

The Future of Animal Science: BSAS Annual Conference 2017

University of chester 26-27 April 2017

Tuesday 25 April BINKS 106
Student Programme

Wednesday 26 April Binks 011
Beef Nutrition/Production
10:30-12:00
Chair

- | | | | |
|-------|---|-----|--|
| 10:30 | 1 | 7+3 | The effects of dietary nitrate addition and increased lipid concentration on sensory attributes of loin steaks from beef cattle
C-A Duthie, J A Rooke, S Troy, J J Hyslop, R Roehe, I Richardson |
| 10:40 | 2 | 7+3 | Alternative growth path finishing systems and their effects on animal performance in Limousin cross (LIMx) steers and heifers
Jimmy Hyslop, Carol-Anne Duthie, John Rooke, Dave Ross, Ian Richardson |
| 10:50 | 3 | 7+3 | Quantifying the impact of Environmental Stewardship on pasture-based cattle production
T Takahashi, D Matsutaka, T Nakajima, J Dwyer |
| 11:00 | 4 | 7+3 | Effect of encapsulated nitrate (EN) and elemental sulphur (S) on methane (CH ₄) production and microbial protein synthesis in beef cattle
Irene Cabeza Luna, John Rooke, Telma Teresinha Berchielli, Juliana Duarte Messana, Lucas Rocha Rebelo, Izabelle Texeira |
| 11:10 | 5 | 7+3 | Prediction of methane (CH ₄) emissions by individual beef cattle from ruminal volatile fatty acids (VFA) using compositional linear mixed models
John Rooke, Javier Palarea-Albaladejo, Ian Nevison, Richard Dewhurst |
| 11:20 | 6 | 7+3 | Alternative growth path finishing systems and their effects on beef eating quality in Limousin cross (LIMx) steers and heifers
Jimmy Hyslop, Ian Richardson, Carol-Anne Duthie, John Rooke, Dave Ross |

11:40	7	7+3	Effect of beef fat class on post-mortem tissue glutathione peroxidase activity Darren Juniper, Caroline Rymer
11:50	8	4+1	Effect of dietary crude protein level on the performance of cereal fed Continental cross Holstein bulls S P Marsh, J R Leeming
11:55	9	4+1	Relationship between net feed efficiency (NFE) and scrotal circumference in young Stabiliser breeding bulls J J Hyslop, R Fuller, U Taylor, D Pullar, D Thirlwell, D Dreux

Wednesday 26 April **Binks 011**
Rumen Microbiome
13:30-15:00
Chair

13:30	134	inv	25+5	Host associated factors that influence rumen microbiome composition David R. Yañez-Ruiz
14:00	135	inv	25+5	Diet effects on the rumen microbiome Robert Gruninger, Gabriel Ribeiro, Tim McAllister
14:30	10		7+3	Differences between fresh ryegrass and hay in the dynamics of feed colonization and utilization by rumen microbes using a rumen simulation technique A Belanche, C J Newbold, A H Kingston-Smiht
14:40	11		7+3	Prediction of methane emissions and feed conversion efficiency of beef cattle based on the rumen microbial community at phylum or genus level R Roehe, M Auffret, C-A Duthie, J A Rooke, T C Freeman, M Watson, R J Wallace, R J Dewhurst
14:50	12		7+3	The effect of essential oils on rumen bacteria and protozoa in dairy cattle H Jones, C J Newbold, B Zweifel

Rumen Microbiome

13:30-15:00

Chair

- | | | | |
|-------|----|-----|---|
| 15:30 | 13 | 7+3 | Antiprotozoal effect of saponins in the rumen is enhanced by chemical modifications to their structure
E. Ramos-Morales, G. de la Fuente, S. Duval, C. Wehrli, M. Bouillon, M. Lahmann, D. Preskett, R. Braganca, C. J. Newbold |
| 15:40 | 14 | 4+1 | Antiprotozoal effect of saponins improves when combined with iminosugars from Stevia
E. Ramos Morales, R. J. Nash, R. Braganca, C. J. Newbold |
| 15:45 | 15 | 4+1 | Impact of soil-enhancers and plant bio-stimulants on the microbial profile of the maize forage: A glasshouse experiment
A. Christou, K. LeCocq, C. Hodgson, T. Cogan, M. Gaffney, D. Davies, M. Lee |
| 15:50 | 16 | 4+1 | Effect of milk replacer and colostrum alternative on the development of the rumen fungal community
A Belanche, A Detheridge, G W Griffith, P Rees Stevens, A H Kingston-Smith, J Cook, C J Newbold |
| 15:55 | 17 | 4+1 | Feed restriction provides a niche environment for metabolic activity of the Methanobrevibacter gottschalkii clade in the bovine rumen

