

WPSA (UK Branch) ANNUAL MEETING

13th/14th April 2010

Canada Room, Queen's University
Belfast

Tuesday 13th April 2010

Whitla Hall

08:45 **Hammond Memorial Lecture.** *Chairman Dr Sinclair Mayne*
Animal Science – recent progress and future challenges
Prof John Oldham

10.20 **OPENING WPSA ANNUAL MEETING**

Nutrition: Original communications *Chairman Aaron Cowieson*

10.30 Influence of whole wheat inclusion and essential oils supplementation on the performance, nutrient utilisation and digestive tract development of broilers 281 A M Amerah, A Peron, E L R Salmon, F Zaefarian, V Ravindran

10.45 The effects of dietary trypsin inhibitor content on digesta viscosity and excreta moisture content in broilers 433 E Clarke, J Wiseman

11:00 Effects of different inclusion levels of an emulsifier on performance of broiler chickens 93 S. N. Mousavi, H. Mohammadi, F. Foroudi, M. Mostashari, M. Mohiti Asli

11:15 Crude protein and amino acid digestibility of 13 varieties of UK-grown peas and beans for broilers 339 HV Masey O'Neill, M Rademacher, J Wiseman

11:30 Multi-carbohydrase and phytase supplementation improves growth performance and liver insulin receptors sensitivity in chickens fed diets containing full-fat rapeseed 346 Damian Józefiak, Anna Ptak, Sebastian Kaczmarek, Pawel Mackowiak, Bogdan Slominski

Behaviour and welfare : Original communications *Chairman Paul Hocking*

11:45 Influence of access to aerial perches on welfare indicators in free-range laying hens 128 C.J. Nicholson, NE O'Connell

12:00 The effect of water resource type on measures of duck (*Anas platyrhynchos*) health and other aspects of welfare 162 K O'Driscoll, DM Broom

12:15 Too hungry to learn? Hungry broiler breeders fail to learn a food quantity T-maze discrimination task 242 L A Buckley, L M McMillan, V S Sandilands, B J Tolcamp, P M Hocking, R B D'Eath

12:30 Lunch

13:45 **Joint WPSA/BSAS Session:
'Progress and potential from animal breeding'**

Chairman: Dr Seamus Hanrahan

13:45 Dr Donagh Berry, Teagasc 'Quantitative and molecular genetics : a love story'

14:15 Dr Gerard Albers, Hendrix Genetics 'Genomic selection in poultry and pig breeding – a breakthrough technology?'

14:45 Increase in accuracy using multi-trait genomic breeding value estimation
M P L Calus, R.F. Veerkamp

15:00 Tea

15:30 **Meat quality and eggs : Original communications** *Chairman Nick Sparks*

15:30 The effect of glycerol and wheat pollard inclusion on drip loss, cooking loss, shear force tenderness and ultimate pH of broiler breast meat 40 L.A Griffiths, MEE McCann, B Moss

15:45 Effect of intensive vs. free range production on the fat and fatty acid composition of whole birds and edible portions of UK retail chickens 295 D I Givens, R A Gibbs, R Brown

16:00 Increased water usage during processing does not improve safety of poultry products 184 D P Smith

16:15 A study of water bath stunning of poultry and the consequences for animal welfare and meat quality 496 VA Hindle, MA Gerritzen, E Lambooi

16:30 Vitamin D and calcium concentrations in eggs from commercial laying hen husbandry systems 348 HM Hobbs-Chell, N Stickland, CM Wathes

16:45 Effects of reducing dietary protein with constant digestible sulfur amino acids and threonine to lysine ratio on laying hen performance and egg quality 417 Seyed Naser Mousavi, Abdollah Ghasemi Jirdehi, Farhad Foroudi

GORDON MEMORIAL LECTURE

17:15 Prof. Eddy Decuyper, *Catholic University of Leuven*. 'The broiler breeder paradox from a physiological, genetic and ethical viewpoint together with suggestions for solutions'

18:15 Gordon Memorial Reception – Canada Room, Queen's University

20:00 **WPSA ANNUAL DINNER** - The Great Hall, Queen's University

Wednesday 13 April 2010

08:30 **WPSA (UK Branch) AGM**

09:00 **Nutrition : Original Communications** *Chairman: Emily Clarke*

09:00 Phosphorus and nitrogen excretion in broilers fed phytase supplemented rice husk and a maize/soyabean diet without phytase 373 S T Ofongo, S Kehraus, E A Iyayi, K H Südekum

