



**Official Journal of
the Animal Science and
Production Association
(ASPA)**

*

**ISSN 1594-4077
eISSN 1828-051X**

*

www.aspajournal.it

*

**Italian Journal
of Animal Science
2015; volume 14
supplement 1**

italian journal of animal science

**ASPA 21st Congress
Milano, June 9-12, 2015**

Book of Abstracts

Guest Editor: Giovanni Savoini

Italian Journal of Animal Science

Official Journal of the Animal Science
and Production Association

ISSN 1594-4077
eISSN 1828-051X

Editor-in-Chief

Rosanna Scipioni, Università degli Studi di Modena e Reggio Emilia
(Italy)

Section Editors

Marcello Mele, Università degli Studi di Pisa (Italy), Deputy Editor

Luca M. Battaglini, Università degli Studi di Torino (Italy)

Umberto Bernabucci, Università degli Studi della Tuscia, Viterbo
(Italy)

Rui José Branquinho Bessa, Universidade Técnica de Lisboa
(Portugal)

Cesare Castellini, Università degli Studi di Perugia (Italy)

Beniamino T. Cenci Goga, Università degli Studi di Perugia
(Italy)

Giulio Cozzi, Università degli Studi di Padova (Italy)

Juan Vicente Delgado Bermejo, Universidad de Córdoba
(Spain)

Luca Fontanesi, Alma Mater Studiorum-Università di Bologna
(Italy)

Oreste Franci, Università degli Studi di Firenze (Italy)

Michael A. Grashorn, University of Hohenheim (Germany)

Juan J. Loor, University of Illinois at Urbana-Champaign (USA)

Nicolò Pietro Paolo Macciotta, Università degli Studi di Sassari
(Italy)

Antonino Nizza, Università degli Studi di Napoli (Italy)

Giuliana Parisi, Università degli Studi di Firenze (Italy)

Giovanni Savoini, Università degli Studi di Milano (Italy)

Giuseppe Stradaoli, Università degli Studi di Udine (Italy)

Editorial Staff

Lucia Zoppi, Managing Editor

Cristiana Poggi, Production Editor

Tiziano Taccini, Technical Support

Publisher

PAGEPress Publications

via Giuseppe Belli 7

27100 Pavia, Italy

Tel. +39.0382.1751762 – Fax: +39.0382.1750481

info@pagepress.org – www.pagepress.org





Italian Journal of Animal Science

The Italian Journal of Animal Science is an international peer-reviewed journal publishing original scientific papers, reviews and short communications on animal science, animal production and related areas. It includes sections on: animal derived food quality and safety; reproduction and physiology (ruminants and non-ruminants); animal production (management, behaviour, welfare, health); wildlife; livestock management and landscape; nutrition and feeding (ruminant and non-ruminant); genetics (quantitative and molecular) and breeding; aquaculture.

Upon request to the Editor, announcements of congresses, presentations of universities, research institutes, books and proceedings may also be published, as well as news regarding the members of the Animal Science and Production Association (ASPA). The Association will be glad to receive proposals for your admission as ordinary or corresponding member: please read regulations and procedures in the ASPA statute. available at http://www.aspajournal.it/public/aspa_statute.pdf.

The publication of manuscripts is subject to the approval of referees and in agreement with the Advisory Board's opinions; referees will be selected from among qualified scientists in the international scientific community.

2013 Impact factor: 0.604. ©JCR Thomson Reuters

Copyright

PAGEPress has chosen to apply the Creative Commons Attribution License (CCAL) to all manuscripts to be published. An Open Access Publication is one that meets the following two conditions: The author(s) and copyright holder(s) grant(s) to all users a free, irrevocable, worldwide, perpetual right of access to, and a license to copy, use, distribute, transmit and display the work publicly and to make and distribute derivative works, in any digital medium for any responsible purpose, subject to proper attribution of authorship, as well as the right to make small numbers of printed copies for their personal use. A complete version of the work and all supplemental materials, including a copy of the permission as stated above, in a suitable standard electronic format is deposited immediately upon initial publication in at least one online repository that is supported by an academic institution, scholarly society, government agency, or other well-established organization that seeks to enable open access, unrestricted distribution, interoperability, and long-term archiving. Authors who publish with this journal agree to the following terms: 1. Authors retain copyright and grant the journal right of first publication with the work simultaneously licensed under a Creative Commons Attribution License that allows others to share the work with an acknowledgement of the work's authorship and initial publication in this journal. 2. Authors are able to enter into separate, additional contractual arrangements for the non-exclusive distribution of the journal's published version of the work (e.g., post it to an institutional repository or publish it in a book), with an acknowledgement of its initial publication in this journal. 3. Authors are permitted and encouraged to post their work online (e.g., in institutional repositories or on their website) prior to and during the submission process, as it can lead to productive exchanges, as well as earlier and greater citation of published work (See The Effect of Open Access).

Peer-review policy

Submission of a manuscript implies that all authors have viewed and approved the paper for release and that each author is responsible for its content. To facilitate the reviewing process, authors are encouraged to have the manuscript reviewed by others before submission. When submitting the manuscript to the journal, authors may indicate reviewers they consider not acceptable because of possible bias in manuscript evaluation or, on the contrary, propose experts as possible reviewers. After a preliminary check of the article, the Editor-in-Chief assigns it to a member of the Editorial Board (Section Editor), who identifies two reviewers for assistance in the evaluation of the paper submitted and to recommend the acceptance or the rejection of the manuscript. If all referees recommend acceptance or rejection, the decision stands. If the opinions of the referees tie, the Editor-in-Chief and the Section Editors have the authority to decide upon the acceptance or rejection of the paper.

Reviewers are asked to maintain confidentiality with respect to the information presented in the manuscript and should inform the editor of any possible conflict of interest which may bias their judgement. Reviewers should render their opinions in an unbiased and fair manner, provide helpful guidance to authors in writing and return the manuscript to the journal within 3 weeks. Manuscripts that require revisions are returned by the journal to the corresponding author for improvement.

The revised manuscript, edited in .doc format, should be resubmitted electronically to the Section Editor (on <http://www.aspajournal.it>) within 28 days from the date of receipt by the author. If the revised manuscript is returned to the journal after the allotted time, it will be considered a new submission.

Authorship. All persons designated as authors should qualify for authorship according to the CSE' criteria (<http://www.councilscienceeditors.org/4a/pages/index.cfm?pageid=3355>) Each author should have participated sufficiently in the work to take public responsibility for the content. Authorship credit should be based only on substantial contributions to (a) conception and design, or analysis and interpretation of data; and to (b) drafting the article or revising it critically for important intellectual content; and on (c) final approval of the version to be published. These three conditions must all be met. Participation solely in the acquisition of funding or the collection of data does not justify authorship. General supervision of the research group is not sufficient for authorship. Any part of an article critical to its main conclusions must be the responsibility of at least one author. In relevant cases of experimentation on animals, Authors may be required to provide the original authorization of their institutional Ethical Committee.

Italian Journal of Animal Science

Journal registered in Pavia, Italy, n. 2/2010-INF.

Direttore Responsabile: Rosanna Scipioni.

Ownership: Animal Science and Production Association (ASPA)

Italian Journal of Animal Science

volume 14, supplement 1, 2015

ASPA 21st Congress Milano, June 9-12, 2015

Guest Editor
Giovanni Savoini

Table of Contents

MAIN LECTURES			
	1	Genetics and genomics/cattle	65
		Animal products and human health/ nutrition and milk quality	69
		Physiology and metabolism/ nutrition and physiology part 1	72
		Genetics and genomics/cattle	75
		Research and development in animal science/feed materials	79
		Physiology and metabolism/ nutrition and physiology part 2	83
ORAL COMMUNICATIONS			
Livestock and environment/welfare	3		
Genetics and genomics/miscellany	7		
New technologies in animal science	13		
Animal products and human health/ nutrition and meat quality	17		
Livestock and environment/environment	22		
Genetics and genomics/cattle	25		
Research and development in animal science/processing and technology transfer part 1	29		
Animal products and human health/ milk and dairy products quality	33		
Physiology and metabolism/ microbiome and gastrointestinal tract	36		
Genetic and genomics/swine	40		
Research and development in animal science/processing and technology transfer part 2	43		
Physiology and metabolism/feed nutritional quality evaluation	46		
Livestock and environment/feed and food	49		
Genetics and genomics/goat	52		
Research and development in animal science/feed additives	55		
Animal products and human health/ animal products characterization	58		
Livestock and environment/miscellany	61		
		POSTERS	
		Animal products for human health	87
		Genetics and genomics	102
		Livestock and environment	129
		New technologies in animal science	143
		Physiology and metabolism	151
		Research and development in animal science	164
		INDEX OF AUTHORS	a
		This supplement is also available at www.aspajournal.it	



