

### Environmental technologies: what are we talking about ?

During the Ecotechs Symposium, organized by Cemagref in prelude to the AgEng 2010 Conference (September, 3 & 4), scientists and representatives of the industry shared their different point of views about Environmental technologies. These differences highlight the fact that we are not seeing Ecotechnologies in the same way. You will find below two examples of these different views.

#### Environmental technologies and TIC: two evolutions which go hand in hand.

In the agricultural sector, the latest scientific breakthroughs were related during a long time to the machines and their capacity of work: their power, sizes and efficiency. But for a few years, the evolutions are related more and more to the use of ICT.

The development of the use of ICT goes with the development of environmental technologies. But far from being two independent evolutions, ICT is a way to increase the development of environmental technologies.

Indeed, ICT brings to machines qualities they are missing: measure, memorizing, optimization, even artificial intelligence.

Because of this, ICT can help current machines to fulfill some of the requirements of the environmental technologies: their employment is less harmful for the environment than the use of usual technologies meeting the same needs. It is especially true for the tools for precision agriculture, where one obtains an optimization of the use of the inputs while improving the agronomic performances. The environmental impacts are less than with usual practices even if improved (sustainable farming especially).

ICT makes possible computer-assisted agronomy (in his meaning defined by Olivier de Serres) and to support the development of the environmental technologies. But they also ensure other functions that are very important for the users: comfort, safety, traceability.

*Gilbert Grenier  
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d'Ingénieurs des Travaux Agricoles de  
Bordeaux, France)*

#### Feedback on Ecotechs

The Eco-design methods and tools for agricultural technologies workshop was held between 3-4 September 2010 and I had a privilege to attend. Below are some of my views and opinion with regard to the workshop.

In South Africa, where I come, we have a programme title "Promotion of Eco-Technologies for Sustainable Agricultural Production". The programme is managed by Agricultural Research Council of South Africa. One of the key feature of the programme is the development and promotion of Conservation Agriculture (CA) technologies. These CA technologies include No-Till or Minimum Tillage machinery based on Ripper Planters.

During the two days' event on ECOTECHS 2010, the presentations and discussions were centred on precision agriculture/farming methods and innovations with strong emphasis on pesticide, manure and fertilizer spreading. While innovative and technology advancement has been made in this regard, I still feel that conservation agriculture technologies should have been given a stronger emphasis. This is because of the negative effects the ploughs and harrows have on the soil and the environment. Ploughs (disc and mouldboard) destroy the land. Environmental Technologies should not only include CA related technologies but also Renewable Energy Technologies. This was never discussed in details at the symposium.

In short, future Eco-Technologies should focus in the following areas:

- Conservation Agriculture related technologies to protect the environment.
- Renewable Energy technologies on the farm
- Precision farming technologies which conserve the environment (air, soil and water) and hence agricultural productivity
- Soil, water and air pollution monitoring technologies

*T. E. Simalenga  
Research and Technologies Director,  
Agricultural Research Council, South Africa*

### Today's AgEng News:

Last news about AgEng 2010 Conference, its programme, and general news.

- **The Tuesday plenary session** will feature the scientific point of view about the new needs in technologies to tackle present and future challenges of agriculture and regions in Europe, Brazil and Maghreb. Keynote Speakers : Dr. Joao Carlos De Moraes Sa (Brazil), Dr. Elies Hamza (General Director of National Institut of Agronomy of Tunisia) and Dr. Hervé Guyomard (Scientific Director of Inra, France).

- **For authors** : Please go to the preview desk to submit your PowerPoint presentation as soon as possible (level 1).

- **A strike is planned for Tuesday 7th** of September 2010 in France. You could have some difficulties with the public transportations, but you will have more information on Monday. Please check the Polydome screens.

# AgEng 2010 Conference

## Who are we ?

This AgEng 2010 Conference is going to welcome 439 participants. People are coming from 38 countries all around the world, from Australia to Taiwan, etc.

221 oral presentations will be made and 114 posters will be exhibited, about a lot of different topics (animal production technologies, crop protection, information technologies, etc. )

We hope you will enjoy this AgEng Conference, and your stay in Clermont-Ferrand.

The Organizing Committee

## AGENDA

### Chairmen of the day :

- **Power and machinery : harvesting I** (Amphitheatre – Level 1)  
From 10:30 am – Chairman : Stefan BOTTINGER
- **Fertilization I** (Room 12-13 – Level 2)  
From 10:30 am – Chairman : Franz HANDLER
- **Crop Protection : Spraying I** (Room 2-3 – Level 2)  
From 10:30 am – Chairman : Enrique MOLTO
- **Ergonomics and safety : Machinery I** (Room 4-5 – Level 2)  
From 10:30 am – Chairman : Fabien COUTAREL
- **Information Technology I** (Room 9-10 – Level 2)  
From 10:30 am – Chairman : Alain QUILLIOT
- **Animal Production technology : Meat Quality** (Room 1 – Level 2)  
From 10:30 am – Chairwoman : Veronique BELLON
- **Structures and environment : Building and landscapes** (Room 6 – Level 2)  
From 10:30 am – Chairman : Antti PELTOLA
  
- **Animal Production technology : Air quality I** (Amphitheatre – Level 1)  
From 2:00 pm – Chairman : Gosta GUSTAFSSON
- **Information Technology II** (Room 12-13 – Level 2)  
From 2:00 pm – Chairman : Victor ALCHANATIS
- **Crop Protection : Spraying II** (Room 2-3 – Level 2)  
From 2:00 pm – Chairman : Zoltan LANG
- **Ergonomics and safety : Machinery II** (Room 4-5 – Level 2)  
From 2:00 pm – Chairman : Stavros VOUGIOUKAS
- **Fertilization II** (Room 9-10 – Level 2)  
From 2:00 pm – Chairman : Josse DE BAERDEMAEKER
- **Animal Production technology : Optimization and efficiency** (Room 1 – Level 2)  
From 2:00 pm – Chairman : Pietro PICCAROLO
- **Soil Analysis** (Room 6 – Level 2)  
From 2:00 pm – Chairman : Peter SCHULZE LAMMERS
- **Sensing and data interpretation in horticulture** (Room 7 – Level 2)  
From 2:00 pm – Chairman : Gilbert GRENIER

### Special Events :

The Clermont-Ferrand municipality is pleased to invite you to a **COCKTAIL RECEPTION**, at City Hall, from 7:30 pm on Monday, 6.

**Don't miss the free Shuttle from Polydome (at 7:00pm)**. Please pay attention that there will be no shuttle for return.

- **LUNCH AND GALA DINNER** : for a better organization, if you have a **food allergy**, please contact us quickly (welcome desk or any staff member).

### EurAgEng Meetings & working groups:

#### EurAgEng Open Meeting

From 1:30 to 2:00 pm (Room 11 – Level 2)

#### Working Groups (From 6:00 to 7:00 pm):

##### Room 12-13

Information Technology

##### Room 2-3

Environmental Safe Plant Protection Systems

Fruit & vegetable Production Engineering

##### Room 1

Innovative Technologies for Dairy Farming

##### Room 6

Rural Buildings & Landscapes

Farm Building Structures & Environment

### We would like to thank our sponsors :