09:15 Effect of supplementation of a corn-cowpea-soybean meal diet with microbial phytase on phosphorus utilization, tibia bone-ash and performance in broilers 53 E A Iyayi, P C Aguihe

09:30 The importance of tannic acid/ polyethylene glycol ratio on the absorption capacity of chicken intestine for D-xylose 469 B Mansoori, M Modirsanei

Short oral introductions to a selection of the poster presentations *Chairman:*

09:45 Approximately 15 posters at 3 minute intervals. *Chairman: Kelvin McCracken*

10:30 **Coffee and Poster viewing. Authors in attendance**

11:15 **Industry session** *Chairman: Patrick Garland*

11:15 Dr Tom Scott, Provimi 'Considerations on how to overcome the limitations on maintaining the growth advantages of early broiler nutrition to market age'

11:45 Mr Steve Lister, Crowshall Veterinary Practice 'Poultry diseases: their control and effects on nutritional requirements'

12:15 **Original Communications: Genetics etc** *Chairman Ian Dunn*

12:15 Using gene expression profiling to identify gene candidates in ovarian follicular development of broiler breeders 123 N A McDerment, P W Wilson, D Waddington, I C Dunn, P M Hocking

12:30 Characterising polymorphism in AADAT – a key metabolic enzyme that affects growth in chickens 194 A Tolcamp, P W Wilson, P M Hocking, D-J Dekoning, I C Dunn

12:45 Simple additive weighting as a tool for decision making in poultry research 213 S A Hosseini, M Mohiti-Asli, H Lotfollahian, M Babaie, S J Hosseini, A R Aghashahi, A Mahdavi

13:00 **Presentation of President's prizes**

Close of meeting

Poster Presentations

Presentations displayed in the Poster area from 10am 13th April to 11.15 am 14th April.

1. Egg shell calcite crystal size has strong genetic determination in laying hens 181 M Bain, A Rodriguez-Navorro, K McDade, M Schmutz, R Preisinger, D Waddington, I Dunn
2. Effect of sodium bentonite containing ferric oxide for treatment of cottonseed meal on egg quality 482 Ali Gilani, Hassan Kermanshahi, Abolghasem Golian, Abdolmansour Tahmasbi
3. An investigation to determine the energy value of glycerol when incorporated into broiler diets containing cereal by-products 41 L AGriffiths, MEE McCann
4. The relationship between protein solubility in potassium hydroxide of full fat soyabean meal and broiler performance and nutrient metabolisability 42 MEE McCann, B Owens, H Hayes, S Smyth
5. Studies on the effect of turmeric rhizome powder on broiler performance and energy utilisation 43 J George, M E E McCann
6. Efficiency of utilization of metabolisable energy for carcass energy retention in broiler chickens fed wheat and maize based diets 89 H Hamandi, V Pirgozliev, S P Rose
7. Effects of water temperature and alcohol on performance of broiler chickens in a hot climate 138 H K Dei, A Mohammed
8. Effects of divercin on gastrointestinal microflora and performance of broilers 146 D Józefiak, S Kaczmarek, A Rutkowski, Anna Sip
9. Effects of supplementing zinc in corn-wheat-soybean meal diet on the tissue mineral status and carcass traits of broiler chicken 515 H M Salim, H R Lee, C Jo, S K Lee, B D Lee
10. Effects of different levels of zinc sulphate and copper sulphate on immune system of male broiler chicks 76 Sajedah Hosseini, Javad Arshami
11. Fat content and fatty acid composition of chicken meat portions and manufactured chicken products 294 RA Gibbs, C Rymer, DI Givens
12. Fatty acid profile and oxidative stability of broiler meat: Influence of different degree of unsaturated fatty acids and α -tocopherol acetate supplementation 381 F M Khattak, J R Scaife
13. Detection of a genetic loci for incubation behaviour in chickens 402 A Baheer, P W Wilson, R J Talbot, P J Sharp, A Law, D Windsor, C Haley, I C Dunn
14. The effects of acute heat stress on body temperature and gene expression in broiler chickens 396 I Zahoor, D J de Koning, P M Hocking
15. Can the occurrence of ascites syndrome be reduced by the combined effects of betaine and reduced dietary salt in broiler chickens? 182