E McGovern, M,S McCabe, P Cormican, A,K Kelly, M Popova, K Keogh, D,A Kenny, S,M Waters |
| 16:00 | 18 | 4+1 | Impact of diet on the diversity of resistance and pathogenicity related genes in the rumen microbial community of apparently healthy cattle

MD AUFFRET, RJ DEWHURST, C-A DUTHIE, JA ROOKE, TC FREEMAN, M WATSON, RJ WALLACE, R ROEHE |
| 16:05 | | 10 | Rumen Microbial Genomics Network
S Huws |

Wednesday 26 April Binks 106

Antimicrobials

10:30-12:35

Chair

10:30 136 INV 20+10 TBA

B Gilmore

11:00 137 INV 20+10 Rumen Microbial Genomics Network

D Barrett

11:30 138 INV 20+10 TBA

P Wall

12:00 19 7+3 Performance Characteristics Of Broiler Chickens Fed Diets Supplemented With Antibiotics And Phytobiotics

O.O ONI, O.M.O IDOWU, A.O OSO, A.A Adegbenjo

12:10 20 7+3 Faecal and urinary elimination of antibiotics and antibiotic resistance genes in dairy cows following intramammary infusion

P Ray, K F Knowlton, C Shang, K Xia

12:20 Discussion

Wednesday 26 April Binks 106

Enabling Technologies - Research into Practice

13:30-15:45

Chair

13:30 139 INV 25+5 Development and application of a net feed efficiency estimated breeding value to a commercial population of Stabiliser cattle in the United Kingdom and Ireland.

Duncan Pullar, Richard Fuller, Ursula Taylor, James Hyslop

14:00 140 INV 25+5 Greener Pigs: Self-sustaining livestock building for commercial production

Sophie Throup, Sandra Edwards, Nigel Woolfenden

14:30	21	7+3	Factors that motivate farmers to invest in automated monitoring of reproduction status in dairy cows: Lessons from France and Scotland P Philippe, F Bidan, C Allain, C Milne, C Disenhaus, M Chagunda
14:40	22	7+3	A comparison of two cow-side reproductive performance monitoring technologies in dairy cows B Muasa, M Chagunda, C Ashworth, A Peters
14:50	23	7+3	The effect of temperature on the activity budget of dairy cows measured using novel sensor technology Olivia Bolton, Jonathan Amory, Jorge Vazquez Diosdado, Edward Codling, Darren Croft, Nick Bell, Zoe Barker
15:00	24	7+3	Evaluation of a 7 day fixed timed artificial insemination protocol for UK dairy heifers. Is a second insemination beneficial? J Walsh, A Coates, R F Smith, G Oikonomou
15:10	25	7+3	Reduction in daily milk yield associated with sub-clinical bovine herpes virus-1 infection- the importance of proactive herd health and production management JME Statham, LV Randall, SC Archer
15:20	26	7+3	Technical feasibility and experimental development of sand recycling options for dairy cattle bedding JME Statham, JCH Dix, N Gray, L Blake
15:30	27	7+3	The effect of light or dark environment on the growth, consumption and mortality in yellow mealworms (<i>Tenebrio molitor</i>) E.R. Tetlow, Z. Huggett, T. Parr, I.C.W. Hardy, A.M. Salter
15:40	28	4+1	Evaluation of calf coats on the performance and health of artificially reared winter born beef calves to 12 weeks S P Marsh, E C L Bleach, J Clift