ASPA 21st Congress

Milano, June 9-12, 2015

ORGANIZING COMMITTEE

Antonella Baldi (*President*)
Anna Caroli
G. Matteo Crovetto
Gustavo Gandini
Vittorio Maria Moretti
Luciano Pinotti (*Secretary*)
Fabia Rosi
Carlo Angelo Sgoifo Rossi

SCIENTIFIC COMMITTEE

Giovanni Savoini (*President*)
Alessandro Agazzi (*Secretary*)
Luciana Bava
Federica Bellagamba
Valentino Bontempo
Bianca Castiglioni
Silvia Cerolini
Federica Cheli
Valentina Ferrante
Fabio Luzi
Giulio Pagnacco
Raffaella Rossi
Marco Saroglia

CONGRESS PRESIDENCY

Vittorio Dell'Orto
Carlo Corino

ASPA 21st Congress

Milano, June 9-12, 2015

SPONSORS



IN COOPERATION WITH



UNDER THE PATRONAGE OF



UNIVERSITÀ
DEGLI STUDI
DI MILANO





ASPA 21st Congress

Milano, June 9-12, 2015

Programme of the Congress

Tuesday, June 9

13.00-15.30	Arrival - Registrations - Welcome coffee
15.30-18.00	Parallel sessions
18.00-19.30	Welcome cocktail

Wednesday, June 10

08.00-09.00	Registration
09.00-10.30	Opening ceremony and main lectures
10.30-11.00	Coffee break and poster session
11.00-13.00	Parallel sessions
13.00-14.00	Lunch and poster session
14.00-15.30	Parallel sessions/Editorial Board Meeting
15.45	Departure to <i>Polo Universitario Veterinario</i> , Lodi
16.15-20.00	Main lectures and scientific visit at the facilities of <i>Polo Universitario Veterinario</i> , Lodi
20.00	Country dinner at the <i>Polo Universitario Veterinario</i> , Lodi

Thursday, June 11

09.00-10.45	Parallel sessions
10.45-11.15	Coffee break and poster session
11.15-13.00	Parallel sessions
13.00-14.00	Lunch and poster session
14.00-16.00	Parallel sessions
16.00-16.30	Coffee break and poster session
16.30-17.15	Reports from study commissions
17.15-19.30	ASPA meeting
20.30	Social dinner

Friday, June 12

System approach for improving the sustainability of animal production, health and welfare
Organized jointly by: Scientific Committee for EXPO, University of Milan, EAAP (European Association of Animal Production), and ASPA (Animal Science and Production Association)

09.00-10.00	Registration and welcome address
10.00-10.30	Keynote speech
10.30-11.45	Session I: Sustainability analysis and life cycle assessment of animal production
11.45-12.15	Coffee break
12.15-13.30	Session II: The impact of animal welfare and health on food quality and safety
13.30-14.30	Lunch
14.30-15.45	Session III: Mitigating the use of antiparasitic and antimicrobial drugs in livestock productions
16.00	Visit Expo sites
20.00	Dinner at Expo

ASPA 21st Congress

Milano, June 9-12, 2015

Italian Journal of Animal Science

2015; volume 14: supplement 1

Agenda for oral presentations

Tuesday, June 9 - Livestock and environment/welfare - Room 211

Chairpersons: Valentina Ferrante - Flavia Gottardo

- 15.30-16.00 Elisabetta Canali, Sara Barbieri, Michela Minero, Valentina Ferrante, Silvana Mattiello, Adroaldo Zanella
AWIN project: innovation in animal welfare assessment..... C-001
- 16.00-16.15 Susanna Lolli, Inma Estevez, Lorenzo Ferrari, Tatiane Terumi Negrão Watanabe, Sezen Ozkan, Carlo Tremolada, Valentina Ferrante
Protocol development for welfare assessment in commercial turkey farms..... C-002
- 16.15-16.30 Monica Battini, Sara Barbieri, Guido Bruni, Giorgio Zanatta, Silvana Mattiello
Testing the feasibility of a prototype welfare assessment protocol in intensive dairy goat farms C-003
- 16.30-16.45 Katia Parati, Rossana Capoferri, Livia Moscati, Marco Sensi, Guerino Lombardi, Francesca Battioni, Gianpietro Sandri, Carlo Briani, Andrea Galli
The effect of the relaying mode on welfare of the pregnant sow..... C-004
- 16.45-17.00 Marta Brscic, Giulia Vida, Annalisa Scollo, Giulio Cozzi, Flavia Gottardo
Relationship between pig welfare in the pre-slaughter phase and superficial bruises of their carcasses..... C-005
- 17.00-17.15 Maria Lúcia Pereira Lima, João Alberto Negrão, Claudia Cristina Paro de Paz
Corral modification for humane livestock handling can improve cattle behavior and reduce serum cortisol..... C-006
- 17.15-17.30 Isabella Lora, Marta Brscic, Luisa Magrin, Clelia Rumor, Flavia Gottardo
Effects of innovative horizontal fans on beef cattle health, growth and welfare..... C-007
- 17.30-17.45 Miriam Iacurto, Roberto Steri, Germana Capitani, Federico Vincenti
Animal welfare in beef cattle: performances and meat quality..... C-008

Tuesday, June 9 - Genetics and genomics/miscellany - Plenary Room

Chairpersons: Alessio Valentini - Roberta Davoli

- 15.30-15.45 Emiliano Lasagna, Simona Rimoldi, Simone Ceccobelli, Stefano Paolo Marelli, Maria Cristina Cozzi, Francesca Maria Sarti, Genciana Terova
The genetic of welfare: gene expression and heat stress in chicken..... C-009
- 15.45-16.00 Paolo Zambonelli, Martina Zappaterra, Maurizio Mazzoni, Massimiliano Petracci, Francesca Soglia, Federico Sirri, Claudio Cavani, Roberta Davoli
Broiler Pectoralis major muscle affected by emerging abnormalities: histology and gene expression..... C-010
- 16.00-16.15 Genciana Terova, Simona Rimoldi, Elena Bossi, Sheenan Harpaz, Marco Saroglia
Transcript quantification of intestinal neutral amino acids and oligopeptides transporters in European sea bass (Dicentrarchus labrax) reared in fresh water and fed fish and plant protein sources..... C-011
- 16.15-16.30 Genciana Terova, Simona Rimoldi, Karolina Kwasek, Marco Saroglia
Dietary methionine in salmonid fish feed alters the expression of genes involved in methionine metabolism C-012
- 16.30-16.45 Gianluca Sottile, Maria Teresa Sardina, Salvatore Mastrangelo, Marco Tolone, Marcello Chiodi, Baldassare Portolano
Identification of breed informative single nucleotide polymorphisms for assigning individual in Sicilian dairy sheep..... C-013
- 16.45-17.00 Maria Grazia Manca, Jessica Serdino, Paolo Urgeghe, Antonio Puledda, Ignazio Ibba, Marino Contu, Nicolò P.P. Macciotta
Multivariate factor analysis of milk composition, coagulation properties and individual cheese yield in Sarda sheep..... C-014

