



**6th IHSIG Symposium**  
**3-5 April 2019, Roma - Italy**  
**Line-up Poster Presentation**



Abstracts selected for the 3-min pitch presentation & poster presentation		
Abstracts selected for the poster presentation		
<b>Session I: GUT HEALTH DIAGNOSTICS</b>		
TITLE	AUTHOR	ABSTRACT ID
Biomarkers of increased intestinal permeability in chickens	Saad Gilani (DuPont Danisco Animal Nutrition, United Kingdom)	03-IHSIG2019
Measuring gut mucosal immunity to better understand immunosuppression by mycotoxins	Astrid Koppenol (Impextraco N.V., Belgium)	09-IHSIG2019
Isolation, primary culture, and characterization of chicken intestinal epithelial cells	Barbara Rossi (Vetagro S.p.A., Italy)	31-IHSIG 2019
Risk factors for intestinal health problems in broilers in Belgium: a cross-sectional study	Moniek Ringenier (Ghent University, Belgium)	122-IHSIG 2019
The impact of high rearing temperature on the performance, villus morphometry and relative expression of some genes in chickens	Vasil Pirgozliev (Harper Adams University, United Kingdom)	40-IHSIG 2019
Detection of novel Picornavirus in Broiler Chicken from Iran	Arash Ghalyanchilangeroudi (University of Tehran, Iran)	65-IHSIG 2019
Molecular characterization of avian rotaviruses in Iran, 2017-2018	Arash Ghalyanchilangeroudi (University of Tehran, Iran)	65-IHSIG 2019
Environmental evaluation of antimicrobial resistance genes (ARGs) in poultry flocks	Camilla Smoglica (University of Teramo, Italy)	66-IHSIG 2019
Non-invasive monitoring of pathogenic Clostridium perfringens load in broiler flocks by a PCR-based test method	Andreas Kappel (Evonik Nutrition & Care GmbH, Germany)	110-IHSIG 2019
Evaluation in vitro of anticoccidial power of six plant extracts	Maroua BETTAIEB (National School of Veterinary Medicine, Tunisia)	124-IHSIG 2019
Investigation into risk factors and effects of Dysbacteriosis in broilers	Stefaan Bekaert (Huvepharma N.V., Belgium)	126-IHSIG 2019
<b>Session II: FOODBORNE PATHOGENS</b>		
TITLE	AUTHOR	ABSTRACT ID
Campylobacter spp. in Red-legged Partridge ( <i>Alectoris rufa</i> ) Farms: Is it a Problem?	António Miguel Ferreira (Universidade de Trás-os-montes e Alto Douro, Portugal)	01-IHSIG2019
Reduction of Campylobacter jejuni colonization in broilers by in-feed supplementation with hyperimmune egg yolk antibodies	An Garmyn (Ghent University, Belgium)	30-IHSIG 2019
A PROBIOTIC CONTAINING VIABLE CLOSTRIDIUM BUTYRICUM SPORES AND ITS EFFECT ON PREVENTING SALMONELLA ENTERITIDIS COLONIZATION IN BROILERS	Wouter Van der Veken (Huvepharma N.V., Belgium)	27-IHSIG 2019
Applying bacterin and subunit vaccines against Campylobacter sp. for in ovo vaccination of chickens	Jasmien Vandeputte (Ghent University, Belgium)	32-IHSIG 2019
<b>Session III: PATHOGENESIS OF INTESTINAL DISEASE</b>		
TITLE	AUTHOR	ABSTRACT ID
Risk factors for the incidence of dysbacteriosis in broiler chickens	Nele Caekebeke (Ghent University, Belgium)	16-IHSIG 2019
Deoxyvalenol induces changes on the morphology and oxidative stress response in the jejunum of broiler chickens	Marielen de Souza (Universidade Estadual de Londrina, Brazil)	74-IHSIG 2019
Evaluation of a candidate live-attenuated Histomoniasis vaccine	Lesleigh C. Beer (University of Arkansas, USA)	43-IHSIG 2019
Evaluation of sphinganine sphingosine ratio of broilers exposed to Fumonisin	Valentine Van Hamme (Kemin Europa N.V., Belgium)	55-IHSIG 2019
Influence of heat stress on gut permeability and inflammation response in broiler chicken	Caroline Emsenhuber (BIOMIN Research Center, Austria)	71-IHSIG 2019
Current status of avian adenovirus control in the south-central US: hemorrhagic enteritis and inclusion body hepatitis	Christine N. Vuong (University of Arkansas, USA)	81-IHSIG 2019
