POSTERS AND PERSPECTIVE FOR "OTHER" MONOGASTRICS (POULTRY, RABBITS AND MICE)

70th EAAP, Ghent-2019

PART I

The posters of session 49

There are 17 posters in Session no. 49

Classified as health related issues with regard (mainly) to: Genetics, Nutrition, Physiology, Welfare, Economics

Genetics

Abstract	Author Corresponding address (🖂)	Title	All Authors	Key words
31575	<mark>Alemu, Solomon</mark> .W	Evaluating body weight and egg number per bird per week for four tropically adapted chicken breeds	Alemu, S.W.; Hanotte, O.; Dessie, T.; Mrode, R.	Design of breeding programmes; Quantitative genetics;
	⊠ s.worku@cgiar.org			
31417	<mark>Chu, Tihnh.T.</mark>	Benefits of using genomic information for broiler breeding program in presence of GxE interactions	Chu, T.T.; Norberg, E.; Henshall, J.; Huang, C.; Jensen, J.	Genomic selection; Quantitative genetics;
	⊠ chu.thinh@mbg.au.dk			
30728	Berghof, Tom V.L.	Improving disease resistance in chickens: divergent selection on natural antibodies	Berghof, T.V.L.; Van Der Poel, J.J.; Bovenhuis, H.; Parmentier, H.K.; Arts, J.A.J.; Visker, M.H.P.W.	Robustness; Health; New phenotypes;
	⊠ tom.berghof@wur.nl			
32320	Emamgholi Begli	A genomic single-step random regression model for egg production in turkeys (Meleagris Gallopavo) 70th EAAP, Ghent-2019	Emamgholi Begli, H.; Wood, B.J.; Willems, O.; Baes, C.F.; Abdalla, E.A.;	
	⊠ emamgholi202@gmail.com			Genomic selection;
			Schenkel, F.	3

Posters- Session 49 (Genetics)

31575

Gains: ACGG-Ethiopia

report

Alemu, Solomon .W; 🖂 s.worku@cgiar.org Evaluating body weight and egg number per bird per week for four tropically adapted chicken breeds

- upgrade smallholder poultry to small-scale commercial framework in Ethiopia
- under the **project called African chicken** genetic gain
- performance traits (e.g. live body weight at week 20 lbw) and number of eggs per bird per week (epbpw) in four tropically adapted chicken



31417 Chu, Thinh.T. ; 🖂 chu.thinh@mbg.au.dk Benefits of using genomic information for broiler breeding program in presence of GxE interactions

- explored benefits of using genomic information in a broiler breeding program
- candidates were raised and tested in a bio-secure environment (B) and close relatives were tested in a commercial production environment (C)
- breeding values (EBVs) of body weight (BW) traits predicted using a pedigree-based BLUP model
 - combined pedigree and genomic information in ssGBLUP substantially increased population accuracy of EBVs 31.7-73.1% for genotyped birds and from 6.3-14.9% for non-genotyped birds

Selected Posters- Session 49 (Genetics)

30728 Berghof, Tom.V.L. ; ⊠ tom.berghof@wur.nl Improving disease resistance in chickens: divergent selection on natural antibodies (!!!) Robustness; Health; New phenotypes;

- Keyhole limpet hemocyanin (KLH)-binding Natural Ab titers in chickens are heritable
- Hypothesis: breeding for higher NAb titers might improve general disease resistance
- White Leghorn chicken line was divergently selected and bred on total KLH-binding NAb titers at 16 weeks of age for 6 generations
- Generations 4 & 6 inoculated with APEC (Avian Pathogenic Escherichia Coli)
- KLH-binding NAb selection has a favourable correlated response on the humoral adaptive immune system
- selection for higher NAb has a beneficial effect on resistance to APEC infection