- 17.00-17.15 Marco Tolone, Salvatore Mastrangelo, Rosalia Di Gerlando, Giuseppina Monteleone, Anna Maria Sutura, Maria Teresa Sardina, Baldassare Portolano
Polymorphisms at β -defensin genes and mastitis in Valle del Belice dairy sheep: a case control study.....C-015
- 17.15-17.30 Alessio Valentini, Lorenzo Bomba, Paolo Ajmone Marsan, Aleksey Zimin, M. Elizabete J. Amaral, Giovanni Chillemi, John L. Williams
Strategies to improve full genome sequences for livestock species.....C-016
- 17.30-17.45 Licia Colli, Marco Milanese, Elia Vajana, Daniela Iamartino, Lorenzo Bomba, Ezequiel Luis Nicolazzi, Sahar Saad El-din Ahmed, Jesus Rommel V Herrera, Libertado Cruz, Shujun Zhang, Liguog Yang, Xingjie Hao, Fuyuan Zuo, Song-Jia Lai, Shuilian Wang, Ruyu Liu, Yundeng Gong, Mahdi Mokhber, Hossein Moradi Shahrababak, Yongjiang Mao, Feng Guan, Augustin Vlaic, Luigi Ramunno, Gianfranco Cosenza, Ali Ahmad, Ihsan Soysal, Emel Özkan Ünal, Mariena Ketudat Cairns, Jose Fernando Garcia, Yuri Tani Utsunomiya, Rangsun Parnpai, Marcela Gonçalves Drummond, Peter Galbusera, James Burton, Eileen Hoal, Yulnawati Yusnizar, Cece Sumantri, Bianca Muioli, Alessio Valentini, Alessandra Stella, John L. Williams, the International Buffalo Consortium, Paolo Ajmone Marsan
Patterns of diversity in swamp and river buffalo as revealed by SNP molecular markers.....C-017
- 17.45-18.00 Simona Rimoldi, Genciana Terova, Laura Benedito-Palos, Jaume Pérez-Sánchez
*Lipid metabolism related gene expression in European sea bass (*Dicentrarchus labrax*): effects of fasting and refeeding*.....C-018

Tuesday, June 9 - New technologies in animal science - Room 111

Chairpersons: Fabio Luzi - Alessandro Agazzi

- 15.30-16.00 Leonardo Nanni Costa
Innovative technologies for the future of animal production.....C-019
- 16.00-16.15 Giuseppe Pulina, Giuseppe Curreli, Anna Nudda, Gianni Battacone
A new strategy to increase sheep meat production in Sardinia.....C-020
- 16.15-16.30 Leonardo Nanni Costa, Agnese Arduini, Emilio Scotti, Davide Sacchi, Roberta Davoli, Vincenzo Russo
The effect of chemical dehairing of pig carcass on sanitation and meat quality.....C-021
- 16.30-16.45 Matteo Ottoboni, Valentina Caprarulo, Carlotta Giromini, Davide Gottardo, Federica Cheli, Vittorio Dell'Orto, Luciano Pinotti
Image analysis for characterization of fishmeal material in aquafeedC-022
- 16.45-17.00 Katarzyna Stadnicka, Anna Bajek, Tomasz Drewa, Marek Bednarczyk
In vitro characterization of proliferation, differentiation and pluripotency markers in hen oviduct epithelial cells which are potential model to study expression of exogenes delivered by nucleofection.....C-023
- 17.00-17.15 Edo D'Agaro, Tiziana Bongiorno, Emilio Tibaldi, Francesca Tulli, Maria Messina, Giovanna Lippe, Astrid Frabbro, Mara Stecchini
A human stunning and killing method applied to marine aquatic species.....C-024
- 17.15-17.30 Giorgia Stocco, Claudio Cipolat-Gotet, Alessandro Ferragina, Giovanni Bittante
Cheese chemical and physical properties predicted by Vis-NIR reflectance and NIR transmittance spectrometry.....C-025

Tuesday, June 9 - Animal products and human health/nutrition and meat quality - Medicina Room

Chairpersons: Vincenzo Chiofalo - Oreste Franci

- 15.30-15.45 Siria Tavaniello, Domenico Di Memmo, Anna Wilkanowska, Mario Gambacorta, Giuseppe Maiorano
Influence of multiple injections of vitamin E on carcass characteristics and meat quality of Laticauda lambsC-026
- 15.45-16.00 Sihem Dabbou, Francesco Gai, Luca Rotolo, Carola Lussiana, Attawit Kovitvadh, Vanda Maria Malfatto, Ahmed Nouredine Helal, Ivo Zoccarato, Laura Gasco
Organic Bilberry pomace in rabbit nutrition: effect on meat quality and fatty acid profileC-027
- 16.00-16.15 Erica Longato, Giorgia Meineri, Pier Giorgio Peiretti, Pier Paolo Mussa
*Effects of diets containing linseed oil and supplemented with grain amaranth (*Amaranthus caudatus*) on growth performances, oxidative status and serum biochemical parameters in broilers*.....C-028
- 16.15-16.30 Nadia Guzzo, Cristina Sartori, Lucia Bailoni, Roberto Mantovani
Carcass traits and meat quality in Italian Heavy Draught Horse foals fed two diets differing in protein levels and slaughtered at 13 or 18 months.....C-029

16.30-16.45	Marco Cullere, Giulia Tasoniero, Barbara Contiero, Antonella Dalle Zotte <i>Sensory acceptability of rabbit meat patties manufactured with increasing levels of rooibos (Aspalathus linearis) tea extract.....</i>	C-030
16.45-17.00	Patrizia Morera, Eleonora Bartolini, Loredana Basicò, Umberto Bernabucci, Bruno Ronchi <i>No detection of transgenic DNA (tDNA) in tissues from rabbits fed with genetically modified soy-bean meal.....</i>	C-031
17.00-17.15	Federica Maghin, Raffaella Rossi, Sabrina Ratti, Grazia Pastorelli, Simone Stella, Erica Tirloni, Carlo Corino <i>Antioxidant mixture supplementation in the medium-heavy pigs: effects on performances and shelf life of Longissimus dorsi muscle.</i>	C-032
17.15-17.30	Attilio Luigi Mordenti, Elena Bonfante, Massimo Dall'Olio, Mattia Fustini, Luca Sardi, Andrea Formigoni <i>Effects of breed and a different lipid supplement on beef quality in heifers: performances, meat quality and fatty acid composition of Longissimus dorsi muscle</i>	C-033
17.30-17.45	Petra Hovorkova,, Stepanka Kruntoradova, Eva Skrivanova <i>Caprylic acid and its effect on Campylobacter jejuni in broiler chickens</i>	C-034
17.45-18.00	Giuseppe Maiorano, Cinzia Abiuso, Katarzyna Stadnick, Siria Tavaniello, Joanna Bogucka, Marek Bednarczyk <i>Effect of in ovo prebiotic administration on growth, carcass characteristics and meat quality of broiler chickens</i>	C-035

Wednesday, June 10 - Livestock and environment/environment - Room 211

Chairpersons: Giulio Cozzi - Luciana Bava

11.00-11.15	Marco Berton, Giacomo Cesaro, Luigi Gallo, Giacomo Pirlo, Maurizio Ramanzin, Franco Tagliapietra, Enrico Sturaro <i>A survey on environmental footprint of intensive beef herds based on farm data: gate-to-gate LCA approach</i>	C-036
11.15-11.30	Mirko Cattani, Laura Maccarana, Franco Tagliapietra, Stefano Schiavon, Lucia Bailoni <i>Effects of five additives with antimicrobial properties on in vitro rumen fermentation and methane production of a commercial diet for dairy cows</i>	C-037
11.30-11.45	Sara Salvador, Anna Zuliani, Mirco Corazzin, Edi Piasentier, Alberto Romanzin, Stefano Bovolenta <i>Sustainability of conventional and organic dairy farms in mountain areas.....</i>	C-038
11.45-12.00	Anna Sandrucci, Maddalena Zucali, Alberto Tamburini, Luciana Bava <i>Green house gas emissions in the production of heavy pig.....</i>	C-039
12.00-12.15	Valentina Cesari, Maddalena Zucali, Luciana Bava, Ivan Toschi <i>Global warming potential of broiler chicken production system using a life cycle assessment</i>	C-040
12.15-12.30	Laura Maccarana, Mirko Cattani, Roberto Mantovani, Franco Tagliapietra, Stefano Schiavon, Lucia Bailoni <i>Assessment of factors influencing in vitro gas and methane production by meta-analysis.....</i>	C-041

Wednesday, June 10 - Genetics and genomics/cattle - Plenary Room

Chairpersons: Giovanni Bittante - Paolo Ajmone Marsan

11.00-11.30	Filippo Miglior, Jacques Chesnais <i>Genomics: an essential tool to improve limited and novel phenotypes in dairy cattle breeding.....</i>	C-042
11.30-11.45	Nicolò P.P. Macciotta, Paolo Ajmone Marsan, Marco Milanese, Daniele Vicario, Alessio Valentini, Silvia Sorbolini, Corrado Dimauro <i>A comprehensive strategy for detecting genomic regions associated with traits of economic interest using information generated in genomic selection programmes</i>	C-043
11.45-12.00	Stefano Capomaccio, Marco Milanese, Elia Vajana, Lorenzo Bomba, Elisa Eufemi, Licia Colli, Riccardo Negrini, Katia Capelli, Ezequiel L. Nicolazzi, Andrea Talenti, John L. Williams, Bruno Stefanon, Paolo Ajmone Marsan <i>Genome-wide gene-based analysis reveals new associations between SNP and production and morphological traits in Italian Holstein.....</i>	C-044
12.00-12.15	Christos Dadousis, Claudio Cipolat-Gotet, Stefano Biffani, Ezequiel L. Nicolazzi, Giovanni Bittante, Alessio Cecchinato <i>Genome-wide association study to identify chromosomal regions associated with coagulation properties, curd firmness and syneresis modeling, and acidity in milk from Italian Brown Swiss cows</i>	C-045

