## Evaluation économique de systèmes d'élevage porcin différenciés par le logement et l'alimentation

Frédéric PABOEUF (1, 2), Michel GAUTIER (1), Jean LOSSOUARN (3), Jean-Yves DOURMAD (4)

(1) Chambres d'agriculture de Bretagne, pôle porc, CS74223, 35042 Rennes Cedex, France (2) Anses, BP53, 22440 Ploufragan, France

(3) AgroParisTech, 16 rue Claude Bernard, 75231, Paris Cedex 05, France

(4) INRA-Agrocampus Ouest, UMR 1348 Pegase, 35590 Saint-Gilles, France

frederic.paboeuf@anses.fr

Avec la collaboration technique de Francis GUENGANT (1), Cédric GUILLOU (1), Dominique LESAICHERRE (1) et Philippe LIRZIN (1)

## Economic performance of pig farming systems with different types of housing and feeding systems

In the context of sustainable development, pig breeders need new references on existing and innovative production systems. In answer to their demand, the *Chambre d'Agriculture* of Brittany has set up a systemic experimental approach. Social demand was the most important in the choice of the two systems which differed for animal housing, either on slatted floor (SF) or on litter bedding (LI), and for manure management, either as slurry or as solid manure. Different strategies for housing gestating sows were also compared, either in small groups with individual feeding stalls or in a large group with an automated feeding stall. For post-weaning and fattening pigs, two animal densities were compared in the SF system, and two types of substrate in the LI system, either straw or sawdust. Post-weaning piglets were given dry feed *ad libitum* in a feeder. Fattening pigs were fed either *ad libitum* with dry feed or restrictedly with three meals of mash feed per day. This resulted in 16 combinations between systems and strategies which were evaluated for their economic efficiency. Production cost differed between systems with sometimes higher costs for the slatted floor system (energy) and sometimes higher costs for the litter system (labour, manure management). Finally, the production cost was on average higher for the litter bedding system (+0.12€ per kg carcass) and also more variable. This study allowed to better identify the optimal strategic and practical rules for the different systems in comparison.