# **Evolving Agriculture and Food - Opening up Biodynamic Research**

## Day 1 - Wednesday, Sep. 5

10.00 - 13.30 Registration

10.45 Goetheanum Tour

13.30 Welcome by Jean-Michel Florin

**Ueli Hurter:** Which research for biodynamic agriculture?

**Jürgen Heß:** Biodynamic agriculture and research - a view from outside

15.00 Refreshment break

15:45 Parallel Sessions I

Session I A: Decision making and social processes. Chair: Petra Derkzen	
Factors affecting farmers' decisions for the biodynamic farming method: the case of Slovenia	Andreja Videmšek
Prév'mange – a pilot project for sustainable food systems in Préverenges, Switzerland	Anna Perret
Social Art of working together	Thomas Schmid
18-year Observational Research Paper of 100,000+ Araku Small and Marginal Farmers, AP, India	David Hogg
Session I B: Dairy Production and milk quality. Chair: Anet Spengler	
Biodynamic milk quality in Germany and human health	Daniel Kusche
Biodynamic milk and its potential health aspects	Ton Baars
Steps towards appropriate feeding and farming conditions for dairy cows (Wiederkäuergerecht Milchviehhaltung): Milk quality, measured by Fluorescence Excitation Spectroscopy.	Jenifer Wohlers
Ethical considerations of consumers concerning the alternative system of mother/dam-bonded calf rearing in German dairy production	Sabrina Wanke
Session I C: Biodynamic compost and soil health. Chair: Christopher Brock	
Alternative herbs and materials for BD manures and BD preps for tropical countries like India (Arunkumar J and Perumal K*)	Karuppan Perumal
Long-term bio-dynamic farming mitigates nitrous oxide emission and enhances methane uptake in arable cropping systems	Andreas Gattinger
Achieving Microbial Balances in Soil through Biodynamic Agriculture Practices	Regina Sharmila Dass
Biodynamic preparations on static pile composting from Opuntia ficus-indica and Moringa oleifera wastes	Heberto Antonio Rodas Gaitán
Session I D: New research methods. Chair: NN	
INBIODYN: Integrated, bio-organic and biodynamic viticulture. A comparative study over a 10-year-period	Georg Meißner
Participative development of a guideline for scientific documentation of casestudies in bd agriculture as part of a research framework	Cornelius Sträßer
From the involvement of dissenting communities in a participative-action-research to uncovering responses to climatic and pathogens threats specific to vines grown biodynamic	Jean Eugen Masson
Fluorescence Excitation Spectroscopy – fundamental principles and key-phenomena of delayed luminescence. An introduction to the method.	Peter Stolz

## 17:30 World Café - Biodynamic Research Agenda

18.45 Evening Break

20.00 Open get-together at the Speisehaus

# Day 2 - Thursday, Sep. 6

8:30 Keynote Speeches

Geraldo Deffune G. de Oliveira: Systems Comparative Research Methods and Results in

Biodynamic Agriculture

Véronique Chable: Multi-actor and transdisciplinary research for an agriculture based on

living processes

10.00 Refreshment break

#### 10.45 Parallel Sessions II

10.45 Parallel Sessions II	
Session II A: Researching non-material influences. Chair: Julia Wright	
Yield, quality and postharvest storage of Daucus Carota L., under biodynamic management, related to moon rhythms	Pedro Jovchelevich
Harmonising the growth and yield of radish with the biodynamic calendar	Chaminda Egodawatta
Screening of analytical methods for eurythmically treated water	Eckart Grundmann
Eurythmic treatment of apples for quality modification	Eckart Grundmann
Session II B: Associative economy and financial challenges. Chair NN	
The Future of Agriculture in Egypt	Helmy Abouleish
Synergies between solidarity economy practice and biodynamic farming enable new sustainable pathways in the food sector	Bettina Scharrer
Financial participation of the supply chain actors in organic plant breeding	Peter Kunz
Session II C:Qualitative analysis of food quality. Chair: Jasmin Peschke	
Droplet evaporation method as a potential tool for qualitative analysis of foods and agricultural products	Maria Olga Kokornaczyk
The vitality of cucumber fruits from different cultivation systems - a new method for assessing antimicrobial, slice healing and green color retainment properties of cucumber fruit	Jens-Otto Andersen
Egg quality – differences between biodynamic, organic and conventional samples, measured with Fluorescence Excitation Spectroscopy (FES).	Peter Stolz
Development of a bioassay with garden cress to test the bioactivity of the biodynamic horn manure preparation	Alain Morau
Session II D: Effects of BD preparations. Chair: Jürgen Fritz	
The Effect of Yield Improvement of Economic Corps and Fruit Trees with Soil Treatment by Demeter Method on Green Agriculture	Dong Xiao
Effect of biodynamic preparations on the soil biological and agrochemical properties and potato tubers quality	Elvyra Jariene
Is it biodynamic preparations that make a change between biodynamic and organic arable farming? – Results from the Frick long-term field trial in Switzerland	Maike Krauss
Implementation and results of the biodynamic preparation prepared 500 (500P)	Vincent Masson