- 12.15-12.30 Marco Milanese, Stefano Capomaccio, Yuri Tani Utsunomiya, Lorenzo Bomba, Licia Colli, Elisa Eufemi, Jan Thijs Van Kaam, Katia Cappelli, Stefano Biffani, Ezequiel Luis Nicolazzi, Riccardo Negrini, José Fernando Garcia, Carl Rubin, Alessandro Nardone, Nicolò P. P. Macciotta, Alessio Valentini, John L. Williams, Paolo Ajmone Marsan
Combining exome sequencing and high density SNP analysis for the detection of common deleterious recessive mutations segregating in Italian Holstein bulls.....C-046
- 12.30-12.45 Andrea Talenti, Marco Milanese, Ezequiel Luis Nicolazzi, Letizia Nicoloso, Stefano Frattini, Beatrice Coizet, Giulio Pagnacco, John L. Williams, Paolo Ajmone Marsan, Paola Crepaldi
Birth date regression to identify genomic signatures of recent selection in Italian Holstein.....C-047
- 12.45-13.00 Antonio Puledda, Marco Milanese, Giustino Gaspa, Corrado Dimauro, Paolo Ajmone Marsan, Nicolò P. P. Macciotta
Study of genomic prediction accuracy using high density SNP panel in Italian Holstein cattle.....C-048

Wednesday, June 10 - Research and development in animal science/ processing and technology transfer part 1 - Room 111

Chairpersons: Biagina Chiofalo - Ambra Rita Di Rosa

- 11.00-11.30 Giovanni Bernardini, Rosalba Gornati, Genciana Terova, Marco Saroglia
Nanotechnology for animal production.....C-049
- 11.30-11.45 Angela Trocino, Alessandra Piccirillo, Marco Birolo, Eirini Filiou, Massimiliano Petracci, Gerolamo Xiccato
Factors affecting growth performance, carcass quality and the occurrence of white striping and wooden breasts in broilersC-050
- 11.45-12.00 Marco Birolo, Angela Trocino, Marco Tazzoli, Eirini Filiou, Gerolamo Xiccato
Feed restriction programs and slaughter age in growing rabbitsC-051
- 12.00-12.15 Maria Antonietta Colonna, Francesco Giannico, Pasqua Rotondi, Lumturi Papa, Marco Ragni, Prospero Cagnetta, Giuseppe Marsico, Anna Caputi Jambrenghi
Effect of feeds containing durum wheat milling products and age at slaughter on chemical composition and fatty acid profile of meat from Gentile di Puglia lambs.....C-052
- 12.15-12.30 Mirco Dalla Bona, Luca Carraro, Stefano Schiavon, Luigi Gallo
Growth and carcass traits of 145 kg body weight pigs fed according to different feeding regimes.....C-053
- 12.30-12.45 Gerolamo Xiccato, Elia Beltrami, Marco Birolo, Nicola Rigo, Angela Trocino
*Effect of gender and slaughter age on carcass and meat quality of brown hares (*L. europaeus*)*.....C-054
- 12.45-13.00 Alessandra Roncarati, Francesca Mariotti, Alberto Felici, Paolo Melotti
*Use of submerged cage and discards as feed for tub gurnard (*Chelidonichthys lucerna* L.) fattening in the mid Adriatic sea*.....C-055

Wednesday, June 10 - Animal products and human health/ milk and dairy products quality - Medicina Room

Chairpersons: Andrea Summer - Angela Gabriella D'Alessandro

- 11.00-11.30 Giovanni Niero, Antonio Masi, Martino Cassandro
Preliminary characterization of soluble thiols in bovine milk.....C-056
- 11.30-11.45 Manuela Renna, Simone Ravetto Enri, Massimiliano Probo, Carola Lussiana, Paolo Cornale, Alberto Bellio, Sara Astegiano, Lucia Decastelli, Luca Maria Battaglini, Giampiero Lombardi
Production regulations and characteristics of cow Piedmontese Noble Milk.....C-057
- 11.45-12.00 Adriana Bonanno, Antonino Di Grigoli, Nicola Francesca, Raimondo Gaglio, Francesca Mazza, Francesca Vitale, Marco Alabiso, Luca Settanni
The effects of the traditional producing system on physicochemical, microbial and sensory properties of Caciocavallo Palermitano cheeseC-058
- 12.00-12.15 Paolo Gottardo, Mauro Penasa, Massimo De Marchi
Fatty acid composition of milk from Holstein-Friesian, Brown Swiss, Simmental and Alpine Grey cattle breeds routinely predicted by mid-infrared spectroscopy.....C-059
- 12.15-12.30 Federica Di Frangia, Massimo Malacarne, Piero Franceschi, Paolo Formaggioni, Michele Faccia, Angela Costanzo, Enrico Santus, Attilio Rossoni, Andrea Summer
Influence of milk composition and κ -casein B content on mozzarella cheese yield and cheesemaking losses.....C-060

- 12.30-12.45 Massimo Malacarne, Federica Di Frangia, Angela Costanzo, Piero Franceschi, Paolo Formaggioni, Andrea Summer
Influence of milk somatic cell content on cheese yield and cheesemaking losses..... C-061

Wednesday, June 10 - Physiology and metabolism/microbiome and gastrointestinal tract processing and technology transfer part 1 - Room 113

Chairpersons: Achille Schiavone - Cesare Castellini

- 11.00-11.15 Paola Cremonesi, Giuseppe Conte, Emanuele Capra, Federica Turri, Marco Severgnini, Luca Rapetti, Stefania Colombini, Stefania Chessa, Marcello Mele, Bianca Castiglioni
Evaluation of the effects of different diets on bacterial diversity and on fatty acid composition in goat rumen..... C-062
- 11.15-11.30 Arianna Buccioni, Carlo Viti, Mariano Pauselli, Roberta Pastorelli, Sara Minieri, Grazia Pallara, Valentina Roscini, Luciana Giovannetti, Marcello Mele
Response of rumen microbial ecosystem to diets integrated with chestnut or quebracho tannins in dairy ewes C-063
- 11.30-11.45 Sara Minieri, Carlo Viti, Stefania Colombini, Arianna Buccioni, Giuseppe Conte, Luca Rapetti, Luca Malagutti, Stefano Rapaccini, Marcello Mele
Effect of dietary starch concentration and fish oil supplementation on fatty acid profile and microbial composition of rumen fluid in lactating dairy cows..... C-064
- 11.45-12.00 Maria Pia Franciosini, Patrizia Casagrande-Proietti, Claudio Forte, Daniela Beghelli, Gabriele Acuti, David Ranucci, Alessandro Dal Bosco, Cesare Castellini, Massimo Trabalza-Marinucci
Effects of using an oregano aqueous extract on performance, gut microbiota and immune function in broiler chickens..... C-065
- 12.00-12.15 Paolo Bosi, Davide Priori, Michela Colombo, Alfons J.M. Jansman, Sietse Jan Koopmans, Paolo Trevisi
The interaction of early intestinal microbial colonisation with the effects of luminal perfusion with enterotoxigenic E. coli, F4ac fimbria or Lactobacillus amylovorus on the jejunal transcriptome in piglets..... C-066
- 12.15-12.30 Maria Grazia Cappai, Franziska Koop, Laura Pistis, Saara J. Sander, Corrado Dimauro, Walter Pinna, Josef Kamphues
Evaluation of Peyer's patch morphological traits as local immune response in relation to different physical forms of one complete diet fed to growing pigs C-067
- 12.30-12.45 Riccardo Fortina, Isabel Macchiorlatti Vignat, Frine Eleonora Scaglione, Paola Pregel, Enrico Bollo, Manuela Renna
Performance and rumen papillae development of Friesian calves fed with pelleted starter or total mixed ration..... C-068