Wednesday 26 April Binks 106

Education - Discussion

15:30-16:30

Chair

141 60 Discussion

Wednesday 26 April Beswick 017

Minerals/Ruminant Nutrition

10:30-11:20

Chair

- | | | | |
|-------|----|-----|--|
| 10:30 | 29 | 7+3 | Potential alternative protein rich feed resources for the provision of rumen un-degradable protein and amino acids
J K Margerison, P Williams, I Insani Hubi Zulfa |
| 10:40 | 30 | 7+3 | The effect of cross inoculation of cattle rumen fluid on <i>in vitro</i> dry matter digestibility
K McDermott, MRF Lee, KJ McDowall, HMR Greathead |
| 10:50 | 31 | 7+3 | Effect of levels of intake on rumen fermentation profile, nutrient digestibility, methane emissions and feeding behaviour
D. Moya, M. Aydin, C. J. Newbold |
| 11:00 | 32 | 7+3 | Mitigating feed nutrient losses in the rumen through dietary inclusion of cashew nut shell liquid: An in-vitro and in-vivo evaluation

R. Y. Aderinboye, A. P. Adetunji, K. O. Yusuf, V. O. A Ojo, A. O. Oni |
| 11:10 | 33 | 7+3 | The effects of field bean (<i>Vicia Faba</i>) inclusion level in the diet of freshly calved dairy cows
DAVID JOHNSTON, KATERINA THEODORIDOU, CONRAD FERRIS |

Wednesday 26 April Beswick 017**Dairy Cow Fertility****13:30-14:10****Chair**

- | | | | |
|-------|----|-----|--|
| 13:30 | 34 | 7+3 | A description of interoestrus and interservice intervals and associated fertility in sixteen UK dairy herds
T. Greenham, D.H. Grove-White |
| 13:40 | 35 | 7+3 | Associations between age at first calving and subsequent performance in UK Holstein and Holstein-Friesian dairy heifers
Neil T. Eastham, Amy Coates, Peter Cripps, Henry Richardson, Rob F. Smith, Georgios Oikonomou |
| 13:50 | 36 | 7+3 | Improving female fertility and calf survival in the UK Limousin beef cattle
AT Moran, M Coffey, K Moore |
| 14:00 | 37 | 7+3 | Immunoglobulin G glycans in milk in early pregnancy and as potential early biomarkers of pregnancy in dairy cattle
I Malo Estepa, M G Diskin, E Matthews, R O'Flaherty, I Walsh, P Rudd, M A Crowe |
| 14:05 | 38 | 7+3 | Identification of circulating miRNA biomarkers of pregnancy status in dairy cattle
D Johnston, I Malo Estepa, E Dempsey, C Mendes de Menezes, M.A Crowe, M.G Diskin |

Wednesday 26 April Beswick 013**Welfare Measures/Status of Pigs****10:30-11:35****Chair**

- | | | | |
|-------|-----|----------|--|
| 10:30 | 142 | INV 25+5 | Animal personality: what does it mean for our understanding of animal welfare?
Lisa Collins |
| 11:00 | 39 | 7+3 | Do weaner pigs (<i>Sus scrofa domestica</i>) prefer olfactory enrichment?
Megan De Sousa, Nicola Blackie |
| 11:10 | 40 | 7+3 | Effect of oral progesterone and caffeine at the end of gestation on piglet growth and survival
W.H.E.J. van Wettere, P Toplis, H Miller |

- 11:20 41 7+3 Use of electrostatic particle ionisation (EPI) equipment in pig buildings: what is the potential to improve pig and worker health (in and outside the pig environment)?
DJG Charman, CM Evans
- 11:30 42 7+3 Relationship between piglet behaviour and vitality after farrowing with colostrum intake and early survival
Ramon Muns, Elizabeth Magowan, Padet Tummaruk

