE) Foundation, AM

18:00 – 20:00

Gartensaal

Tasting of local delights

Scientific Conference, Day 2

08:00 – 09:00

Reception &
Gartensaal

Registration, Morning Coffee

09:00 – 10:30

Haydusaal

Parallel Sessions IV

4.1 Sustainable production forms

Chair: Stefan Vetter, Federal Ministry for Sustainability and Tourism (BMNT), AT

- Biodiversity performance of organic farms in Austria – results from eight years of biodiversity assessment, **Thomas Drapela**, Research Institute of Organic Agriculture (FiBL), AT
- Is bio-certification of subsistence farms a good strategy to conserve traditional landscapes and biodiversity? A case study from Transylvania, Romania, **Laszlo Rákossy**, Babes-Bolyai University, RO
- Four years of model organic regions in Bavaria – an interim report and first results, **Christian Novak**, Bavarian State Research Center for Agriculture (LfL), DE
- The Roller-Crimper method. Regenerative Organic No-Till!, **Alfred Grand**, Vermigrand

Empire Saal

4.2 Partnerships along the value chain I – Sustainable supply chains

Chair: Isabella Gusenbauer, Research Institute for Organic Agriculture (FiBL), AT

- Regional and supra-regional market relations of dairy farms in two Austrian regions, **Ruth Bartel-Kratochvil**, Research Institute of Organic Agriculture (FiBL), AT

Empire Saal
(Parallel Session IV, 4.2)

- Defining criteria and indicators to assess partnerships along food value chains, **Susanne Kummer**, Research Institute of Organic Agriculture (FiBL), AT
- Collaborative short food supply chains, **Susanne Braun**, University of Hohenheim, DE

Moreau Saal

4.3 Better knowledge transfer and dissemination across all stakeholders in organic agriculture

Chair: Klaus Wiesinger, Bavarian State Research Center for Agriculture (LfL), DE

- Knowledge transfer in organic farming in Estonia, **Elen Peetsmann**, Estonian University of Life Sciences, EE
- Low Input dairy farming in Austria – Experiences from training courses and results of participating farmers, **Andreas Steinwider**, Höhere Bundeslehr- und Forschungsanstalt Raumberg Gumpenstein, AT
- Pleasurable Cooking Lessons work! Findings from the Pilot Phase of Schule des Essens (School of Eating), **Theres Rathmanner**, Research Institute of Organic Agriculture (FiBL), AT

10:30 – 11:00

Gartensaal

● Coffee Break

11:00 – 12:30

Haydhsaal

● Parallel Sessions V

5.1 Organic crop production II

Chair: Jürgen Friedel, University of Natural Resources and Life Sciences (BOKU), AT

- Soil-data can be improved by qualitative soil food web assessment of soils from various organic cultivation practices, **Eszter Tóth**, Szent István University, HU
- Effect of cover crops on the level of soil moisture in a Hungarian vineyard, **Ádám Donkó**, Hungarian Research Institute of Organic Agriculture (ÖMKi), HU

Empire Saal

5.2 Partnerships along the value chain II – Strengthening links across actors

Chair: Milan Ščasný Charles University, CZ & **Iva Zvěřinová**, Charles University, CZ

- PROVE. Empowering local networks for a more sustainable future, **Daniela Craveiro**, Instituto Universitário de Lisboa (ISCTE-IUL), PT
- Intersectoral Cooperation of an Urban Food Garden in the Netherlands, **Nina van der Vliet**, National Institute for Public Health and the Environment (RIVM), NL
- Community financing in the German organic food sector - an alternative to traditional credit financing?, **Gerlinde Behrendt**, University of Applied Sciences for Sustainable Development Eberswalde (HNEE), DE

Moreau Saal

5.3 Fraud prevention and enhanced transparency

Chair: Jiří Urban, Central Institute for Supervising and Testing in Agriculture (UKZUZ), CZ

- Fraud in organic agriculture – an introduction, **Toralf Richter**, Research Institute for Organic Agriculture (FiBL), CH
- Digitalization in organic trade in Ukraine as a key to improve transparency and integrity, **Mariia Makhnovets**, Organic Trade from Ukraine, UA

Moreau Saal
(Parallel Session V, 5.3)

- Enhanced fraud prevention through combining supply chain and satellite information – a pilot project for Kazakhstan, **Gerald A. Herrmann**, Organic Services GmbH, DE

12:30 – 14:00 ● **Lunch Break**

Gartensaal

14:00 – 15:30 ● **Parallel Sessions VI**

Haydnsaal

6.1 Food quality, safety and nutrition

Chair: Dagmar Janovská, Czech Technology Platform for Organic Agriculture (CTPOA), CZ

