Summer school

Agroecology and animal production

Are you interested in agroecology systems? And specific in the livestock component? Would you like to broaden and deepen your understanding on this topic from a broad perspective and European context? Then this summer school might be something for you. Agroecology is receiving increasing attention as a sustainable solution for future agriculture. Livestock is a key component in agroecological systems. Yet livestock production gives rise to growing concerns about social and environmental consequences. Implementation of the agroecological approach therefore is of growing importance for the future of agriculture, in specific livestock systems.

Target audience
The Summer School Agroecology and animal production is especially designed for PhD students in the field of agriculture, and professionals in agriculture and the feed and food industry, such as consultants, technical advisors, policy makers and researchers.

Course deliverables
After completion of the Summer Course, you gained in-depth understanding of the holistic and interdisciplinary agroecological approach in relation to livestock systems. Furthermore, you are able to add new knowledge to your field of expertise and to anticipate on future developments in agroecology.

Location: Clermont-Ferrand (Centre of France), on the VetAgro Sup Campus (University of Agriculture)
Dates: 26-29 June 2017
Organised by: Heleen van Kernebeek, MSc (WUR), Fabien Stark, PhD (Agreenium)

Our approach
The course includes a variety of scientific approaches and teaching methods to facilitate appropriation and application of concepts:

- Systemic approach: “animal” in interaction with other components of the “agricultural system”: forage and cropping system, (natural) resources, ecological environment, socio-economic and biophysical environment
- Multifaceted approach: Multi-criteria, multi-scale, and multi-disciplinary analyses, and decision systems
- Teaching methods: Lectures, Flipped classroom, Digital learning, Field and case studies, workshops
- Participation and interactions: Interactive teaching methods facilitate active exchange of knowledge and ideas with other participants and the experts involved in the course. Social activities offer the opportunity to expand your professional and private network.
Programme

26-29 June, 2017 (arrival on the 25th in the afternoon and departure on the 30th in the morning, with good train connection and daily flights between Amsterdam and Clermont-Ferrand).

Theoretical frameworks for agroecological livestock farming systems
To understand the fundamental principles of agroecology and their application to livestock systems.

How to realise transition
To gain an overview of the diversity of levers and practices that can be implemented in the context of the agro-ecological transition: animal traits, animal health and welfare, agricultural practices under extensive, mixed and intensive farming systems.

Assessment of livestock systems under agroecological framework
To be able to mobilize appropriate assessment methods and criteria to take into account the different dimensions of agroecology: nutrient cycles and multi-criteria assessment from farm to regional level.

Innovations to allow agroecological transition
Join in a change process, combining biophysical up to socioeconomic innovation: participative co-design, ecological processes at regional level and functional land management catchment challenge.

Practical information

Costs
PhD: €395,-
Educational staff / post doc: €695,-
Professional: €1495,-
The course fee includes course materials, coffee/tea, field trip, lunches and one dinner. Accommodation facilities are proposed on campus (single room, breakfast and dinner, 5 nights) for €230,- (excluded).

Registration
You can register via our website: www.wur.eu/academy. After registration you will receive the details about location, payment, programme and participants list.

General Terms
The General Terms and Conditions of Wageningen Academy apply to all activities of Wageningen Academy; www.wur.eu/academy

Our offer
Wageningen Academy also offers in company training, distance learning modules and summer schools. Check our website for more options.

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Today’s knowledge, tomorrow’s business
Programme

Summer School on Agroecology and animal production

Agreenium and Wageningen University & Research

Date: 26 – 29 June 2017
Speakers

Imke de Boer, Wageningen University & Research
Rogier Schulte, Wageningen University & Research
Theun Vellinga, Wageningen University & Research
LAE, Agreenium
Guillaume Martin, Julie Rischawy and Marie-Angéline Magne, Agreenium
Gwenaël Vourch, Cécile Ginane and Isabelle Veissier, Agreenium
Jose Pires, Muriel Bonnet, L. Mendes and Fabienne Blanc, Agreenium
Safya Menasseri, Agreenium
Magali Jouven, Agreenium
Yves Michelin, Agreenium
Frédéric Louault, Katja Klumpp and Juliette Bloor, Agreenium

Course location

Clermont-Ferrand (Centre of France),
VetAgroSup Campus (University of Agriculture)
1, avenue Bourgelat, 69280 Marcy l’Etoile, France
Speakers:

From Wageningen University & Research:

- **Imke de Boer, Animal Production systems Group:** Research of the Animal Production Systems Group focuses on unravelling the complexity of concerns in livestock systems and exploring trade-offs and synergies of innovations regarding environmental impact, animal welfare, and economic viability, to design a more sustainable future.

- **Rogier Schulte, Farming Systems Ecology Group:** The Farming Systems Ecology Group focuses on the analysis, evaluation and design of agroecological farming systems. The ultimate goal is high-quality, value-driven agriculture that is based as much as possible on closed cycles and socially-acceptable management in self-sustaining landscapes.