Wednesday 26 April Beswick 013

Pig Feed and Nutrition

13:30-14:45

Chair

- 13:30 43 7+3 The use of processed soy to reduce fishmeal in newly weaned piglet diets
H Hall
- 13:30 44 7+3 Effect of cereal fermentation and carbohydrase supplementation to grow-finisher pig diets on growth and carcass quality
A. Torres-Pitarch, M. van der Heide, G.E. Gardiner, E.G. Manzanilla, R. Lizardo, D. Torrallardona, J.V. O'Doherty, P.G. Lawlor
- 13:40 45 7+3 The variability in chemical composition and ileal digestibility of amino acids of rapeseed meal available for pig feed in the UK
Elizabeth Magowan, Elizabeth Ball, Hadden Graham
- 13:50 46 7+3 Quantitative analyses of DNA in pig faeces: a non-invasive measure of feed efficiency?
K R Slinger, K May, A Chang, M R Bedford, T Parr, J M Brameld
- 14:00 47 7+3 Improving the lifetime performance of small pigs at weaning through the use of nurse sows and/or starter diet allowance
A. Craig, E. Magowan, A. Gordon
- 14:10 48 7+3 Reproductive benefits and trade-offs with increasing sow live-weight and back-fat depth in late gestation
A Lavery, E Magowan, H.M Miller, D.P Berry, P.G Lawlor
- 14:20 49 7+3 Whole animal system calorimetric estimates of greenhouse gas emissions from finishing pigs of contrasting feed use efficiency
Elizabeth Magowan, Peadar Lawlor, Tainhai Yan, Alistair Wylie

- | | | | |
|-------|----|-----|--|
| 14:30 | 50 | 7+3 | Porcine feed efficiency (FE)-associated intestinal microbiota and physiological traits: finding consistent cross-locational biomarkers for residual feed intake (RFI)
UM McCormack, T Curiao, BU Metzler-Zebeli, E Magowan, D Berry, H Reyer, ML Prieto, M Harrison, SG Buzoianu, N Rebeiz, F Crispie, P Cotter, O O'Sullivan, GE Gardiner, PG Lawlor |
| 14:40 | 51 | 4+1 | The effect of dietary supplementation with omega-3 polyunsaturated fatty acids from salmon oil on reproductive performance of sows

H M Miller |

Wednesday 26 April Beswick 013

Cattle Breeding

15:30-17:15

Chair

- | | | | |
|-------|----|-----|--|
| 15:30 | 52 | 7+3 | Genome-wide association studies of telomere length in dairy cattle.
A Psifidi, L Seeker, J Ilska-Warner, B Whitelaw, D Nussey, M Coffey, D Banos |
| 15:40 | 53 | 7+3 | Exploring quantitative trait loci mapping for lameness traits in Holstein dairy cows
E Sánchez-Molano, V Bay, R Smith, G Oikonomou, G Banos |
| 15:50 | 54 | 7+3 | Relationships of cellular immune-associated traits with health, fertility and production in dairy cows
S J Denholm, T McNeilly, G Banos, M P Coffey, G C Russell, A Bagnall, M C Mitchell, E Wall |
| 16:00 | 55 | 7+3 | Genetic parameters of telomere length in dairy cattle.
Joanna Ilska-Warner, Luise Seeker, Androniki Psifidi, Bruce Whitelaw, Mike Coffey, Georgios Banos |
| 16:10 | 56 | 7+3 | Genetic relationships between methane emission and production traits in Holstein-Friesian dairy cows
I.S. Breider, E. Wall, R. Stöger, P.C. Garnsworthy |
| 16:20 | 57 | 7+3 | Effect of adjusting for live weight, rather than age, in the genetic evaluation of measurements in lambs.
J A Roden, S Boon |

- 16:30 58 7+3 Effect of crossbreeding on the performance and survival of dairy cattle in commercial dairy herds in Northern Ireland
CP Ferris, RS Park, RB Hunter, D Mackey, CS Mayne
- 16:40 59 7+3 Genetic parameters for production and reproduction traits of the dairy Mpwapwa cattle breed performing in a low input system
A Chawala, G Banos, A Peters, M Chagunda
- 16:50 60 7+3 Implications of a clinical BHV-1 infection on the economic performance of an Irish spring calving suckler herd
Richard Lynch, Mervyn Parr, David Kenny, Damien Barrett, Paul Crosson
- 17:00 61 7+3 Effect of bovine herpesvirus-1, bovine viral-diarrhoea and leptospirosis sero-positivity status on some key performance indicator traits in Irish spring calving beef cow herds.
Mervyn Parr, Richard Lynch, Paul Crosson, Damien Barrett, David Kenny
- 17:10 62 4+1 A meta-analysis of heterosis for production and fitness traits in tropical cattle
H Bunning, G Simm, E Wall, MGG Chagunda, G Banos