- Improving organic food integrity and quality management by better understanding the root causes of residue findings. – The case of Ukraine, **Toralf Richter**, Research Institute for Organic Agriculture (FiBL), CH
- Extending shelf life of organic beans, **Christina Vakali**, Aegilops-network for biodiversity and ecology in agriculture, EL
- The content of bioactive compounds in the apples variety Gold Millennium® and in the apple poly-phenolic preparations produced from these apples, **Ewa Rembiałkowska**, Warsaw University of Life Sciences (SGGW), PL

Empire Saal

6.2 Consumers' perspectives and attitudes towards organics

Chair: Anja Eichinger, Research Institute for Organic Agriculture (FiBL), AT

- Organic - what consumers think, **Reinhard Geßl**, Freiland Verband, AT

Moreau Saal

6.3 Poster Session II

See list of posters (Page 33)

15:30 – 16:15 ● **Coffee Break**

Gartensaal

16:15 – 17:45 ● **Scientific Conference Closing Session**

Haydnsaal

- **Joanna Wierzbicka**, IFOAM EU, PL
- **Jiří Urban**, UKZUZ, CZ
- **Andreas Kranzler**, Director FiBL, AT

18:00 – 22:00 ■ **Wine tasting and evening reception**

Kalandahaus

A shuttle between the conference venue and Kalandahaus will be provided.



Organic Policy Summit – Innovationsforum Biolandwirtschaft and Field Trips, Day 3

Moderator: Gerald Groß

- 08:00 – 09:00** ● **Registration, Welcome Coffee**
Reception & Gartensaal
- 09:00 – 09:15** ● **Opening of Organic Policy Summit**
Haydnsaal
Elisabeth Köstinger, Austrian Federal Minister for Sustainability and Tourism
- 09:15 – 10:30** ● **Key Note Speakers (tbc)**
Haydnsaal
High-level speakers from EU member states and European Institutions
- 10:30 – 12:00** ● **Panel Discussion**
Haydnsaal
- **Andreas Kranzler**, Director FiBL Austria
 - **Theresia Neuhofer**, Organic Farmer, Chairwoman of the Austrian's Chamber of Agriculture Committee on Organic Farming
 - **Gertraud Grabmann**, Organic Farmer, President of Bio Austria
 - **Jiří Lehejček**, Board Vice President of IFOAM-EU
 - **Barna Kovács**, Counsellor of BIOEAST Secretary
 - **Michael Blass**, Agrarmarkt Austria Marketing GmbH

12:00 – 13:30 ● **Lunch Break**

Prunkräume

13:30 – 18:00 ■ **Field trips ICOAS**

Haydnsaal

Visit of two organic producers in the region. Please see page 36/37 for more information on the destinations of the field trip.

Innovationsforum Biolandwirtschaft

Hintergrund und Ziel der Veranstaltung

In Österreich werden bereits rund 25 % der landwirtschaftlich genutzten Fläche biologisch bewirtschaftet, deshalb hat die Biolandwirtschaft auch einen sehr hohen Stellenwert innerhalb der österreichischen Landwirtschaft. Dieser Stellenwert spiegelt sich allerdings nicht entlang der Lebensmittelwertschöpfungskette wider. Hier ist noch viel Potential vorhanden, wo es besonderer Bewusstseinsbildung bedarf und das eine enorme Chance beinhaltet, Wertschöpfung im und am Land zu behalten

Ziel dieses Workshops ist es, anhand von Inputs und die Darstellung von Best Practice Beispielen für das vorhandene Potential der Bioprodukte für die Wertschöpfung in Österreich zu sensibilisieren und innovative Möglichkeiten aufzuzeigen. Die Veranstaltung soll unter anderem zur Stärkung der Kooperationen mit Verarbeitungsbetrieben, Tourismus und Kommunen beitragen.

Programm:

12:00-13:20

Poster Session aktueller BioForschungsergebnisse und Diskussionsthemen

Ab 13:30 werden folgende Themenschwerpunkte in fünf Workshop-Gruppen erarbeitet:

Impuls 1: Biolebensmittel in der Gemeinschaftsverpflegung

AG 1: „Können öffentliche Küchen ein Vorbild bei der Verpflegung mit heimischen Biolebensmitteln sein?“

Referentin: Susanne Maier, Geschäftsführung BIO AUSTRIA

Impuls 2: Verarbeitung von Biogetreide

AG 2: „Vom heimischen Biogetreide zum Biobrot – wie können wir die Transparenz verbessern?“

Referentin: Andreas Kranzler, Forschungsinstitut für biologischen Landbau FiBL

Impuls 3: Biolandwirtschaft und Tourismus

AG 3: „Wie können mehr österreichische Bioprodukte auf den Tellern von Touristinnen und Touristen in den heimischen Gasthöfen und Hotels kommen?“

