Report on the 37th Research Swine Days
(Journées de la Recherche Porcine)
Paris, France, February 1st-3rd, 2005

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Each year, since 1969, the **National Institute for Agricultural Research (INRA)** and the **Technical Institute for Pig Production (ITP)** organise "The Research Swine Days" in Paris. The aim of these "Swine Days" is mainly to ensure a rapid transfer of the research results to practice. The number of participants is about 700 on average, with an increasing number of speakers and delegates from other countries: Canada, Belgium, Spain, Italy, etc.

The Swine Research Days meeting is a very good opportunity to know about very recent research results and transfer of these results to practical use. It is also an important opportunity for networking with geneticists from other countries, but also with researchers working in other areas, and with experts from different sectors of pig industry.

Sixty-four papers were presented this year, in six different sessions:

- Environment
- Genetics and Meat Quality
- Feeding
- Special issue : application of modelling in pig production
- Animal Health
- Economy - Sociology

There were six papers presented by Canadian researchers, regarding environment, feeding and health, mostly from Agriculture and Agri-Food Canada, CDPQ and the Faculty of Veterinary Medicine of Montréal.

Highlights

- Sanchez et al. reported preliminary results about fine mapping of QTL affecting growth, body composition and meat quality on chromosomes 1, 2, 4 and 7, as refinements from the European PorQTL program, based on an F2 population of Large White×Meishan. New QTLs affecting meat quality were identified, and the effects of the IGF2 gene region were found to be of larger magnitude than in previous studies.
- Canario et al. presented a study about the use of frozen semen to estimate genetic progress between 1977 and 1998. Their work dealt with piglet body composition and physiological state at birth. It was shown that the improvements on litter size and lean growth lead to an increase in protein synthesis potential and delay in piglet maturity.
- Sourdioux et al. carried out a preliminary study about behavioural characteristics of the Sino-European Tai Zumu composite line, using two tests involving reaction towards human presence and new environment. A relationship was shown between high fear towards human and lower performances for live piglets at birth.
- Two papers dealt with MRI (Magnetic Resonance Imaging**)** techniques, for searching new predictors of lean meat content in pig carcasses or cuts. This was done in a French and a European project, in order to set reference methods useful for calibrating several grading instruments. The use of RMI to measure intramuscular fat was also suggested.

Papers of special interest in genetics area:

- **Fine mapping of QTL located on pig chromosomes 1, 2, 4 and 7: preliminary results**, *by Marie-Pierre Sanchez, Juliette Riquet, Nathalie Iannuccelli, Jean Gogué, Yvon Billon, Olivier Demeure, Jean-Claude Caritez, Germaine Burgaud, Katia Fève, Christophe Péry, Hervé Lagant, Pascale Le Roy, Jean-Pierre Bidanel and Denis Milan.*
- **Estimation of the effects of realized selection in Large White population from 1977 to 1998 on body composition and physiological state at birth using frozen semen**, *by Laurianne Canario, Thierry Tribout, Françoise Thomas, Chrystèle David, Jean Gogué, Patrick Herpin, Jean-Pierre Bidanel, Marie-Christine Père and Jean Le Dividich.*
- **Effects of piglet birth body weight on carcass composition, muscle characteristics at slaughter and meat quality**, *by Florence Gondret, Louis Lefaucheur, Isabelle Louveau, Hervé Juin and Bénédicte Lebret*
- **Influence of the sow personality on its adaptation and its performances in farrowing**, *by Michel Sourdioux, Damien Bahon, Marie-Christine Meunier-Salaün, Pierre Orgeur and Christian Gasnier.*
- **Identification of biomarkers of tenderness in pig meat by proteomic analysis**, *by Martine Morzel, Claire Bouchut, Christophe Chambon, Elisabeth Laville, Karen O'Reilly and Anne Maria Mullen.*
- **Quantification of muscle and fat in pig carcasses and cuts by magnetic resonance imaging**, *by Mathieu Monziols, Guylaine Collewet, Michel Bonneau, François Mariette, Armel Davenel and Maryline Kouba.*
- **Contributions of Magnetic Resonance Imaging in the search of predictors of the lean meat proportion of pig carcasses**, *by Gérard Daumas, Armel Davenel, Guylaine Collewet, Stéphane Quellec and Peter Bogner.*
- **Evaluation of different ultrasound instruments for the prediction of salable meat yield**, *by André Fortin, Alan K.W. Tong and Wayne M. Robertson.*
- **InraPorc: a model to analyze performance and to evaluate nutritional strategies in growing pigs**, *by Jaap Van Milgen, Jean Noblet, Alain Valancogne, Serge Dubois and Jean-Yves Dourmad* .

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http://www.journees-recherche-porcine.com/

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http://www.journees-recherche-porcine.com/gb/abstra/index.htm

Full papers are available on request at CCSI