The Posters in Session no.49

<u>Welfare</u>

Abstract	Author Corresponding address (⊠)	Title	All Authors	Key words
30536	Braun, R.	Animal welfare and productivity of hosted hens in a cage-free system	R. Braun, S. Pattacini, J. Sosa Bruno	Hens; cage-free; efficiency
	⊠ braun1816@gmail.com			
32015	<mark>Buijs, Stephanie</mark> .A.F.	How accurate is keel bone damage assessment by palpation and how does experience affect this?	Buijs, S.; Heerkens, J.L.T.; Delezie, E.; Tuyttens, F.A.M.; Ampe, B.; Rodenburg, T.B.	Health; Welfare;
	⊠ stephanie.buijs@afbini.gov.uk			
31718	Toppel, Kathrin	Impact of a litter amendment on	Toppel, K.; Schoen, H.;	Managamantand
	⊠ k.toppel@hs-osnabrueck.de	welfare indicators and litter quality in a Turkey husbandry	Gauly, M.; Kaufmann, F.; Andersson, R.	husbandry; Welfare;

Selected Posters- Session 49 (Welfare) 🦓

30536

Braun, R.; 🖂 braun1816@gmail.com Animal welfare and productivity of hosted hens in a cagefree system Hens; cage-free; efficiency

- The production of eggs in cage-free floor systems (diametrically different from production in confinement)study from Argentina
- > The indicators tested were:
- live weight, growth and eating behavior, productive of eggs along the posture and feed conversion efficiency
- animal density, temperature, relative humidity, air flow and light intensity
- presence of wounds and injuries, nail length and mortality
- The percentage of laying was relatively lower (5%) than in confined hens.
- It was difficult to adapt the hens to the nesting ; 50% of the eggs were collected from the floor

https://www.revolvy.com/ page/Free%252Drangeeggs



32015

Buijs, Stephanie .A.F. ; ⊠ stephanie.buijs@afbini.gov.uk How accurate is keel bone damage assessment by palpation and how does experience affect this? Health; Welfare;

- Palpation is the most commonly used method to evaluate keel bone damage in living hens
- How important is the experience of assessor

Wikipedia pl

- 10 assessors, 50 laying hens , for intra-assessor consistency (i.e., test-retest reliability) Cohen's Kappa was calculated for each assessor
- all assessors lacked accuracy when assessing caudal fractures
- experience improves accuracy but does not guarantee high accuracy for all types of damage
- implement other training methods (e.g., comparison to post-dissection scores or to radiographs) ?

Abstract	Author Corresponding address (⊠)	Title	All Authors	Key words
32052	Tozawa, Akitsu ⊠ akitsu-t@ntu.ac.jp	Comparison of broiler productivity fed different types of diet at commercial farm in Northern Japan	A. Tozawa, S. Sato	
31787	Van Beirendonck, S. Bruneel@orffa.com	L-selenocystine and L- selenomethionine and their deposition in broiler muscle tissue	S. Van Beirendonck, B. Driessen, G. Du Laing, <mark>Brecht Bruneel,</mark> L. Segers	
31260	<mark>Yang, Ye</mark> .Y. ⊠ yangyi1104657897@163.com	Effects of de-oiled lecithin in laying hens	Yang, Y.; Nguyen, D.H.; Seok, W.J.; Kim, I.H.; Yoon, S.B.; Kim, K.A.	Feed supplements and additives; Livestock effects on environment; Management and husbandry;
30537	Braun, R.O. ⊠ braun@agro.unlpam.edu.ar	Productive response in broilers fed with rape seed (Brassica napus)	<mark>Pattacini, S</mark> .; Chapado, J.; Braun, R.; Magnani, M.	
31521	<mark>Buyse, Kobe</mark> ⊠ Kobe.Buyse@ilvo.vlaanderen.be	Chestnut tannins in laying hen feed and their effect on metabolism	Buyse, K.; Wegge, B.; Janssens, G.G.P.; Delezie, E.; Lourenço, M.	Feed supplements and additives; Digestion and metabolism;
31641	<mark>Emegha, Udu</mark> .O. ⊠ pstemeghaudu52@gmail.com	Using mixed rice bran in laying hen diets 70th EAAP, Ghent-2019	U.o, J.J.	New feeding systems;