Thursday 27 April
Hammond
09:00-10:00
Chair

Binks 011

- 09:00 143 INV 60 What has animal science ever done for us, and what does it need to do now?
Geoff Simm

Thursday 27 April Binks 011

President's Session - Precision Livestock Nutrition

10:30-12:00

Chair

10:30 144 INV 25+5 TBA

John Newbold

11:00 145 INV 25+5 Use of transcriptomics to identify mechanisms of improved growth and feed efficiency

John Brameld, David Brown, Tim Parr

11:30 146 INV 25+5 Is precision control of the rumen microbiome possible

C J Newbold

Thursday 27 April Binks 011

Chris Wathes Memorial Session

13:30-15:00

Chair

13:30 147 INV 30 TBA

Animal Health and Welfare

14:00 63 7+3 The effect of floor type on the behaviour and hoof growth of finishing beef cattle

Victoria Murphy, Denise Lowe, Francis Lively, Alan Gordon

14:10 64 7+3 Relationship between the oxidative stress index measured in milk and the health and performance of dairy cows

Caroline Rymer, Kirsty Kliem, Barney Jones, Darren Juniper

14:20 65 7+3 Prevalence of rumen fluke (*Calicophoron daubneyi*) in cattle herds, sheep flocks and in intermediate snail host, *G. truncatula*, on Welsh farms.

R A Jones, H W Williams, P M Brophy

14:30 66 7+3 Assessing the effect of early lactation foot trimming on the prevalence of foot lesions at drying off in first and second parity cows

J Oultram, J Atkins, A Bowers, G Oikonomou, R F Smith

14:40	67	7+3	Nanoparticles induced oxidative stress and histological changes in gills of <i>Cyprinus carpio</i> exposed to water borne engineered Cu nanoparticles F Jabeen, A Noureen, A S Chaudhry
14:50	68	4+1	Characterizing the activity and feed intake of lactating dairy cows during the peri-oestrus period HM Zebari, EC Bleach, SM Rutter
14:55	69	4+1	Effect of <i>Fasciola hepatica</i> infection on the susceptibility to Johne's disease in cattle in UK N. Selemetas, D. Cockrem, K. Hinchliffe

Thursday 27 April **Binks 107**
WPSA/BSAS Session
10:30-12:30
Chair

10:30	148		The use of insects in the animal production sector with an insight into consumer perception of insects as food or feed and potential to replace antibiotics N Rousseau
-------	-----	--	--

Thursday 27 April **Binks 106**
Feed and Nutrition (Dairy)
10:30-12:15
Chair

10:30	70	7+3	The use of high sugar grasses as a strategy to improve nitrogen utilization efficiency: A meta-analysis. Andreas Foskolos, Jon, M. Moorby
10:40	71	7+3	Particle size and physically effective fibre (<i>peNDF</i>) distribution in a range of grass silage, maize silage and total mixed rations on UK dairy herds Usama Tayyab, Robert Wilkinson, Chris Reynolds, Liam Sinclair
10:50	72	7+3	A meta-analysis of supplementing lactating dairy cow diet with soybean oil on milk production, fat, and linoleic acid in milk B Darabighane, A Mahdavi, A Mahdavi, M.R.F. Lee

11:00	73	7+3	The effect of the addition of hydrolysable tannins to lucerne and red clover silages on the performance and milk fatty acid profile in Holstein-Friesian dairy cows C E A Campbell, J A Huntington, L A Sinclair
11:10	74	7+3	A review of grass silage quality in NI from 1996 to 2015 using data from the Hillsborough Feeding Information System - regression between silage nutritive value and harvesting year T Yan, J Archer, Y.G. Zhao, N Grant
11:20	75	7+3	A review of grass silage quality in NI from 1996 to 2015 using data from the Hillsborough Feeding Information System - effects of harvesting year and harvesting season T Yan, J Archer, Y.G. Zhao, N Grant
11:30	76	7+3	Effect of a whey protein gel of rapeseed oil supplement on milk fatty acid composition of Holstein Friesian cows fed maize silage-based diets Kirsty E Kliem, David J Humphries, Alistair G Grandison, Rebecca Morgan, D Ian Givens, Chris K Reynolds
11:40	77	7+3	The effects of feeding lucerne silage, at two different chop lengths and inclusion rates, as a source of physically effective dietary fibre for lactating dairy cows A L Thomson, D J Humphries, M Dittmann, C K Reynolds
11:50	78	7+3	Rate of inclusion of microalgae and its effect on whole tract digestibility and milk fatty acid profile in Holstein-Friesian dairy cows B E Till, J A Huntington, J Taylor-Pickard, L A Sinclair
12:00	79	7+3	Effects of dry period length and concentrate protein content in late lactation on body condition score change and subsequent lactation performance of thin dairy cows CP Ferris, AJ Dale, PJ Purcell, ARG Wylie, AW Gordon
12:10	80	4+1	Relationship between feed efficiency, milk yield, rumination rate and faecal glucocorticoids in dairy cows L.J Tennant, G White, R Anand-Ivell, P.C Garnsworthy