Effects of Synbiotic Supplementation on Clostridium perfringens load in Birds Induced with Necrotic Enteritis	Revathi Shanmugasundaram (University of Georgia, USA)	83-IHSIG 2019
Development of an in ovo colibacillosis challenge model utilizing sub-lethal bacteriostatic tetracycline co-administered with virulent Escherichia coli	Danielle Graham (University of Arkansas, USA)	94-IHSIG 2019
Assessment of a quantitative PCR method for the detection of necrotic enteritis in commercial broiler flocks by monitoring markers in pooled faeces	Emeka Ignatius Igwe (Evonik Nutrition & Care GmbH, Germany)	111-IHSIG 2019
The study of resistance to enrofloxacin and amoxicillin in Salmonella enterica isolated at poultry farms of the Russian Federation in 2007 and 2017	Davydova N.V. (Siberian Federal Scientific Center of Agrobiotechnologies, Russia)	129-IHSIG 2019
<b>Session IV: PARASITIC DISEASES OF POULTRY</b>		
TITLE	AUTHOR	ABSTRACT ID
Second and third-generation sequencing revealing new insight on the microbiota changes during subclinical coccidiosis	Birgit Antlinger (Biomim Holding GmbH, Austria)	106-IHSIG 2019
Anticoccidial Effects of Dietary Supplementation of Trachyspermum ammi in chicken	Muhammad Asif Raza (Muhammad Nawaz Shareef University of Agriculture, Pakistan)	50-IHSIG 2019



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Session V: NUTRITION AND IMMUNITY		
TITLE	AUTHOR	ABSTRACT ID
Algal $\beta$ -(1,3)-glucan: its role as an immune modulator	Valentine Van Hamme (Kemin Europa N.V., Belgium)	10-IHSIG2019
Effects of feeding an Olive pomace extract from <i>Olea europaea</i> to broiler chickens on intestinal mucosa integrity after a short-term fasting period	Javier Herrero-Encinas (Universidad Politécnica de Madrid, Spain)	38-IHSIG 2019
Algal $\beta$ -(1,3)-glucan and its role in Infectious Bursal Disease vaccination	Natasja Smeets (Kemin Europe N.V., Belgium)	58-IHSIG 2019
Zinc amino acid complex alleviates the loss of intestinal mucosal barrier function induced by <i>C. perfringens</i> challenge	Cibele Araujo Torres (Zinpro Corporation, USA)	104-IHSIG 2019
Diet-Induced Dysbiosis of the Intestinal Microbiota in Broiler Chickens	Gunther Antonissen (Ghent University, Belgium)	109-IHSIG 2019
Yeast cell wall fractions as immune modulators: the adjuvant effect of $\beta$ -1,3/1,6 glucans extracted from <i>Saccharomyces cerevisiae</i> yeast in chickens vaccinated against viral diseases.	Tadele G. Kiros (Phileo Lesaffre, France)	115-IHSIG 2019
Effect of two different challenge models inducing dysbiosis on performance and gut health status of broilers	Lamya Rhayat (Adisseo France SAS, France)	125-IHSIG 2019
Immunogenicity of the Newcastle disease virus vaccine La Sota, in introduced birds under intensive and extensive management conditions	Berhanu Abera (Ethiopian Institute of Agricultural Research, Ethiopia)	12-IHSIG 2019
Mycotoxin Contamination of Poultry Feed in Nigeria: A Consequence of Climate Change and its Implications on Poultry Production. Case Studies from Nigeria.	Adejoro Stephen Oluwole (Livestock Industry Foundation for Africa, Nigeria)	64-IHSIG 2019
Fasting influences intestinal function to enhance feed energy digestibility of broilers	Youli Wang (China Agricultural University, China)	67-IHSIG 2019
Physiological and genomic characterization of <i>Lactobacillus reuteri</i> strains isolated from Swiss poultry gastrointestinal tract	Greppi, Anna (ETH-Zurich, Switzerland)	78-IHSIG 2019
CITRUS EXTRACT IN ORDER TO PROMOTE FEED RECOVERY ON BROILERS CHICKENS	Sekhou CISSE (NOR-FEED SAS, France)	86-IHSIG 2019
2018 Worldwide Mycotoxin Occurrence in Feed Materials	Michele Muccio (Biomim Holding GmbH, Austria)	102-IHSIG 2019
Improving broiler performance with a strategy that reduces the endotoxin related triggering of the immune system	Jesse Stoops (Nutrex, Belgium)	112-IHSIG 2019