Selected Posters- Session 49 (Nutrition)

32052

Tozawa, Akitsu.; 🖂 akitsu-t@ntu.ac.jp Comparison of broiler productivity fed different types of diet at commercial farm in Northern Japan

Productivity of broilers fed 3 types of diets:

A/ commercial diet with antibiotics;

B/ commercial diet with brown rice and rye w/o antibiotics;

C/ commercial diet with vitamins and *Lactobacillus*-based probiotic w/o antibiotics

(Data of 909 broiler flocks kept in 41 broiler farms in Northern Japan from Apr. 2017 to Feb. 2018 were used)

 broiler fed a diet with vitamins and Lactobacillus probiotic w/o antibiotics /C/ in conventional farm had <u>lower productivity</u> than the broiler fed a commercial diet /A/ or a commercial diet with brown rice and rye /B/ 30537

Braun, R.O. ;⊠ braun@agro.unlpam.edu.ar Productive response in broilers fed with rape seed (Brassica napus) (Pattacini presenting)

the rapeseed grain (6%) prior to inclusion in the balanced diets during the growth - fattening period, to improve the composition of the carcasses and the quality of the meat and its fatty acid composition

The II₂ of the fat of rape-eating chickens is higher and is reflected in higher % unsaturated fatty with three and more than three double bonds in the carbon chain (ω 3)

> The ratio $\omega 6 / \omega 3$ that for the control was 10.69: 1 and for the treatment 8.30: 1.



Physiology Economics

Abstract	Author Corresponding address (⊠)	Title	All Authors	Key words
2381	Carrillo-Moreno, Dalia. I. Malia.ivettecm@gmail.com	Relationship between the number of hatchings and the pre-incubation conditions of poultry eggs	D.I. Carrillo-Moreno, J.H. Hernandez, C.A. Meza- Herrera, J.A. Beltran- Legaspi, E. Carrillo- Castellanos, J.Z. Ordoñez- Morales, F.G. Véliz-Deras	
31012	<mark>Litt, J.</mark> ⊠ litt@itavi.asso.fr	European guide of good and better practices for poultry transport	L. Warin, J. Litt, C. Mindus, E. Sossidou, H.A.M. Spoolder, L. Bignon	
32426	Katarzyna Utnik-Banaś ⊠ rrbanas@cyf-kr.edu.pl	Fluctuation of chicken meat price in European Union in 2007-2018	K. Utnik-Banaś	time series decomposition, price fluctuation, broiler chicken JEL classification: Q11, Q13 (BIOSTRATEG)



PART II

Perspective for "other monogastric" species in EAAP

Increasing input from poultry, rabbit and mice



- Sessions (%) where "other monogastrics" (poultry, rabbits, mice) appeared
- Share of abstracts (%) with "other monogastrics" (poultry, rabbits, mice)





Poultry and rabbits in other organizations



European Forum of Farm Animal Breeders



World Lagomorph Society



ATF-EAAP Special session, 26/08

A European Public-Private Platform

Poultry and rabbits in EU-funded projects



FABRE Technology Platform (TP)

(EAAP Session: Gene editing: Can we afford (not) to use precision technologies in livestock breeding ; Wednesday 28 August 2019, 08:30-12:30) (Room 400)



Innovative Management of Animal Genetic resources

functional genomes of two main monogastric farm species (pig & GENE-SWITCH chicken)



Feed-a-gene



LaGomiCs Sequencing the Genomes of an Entire Mammalian Order



COST Action "A Collaborative European Network on Rabbit Genome Biology – RGB-Net"



Strengthening Animal Production and Health through the Immune Response



Solutions to farming problems in intensive production of monogastric animals



Efficient and ecologically friendly pig and CE poultry production