#### 12.15 Lunch break

14.00 Experience the Living - Exercises -

#### 15.00 Refreshment break

#### 15.45 Workshops I

Research agenda for biodynamic agriculture and nutrition. Part Lof III	Petra Derkzen, Jean-Michel Florin, Thomas Schmid
Creating unknown research-methods for unknown subjects: encountering individuality. Part I of II	Luc Ambagts

Evidence base for biodynamic agriculture. Part I of II	Liron Israely
Biodynamic farmers' tacit knowledge. Part I of I	Sofi Gerber
Using nature constellations to communicate with the consciousness of nature. Part I of II	Melissa Roussopoulos
Extended understanding of the "Agriculture Course". Part I of I	Hartmut Heilmann, Markus Hörner

#### 17.30 Poster Session

#### 18.45 Evening Break

 $20.00\ Cultural\ Evening\ \textbf{-}\ THE\ SOUL\ AND\ THE\ HARMONY\ OF\ THE\ UNIVERSE\ \textbf{-}\ A\ musical\ eurythmy-programme\ performed\ by\ the\ Eurythmeum\ CH,\ Switzerland$ 

Compositions for piano and cello by Lajos Bárdos, Ernest Bloch, Frederic Chopin, Manuel De Falla, Arthur Lourie, Leopold van der Pals, Arvo Pärt, Dimitri Shostakovich, Franz Schubert and others

# Day 3 - Friday, Sep. 7

8.30 Keynote Speech

Silvia Ivemeyer, Mechthild Knösel, Anet Spengler: Participatory approaches in researcher -

farmer - collaboration

10.00 Refreshment break

#### 10.45 Parallel Sessions III

Session III A: Meta-reflection on the research field. Chair: NN	
Thoughts from collating biodynamic research and possible development	Mark Moodie
What agroecology research and biodynamic agriculture could learn from each other about intuitive farming	Saskia von Diest
A call for Biodynamic Agriculture to Come Out about the Non-Material World	Julia Wright
The gap between scientific relevance and scientific acceptance	Luc Ambagts
Session III B: Biodynamic fertilization and plant breeding. Chair:	
Application of foxglove-extract in combination with different potassium fertilizers	Hartmut Spieß
Soil carbon sequestration in selected orchards and agroforests managed through organic, biodynamic and conventional agricultural practices	Karuppan Perumal
Breeding maize under biodynamic conditions for nutritional value and nutrient efficiency	Walter Goldstein
Effect of biodynamic preparations of the properties of soil and great pumpkin (Cucurbita maxima D.) fruits quality	Honorata Danilčenko
Session III C: Effects in soil health and fertility. Chair: Christopher Brock	
Biodynamic agricultural practices on improving the soil health and the productivity of rice (Oryza sativa L.) under two agroclimatic zones of Tamil Nadu	Karuppan Perumal
Long-term, on-farm field manure experiment in Sweden comparing liquid and composted manure, including biodynamic treatments and biochar	Artur Granstedt
Long term field studies improving soil health crop yield through on organic and Biodynamic farming among small scale farmers in rainfed region	Karuppuraj Veluchamy
Cross-scale effects of resilience – from soil resilience to farm resilience	Marie Ludwig
Session III D: Part 1: Animal health. Part 2: Agriculture and wildlife. Chair: NN	
Use and efficacy of homeopathy in prevention and treatment of bovine mastitis	Johanna Zeise
How does a honeybee colony learn to cope with the Varroa mite?	Johannes Wirz