Session VI: FEED ADDITIVES TO CONTROL GUT HEALTH		
TITLE	AUTHOR	ABSTRACT ID
Ileal kinome analysis shows dietary supplementation with AviPlus <sup>®</sup> P stimulates key immune and metabolic pathways	Christina L Swaggerty (U.S. Department of Agriculture, USA)	02-IHSIG2019
The use of feed additives can support intestinal health and increase performance in broilers	Barbara Brutsaert (Trouw Nutrition, The Netherlands)	07-IHSIG2019
<i>Bacillus amyloliquefaciens</i> CECT 5940 improves gut integrity by regulating tight junction protein expression in broilers under a subclinical necrotic enteritis challenge	Shubiao Wu (University of New England, Australia)	23-IHSIG 2019
Algal polysaccharides to improve gut health	María García (OLMIX S.A., France)	24-IHSIG 2019
Review: How the anti-inflammatory properties of isoquinoline alkaloids contribute to an efficient poultry production	Anja Pastor (Phytobiotics Futterzusatzstoffe GmbH, Germany)	45-IHSIG 2019
Resin acid composition reduces small-intestinal expression of collagen-degrading matrix metalloproteinases in broilers	Hannele Kettunen (Hankkija Ltd, Finland)	82-IHSIG 2019
Transcriptomic analysis reveals protective mechanisms of refined functional carbohydrates against <i>Salmonella typhimurium</i>	Mini Singh (University of Sydney, Australia)	95-IHSIG 2019
Comparison of the effect of two yeast based products on zootechnical performances of broilers	Anis Hedhli (Phileo Lesaffre, France)	103-IHSIG 2019
Evaluation of the effect of three probiotic products to control <i>Clostridium perfringens</i> induced necrotic enteritis in broilers	Charles L. Hofacre (Phileo Lesaffre, France)	113-IHSIG 2019
Effect of supplementation of <i>Bacillus</i> -based probiotics on broiler growth performance	Anis Hedhli (Phileo Lesaffre, France)	114-IHSIG 2019
Encapsulated fatty acids and essential oils improved performance of broilers challenged with a necrotic enteritis reused litter	Nedra Abdelli (Universitat Autònoma de Barcelona, Spain)	120-IHSIG 2019
Effect of a feed additive on growth performance, gut morphology and microbiota of broilers in antibiotic-free production system	Barbara Brutsaert (Trouw Nutrition, The Netherlands)	05-IHSIG 2019
A novel feed additive to control gut health	Katrien Deschepper (Impextraco N.V., Belgium)	08-IHSIG 2019
Efficacy of synbiotic application on health status and performance of broilers compared with antibiotic growth promoters	Basharat Syed (BIOMIN Holding GmbH, Austria)	11-IHSIG 2019
Synergistic effects between Biostrong <sup>®</sup> Protect, a phytogetic feed additive, and anticoccidial medication on broiler performance	Francisco Dias (Delacon Biotechnik GmbH, Austria)	13-IHSIG 2019
Phytogetic feed additives can alleviate the negative impact of necrotic enteritis in broilers	Vasil Pirgozliev (Harper Adams University, United Kingdom)	15-IHSIG 2019
<i>Bacillus amyloliquefaciens</i> CECT 5940 alone or in combination with calcium butyrate improved performance while reduced ileal <i>Escherichia coli</i> in broiler chickens	Juliano Cesar de Paula Dorigam (Evonik Nutrition & Care GmbH, Germany)	19-IHSIG 2019



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Organic acids and nature identical compounds improve the efficacy of conventional antibiotics against <i>C. perfringens</i>	Benedetta Tugnoli (Vetagro S.p.A., Italy)	20-IHSIG 2019
Exploring the villus: ileal mucosal ultrastructure of chicks exposed to necrotic enteritis and a probiotic	Shaniko Shini (University of Queensland, Australia)	21-IHSIG 2019
Mitigating necrotic enteritis in coccidia vaccinated broilers using a probiotic containing viable spores of <i>Bacillus licheniformis</i>	Wouter Van der Veken (Huvepharma N.V., Belgium)	25-IHSIG 2019
