



LIFE
University of
Copenhagen

EPSO workshop

“The European Feed Value Chain”

Faculty of Life Sciences, University of Copenhagen

26 and 27 June 2007



European Plant
Science Organisation

Program – updated 19.06.07

The proposed workshop is aimed to create a forum for interaction of European private and public stakeholders within the feed - livestock value chain. The expected outcome is a white paper describing the current state of the area, and defining prioritized objectives for European cross disciplinary research activities across the feed - livestock value chain - to secure a competitive and environmentally sustainable European meat, dairy and egg production by the development of improved feed and optimized feeding technologies.

The white paper should aid EPSO to suggest new directions in research within Europe at European and national level, such as the Strategic Research Agenda “Plants for the Future”. This workshop is supported by the European Technology Platform “Plants for the future”.

Size of the meeting: max 50 attendees

Tuesday 26 June 2007

10:00-10:50 Welcome and Introduction

10:00–10:10 **Karin Metzloff** , EPSO and **Claus H. Andersen**, Plant Biotech Denmark
Welcome

10:10-10:30 **Vincent Petiard**, Technology Platform “Plants for the Future”, Nestle R&D, France
Introduction: Integrating the Feed Value Chain

10:30-10:50 **Gerhard Schiefer**, Technology Platform “Food for Life”, University of Bonn, Germany
Emerging Challenges for Food Chain Management

10.50-11.50 Theme 1: THE “OMICS” TOOL BOX – status on technologies, including genetic and genomics, proteomics and metabolomics resources.

Speakers

10:50-11:10 **Catherine Feuillet**, UMR INRA-UBP, Clermond-Ferrand, France
Genomic tools and network resources for improving Triticeae species for the EU feed value chain

11:10-11:30 **Iain Donnison**, Institute of Grassland and Environmental Research (IGER), Aberystwyth, UK
Genetic and genomic resources in forage grasses and clovers

11:30-11:50 **György Botond Kiss**, Grain Legumes IP, Agricultural Biotechnology Centre, Hungary
Grain legume genetics and genomics

11.50-12.20 Coffee break

12:20-14:00 Theme 2: PRICE - availability, diversification and input / output ratio

Speakers

12:20–12:40 **Wolfgang Friedt**, University of Giessen, Germany
Heterosis, yield and stability

12:40-13:00 **Roberto Tuberosa**, University of Bologna, Italy
Tailoring architecture and flowering time of cereal crops for a higher and more stable feed production

- 13:00-13:20 **Bertran Hirel**, INRA-Versailles, France
The challenge of improving nitrogen and phosphorus use efficiency in crop plants: towards a more central role for genetic variability and quantitative genetics within integrated approaches
- 13:20-13:40 **Patrick Schweizer**, IPK Gatersleben, Germany
A high-throughput phenomics approach in barley reveals genes required for durable disease resistance: An entry point for targeted trait improvement
- 13:40-14:00 **Dirk Hincha**, MPI-MP Golm, Germany
Frost and drought tolerance in model and crop plants
- 14:00-15:00 Lunch**
- 15:00-15.40 Theme 3: SAFETY**
- Speakers**
- 15:00-15:20 **Christophe Von Holst**, JRC-IRMM, Geel, Belgium
Safety and traceability of feed composition in the EU – Current examples
- 15:20-15:40 **Naresh Magan**, Faculty of Medicine and BioSciences, Cranfield University, UK
Mycotoxins in feed crops
- 15:40-16.40 Theme 4: QUALITY**
Part 1: Concentration, quality and composition of macronutrients
- 15:40-16:00 **Speakers**
- Noel Ellis**, Grain Legume IP, John Innes Centre, UK
- 16:00-16:20 Grain Legumes as a European protein source for animal feed
- Preben B. Holm**, University of Aarhus, Denmark
- 16:20-16:40 Amino acid composition and mineral bioavailability: Important feed quality traits in cereals
- Robert van Loo**, Plant Research International, The Netherlands
Challenges and opportunities in the field of improvement of nutritional value of forage crops for Europe
- 16:40-17:10 Coffee break**
- 17:10-17:50 Theme 4: QUALITY**
Part 2: Concentration of micronutrients
- Speakers**
- 17:10-17:30 **Martin Broadley**, University of Nottingham, UK
Improving the micronutrient content of crops using agronomic and genetic approaches: selenium and zinc as case studies
- 17:30-17:50 **Gilles Charmet**, INRA, Clermont-Ferrand, France
Genetic improvement of dietary fibre and mineral content in wheat grain for feed use
- 18:00-19:00 Refreshments**
20:00 Dinner

Wednesday 27 June 2007

- 9.00-9.40 Theme 4: QUALITY**
Part 3: Improved digestibility
- Speakers**

9:00-9:20	Yves Barriere , INRA, Lusignan, France Forage maize and grasses for the future. Breeding for improved maize and grasses intake and digestibility in cattle based on understanding the cell wall biogenesis
9:20-9:40	Henrik Vibe Scheller , University of Copenhagen, Denmark Biochemistry and genetic background of cell wall digestibility in cereals
9:40-10:00	Theme 5: Processing
	Speaker
9:40-10:00	Dan Petterson , Novozymes A/S, Animal Feed Applications, Denmark Improving feed with exogenous enzymes
10:00-10:30	Coffee break
10:30-10:50	Theme 6: Health, productivity and environmental impact Part 1: Nutrition in non-ruminants
	Speakers
10:30-10:50	Julian Wiseman , University of Nottingham, UK Nutritional quality of plant diets for non-ruminant farm livestock
10:50-11:10	Trond Storebakken , Agricultural University of Norway. Need for improved plants for European fish feed
11:10-12:10	Theme 6: Health, productivity and environmental impact Part 2: Nutrition in ruminants
	Speakers
11:10-11:30	Henrik J. Andersen , Head of Research, Arla Foods Sustainable and competitive milk quality
11:30-11:50	John Wallace , Rowett Research Institute, UK Plant feed additives and microbial fermentation
11:50-12:10	Ken Laughlin , Aviagen, UK Opportunities for synergy between plant and animal breeding – True Hybrid Vigor
12:10-12:50	Theme 6: Health, productivity and environmental impact Part 3: Environmental impact
	Speakers
12:10-12:30	Caspar Wenk , Zürich, Switzerland Managing residues and nitrogen in intensive cropping systems
12:30-12:50	Leon Sebek , Wageningen University, The Netherlands Sustainable dairy production: low N and P input incompatible with high outputs?
12:50-13:50	Lunch
13:50-16:00	Round table discussions: Initiation of a draft white paper on “The European Feed Value Chain” and including identifying prioritized research objectives
16:00	Departure