
Newsletter # 3

Industrial meeting inform, November 2015 - Madrid (Spain)

Industrial meeting of our COST Action FA1401 was held in Madrid last November 11th. The meeting was performed in the framework of the XXXI FEDNA Nutrition Course which received participation of more than 250 professionals coming from multidisciplinary origins, such as feed and additives companies, pig and poultry industry, universities and research institutes, etc. This year the meeting was organized in a two days meeting with the first day (11th Nov) focused on the objective of promoting a responsible use of antibiotics in the EU pig industry.

The programme included several talks to describe the framework, the actors, and similarities or different strategies followed by the European countries to prevent and reduce the use of antibiotics in the industry.

The meeting contained different talks which will be uploaded in the FEDNA and PiGutNet website.

In a first talk, Enric Marco posed his view about the future of the swine industry in the EU-28, raising the importance of legislation and their effect on the cost of production. The production costs are clearly different among European countries as differences are in the size and organization of the companies. Changes were previewed in the European industry with countries which are expected to increase production while other probably will reduce their size in relation to their cost of production.

The presence in the meeting of Dr Mike Tokach and Doug Cook provided also inputs about the USA situation, where similar objectives to reduce the use of antibiotics are expected in the coming years. A higher effort on designing feeding programs for the pregnant and lactating sows and weanling pigs, as well using new additives will help to reduce the frequency of dysbiosis in young piglets and the use of antibiotics.

From our COST consortium, Robert Pieper made a description about the efficacy of feed additives for the manipulation of gut physiology and microbiota in weanling pigs. The talk focused on the use of probiotics and therapeutic doses on Zn oxide in feed, and risks associated. Charlotte Lauridsen also described nutritional strategies for the prevention of colibacillosis in young pigs, with the description on the importance of

nutrients that can modulate an early immune response or modulate microbiota of the young piglets.



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A final round table was performed with the presence of C. Lauridsen, R. Pieper and F. Pérez (from Cost Action FA1401) , M. Tokach and D. Cook (USA) and M. Gorrachategui and J. Coma (Spain feed and pig industry). The round table allowed numerous inputs from the audience. Some inputs are listed below:

- There are clear differences among countries on the way antibiotics are used. While in Germany and Denmark antibiotics are mostly used “in farm” as oral solution or oral powder, in Spain or USA the antibiotics are mostly included in feed in big feed mills.
- Including antibiotics in the feed mill appears to be more precise but larger amounts of antibiotics are used for all kind of farms.
- Veterinary prescription is clearly linked to the individual farm status in the first examples. Clear efforts have been done in Denmark and Germany during the last years at a farm level to reduce the use of antibiotics in farm. Farms are differentiated by their requirements and use of antibiotics and efforts on the management of the farm need to be implemented to reduce antibiotics. In Denmark, the results can be viewed in the report by Danmap (<http://www.danmap.org/>). In Netherland measures are addressed at concentrating in a unique veterinary the responsibility of antibiotics in each farm; banning the use of last-generation antibiotics; the compulsory use of antibiogram before the prescription; centralized control of prescriptions; annual programme for animal health.
- The preventive use of antibiotics “in feed” may delay the need to do this effort in farm. However, changes on legislation will force to implement also changes on reluctant companies. In USA, the govern proposed that the animal production sector finds voluntary solution to reduce antibiotic use, otherwise there will be a legislative intervention.
- New sceneries, where the use of antibiotics will be the exception, probably will require to accept that objectives of performance early after weaning will be

temporally lower (lower dietary protein levels, higher fiber diets) with the expectation of reducing morbidity, mortality and recover performance later on during the growing period.

- Genotype selection in order to increase prolificacy increases the challenge to deal with low-weight piglets after weaning. This is a scenario which will remain in the future. It would be good if genotypes selection programmes could include factors to improve the resilience of the animals to dybiosis.