Use of botanic molecules (Pronutrients and Cimenol Ring) for intestinal health in broilers	Alfonso Díaz (INPSAS & BIOVET S.A, Spain)	29-IHSIG 2019
Comparing the effects of different methyl group donors on the carcass quality of broilers in challenged conditions and the effect on the litter quality	Saksit Srinongkote & Ana Gavráu (AGRANA Stärke GmbH, Austria)	33-IHSIG 2019
Effects of OPTIGUT on the performance and physico-chemical properties of the intestinal digesta in a necrotic enteritis challenge model in broiler chicks	Vasileios Tsiouris (University of Thessaloniki, Greece)	34-IHSIG 2019
In-vitro evaluation of Brazilian propolis for poultry gut health promotion: Selective antibacterial activity ( <i>C. perfringens</i> vs <i>Lactobacillus</i> spp.) and immunomodulatory property.	Sylvain Kerros (PHYTOSYNTHESE, France)	37-IHSIG 2019
Yeast cell wall immunomodulatory and intestinal integrity effects on broilers challenged with <i>Salmonella</i> Enteritidis	Melina Aparecida Bonato (ICC Industrial Comércio, Brazil)	42-IHSIG 2019
<i>Bacillus subtilis</i> probiotics influence gut health and the strength of the epithelial barrier function in a strain-dependent manner	Stina Rikke Jensen (Novozymes A/S, Denmark)	44-IHSIG 2019
Allometric growth of digestive and immune organs of broilers chickens	Jose Henrique Stringhini (Universidade Federal de Goiás, Brazil)	47-IHSIG 2019
Allometric evaluation of histomorphometric intestinal development in broilers	Jose Henrique Stringhini (Universidade Federal de Goiás, Brazil)	48-IHSIG 2019
Nutribiosis: The interaction between nutrition, microbiome, and gut & immune function	Charlotte Horsmans Poulsen (Dupont Industrial Biosciences, Denmark)	49-IHSIG 2019
Efficacy of a mixture of mono-, di- and triglycerides of butyric, capric, and caprylic acid, formic acid and a probiotic <i>Clostridium butyricum</i> on performance and gut health in broiler chickens	Jürgen Zentek (Freie Universität Berlin, Germany)	51-IHSIG 2019
Feeding <i>Bacillus amyloliquefaciens</i> CECT 5940 reduced Foot Pad Lesions and improved growth performance in broiler chickens	Alvaro Ortiz (Evonik Nutrition & Care GmbH, Germany)	54-IHSIG 2019
Fewer therapeutics antibiotics, the challenge of field testing tools.	Susanne Kirwan (Kemin Europa N.V., Belgium)	57-IHSIG 2019
Effect of a novel microbial muramidase alone and in combination with a xylanase on growth performance and intestinal viscosity in broiler chickens	Estefania Pérez Calvo (DSM Nutritional Products, France)	59-IHSIG 2019
Prevention of necrotic enteritis by a synergistic non-antibiotic feed additive in broiler chickens	Alireza Khadem (Innovad® NV/SA, Belgium)	60-IHSIG 2019
The Effect of encapsulated indigenous lactic acid bacteria probiotics and herbs on histomorphology, goblet cell and aggregated lymphoid nodule of laying hens	Prof. Dr. Sri Harimurti (Universitas Gadjah Mada, Indonesia)	62-IHSIG 2019
Effect of a <i>Bacillus subtilis</i> probiotic on broiler performance and gut health	Natasja Smeets (Kemin Europa N.V., Belgium)	79-IHSIG 2019
Mycotoxins in Poultry feed: 2018 survey and nutritional solution	Radka Borutova (Adisseo France SAS, France)	80-IHSIG 2019
Effect of oregano essential oil as feed additive in broiler diet (14-35 days), reared under heat stress on performance and balance microflora	Rodica Diana Criste (IBNA, Romania)	87-IHSIG 2019
Implication of dietary willow bark extract ( <i>Salix alba</i> ) on performance and caecal microflora of broilers (14-42 days) reared at 32 °C	Mihaela Saracila (IBNA, Romania)	88-IHSIG 2019
CARbohydrate BOosted Control of Intestinal Immunity in Chickens (CARBO-CLICK)	Miriam J. Oost (Maastricht University, The Netherlands)	90-IHSIG 2019
