Travel Award - Dr Jae Kim to Attend 11th International Symposium on Digestive Physiology of Pigs 2009 – Spain

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Dr Jae Kim of the Department of Agriculture & Food WA travelled to Spain in May 2009 to attend the 11th International Symposium on Digestive Physiology of Pigs (DPP). The DPP conference is held tri-annually and is the only international pig-specific conference of its kind, providing results of the latest technology in relation to pig nutrition and health conducted in most of the top international research institutes.

Much of the research discussed is of direct relevance to the Australian pig industry and it was evident that research being conducted in Australia by the DAFWA is of comparatively high standard to that being conducted at other international research institutes.

A large number of papers and posters dealt with prevention/reduction of post-weaning diarrhoea using many dietary and management strategies, but none have been totally successful to date. Some of the strategies presented included manipulating dietary protein levels and use of legume fibres in weaner diets, similar research to that which the DAFWA pig group is undertaking with Murdoch University. Strategic use of lupin hulls for control of intestinal microbiota is an area of research that the WA and Australian pig industry should investigate given the volume of the lupins produced in WA.

Another novel technique (indicator amino acid oxidation technique) introduced at the symposium as an alternative technique for in vitro-based feed evaluation of protein-rich feedstuffs has the potential to greatly improve the accuracy of measurement of in vivo amino acid bioavailability in pigs. Introduction and routine use of this technique in Australia would improve precision of amino acid nutrition in the future.

Use of dietary electrolytic balance for formulation of sow diets in summer is a concept that should be immediately adopted by the Australian pig industry to partly solve low fertility and low reproductive performance observed in the summer months. Finally, use of fermentable fibres in the late finishing stage could be an easy-to-adopt alternative for surgical- or immuno-castration although further research and economic evaluation are required.