Wednesday, June 10 - Genetics and genomics/swine - Plenary Room

Chairpersons: Paolo Carnier - Bianca Castiglioni

- 14.00-14.15 Giuseppina Schiavo, Giuliano Galimberti, Daniela Giovanna Calò, Emilio Scotti, Francesca Bertolini, Antonia Bianca Samorè, Vincenzo Russo, Maurizio Gallo, Luca Buttazzoni, Luca Fontanesi
Genome wide analysis of the effects of twenty years of artificial directional selection in the Italian Large White pig breed..... C-069
- 14.15-14.30 Anisa Ribani, Francesca Bertolini, Giuseppina Schiavo, Emilio Scotti, Valerio Joe Utzeri, Stefania Dall'Olio, Paolo Trevisi, Paolo Bosi, Luca Fontanesi
Next generation semiconductor based sequencing of bitter taste receptor genes in different pig breeds and populations and association study of identified polymorphisms using a DNA pooling strategy..... C-070
- 14.30-14.45 Roberta Rostellato, Valentina Bonfatti, Paolo Carnier
Quantification of boar taint compounds in adipose tissue of intact male pigs at 160 and 220 days of age and estimates of genetic parameters C-071
- 14.45-15.00 Roberta Davoli, Gennaro Catillo, Marcello Mele, Andrea Serra, Luca Buttazzoni, Roberto Steri, David Meo Zilio, Paolo Zambonelli, Vincenzo Russo
Study on genetic parameters of subcutaneous fatty acid composition in Italian Large White pig breed C-072
- 15.00-15.15 Martina Zappaterra, Paolo Zambonelli, Roberta Davoli
Perilipins and the complex gene network of lipid metabolism enzymes in muscle are related to porcine intramuscular fat deposition..... C-073

Wednesday, June 10 - Research and development in animal science/ processing and technology transfer part 2 - Room 111

Chairpersons: Andrea Formigoni - Mattia Fustini

- 14.00-14.15 Agnese Arduini, Vincenzo Pace, Veronica Redaelli, Fabio Luzi, Leonardo Nanni Costa
Survey on pre-slaughter handling and skin damages on pig carcasses C-074
- 14.15-14.30 Marisa Palmeri, Cinzia Cardamone, Massimo Todaro, Luca Settanni, Raimondo Gaglio, Isabella Mancuso, Maria Luisa Scatassa, Onofrio Corona
An investigation of the shelf-life of pdo Vastedda della Valle del Belice cheese subjected to different packaging systems alternative to vacuum..... C-075
- 14.30-14.45 Andrea Cabiddu, Mauro Decandia, Giovanni Molle, Michael Lee
Plant secondary metabolites and traceability of dairy products: a key role for livestock production and efficiency in ruminant dairy products C-076
- 14.45-15.00 Carlotta Giromini, Raffaella Rebutti, Francesca Saccone, Eleonora Fusi, Antonella Baldi
Cytotoxicity, DNA integrity and methylation in mammary and kidney epithelial cell lines exposed to Ochratoxin A..... C-077
- 15.00-15.15 Stefano Biffani, Cesare Lubiano, Davide Pravettoni, Antonio Boccardo
Predicting survivors of neonatal calf diarrhea using logistic regression or gradient boosting..... C-078
- 15.15-15.30 Eugenio Demartini, Alberto Pirani, Mattia Bertocchi, Maria Elena Marescotti, Anna Gaviglio
The hidden costs of animal health in dairy cattle breeding: evidences from a case study..... C-079

Wednesday, June 10 - Physiology and metabolism/ feed nutritional quality evaluation - Room 113

Chairpersons: Lucia Bailoni - Umberto Bernabucci

- 14.00-14.15 Nadia Musco, Federico Infascelli, Raffaella Tudisco, Laura Addi, Raffaella Grazioli, Pietro Lombardi, Giuseppe Vassalotti, Serena Calabrò, Monica Isabella Cutrignelli
Nutritional and functional evaluation of cereals and legumes seeds C-080
- 14.15-14.30 Achille Schiavone, Michele De Marco, Silvia Martínez, Fuensanta Hernandez, Francesco Gai, Luca Rotolo, Sihem Dabbou, Attawit Kovitvadhi, Laura Gasco
*Nutritional value of two different insects meal (*Tenebrio Molitor* and *Hermetia Illucens*) for broiler chickens: apparent ileal amino acid digestibility and apparent metabolizable energy* C-081
- 14.30-14.45 Mattia Fustini, Alberto Palmonari, Giorgia Canestrari, Nicola Negri, Andrea Formigoni
Effect of alfalfa hay digestibility and inclusion rate in lactating dairy cows diets on feed intake, digestibility, ruminal pH and productive performance..... C-082
- 14.45-15.00 Francesca Martuzzi, Federico Righi, Yarin Mazzoni, Afro Quarantelli
Relationship between horse faecal particle size and forage type/dry matter digestibility..... C-083
- 15.00-15.15 Serena Calabrò, Raffaella Tudisco, Valeria Terzi, Monica I. Cutrignelli, Laura Addi, Nadia Musco, Caterina Morcia, Federico Infascelli
*In vitro rumen fermentation of barley grain contaminated with *Fusarium mycotoxins** C-084
- 15.15-15.30 Alberto Palmonari, Mattia Fustini, Giorgia Canestrari, Antonio Gallo, Alessandro Lotto, Andrea Formigoni
Evaluation of inoculants addition on corn silage nutritional value C-085

Thursday, June 11 - Livestock and environment/feed and food - Room 211

Chairpersons: Stefano Schiavon - G. Matteo Crovetto

- 9.00-9.15 Aldo Prandini, Samantha Sigolo, Mauro Morlacchini, Gianluca Giuberti, Maurizio Moschini
Pasta by-product as alternative source of starch in diets for finishing pigs C-086
- 9.15-9.30 Luca Malagutti, Gianluca Galassi, Luca Rapetti, Stefania Colombini, Mauro Spanghero, Diego Capraro, G. Matteo Crovetto
Digestibility and energy balance of heavy pig fed high cut corn silage..... C-087
- 9.30-9.45 Luigi Gallo, Luca Carraro, Mirco Dalla Bona, Alessio Cecchinato, Stefano Schiavon

	<i>Effect of genetic group and dietary crude protein content on technological properties of thighs intended for dry-cured ham production</i>	C-088
9.45-10.00	Giuseppe Conte, Alice Cappucci, Andrea Serra, Eleonora Bulleri, Federica Mannelli, Marcello Mele <i>Multivariate analysis of milk fatty acid composition is able to discriminate dairy farm according to feeding regimen and predicted methane emission</i>	C-089
10.00-10.15	Gabriella Cobellis, Claudio Forte, Gabriele Acuti, Zhongtang Yu, Massimo Tralbalza-Marinucci <i>Effects of rosemary extracts on sheep rumen microbiome</i>	C-090

Thursday, June 11 - Genetics and genomics/goat - Plenary Room

Chairpersons: Fabio Pilla - Paola Crepaldi

9.00-9.30	Alessandra Stella, Ezequiel Luis Nicolazzi, the Adapt Map Group <i>Integration of data to study goat diversity and adaptation: the AdaptMap project</i>	C-091
9.30-9.45	Andrea Talenti, Ezequiel Luis Nicolazzi, Letizia Nicoloso, Stefano Frattini, Beatrice Coizet, Stefania Chessa, Giulio Pagnacco, Fabio Pilla, Paolo Ajmone Marsan, Paola Crepaldi, the Italian Goat Consortium <i>Parentage assessment with 200 single nucleotide polymorphisms on 15 Italian goat breeds</i>	C-092
9.45-10.00	Stefano Frattini, Emanuele Capra, Barbara Lazzari, Beatrice Coizet, Debora Groppetti, Pietro Riccaboni, Alessandro Pecile, Silvana Arrighi, Stefania Chessa, Bianca Castiglioni, Alessia Giordano, Davide Pravettoni, Andrea Talenti, Letizia Nicoloso, John L. Williams, Paola Crepaldi, Alessandra Stella, Giulio Pagnacco <i>The analysis of the methylome of Capra hircus</i>	C-093
10.00-10.15	Emanuele Capra, Stefano Frattini, Barbara Lazzari, Beatrice Coizet, Debora Groppetti, Pietro Riccaboni, Alessandro Pecile, Silvana Arrighi, Stefania Chessa, Bianca Castiglioni, Alessia Giordano, Davide Pravettoni, Andrea Talenti, Letizia Nicoloso, Paola Crepaldi, John L. Williams, Giulio Pagnacco, Alessandra Stella <i>MicroRNAs expression in hypothalamus and pituitary of Saanen goat</i>	C-094
10.15-10.30	Gustavo Gandini, Federica Turri, Rita Rizzi, Flavia Pizzi <i>Economic evaluation of genetic improvement with inbreeding control in the Verzaschese goat</i>	C-095