Oral nucleosides accelerates the differential and maturation of intestinal development in broilers	Gopi Marappan	91-IHSIG 2019
Triphala – A Polyherbal Ayurvedic Supplement Improved the Intestinal Health in Broilers	Madhupriya Velusamy (Tamil Nadu Veterinary and Animal Sciences University, India)	92-IHSIG 2019
Performance of a fungal muramidase on purified peptidoglycan from five chicken gut bacterial isolates	Christian Nyffenegger (Novozymes A/S, Denmark)	97-IHSIG 2019
Encapsulated butyrate in the maintenance of broiler gut barrier function applying a dysbacteriosis model	Mohammad Naghizadeh (Aarhus University, Denmark)	98-IHSIG 2019
A better feed valorisation thanks to a Natural Citrus Extract supplementation	Anne Burel (NOR-FEED SAS, France)	99-IHSIG 2019
A meta-analysis on the impact of a new formulation of essential oil compounds on growth performance and some aspects of gastrointestinal functionality in broiler chicken	Aurélia-Anne SEON SIMON (DSM Nutritional Products, France)	101-IHSIG 2019
The abundance and morphology of mitochondria in enterocytes of chickens exposed to necrotic enteritis and treated with a probiotic	Shaniko Shini (University of Queensland, Australia)	108-IHSIG 2019
Effect of alternative feed additives based on organic acids, phytochemicals, prebiotics and probiotics on production performance and <i>Clostridium perfringens</i> in broiler chickens	Magne Kaldhusdal (Norwegian Veterinary Institute, Norway)	116-IHSIG 2019
Coccidiostat-free broiler production: Fact or fiction?	Tone S. Martinsen (Vilomix, Norway)	119-IHSIG 2019
Phytochemical feed additive improved growth performance of broilers fed a diet with nutrient density below standard	Remco Muntendam (Biomin Holding GmbH, Austria)	127-IHSIG 2019



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Session VII: THE IMPACT OF NOVEL FEED INGREDIENTS ON GUT HEALTH

TITLE	AUTHOR	ABSTRACT ID
The influence of two dietary calcium and phytase levels on the lesion scores, gut pH, gut permeability and serum calcium and phosphorus of broiler chickens challenged with necrotic enteritis	Holy Kwabla Zanu (University of New England, Australia)	73-IHSIG 2019
Nicotinic acid and hypoxanthine produced by the probiotic strain <i>Bacillus subtilis</i> 29784 possible key metabolites in intestinal health	Pearl Choi (Ghent University, Belgium)	105-IHSIG 2019
Standardized blend of carvacrol, cinnamaldehyde and capsiacum oleoresin modulates broiler metabolism leading to better growth performance and carcass quality	Josselin le Cour Grandmaison (Pancosma, France)	17-IHSIG 2019
Supplementation of broiler diet with yeast mannan rich fraction alters microbiome functional capacity and yields improvements in gut health status.	Aoife Corrigan (Alltech, Ireland)	18-IHSIG 2019
A novel soluble probiotic containing viable <i>bacillus licheniformis</i> spores and its effect on performance parameters in commercial poultry rearing	Wouter Van der Veken (Huvepharma N.V.)	26-IHSIG 2019
Yeast mannan rich fraction modulates respiration of antimicrobial sensitive and antimicrobial resistant <i>Escherichia coli</i>	Sharon Grant (Alltech, Ireland)	46-IHSIG 2019
Effects of Dietary Mannan-Rich Fraction on Microbial Populations in Broiler Chickens	Joanne Parker (Alltech, Ireland)	56-IHSIG 2019
Soluble fiber (pectin) in the diet on proventriculus structure of broilers	Ana Flavia (São Paulo State University)	68-IHSIG 2019
Long pectin (soluble fiber) intake increases jejunal mucosal vascularity, crypt cell proliferation and villi height of laying hens	Rachel Santini Paulino (São Paulo State University)	69-IHSIG 2019
Use of a novel protease to reduce subclinical necrotic enteritis in broilers	Marisol Castillo (Novus Int.)	128-IHSIG 2019