Thursday 27 April Binks 106

Calf - Nutrition and Husbandry

13:30-14:45

Chair

- | | | | |
|-------|----|-----|---|
| 13:30 | 81 | 7+3 | Evaluation of factors associated with passive immunity status, colostrum quality, morbidity and mortality in dairy calves
K E McLaughlin, B Waters, A Gordon, S Morrison |
| 13:40 | 82 | 7+3 | Immune-related transcriptional response to colostrum feeding in neonatal Holstein dairy calves during the first week of life
K Keogh, C Surlis, B.E Earley, M McGee, A Dunn, S Morrison, S.M Waters |
| 13:50 | 83 | 7+3 | The effect of mode of delivery on gene expression in the lungs and jejunum of neonatal beef calves
C Surlis and, K McNamara, E O'Hara, S.M Waters, M Beltman, D Kenny |
| 14:00 | 84 | 7+3 | Calfhood morbidity affects growth, fertility, first lactation and lifetime performance in dairy heifers
K E McLaughlin, A Gordon, S Morrison |
| 14:10 | 85 | 7+3 | Quantifying pre-weaning calf growth response to cow milk production in pasture-based beef suckler systems: A meta-analysis

D Sapkota, P Crosson, R R White, A K Kelly, M McGee |
| 14:20 | 86 | 4+1 | Evaluation of feeding elevated levels of milk replacer (750 v 900g) on the performance and health of artificially reared beef calves to 12 weeks

S P Marsh, E C L Bleach, R M McGowan, P Knight |
| 14:25 | 87 | 4+1 | Comparing greenhouse gas emissions, fibre digestibilities, energy and nitrogen utilisation of pre-weaned calves from forage treatments, reared on an accelerated or conventional milk replacer regimen
Joshua McDowell, Steven Morrison, Tianhai Yan, Yiguang Zhao, Katerina Theodoridou |
| 14:30 | 88 | 4+1 | The effect of calf jacket usage on skin surface temperature of pre-wean dairy origin calves
G Scoley, A Presho, S Morrison |
| 14:35 | 89 | 4+1 | Growth response to creep feeds containing different protein levels in autumn born suckled calves
S P Marsh, A J Montgomery, J Evans |

14:40 90 4+1 An investigation into the preferred disbudding procedure of beef and dairy farmers in the UK, how many farmers follow DEFRA's three codes of recommendations?
H L Jones, L Haydon, P Watson

Thursday 27 April **Beswick 017**

Sheep

10:30-11:25

Chair

10:30 91 7+3 Evaluation of nitrogen utilisation efficiency in hill ewe lambs with two types of forage
Y.G. Zhao, T. Yan

10:40 92 7+3 Effect of Nutritional Restriction on the Response of Ewes to Vitamin E Supplementation During Late Pregnancy and Early Lactation
A Q Abbi, A M Mackenzie, N Naylor, R G Wilkinson

10:45 93 7+3 Sensitivity of ewe β -hydroxy-butyrate to blood sample type, by-pass protein nutrition and parasitism
Jos Houdijk, Alma van der Heiden, Yoni Trienes, John Vipond

10:50 94 7+3 Persistence of *Dichelobacter nodosus*, the causal agent of ovine footrot
K. Giebel, L.E. Green, K.J.P. Purdy

11:00 95 7+3 Optimising use of labour at lambing time on outdoor sheep farms
Claire Morgan-Davies, Ian Robertson