Thursday, June 11 - Research and development in animal science/feed additives - Room 111

Chairpersons: Giovanni Savoini - Eugenio Demartini

9.00-9.30	Adam Smith, Fabrizio Pepe <i>Use of protease enzymes in poultry feed offers promising economic and environmental benefits</i>	C-096
9.30-9.45	Xian-Ren Jiang, Alessandro Agazzi, Federica Cheli, Ajay Awati, Maurizio Crestani, Francesca Vitari, Helena Bento, Giovanni Loris Alborali, Cinzia Domeneghini, Valentino Bontempo <i>Effects of a blend of essential oils and an enzyme combination on growth performance, microbial counts, and ileum morphology in Escherichia coli K88 challenged piglets</i>	C-097
9.45-10.00	Xian-Ren Jiang, Marcello Comi, Federica Cheli, Carlotta Giromini, Davide Gottardo, Raffaella Rebutti, Valentino Bontempo <i>Effects of a novel emulsifier supplementation on growth performance and carcass yield of female and male broiler chicks</i>	C-098
10.00-10.15	Giuseppina Avantaggiato, Donato Greco, Fiorenza Minervini, Antonella Garbetta, Francesco Grieco, Angelo Visconti <i>In vitro studies to assess the efficacy and potential toxicity of multi-mycotoxins adsorbing agents used as feed additives</i>	C-099
10.15-10.30	Pier Paolo Danieli, Umberto Bernabucci, Bruno Ronchi <i>Organic laminaria and selenized yeast as dietary integrators of iodine and selenium in organic dairy goat farming</i>	C-100
10.30-10.45	Federico Righi, Marco Renzi, Afro Quarantelli <i>Effect of dried extracts of Aspergillus oryzae and their association with Saccharomyces cerevisiae on mid lactation dairy cattle productivity under moderate heat stress conditions</i>	C-101

Thursday, June 11 - Animal products and human health/ animal products characterization - Medicina Room

Chairpersons: Agostino Sevi - Adele Meluzzi

- 9.00-9.30 Antonella della Malva, Marzia Albenzio, Mariangela Caroprese, Antonella Santillo, Agostino Sevi, Rosaria Marino
Factors contributing to meat tenderness: interaction between myofibril structure and proteolytic changes in beefC-102
- 9.30-9.45 Federico Sirri, Massimiliano Petracci, Claudio Cavani, Adele Meluzzi
Quality characterization of products from Romagna chicken breed: 2. EggsC-103
- 9.45-10.00 Massimiliano Petracci, Francesca Soglia, Federico Sirri, Paolo Zambonelli, Roberta Davoli, Claudio Cavani
Broiler Pectoralis major muscle affected by emerging abnormalities: composition and technological traits.....C-104
- 10.00-10.15 Paolo Polidori, Ambra Ariani, Silvia Vincenzetti
Meat and carcass quality in Martina Franca donkey foalsC-105
- 10.15-10.30 Mauro Vasconi, Laura Borella, Fabio Caprino, Federica Bellagamba, Vittorio Maria Moretti
*Chemical characterization of European eels (*Anguilla anguilla*) of different origins collected from Italian market*.....C-106

Thursday, June 11 - Livestock and environment/miscellany - Room 211

Chairpersons: Marco Saroglia - Luca Maria Battaglini

- 11.15-11.30 Cristina Rossi, Loredana Basiricò, Pier Paolo Danieli, Bruno Ronchi
The β -hexachlorocyclohexane (β -HCH) affects the oxidative status of bovine peripheral blood mononuclear cells in vitroC-107
- 11.30-11.45 Luciana Bava, Anna Sandrucci, Stefania Colombini, Milena Brasca, Tiziana Silvetti, Alberto Tamburini, Maddalena Zucali, G. Matteo Crovetto
Milking procedure can affect anaerobic spore-forming bacteria in milkC-108
- 11.45-12.00 Maddalena Zucali, Luciana Bava, Alberto Tamburini, Anna Sandrucci, Silvana Mattiello, Giovanna Battelli, Milena Brasca
Global milk quality: evaluating tool for dairy farmC-109
- 12.00-12.15 Giulio Cozzi, Anna Benedet, Paola Prevedello, Dario Tonietto, Ilario Bazzoli, Claudio Valorz, Gianbattista Rigoni Stern
Animal husbandry as a tool for post-war recovery and reconciliation. An update from The Transhumance of the Peace project.....C-110
- 12.15-12.30 Alberto Tamburini, Anna Sandrucci, Maddalena Zucali, Luciana Bava, Gabriele Mattachini, Giorgio Provolo
Integrated approach to evaluate primiparous dairy cows performance.....C-111
- 12.30-12.45 Luca Parma, Daniela Bertotto, Erika Bonvini, Elena Negrato, Marco Chiumento, Pier Paolo Gatta, Alessio Bonaldo
*Light conditions affect development and cortisol response in common sole (*Solea solea L.*) eggs and larvae: preliminary findings*.....C-112
- 12.45-13.00 Gloriana Cardinaletti, Tiziana Bongiorno, Matteo Gava, Maria Messina, Massimiliano Bruno, Francesca Tulli, Emilio Tibaldi
*Compensatory growth following long term multi-phase cyclic feeding in rainbow trout (*Oncorhynchus mykiss*)*C-113

Thursday, June 11 - Genetics and genomics/cattle - Plenary Room

Chairpersons: Roberta Ciampolini - Baldassare Portolano

- Not published.....C-114
- 11.15-11.30 Cristina Sartori, Nadia Guzzo, Serena Mazza, Roberto Mantovani
Genetic correlations among selected traits and inbreeding depression in dual purpose Rendena breedC-115
- 11.30-11.45 Roberta Ciampolini, Sara Casu, Salvatore Mastrangelo, Laurence Flori, Katayoun Moazami-Goudarzi, Tiziana Sechi, Francesca Cecchi, François Casabianca, Anne Lauvie, Mathieu Gautier, Antonello Carta, Baldassare Portolano, Denis Laloë
Genetic diversity of Mediterranean cattle breeds related to geography and climateC-116
- 11.45-12.00 Salvatore Mastrangelo, Marco Tolone, Maria Teresa Sardina, Rosalia Di Gerlando, Luca Fontanesi, Baldassare Portolano
Genomic inbreeding estimation in small populations: evaluation of runs of homozygosity in local cattle breeds.....C-117
- 12.00-12.15 Simone Ceccobelli, Piera Di Lorenzo, Hovirag Lancioni, Irene Cardinali, Licia Colli, Marco Rosario Capodiferro, Luca Ferretti, Paolo Ajmone Marsan, Francesco Panella, Emiliano Lasagna, Alessandro Achilli
The distinctive mitochondrial DNA signature of Podolic cattle in Italy.....C-118

- 12.15-12.30 Lorenzo Bomba, Hans D. Daetwyler, Iona M. MacLeod, Sunduimijid Bolormaa, Amanda J. Chamberlain, Licia Colli, Marco Milanese, Elia Vajana, Ben J Hayes, Paolo Ajmone Marsan, The NEXTGEN Consortium
Investigation of Bos indicus and Bos taurus admixture in Sanga cattle from Uganda by whole genome sequence analysis. C-119
- 12.30-12.45 Marisilvia D'Andrea, Denis Guiatti, Andrea Serra, Marco Milanese, Sandy Sgorlon C-120
Fatty acids milk composition in Italian Simmental and Italian Holstein cows

Thursday, June 11 - Animal products and human health/ nutrition and milk quality - Medicina Room

