



Australasian Pig Science Association (Inc)

APSA 2011

13th Biennial Conference

Adelaide Hilton. South Australia. Australia

27 - 30th November 2011



Sunday 27th November

17:45 – 18:00	Industry Workshops (AusPac, Biomin and BEC Feedsolutions)
18:00 - 19:00	New Pork CRC/Opening of APSA - Ms Patricia Kelly (Deputy Secretary DIISR)
19:00 - 21:00	AC Dunkin Memorial Lecture Welcome Reception

Monday 28th November

Time	First author	Title
<i>Session 1</i>		Title: Immunology and the gut microbiota <i>Chair: John Pluske</i>
8:30	D Emery	Review: Development of the gastrointestinal ecosystem and mucosal immunity in the neonatal pig
	C De Lange	Review: Immune system stimulation in the pig: effect on performance and implications for amino acid nutrition
9.30	M Nogueira*	The immune response to a ten-times oral or intramuscular immunisation with <i>Lawsonia</i> vaccine in weaner pigs

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9.40	J Kim	Chronic immune system activation increases the growing pig's requirement for sulphur amino acids
9.50	D Guillou	Colostrum and milk immunoglobulins increase in sows fed live <i>Saccharomyces cerevisiae boulardii</i>
10.00	S Woon*	Intramuscular administration of porcine plasma does not improve performance of neonatal piglets
10.10	L Beale	Probiotics limit the severity of post weaning diarrhoea
10.20	J Resink	The effect of feed intake pattern on the microflora in the gastro intestinal tract of piglets in the adaptive period after weaning
Session 2		
10:30	C May	Morning Tea and Poster Session Physi-Trace: Adding value to Australian Pork with traceability
	M Trezona	Inclusion of lupin hulls or lucerne in finisher pig diets can increase percent drip loss in fresh pork
	S Hermes	Higher heritability estimates for fat and muscle depth obtained using the PorkScan™ system
	N Hudson	Erythropoietin increases iron in pork
	H Channon	Predicting threshold sensory scores required for pork to achieve positive consumer re-purchase intention ratings
	H Channon	Eating quality of Australian pork is variable
	T Hung	Effect of dietary nano-sized chromium picolinate on growth and carcass traits in finisher gilts during summer
	H Akit	Dietary lecithin improves the ratio of polyunsaturated to saturated fatty acids in pork
	H Akit	Dietary lecithin alters the expression of genes involved in skeletal muscle collagen synthesis and degradation
	R van Barneveld	Semi-moist extruded creep feed improves intake of pigs post-weaning
	J Pluske	Sourcing cereal feed grains for pigs: what are the views of the supply chain?
	A Edwards	The responses of finishing pigs to Ractopamine are enhanced in higher energy diets
	B Hosking	How do commercial processing conditions affect the quality of pig grower diets? Process conditions and pellet quality
	J Kim	Development of new wheat varieties for the pig industry: Digestible energy yield of candidate wheats
	J Kim	Variability in the total and reactive lysine content of soybean meal
	R Hewitt	Weight loss during first lactation does not influence subsequent reproductive performance
	R Hewitt	Pig performance responds linearly to ractopamine dose
	H Frobose	Influence of pelleting and supplementing Sodium Metabisulfite to nursery pig diets contaminated with Deoxynivalenol
	K Moore	The response of male pigs immunised against gonadotrophin releasing hormone to dietary available lysine
	C Collins	Juncea (<i>Brassica juncea</i>) meal can be utilised as an alternative vegetable protein source in growing pig diets
	C Collins	The inclusion of tilmicosin phosphate in the diet for pigs after weaning does not depress feed intake
	A Finn	<i>In vitro</i> digestion of the sorghum Kafirin fraction with commercial feed enzymes
	R Cutler	Buserelin and single fixed time insemination in gilts achieves reproductive performance comparable to standard practice