Referent: Vertreter von „Die Bio-wirtInnen“

Impuls 4: Biomilchprodukte – Erfolgreich im Inland und im Export

AG 4: „Wie können wir den heimischen Biomarkt stärken und die Bio-Exportmärkte nachhaltig absichern?“

Referentin: Elisabeth Haimberger, Projektmanagement & Öffentlichkeitsarbeit Berglandmilch

Impuls 5: Bio-Direktvermarktung – Dialog mit den Konsumentinnen und Konsumenten

AG 5: „Wie überzeugen wir die Konsumentinnen und Konsumenten von unseren heimischen Bioprodukten?“

Referent: Christoph Höfer, HÖFER Naturköstlichkeiten

Kontakt

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Kosten

Die Teilnahme an der Veranstaltung ist kostenlos

Poster Session I

P1 Characterization and participatory evaluation of Greektomato heritage varieties for organic farming
Avdikos, I. et al., AEGILOPS, Greek Network for Biodiversity and Ecology in Agriculture, GR

P2 Effects of different farming systems on soil P in four regions of Germany
Chmelikova, L. et al., Technical University of Munich, DE

P3 Comparison of two specific treatments in the Hungarian on-farm research program for varroa control in organic beekeeping
Csáki, T. et al., Hungarian Research Institute of Organic Agriculture (ÖMKi), HU

P4 Approaches to hop agrotechnics in organic farming in the Czech Republic
Donner, P. et al., Hop Research Institute Co., Ltd., CZ

P5 FARMER'S PRIDE: enhancing in situ conservation of plant genetic resources in Europe
Fehér, J. et al., Hungarian Research Institute of Organic Agriculture (ÖMKi), HU

P6 Certification of green inputs for livestock production
Fernández-Blanco Barreto, A.M. et al., Livestock Inputs Department, CAAE Certification Service, ES

P7 Implementing and fostering capacity building processes on sustainable agriculture in indigenous communities in the upper Baram (Sarawak, Malaysia)
Kaser, A. et al., Research Institute of Organic Agriculture (FiBL, AT), AT

Netzwerk Zukunftsraum Land wird finanziert von Bund, Ländern und Europäischer Union

Bundesministerium
Nachhaltigkeit und
Tourismus

LE 14-20
Entwicklung für eine nachhaltige Zukunft

Europäischer
Landwirtschaftsfonds für
die Entwicklung des
ländlichen Raumes
This financial support is
the European Union's
contribution to the
rural development

netzwerk
zukunftsraum
land
LE 14-20

P8 Does the length of value chains matter? Assessing the regional benefit of different beetroot value chains in Lower Austria

Markut, T. et al., Research Institute of Organic Agriculture (FiBL), AT

P9 Five years of the BioRegio Farm Network in Bavaria – an assessment

Sadler, T. et al., Bavarian State Research Center for Agriculture (LfL), DE

P10 Organic consumers' knowledge and attitudes towards wild plant foods in Vienna, Austria

Schunko, C. et al., University of Natural Resources and Life Sciences Vienna (BOKU), AT

P11 Using cluster analysis to determine key drivers of sustainability of Austrian organic dairy farms

Scheurich, A. et al., Research Institute of Organic Agriculture (FiBL), AT

P12 Ease of handling of sows on organic farms: assessment options and genetic selection

Sinz, E. et al., Bavarian State Research Center for Agriculture (LfL), DE

P13 Postharvest and minimal processing technologies applicable to organic fruits

Stan, A. et al., Research Center for Studies of Food Quality and Agricultural Products, Bucharest, RO

Poster Session II

P14 Rotational no-till vs. reduced soil tillage cultivation in organic soybean

Blankenhorn, B. et al., University of Natural Resources and Life Sciences Vienna (BOKU), AT

P15 Agronomic performance of winter wheat in organic on-farm variety trials in Hungary

Drexler, D. et al., Hungarian Research Institute of Organic Agriculture (ÖMKi), HU

P16 Competition and productivity in organic oats-forage legumes cropping system,

Gecaite, V. et al., Lithuanian Research Centre for Agriculture and Forestry, LT

P17 Bioaccumulation of essential and toxic elements in two species of alternative small grains in organic farming

Gršić, N. et al., University of Belgrade, RS

P18 Experiments of variety tests and seed-and soil treatment in organically cultivated soybean (glycine max (L.) Merrill.)