Chairpersons: Oliviero Olivieri - Federico Infascelli

- 11.15-11.30 Raquel Martínez-Loperena, Francisco J. Solorio-Sánchez, Armin Ayala-Burgos, Octavio A. Castelán-Ortega
Effect of an intensive silvopastoral feeding system based on Leucaena leucocephala on the physico-chemical and sensory characteristics of the artisan cheese from Michoacán, Mexico C-121
- 11.30-11.45 Ludovica Mammi, Mattia Fustini, Luigi Grazia, Andrea Formigoni
Influence of monensin continuous-release intraruminal device on milk and whey starter quality used for Parmigiano Reggiano cheese production..... C-122
- 11.45-12.00 Anna Nudda, Fabio Correddu, Alessandra Marzano, Gianni Battacone, Giuseppe Pulina
The inclusion of a by-product from myrtus communis in the diet of lactating ewes: effects on milk production traits..... C-123
- 12.00-12.15 Maria Giovanna Ciliberti, Marzia Albenzio, Rosaria Marino, Antonella Santillo, Agostino Sevi, Mariangela Caroprese
Effect of PUFA supplementation on milk production and fatty acid profile in sheep under hot season..... C-124
- 12.15-12.30 Massimo Todaro, Marco Alabiso, Antonio Console, Antonino Di Grigoli, Francesca Mazza, Giuseppe Maniaci, Adriana Bonanno
Effect of the inclusion of lemon citrus pulp in the diet of Valle del Belice lactating ewes. Milk production and composition..... C-125
- 12.30-12.45 Alice Cappucci, Valentina Roscini, Giuseppe Conte, Arianna Buccioni, Eleonora Bulleri, Andrea Serra, Stefania Urbani, Maurizio Servili, Mariano Pauselli, Marcello Mele
Effect of olive pomace and extruded linseed on milk yield and fatty acid composition from dairy ewes..... C-126

Thursday, June 11 - Physiology and metabolism/ nutrition and physiology part 1 - Room 113

Chairpersons: Monica Cutrignelli - Luciano Pinotti

- 11.15-11.30 Maria Messina, Massimiliano Bruno, Gloriana Cardinaletti, Bianca Maria Poli, Graziella Chini Zittelli, Francesca Tulli, Emilio Tibaldi
Growth response, plasma metabolites and intestinal brush border enzyme activity of sea bass fed diets including a blend of two marine microalgae..... C-127
- 11.30-11.45 Jessica Michela Caputo, Guido Invernizzi, Anna Campagnoli, Greta Farina, Mariella Ferroni, Alessandro Agazzi, Juan J. Loor, Giovanni Savoini
Dietary fish oil and stearate action on adipose lipid metabolism transcriptomics in periparturient dairy goats..... C-128
- 11.45-12.00 Daniele Dipasquale, Loredana Basiricò, Patrizia Morera, Andrea Serra, Marcello Mele, Arnulf Troescher, Umberto Bernabucci
Effects of conjugated linoleic acids isomers on oxidative mammary gland metabolism..... C-129
- 12.00-12.15 Erminio Trevisi, Fiorenzo Piccioli Cappelli, Matteo Mezzetti, Giorgia Lovotti, Paolo Bani
Effect of the ruminal slow-release of monensin during the transition period of dairy cows on health status, energy metabolism and inflammatory conditions..... C-130
- 12.15-12.30 Giacomo Cesaro, Erika Pellattiero, Franco Tagliapietra, Stefano Schiavon, Giovanni Bittante
Alteration of bovine milk fatty acid profile caused by the dietary crude protein content supplemented or not with rumen protected conjugated linoleic acids..... C-131
- 12.30-12.45 Fiorenzo Piccioli-Cappelli, Andrea Minuti, Luigi Calamari, Erminio Trevisi
Intrajugular infusion of long chain omega-3 fatty acids at calving: effect on metabolic profile, feed intake and milk yield..... C-132

Thursday, June 11 - Genetics and genomics/cattle - Plenary Room

Chairpersons: Anna Maria Caroli - Luigi Ramunno

- 14.00-14.15 Alessandro Bagnato, Johanna Vilkki, Terhi Iso-Touru, Erika Frigo, Maria Cristina Cozzi, Maria Giuseppina Strillacci, Fausta Schiavini, Raphaelle Teresa Matilde Maria Prinsen, Mario Vevey, Attilio Rossoni, Luca Fontanesi, Marlies Dolezal
Copy number variation in cattle breeds C-133
- 14.15-14.30 Raffaella Finocchiaro, Jan-Thijs van Kaam, Maurizio Marusi
Haplotype detection for monogenic factors in the Italian Holstein cattle breed C-134
- 14.30-14.45 Stefano Biffani, Stefania Chessa, Alessandra Stella, Filippo Biscarini
A statistical learning approach to detect carriers of the HHI haplotype in Italian Holstein Friesian cattle C-135
- 14.45-15.00 Giulietta Minozzi, Marcello Del Corvo, Isabella Della Noce, Mario Luini, Alessandra Stella, Giulio Pagnacco, John Luis Williams
Fine mapping of loci on BTA8 associated to antibody response to Mycobacterium avium paratuberculosis in cattle C-136
- 15.00-15.15 Mauro Penasa, Denis Pretto, Alice Varotto, Massimo De Marchi
Heritability of milk β -hydroxybutyrate and its genetic association with milk yield and fat-to-protein ratio in Italian Holstein cows C-137
- 15.15-15.30 Alessio Cecchinato, Claudio Cipolat-Gotet, Giorgai Stocco, Christos Dadousis, Giovanni Bittante
Genetic and phenotypic relationships of milk coagulation properties and curd firmness modeling with the cheese yield and curd nutrients recovery in bovine milk C-138
- 15.30-15.45 Valentina Bonfatti, Roberta Rostellato, Daniele Vicario, Paolo Carnier
Effects of variation in milk coagulation properties on cheese yield, curd composition and recovery rates of the main milk constituents measured by micro-cheese making C-139

Thursday, June 11 - Research and development in animal science/feed materials - Room 111

Chairpersons: Valentino Bontempo - Luciana Rossi

- 14.00-14.30 Carlos Dapoza, Luca Iacoianni
Amino acids as advanced technology to improve sustainable livestock production C-140
- 14.30-14.45 Elena Bonfante, Mattia Fustini, Nicola Negri, Alberto Palmonari, Giorgia Canestrari, Andrea Formigoni
Complete diet in pellet for ruminants nutrition C-141
- 14.45-15.00 Luciano Pinotti, Valentina Caprarulo, Matteo Ottoboni, Alessandro Agazzi, Luciana Rossi, Radmilo Čolović, Olivera Đuragić, Đuro Vukmirovi, Jovanka Lević
Feedneeds: new prospective for R&D in the Italian and Serbian feed sectors C-142
- 15.00-15.15 Matteo Ottoboni, Thomas Spranghers, Patrick De Clercq, Stefaan De Smet, Wesley De Jaeghere, Mia Eeckhout
The inclusion of black soldier fly material in an experimental extruded feed: extrusion optimization and its impact on digestibility C-143
- 15.15-15.30 Luciana Rossi, Elisabetta Onelli, Alessandra Moscatelli, Angela Lombardi, Antonella Baldi
Morphological evaluation of Nicotiana tabacum plants transformed for the expression of verocytotoxic Escherichia coli antigens C-144
- 15.30-15.45 Alessandra Moscatelli, Elisabetta Onelli, Mauro Zaninelli, Francesca Saccone, Luciana Rossi
Proteomic characterisation of Nicotiana tabacum seeds expressing verocytotoxic Escherichia coli antigens C-145
- 15.45-16.00 Riccardo Primi, Pier Paolo Danieli, Francesco Rossini, Roberto Ruggeri, Mercedes Muzquiz, Mercedes Martin Pedrosa, Catia Stamigna, Domenico Chiaretti, Emiliano Chiaretti, Giulia Falcone, Giovanni Giuliano, Bruno Ronchi
Chemical, amino-acidic and anti-nutritional composition of new sweet genotypes of narrow-leaf (Lupinus angustifolius L.) and white lupines (Lupinus albus L.) seeds C-146