11:10 96 4+1 Response to cobalt supplementation in lambs post weaning
A Aubry, J Barley, H Edgar, R Annett, D Irwin

11:15 97 4+1 Prediction of carcass weight from live weight in cull ewes
T.W.J. Keady, J.P. Hanrahan

11:20 98 4+1 Effect of Separation Age on Weight Gain of Artificially Reared Friesland Lambs
Paloma Prosser

Thursday 27 April
Sheep Genetics
13:30-14:50
Chair

Beswick 017

- 13:30 99 7+3 The genetic basis of aseasonal breeding and pseudopregnancy in dairy goats
S Desire, S Mucha, M Coffey, R Mrode, J Broadbent, J Conington
- 13:40 100 7+3 Genetic parameters for longevity traits in UK dairy goats
L J Geddes, S Mucha, J Conington, M Coffey, R A Mrode
- 13:50 101 7+3 Genetic aspects of ewe longevity and fertility traits in Lleyn and Dorset sheep
A. McLaren, K. Kaseja, K. Moore, S. Mucha, S. Boon, J. Conington
- 14:00 102 7+3 Novel approach to the reduction of round worm infections in Lleyn sheep
K Kaseja, S Boon, K Moore
- 14:10 103 7+3 Phenotyping tools for genomic selection to reduce mastitis in Texel sheep
A. McLaren, W. Sawday, J. Yates, S. Mucha, J. Conington
- 14:20 104 7+3 Effect of breed and sex on production and carcass traits of male lamb following an intensive finishing period
N.A Claffey, A.G Fahey, F.J Monahan, M.G Diskin
- 14:30 105 7+3 Effects of forage type and genotype on methane emissions from hill ewe lambs
Y.G. Zhao, R. Annett, A. Aubry, T. Yan
- 14:40 106 7+3 Sheep selected for divergent methane yield on lucerne pellets also express the same trait when fed fresh pasture
A. Jonker, E. Sandoval, P. Boma, S. MacLean, S. Hickey, J.C. McEwan, P.H. Janssen, S. Rowe

Thursday 27 April **Beswick 013**

Equine

10:30-12:10

Chair

10:30 148 inv 40+15 TBA

G Higgins

11:25 107 7+3 Serum cortisol concentrations in horses supplemented with selenium and vitamin E undergoing moderate exercise in an ozone polluted environment

E Velazquez-Canton, AH Ramirez-Perez, LA Zarco-Quintero, JC Angeles-Hernandez

11:35 108 7+3 In vitro digestibility and nutritional quality of soaked hay and straw for use as forage for laminitis-prone horses

Emma C Somers, Kirsty E Kliem

11:45 109 7+3 The effect of home-made semen extenders and commercial semen extenders in the progressive motility of equine spermatozoa

A Hoffmann Trejo, J Mottershead

11:55 110 7+3 The role of veterinary paraprofessionals in equine therapy and rehabilitation; A study of public perception

Evangaline Narika Atterby

12:05 111 4+1 Characterisation of transcriptome profiles of fresh or cultured *ex vivo* equine endometrial explants at different time points

M Monteiro de Barros, D Nash, M Davies-Morel, C Creevey, V Lenis

Thursday 27 April **Beswick 013**

The role of Tannins in animal health and performance

13:30-15:00

Chair

13:30 149 INV 25+5 Structure-activity relationships of condensed tannins and their effects on gastro-intestinal nematodes in livestock

Irene Mueller-Harvey, Garry Waghorn, Herve Hoste, Andrew R. Williams, Stig M. Thamsborg

14:00 150 INV 25+5 Tannins and animal health: modulation of immunity and inflammation by dietary tannins during gastrointestinal parasite infections

A R Williams, I Mueller-Harvey, S M Thamsborg

14:30 151 INV 25+5 The role of tannins in animal health and performance

Wilbert F. Pellikaan

Posters

112 Sodium butyrate modifies fermentation patterns in the gastrointestinal tract of pre-weaned calves, independently of changes in microbial composition

Eóin O'Hara, Alan Kelly, Paul Cormican, Matthew McCabe, Le Luo Guan, David Kenny, Sinéad Waters

113 Weight and piglet vitality at birth are main determinants of piglet performance to weaning

H Davis, H.M Miller

114 Acute phase proteins response as biomarkers in the immediate response to vaccination in specific pathogen free layer chicks