- **Theun Vellinga, Wageningen Livestock Research:** Wageningen Livestock Research performs fundamental, innovative research and looks for practical solutions for sustainable and profitable livestock farming.

From Agreenium members:

- **LAE (Agronomy and environment laboratory):** Works on agricultural systems through the development of agri-environmental indicators and the study of the interactions agriculture/biodiversity;

- **Guillaume Martin, Julie Rischawy and Marie-Angélina Magne, UMR AGIR (Agroecologies, Innovations & Ruralities):** Deals with specific issues about agriculture and sustainable development, focusing on situations linking the cultivated grassland and the agroecosystems;

- **Gwenaël Vourch, Cécile Ginane and Isabelle Veissier, UMR EPIA (Epidemiology of animal and zoonotic diseases):** The unit studies the epidemiology of infectious diseases in animal populations, in relation to ecological and evolutionary processes, and in the context of global change;

- **Jose Pires, Muriel Bonnet, L. Mendes and Fabienne Blanc, UMR H (Herbivores):** Contributes to the design of sustainable farming systems for herbivores that seek to reconcile production efficiency, product quality and socio-economic viability with environmental protection and valuation, and animal welfare;

- **Safya Menasseri, UMR SAS (Soil, Agro- and Hydro-systems, spatialization):** Studies the interactions between agriculture and the environment using an integrative and spatialized approach of rural areas;

- **Magali Jouven, UMR SELMET (Tropical and Mediterranean Animal Production Systems):** Works on animal production agro-ecosystems in warm climates, in normal and harsh conditions;

- **Yves Michelin, UMR Territore (Changing activities, areas and forms of organization in rural territories):** Objectives to better understand the changes underway in rural territories and to accompany stakeholders producing these changes;

- **Frédéric Louault, Katja Klumpp and Juliette Bloor, UREP (Prairie ecology):** Ecology, operation and service of permanent pasture in a context of global change.
Programme

Day I: Monday 26 June 2017

TRAINING MODULE I: THEORETICAL FRAMEWORKS FOR AGRO-ECOLOGICAL LIVESTOCK FARMING SYSTEMS

08:30  Welcome of participants and objectives of the course

09:30  Emerging concepts applied to livestock systems
        Imke de Boer – 3 hours lecture

12:30 LUNCH

14:00  Principles of agroecology applied to livestock systems
        M.Jouven, E. Gonzalez-Garcia (to be confirmed)

16:00  Animal traits for agroecological livestock systems (adaptive abilities, robustness...)
        J. Pires, M. Bonnet, L. Mendes, F. Blanc (to be confirmed)

Evening  Social Event: Debates on concepts of agroecology, ecological intensification, industrial ecology, etc.

Day II: Tuesday 27 June 2017

TRAINING MODULE II: HOW TO REALISE TRANSITION: PRACTICES TO ENSURE COMPLIANCE TO AGRO-ECOLOGICAL PRINCIPLES

08:30  Impacts of applying agroecological principles on animal health and welfare
        G. Vourch, C. Ginane, I Veissier (to be confirmed)

10:30  Grassland ecology (UREP)
        F Louault, K. Klumpp, J. Bloor (to be confirmed)

12:30 LUNCH

14:00  Field trip 1: Grazing dairy cow system (+ cheese transformation)
        B. Martin, P. Chassard (farm manager) (to be confirmed)

14:00  Field trip 2: Salamix experiment (mixture of species to improve resource use and health, and to enhance resilience)
Evening  Social Event: Participants exchange knowledge from both field trips

Day III: Wednesday 28 June 2017

TRAINING MODULE III: ASSESSMENT OF LIVESTOCK SYSTEMS UNDER AGRO-ECOLOGICAL FRAMEWORK

08:30  Mixed crop-livestock systems and the impact on resilience of livestock
P. Veysset, M. Benoit, S. Prache (salamix), C. Mosnier from UMRH and G. Bigot, S. Cournut from UMR Territoire (to be confirmed)

10:30  Multi-criteria assessment: from farm to regional level
R. Botreau + G. Martin/J. Rischawy/ M.A. Magne + O. Godinot (to be confirmed)

12:30  LUNCH

14:00  Nutrient cycles: from farm to regional level
Dr. Theun Vellinga, S. Menasseri

Evening  Evening program: Walk in the area of 'Puy de Dome', performing a landscape analysis
Yves Michelin (to be confirmed)

Day IV: Thursday 29 June 2017

TRAINING MODULE IV: INNOVATIONS TO ALLOW AGRO-ECOLOGICAL TRANSITION

08:30  Ecological processes at regional level
Y. Michelin (to be confirmed)

10:30  Participative co-design
G. Martin, J. Rischawy and M.A. Magne (to be confirmed)

12:30  LUNCH

14:00  Workshop Functional Land Management Catchment Challenge.
Rogier Schulte, Y. Michelin 3 hours workshop

17:00  Assessment of the course