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	<p>G Tuckett T Chamberlain S O'Leary G Cassar R Athorn R Athorn W van Wettere W van Wettere W van Wettere K Gannon E Roura R Newman K Gatford C Rikard-Bell S Knapp R Taylor L Woolley J Kim J Kim M Groves G Karlen C Lewis K Bunter F Kelk L O'Keefe T Craddock</p>	<p>Pregnancy outcomes of porcine embryo transfer are not affected by increasing the volume of transfer medium The influence of boar sexual behaviour at the time of exposure on the induction of puberty in gilts Increasing endogenous progesterone production in early pregnancy increases litter size in pigs Relationship between vaginal conductivity, onset of oestrus and time of ovulation Feeding level and dietary energy source during early pregnancy in first parity sows: Effects on pregnancy and litter size Day of gestation influences progesterone concentrations in systemic and local Utero-Ovarian blood circulation Supplementary Betaine effects on growth and reproductive performance of replacement gilts Seasonal differences in circulating progesterone concentrations in pregnant sows Oral spermine supplementation promotes pre-weaning growth and intestinal development of piglets A survey of sow blood haemoglobin by parity in Western Australia A method to evaluate piglet preferences specific to taste Insulin secretion performance and pig performance are altered by feeding pattern Pulsatile but not basal maternal growth hormone during late pregnancy predicts piglet birth weights Ractopamine effects β-1 and β-2 adrenergic receptor gene expression in fat and muscle tissue of boars and gilts Dietary supplementation of L-arginine HCl increases lactating sow feed efficiency and promotes male piglet growth Changes in faecal short-chain fatty acid concentrations in pigs infected with <i>Lawsonia intracellularis</i> Evaluation of a <i>Mycoplasma hyopneumoniae</i> culture-based challenge regime for assessing protective efficacy of experimental vaccines Post-weaning diarrhoea and performance of pigs fed a low protein diet without essential amino acid supplementation Micro-encapsulated zinc oxide as a means of controlling post-weaning diarrhoea in pigs Development of methodologies for future surveillance of Methicillin-resistant <i>Staphylococcus aureus</i> in Australian pigs The relationships between agnostic behaviour, injuries and stress in group-housed sows A phenotypic and genetic analysis of still born piglets Sow health influences piglet survival Strategies for the early detection of sick and injured stall-housed gestating sows A study of the relationships between social and feeding behaviour and injuries in group-housed gestating gilts Nutrient and heavy metal contents of spent bedding from straw based pig housing</p>
12:00 - 13:00	Lunch	
<i>Session 3</i>		<p>Title: Feed processing <i>Chair: David Cadogan</i></p>

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13:00	E Roura J Black M Hazzledine	Symposium: Feed intake of the modern pig: What's changed and how is it regulated?
14:30	B Hosking	Kinetics of digestion in grower pigs fed sorghum and barley diets
14:40	D Pearson	Variation in wheat digestible energy and crude protein in a commercial feedmill measured online by Near Infrared Spectrometry
14:50 - 15:30	Afternoon tea	
Session 4		Title: Feed additives and grains <i>Chair: Neil Gannon</i>
15:30	C Collins Presented by A Lealiifano	The use of sodium bromide to influence feed intake of finisher pigs during summer
15:40	D Cadogan	Phytase improves the digestibility of minerals and essential amino acids in barley and sorghum based diets
15:50	A Finn	Protease supplementation of sorghum improves growth performance of young pigs
16:00	R van Barneveld	Feed conversion ratio is improved in growing pigs fed wheat/barley-based diets supplemented with bacterial Xylanase
16:10	H Frobose*	Hydrothermal treatment of corn dried distiller's grains with soluble sodium metabisulfite reduces vomitoxin levels in the presence of sodium metabisulfite
16:20	S Moore	Field pea phenology: The effect of planting time on grain yield of field pea (<i>Pisum sativum L.</i>) varieties in northern NSW
16:30	J Tossenberger	The effects of Endo-Xylanase application to an energy reduced diet on performance of grower-finisher pigs
16:40	D Henman	Effect of grain type, particle size and processing conditions on growth performance characteristics in pigs
17:15	APSA AGM	
19:30	Dinner	