Hunyadi, É. et al., Hungarian Research Institute of Organic Agriculture (ÖMKi), HU

P19 Impact of roasting on the phenolic profiles, anti-oxidant and metabolic syndrome-related enzymes modulatory activities of Sorghum bicolor grain

Ironi, E.A. et al., Kwara State University, NG

P20 Herbicidal Potentials of Three Botanicals in Cowpea Field in Oyo State, Nigeria

Isienyi N. et al., Bioscience, Forestry Research Institute of Nigeria, NG

P21 On the suitability of different grain legume species for organic fodder production in Luxembourg and Germany regarding to their nutritive and antinutritive ingredients

Keßler, S. et al., Institut für biologische Landwirtschaft an Agrarkultur Luxemburg (IBLA) a.s.b.l., LU

P22 Effect of different mulching systems on the generative product and soil temperature of organically grown strawberry

Király, I. et al., John von Neumann University, HU

P23 Microbes and meat bone meal fertilization: effects on oat, barley, lettuce and ray grass yields

Kivelä, J. et al., University of Helsinki, FI

P24 Variety assessment with multicopter in on-farm winter wheat trials

Kovács, T. et al., Hungarian Research Institute of Organic Agriculture (ÖMKi), HU

P25 Sustainable control of oriental fruit moth, *Cydia molesta* Busck and peach twig borer *Anarsia lineatella* Zell. by using Cidetrak® OFM/PTB MESO™ pheromone dispensers

Kutinkova, H. et al., Fruit Growing Institute, BG

P26 Phenolic acids composition of organically grown einkorn, emmer and spelt

Lacko-Bartošová M. et al., Slovak University of Agriculture in Nitra, SK

P27 LeguTec – Mechanical weed control in soybean cultivation in Luxembourg

Leimbrock, L. et al., Institut für biologische Landwirtschaft an Agrarkultur Luxemburg (IBLA) a.s.b.l., LU

P28 Effects of foliar spraying with a *Scenedesmus obtusiusculus*-based microbial product on growth, yield and stress tolerance of organically grown strawberry

Mihálka, V. et al., John von Neumann University, HU

P29 Determining white clover leaf mass yield and ratio of a range of cultivars and successive cuttings

Paczkowski A. et al., Bavarian State Research Center for Agriculture (LfL), DE

P30 Impact of winter cover crops on soil quality and weeds in organic cropping systems

Talgre, L. et al., Estonian University of Life Sciences, EE

P31 Effects of two seeding dates on the performance of grass-clover leys

Urbatzka, P. et al., Bavarian State Research Center for Agriculture (LfL), DE

P32 Impact of legume crops on a subsequent pea crop in soils affected by legume yield depression syndrome

Winterling, A. et al., Bavarian State Research Center for Agriculture (LfL), DE

P33 Interactions of weeds and cover crops and their relations to management

Wolfrum, S. et al., Technical University of Munich, DE

Field Trips

- Please **show your voucher** received upon registration when entering the bus.
- **Meeting point:** Friday (9 November) at 13.30 in the yard of Esterházy Palace (downstairs)
- **Return:** approximately 18.00 at Esterházy Palace
- Please **sign up at the registration desks** for one of the two groups

Group I

Seehof PANNATURA, Donnerskirchen

Around 5,600 hectares of the Esterhazy estate are used for agriculture. A large part of the land is either in or directly adjacent to environmentally sensitive areas such as the Neusiedler See-Seewinkel National Park, nature reserves or Natura 2000 areas. Esterhazy is aware of its ecological responsibility and was one of the first of the “big” estates to switch all of its own-run areas entirely to organic farming back in 2002. The organic Esterhazy estate produces high-quality agricultural products from the region for the region. Diverse crop rotation, a total absence of agricultural chemicals as well as closed nutrient cycles are the main priorities.

Private Brewery Golser, Gols

Using highly developed equipment the family driven brewery „Privatbrauerei Gols“ brews best pannonian beers in the village of Gols / Burgenland. Head brewer and owner Markus Sautner keeps the business regional and quality-oriented. The brewery offers 6 different beer styles permanently and creates specialties using domestic ingredients like chestnuts or herbs.

Group II

SAATBAU – Organic farm Pöttelsdorf

In cooperation with SAATBAU LINZ organic seed has been propagated since 1995 at this location. The Pannonian dry climate is a big advantage. Currently, 9,000 - 10,000 t of raw materials for organic seeds, organic cereals and organic soybeans are taken over and processed on this site.

Vitakorn, Pöttelsdorf

Vitakorn Biofuttermittel GmbH was founded in 1999 as the first feed mill in Europe that was certified and continuously controlled 100% organic. The company works in three areas of operations: Feed production, oil mill and grain trading, with a turnover of more than € 17 million. Vitakorn has ten employees and is a strong regional business partner of tillers and livestock owners.