16. Relationship of chemical composition and metabolisable energy of triticale for poultry 151 Heydar Zarghi, Abolghasem Golian, Hasan Kermanshahi
17. Effect of yeast and enzyme supplementation on energy metabolisability by broiler chickens fed diets containing malted sorghum sprouts and wheat bran 110 F O Oke, O O Oduguwa, A O Fafiolu, A V Jegede, O M O Idowu, K-H Südekum
18. Improvement in the use of undecorticated sunflower seed meal diets with multi-enzyme mixture by growing pullets 268 A O Fafiolu, O O Oduguwa, A V Jegede, O M O Idowu, A O Oso, R A Sobayo
19. The effect of glycerol inclusion in broiler diets on amino acid digestibility 258 L Griffiths, M E E McCann
20. The effects of Zinc Sulphate on egg production and egg shell quality in laying hens drinking saline water 8 Z Mirabdolbaghi, A Mahdavi, A Hosseini, F Alemi, H Lotfolahian, M Kolanie
21. Effects of high zinc salts supplementation on Zn residue in tibia bone, liver, excreta and egg shell of laying hens 261 O M O Idowu, A O Fafiolu, A O Oso, O O Oduguwa
22. The effects of ascorbic acid on egg production and egg shell quality in laying hens drinking saline water 10 Z Mirabdolbaghi, A Mahdavi, A Hosseini, F Alemi, H Lotfolahian, M Kolanie
23. Effect of different levels of methionine on performance and immune response in native Iranian hens 33 Alireza Hesabinameghi
24. Effect of egg size on hatchability and performance of hatchlings 214 Kazem Yousefi Kalarikalaie, Hossein Yousefi Kalarikalaie, Ali Naghi Eghbalian, Hamid Shojaie, Maziar Mohiti-Asli, Seyed Abdollah Hosseini
25. Energy metabolisability by broiler chickens fed enzyme supplemented maize- wheat bran based diets 114 C C N Ezennabike, O O Oduguwa, A V Jegede, A O Fafiolu, O M O Idowu, K-H Südekum
26. How much methionine could be replaced by betaine to improve carcass characteristics of broiler chickens without reducing growth rate? 127 Seyed Abdollah Hosseini, Maziar Mohiti-Asli, Houshang Lotfollahian, Ali Mahdavi
27. The comparison of dietary supplementation of cumin seed and cumin seed meal with prebiotic on blood metabolites and performance of broiler chickens 147 Abolghasem Golian, Mohammad Azghadi, Mohammad Sedghi
28. The influence of dietary supplementation of licorice extract and prebiotic on fat digestibility, blood metabolites and performance of broiler chickens fed diets low in digestible amino acids 149 Mohammad Sedghi, Abolghasem Golian, Hasan Kermanshahi, Mohammad Reza Nasiri, Mohammad Azghadi
29. Effects of diet dilution and enzyme supplementation on growth performance and feed:gain cost of broiler chicks 34 Hosna Hajati, Mansour Rezaei, Hadi Sayyazadeh

30. Digestible lysine requirement of male and female broiler chicks during the period three to five weeks post hatching 26 F Alemi, A Mahdavi, M Shivazad, M Zaghari, H Moravej, A Hosseini, J Mirabdolbaghi, H Lotfolahiyan
31. Apparent digestibility of crude protein and fat and digesta viscosity in broilers fed fungal biodegraded rice husk-based diets 371 S T Ofongo, S Kehraus, E A Iyayi, K H Südekum
32. Effects of enzyme supplementation to diets containing wheat and canola meal on intestinal morphology and performance of broiler chicks 390 Golestane Golestani, Seyed Davood Sharifi, Akbar Yaghobfar, Ali Akbar Khadem
33. Evaluation of isolated Lactobacilli from the gastrointestinal tract of broiler chickens toward their use as probiotic 383 Reza Majidzadeh Heravi, Hassan kermanshahi, Abdolreza Varasteh, Mojtaba Sankian, Alireza Heravi Mousavi
34. Effects of combination of citric acid and microbial phytase on the serum concentration and digestibility of some minerals in broiler chicks 414 Yahya Ebrahim Nezhad, Abolfazl Agajanzadeh Golshani, Akbar Darvishi
35. The effect of semen collection frequency on spermatozoa quality in chicken 69 S. Tabatabaei, M. Chaji, T. Mohammadabadi
36. The correlation between storage period of semen and spermatozoa quality in chicken 47 S Tabatabaei, M Chaji, T Mohammadabadi
37. Determination of the mtDNA D-loop sequence of Iranian native Marandi chicken 406 Mohammadi Pestebik, N Pirany, J Shodja, A Mohammadhashemi