HAIDER TUMA KAAB, MAUREEN MARGARET BAIN, DAVID PETER ECKERSALL

115 The effect of a high lactose creep feed and a peat product on piglet performance

S Hazelden, M Le Bon, K Almond

116 High doses of supplementary phytase improve the performance of weaner pigs fed a low iron wheat-soybean meal based diet

Steven Laird, Peter Wilcock, Imke Kühn, Helen Miller

117 The impact of three contrasting management strategies on hock lesion scores in dairy cows

C Cochrane, A Gordon, CP Ferris

- 118 Comparison between half and full body weight assessment of Holstein Friesian calves when monitoring pre and post-wean growth
Andrew Brown, Ruth Kinkead, Steven Morrison
- 119 Effect of overstocking during the non-lactating (dry) period on behaviour and faecal glucocorticoid metabolites in pregnant dairy cows, and on calf birthweight and growth
Mayumi Fujiwara, Kenny Rutherford, Marie Haskell, Alastair Macrae
- 120 Age and diet affect the faecal microbial composition in the domestic cat (*Felis catus*); a 5-year study
E.N. Bermingham, C.F. Butowski, W. Young, C.D. Moon, N.J Cave, D.G. Thomas
- 121 Feed efficiency correlations in beef cattle offered zero-grazed grass and a high-concentrate diet
S. Coyle, C. Fitzsimons, D.A. Kenny, A.K. Kelly, M. McGee
- 122 Milk yield, milk composition, and milk fatty acid profile in Holstein dairy cows fed a pomegranate peel extract
M.J. Abarghuei, Yousef Rouzbehan, A.Z.M. Salem, M.J. Zamiri
- 123 The effect of dog safety education on the recognition of dog visual behavioural cues in "at risk" scenarios in primary school children in the UK
N. van Veggel, E. Nyari
- 124 Digestibility and nitrogen balance in beef cattle offered autumn grass herbage differing in fertiliser nitrogen application rate
A O'Connor, M McGee, A.P Moloney, T.M Boland, P O'Kiely
- 125 Effect of Docosahexaenoic acid (DHA) supplementation on horse (*Equus caballus*) reactivity and physiological (stress) response
G Abernethy Palmer, L Cameron, J Lowe
- 126 The use of cholecalciferol supplementation in beef heifers, to increase beef vitamin D content and improve beef tenderness and sensory evaluation
S.K Duffy, J.V O'Doherty, G Rajauria, K.D Cashman, A.K Kelly

- 127 Productive traits and blood insulin alterations by two Saudi local sheep breeds supplemented by Quebracho tannins in their diets
HS Aljabeili
- 128 Differences in conformation of Holstein heifers in herds adopting different grazing systems.
Jessica Edwards, Janet Roden
- 129 Modelling the food-feed competition for agricultural land under heterogeneous soil fertility
T Takahashi, MRF Lee
- 130 estimating the genetic diversity of *Rhodesus amarus* in Caspian Sea's river using PCR-RFLP method
Sara Jafari Kenari, Ghodrat Rahimi, Hosein Rahmani, Ayob Farhadi
- 131 Approach to a case of Haemonchosis in an alpaca herd and management of a case of acute trauma in an alpaca.
J Oultram, A Coates
- 132 A reverse-transcriptase PCR assay to assess the survival time of 16S ribosomal RNA of *Mycoplasma hyopneumoniae*: A potential diagnostic methodology tool
C Baker, H.M. Miller, C Browne
- 133 Effect of condensed tannins on short chain fatty acid production in five ruminant species
I C S Bueno, G M Fagundes, G Benetel, K C Welter, P Meo Filho, F A Melo

Academia Association Posters

Differences of iodine concentration between conventional, organic and ultra-high temperature milk at retail; implications for pregnant women in the UK

M Stevenson, C Drake, I Givens

Associations between ration formulation, feeding management practices and herd characteristics on the level of sorting of total or partial mixed rations on UK dairy farms

Andrew Harrison, Liam Sinclair, Usama Tayyab

Improving lipid composition of beef and lamb meat
LS Perkins, A Koidis, MM Cantwell, ND Scollan