Agriculture practices supporting biodiversity conservation in Mediterranean Areas: A meta-analysis	Liron Israely
Bottle and Bolt Model:the eco-friendly concept for controlling crop losses	Dheeraj Singh

#### 12.15 Lunch break

## 14.00 Experience the Living - Exercises -

## 15.00 Refreshment break

#### 15.45 Workshops II

Research agenda for biodynamic agriculture and nutrition. Part II of III	Petra Derkzen, Jean-Michel Florin, Thomas Schmid
Creating unknown research-methods for unknown subjects: encountering individuality. Part II of II	Luc Ambagts
Evidence base for biodynamic agriculture. Part II of II	Liron Israely
Using nature constellations to communicate with the consciousness of nature. Part II of II	Melissa Roussopoulos
Extended understanding of the "Agriculture Course". Part I of I	Hartmut Heilmann, Markus Hörner

## 17.30 Workshops III

Research agenda for biodynamic agriculture and nutrition. Part III of III	Petra Derkzen, Jean-Michel Florin, Thomas Schmid
Nutrition Sensitive Agriculture with agroecological and biodynamic base in Andes Region.	Patricia Flores
Participatory seed breeding	Federica Bigongiali, Peter Kunz
Soil life and soil fertility	Dominique Massenot
Do we need different plants for compost preparation in tropical & subropical regions ?	Jürgen Momsen, Reto Ingold
Pfeiffer Circular Chromatography in agroforestry systems	Lucas Contarato Pilon

## 19.30 Conference Dinner at the Speisehaus

# Day 4 - Saturday, Sep. 8

## 8.30 Parallel Sessions IV

Session IV A: Nutrition, health and human development. Chair: Patricia Flores	
San Francisco Farm Demeter Bananas, nutrition and human development: emphasis on the etheric of the food.	Andreas Attila de Wolinsk Miklós
How can it be shown the effect that farming methods have on the quality and vitality of the products?	Richard Swann
The turnaround in nutrition – an aspect of salutogenesis	Jasmin Peschke
Integrating biodynamic methods into elm mistletoe cultivation – effects on pharmaceutical products	Hartmut Ramm
Session IV B: Alternative research methods. Chair: NN	
Pfeiffer's circular chromatography test applied to soil samples and comparison to chemical analysis results	Maria Olga Kokornaczyk
Visual Gestalt evaluation of biocrystallization images: ranking wheat samples from different production systems	Jürgen Fritz
Integrated analysis in agroecosystems: Pfeiffer Circular Chromatography and approximation of Graph theory	Lucas Pilon
Experiences with new and alternative research methods at Hiscia Research Institute	Claudia Scherr

Session IV C: Biodynamic breeding and animal welfare. Chair: Anet Spengler	
Our pig - an alternative breed of pigs	Anna Jenni
Breeding program for organic dairy cattle in the Netherlands	Wytze J. Nauta
Organic Breeding of Laying Hens, the Vredelinger	Wytze J. Nauta
Investigation of the internal atmosphere of hives of different typologies hosting colonies of European domestic bees (Apis mellifera L., ligustica breed, carnica, or their hybrids)	Sabrina Menestrina, Luca Mion
Session IV D: Exploring the edges of biodynamic research. Chair: Julia Wright	
Comparison of the biodynamic concept of farm individuality with actual concepts of individuality in biological science	Alain Morau
Exploring the Cultural Landscape of Biodynamic Research	Jonathan Code
An Exploration of the Effects of Meditation in Regenerative Agriculture – A Case Study of Sustainable Yogic Agriculture	Janus Bojesen Jensen
Role of astronomy in agriculture	Alexander Bradley

#### 10.00 Refreshment break

## 10.45 - 12.00 Closing Ceremony

- 13.30 Excursion to the biodynamic farm Rütihof in Hellikon / Switzerland. Back in Dornach at
- 17.30 More information: www.sektion-landwirtschaft.org/en/