Tuesday 29th November

Time	First author	Title
Session 5		Title: Reproduction <i>Chair: Rob Smits</i>

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8:30	P Hughes	Nutritional manipulation of sows in late gestation to reduce still birth and improve pre-weaning mortality rates
8:40	P Langendijk	Feeding level and fibre during early pregnancy in gilts and effects on pregnancy and litter size
8:50	W van Wettere	B vitamin and methyl donor supplementation of gestating sow diets: effects on pregnancy outcomes and prolificacy
9:00	J Downing	Optimal timing of oestrus induction during lactation to achieve normal farrowing performance
9:10	G Casar	Effect of supplemental human chorionic gonadotrophin on ovulation in hormone treated gilts
9:20	M Sutherland	Stress during gestation effects the growth, but not the stress response of the offspring
9:30	T Harris*	Effect of embryo transfer transport conditions on the viability of <i>in vitro</i> produced porcine embryos
9:40	A Weaver*	Feeding gilts high fibre diets prior to mating improves oocyte quality
9:50	L Frazer*	Nutritional manipulation to improve performance and ovarian function of primiparous sows
10.00 - 10:30	Morning tea	
Session 6		Title: Health management and product integrity <i>Chair: Trish Holyoake</i>
10:30	T Holyoake D Trott A Edwards	Symposium: Modern health management of pigs
12:00	N Kreitals*	Traceability of offal in the Australian Pork Industry
12:10	K Tickle*	Breed and slaughter day affects carcass and pork quality
12:20	H Akit*	Dietary lecithin improves eating quality, dressing percentage and meat colour in finisher gilts
12:30	T Hung	Adipose tissue gene expression in response to dietary nano-chromium and fat supplementation in finisher gilts Skeletal muscle gene expression in response to dietary nano-chromium and fat in finishing gilts
12:40 – 13:30	Lunch	
Session 7		Title: Health and production <i>Chair: Frank Dunshea</i>
13:30	R Hewitt	Piglet birthweight influences slaughter weight but not rate of gain during the growing-finishing stage
13:40	T Chen*	Influence of nutrition during early follicle development on follicle recruitment and ovulation
13:50	C Lewis	Phenotypic trends in means and variation for backfat and growth rate of the growing pig

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14:00	B Mullan	Improved response to Ractopamine in finisher gilts as dietary lysine is increased
14:10	R Terry*	The effect of split weaning on piglet growth
14:20	R Urbaityte	The effect of split weaning and boar taint contact on the incidence of sow lactational oestrus
14:30	H Kluge Presented by C Paulus	Dietary acidifiers enhance growth rate of weaned pigs
14:40	C Turni	Effects of benzoic acid and sodium benzoate in diets for weaned piglets
14:50	G Eamens	New, relevant diagnostic technology for pig respiratory pathogens - dangers and pitfalls
15:00	M Squire*	Effects of mycoplasmal pneumonia during the first weeks after challenge
		Detection of <i>Clostridium difficile</i> in piggery effluent after treatment in a two-stage pond system
15:10 – 15:30	Afternoon tea	
Session 8		Title: Welfare, behaviour and piglet survival <i>Chair: Cherie Collins</i>
15:30	R Morrison	Review: A review - Sow Housing in Australia. Current Australian Welfare Research and future direction
16:10	E Baxter	The influence of space and temperature on sow farrowing location and piglet survival in an indoor free-farrowing system
16:20	J Pluske	PigFare: An economic model for comparing sow housing systems
16:30	E Kearns*	The behaviour of piglets and lactating sows during overnight separation
16:40	J Groat	Surface and core body temperature measurements for the assessment of welfare in weaner pigs
16:50	F Kelk*	Strategies for the early detection of sick and injured group-housed gestating sows
17:00	M Verdon*	Changes in aggression in groups of sows within and between days two and eight post-mating
17:10	J Pedersen Presented by C Hansen	Physical characteristics of surviving piglets born in a loose farrowing system
17:20	P Tabuaciri	Piglet attributes at birth can influence survival
18:30	BBQ	

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Wednesday 30th November

Time	First author	Title
Session 9		Title: Pig Management <i>Chair: Roger Campbell</i>
8.30	J Galloway Presented by S Wiedemann	Nutrient mapping of free range pork production using Electromagnetic (EM) technology
8.40	S Wiedemann	Estimation of greenhouse gas emissions from alternative piggery effluent treatment systems
8.50	P Herde*	Effect of dietary fibre content and feeding frequency during late gestation on lactation performance of first parity sows
9.00	K Gannon	Validation of a sow-side test for a measurement of blood haemoglobin
9.10	F McPherson*	Semen factors associated with post-breeding sow responses
9.20	J Perovic*	Failure to program piglet growth performance in barrows through neonatal androgenisation
9.30	S Hodgkinson	Effect of pasture allowance in pasture dry matter consumption of grazing European wild boar
9.40 – 10.00	Morning tea	
Session 10		Title: Delivering quality pork <i>Chair: Megan Trezona</i>
10.00	D D'Souza	High boar taint risk in entire male carcasses
10.10	R Smits	Testes size of male pigs treated with an anti-GnRF vaccine dependant on slaughter age after second vaccination
10.20	I Bennet Presented by E Roura	Comparison of cooked pig ham aroma profiles obtained by Solid Phase Microextraction (SPME) or Stire Bar Sorptive Extraction (SBSE)
10.30	H Channon R Warner	Review: Delivering consistent quality Australian pork to consumers - a comparative industry analysis
11.30		Close

Key * = eligible for the APSA Medal

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Principal



Gold



Silver



Bronze



Conference Prizes