**Thursday, June 11 - Physiology and metabolism/
nutrition and physiology part 2 - Room 113**

Chairpersons: Adriana Bonanno - Marcello Mele

- 14.00-14.15** Andrea Serra, Eleonora Bulleri, Laura Casarosa, Alice Cappucci, Federica Mannelli, Marcello Mele
Effect of different doses of cracked whole soybean on milk fatty acid composition in buffalo..... C-147
- 14.15-14.30** Adriano Pilotto, Guido Invernizzi, Antonella Baldi, Giovanni Savoini
Plasma α -tocopherol content and its relationship with milk somatic cells count in Italian commercial herds..... C-148
- 14.30-14.45** Achille Schiavone, Michele De Marco, Martina Tarantola, Francesco Gai, Luisa Pozzo, Laura Cavallarin, Stefania Bergagna, Daniela Dezzutto, Maria Silvia Gennero, Luca Rotolo, Manuela Renna, Sihem Dabbou, Alberto Brugiapaglia, Laura Gasco
Mealworm inclusion in Label chicken diet does not affect both performance and welfare parameters..... C-149
- 14.45-15.00** Francesca Petrera, Alessandra Gubbiotti, Fabio Abeni
Haematological, biochemical and serum protein profiles during lactation in Modenese and Italian Friesian cattle breeds C-150
- 15.00-15.15** Cesare Castellini, Alessandro Dal Bosco, Genciana Terova, Emiliano Lasagna, Lara Macchioni, Simona Mattioli
Evaluation of the gene expression and 6-desaturase activity in different chicken strains..... C-151

ASPA 21st Congress

Milano, June 9-12, 2013

Italian Journal of Animal Science

2015; volume 14: supplement 1

Agenda for poster presentations

Animal products for human health

Marek Bednarczyk, Katarzyna Stadnicka, Giuseppe Maiorano, Aleksandra Dunislawska, Rossella Mucci <i>In field study to optimise doses of new synbiotic formulations for in ovo application</i>	P-001
Laura Borella, Mauro Vasconi, Fabio Caprino, Federica Bellagamba, Mario Pazzaglia, Vittorio Maria Moretti <i>Chemical composition of caviar from farmed sturgeon: comparison between four different species</i>	P-002
Monica Borgogno, Mirco Corazzin, Elena Saccà, Saida Favotto, Sara Salvador, Stefano Bovolenta, Edi Piasentier <i>Prediction of eating quality of Italian simmental beef from butcher's steak appearance judgment</i>	P-003
Ada Braghieri, Nicoletta Piazzolla, Amelia Maria Riviezi, Salvatore Claps, Attilio Matera, Giuseppe Morone, Fabio Napolitano <i>Sensory properties of mozzarella cheese as affected by starter cultures and preservation liquid</i>	P-004
Luigi Calamari, Laura Gobbi, Paolo Grossi, Paolo Bani <i>Relationships between milk acidification rate with protein metabolism and diet characteristics in dairy cows</i>	P-005
Biagina Chiofalo, Serena Calabrò, Micaela Grossi, Raffaella Tudisco, Vittorio Lo Presti, Monica I. Cutrignelli, Federico Infascelli <i>Free amino acids in meat of buffalo young bulls fed faba bean as protein source</i>	P-006
Francesca Ciucci, Cairtriona Long-Smith, Ruairi Roberston, Catherine Stanton, Kieran Kilcawley, Andrea Serra, Giuseppe Conte, Marcello Mele <i>Microencapsulated fish oil to enrich yoghurt with omega-3 fatty acids: evaluation of fatty acid composition and volatile compounds</i>	P-007
Salvatore Claps, Lucia Sepe, Anna Rocchina Caputo, Maria Antonietta Di Napoli, Daniela Giorgio, Giuseppe Morone, Giovanni Annicchiarico, Adriana Di Trana <i>Comparison of Canestrato Pugliese cheese quality between native and non-native sheep breeds</i>	P-008
Davide De Marzo, Anna Maria Facciolongo, Francesco Totoda, Francesco Nicastro <i>Lipid sources influence on healthful indexes of lamb meat</i>	P-009
Ambra Rita Di Rosa, Giuseppe Magazzù, Vittorio Lo Presti, Nirey Velez-Cervera, Alessandro Zumbo <i>Chemical and technological traits of Nero Siciliano dry-cured ham</i>	P-010
Ambra Rita Di Rosa, Luigi Liotta, Alessandro Margiotta, Salvatore Vasi, Enrico D'Alessandro, Vincenzo Chiofalo, Alessandro Zumbo <i>Utilization of lemon molasses and dry orange pulp in dairy ewes feeding during the first stage of lactation: effect on milk quality</i>	P-011
Sebastiana Failla, Giulia Francesca Cifuni, Michela Contò, Paolo Viola, Andrea Amici <i>Effect of cooking on fatty acid composition, lipid oxidation and cholesterol content of hunted wild boar (Sus scrofa) meat</i>	P-012
Guido Ferruzzi, Danilo Mani, Piera Poli, Marco Guastella, Alessandro Pistoia <i>Effect of different breed on Ragusano cheese quality</i>	P-013
Luigi Liotta, Flavia Trentacoste, Giuseppe Magazzù, Giuseppe D'Angelo, Vincenzo Chiofalo <i>Technological and quality characteristics of Bresaola from Cinisara cattle breed</i>	P-014
Luigi Liotta, Ambra Rita Di Rosa, Adriano Covato, Riccardo Fiumanò, Massimiliano Pagliaro, Alessandro Zumbo <i>Productive performance and egg quality of an endangered Siciliana poultry breed</i>	P-015
Fabio Napolitano, Nicoletta Piazzolla, Amelia Maria Riviezi, Corrado Pacelli, Angela Carlucci, Gabriella Caporale, Andrea Bragaglio, Ada Braghieri <i>Determinants of consumer choice for mozzarella cheese</i>	P-016
Massimiliano Petracchi, Francesca Soglia, Luca Canonico, Federico Sirri, Adele Meluzzi, Claudio Cavani <i>Quality characterization of products from Romagnola chicken breed: 1. Carcass and meat</i>	P-017

Salvatore Pier Giacomo Rassu, Giovanni Antonio Pilo, Agnese Eugenia Cannas, Antonio Mazza, Gianni Battacone, Giuseppe Pulina, Anna Nudda <i>Investigation on milk yield and composition of Sarda donkeys</i>	P-018
Raffaella Rossi, Claudia M. Balzaretto, Sabrina Ratti, Vincenzo Russo, Carlo Corino <i>Functional food in mass catering: methodological approach</i>	P-019
Mohamed Sadoud, Fouèd Chehat, Hadjer Sadoud <i>Algerian dairy policy: causes weakness of milk production</i>	P-020
Antonella Santillo, Mariangela Caroprese, Rosaria Marino, Giovanni Annicchiarico, Agostino Sevi, Marzia Albenzio <i>Linseed supplementation in Pezzata Rossa Italiana lactating cows: effect on milk and Cacioricotta cheese quality</i>	P-021
Achille Schiavone, Michele De Marco, Alessandra Dalmasso, Maria Teresa Bottero, Daniele Pattono, Paola Sacchi, Roberto Rasero, Stefano Sartore, Dominga Soglia, Sandra Maione, Mario Giacobini, Luigi Bertolotti, Martina Tarantola, Ivo Zoccarato, Laura Gasco, Alberto Brugiapaglia <i>Preliminary study on the carcass and meat characteristics of two free-range reared Italian local hen breed: Bianca di Saluzzo and Bionda Piemontese</i>	P-022
Lucia Sepe, Maria Antonietta Di Napoli, Anna Rocchina Caputo, Giuseppe Morone, Domenico Rufrano, Francesco Paladino, Emilio Sabia, Salvatore Claps <i>Nutritional quality and aromatic profile of Caciotta cheese in cows fed with <i>Linum usitatissimum</i> L.</i>	P-023
Francesco Sirtori, Corrado Dimauro, Massimo Cellesi, Luca Calamai, Carolina Pugliese <i>Use of multivariate procedures for classification of "Toscano" dry-cured ham according to the volatile composition</i>	P-024
Francesco Sirtori, Antonio Pezzati, Doria Benvenuti, Oreste Franci, Carolina Pugliese <i>Effects of slaughter weight on meat quality in two pig genotypes</i>	P-025
Roberto Tocci, Matteo Camprostrini, Eleonora Pippi, Roberto Fratini, Andrea Martini <i>Adult ovine meat marketing in Tuscany</i>	P-026
Giovanni Tulipano, Lara Faggi, Andrea Cacciamali, Anna Maria Caroli <i>Whey proteins as functional food affecting metabolic health</i>	P-027
Mauro Vasconi, Fabio Caprino, Federica Bellagamba, Laura Borella, Vittorio Maria Moretti <i>Evolution of fatty acid profile of gilthead sea breams during the decade 2005-2014</i>	P-028
Natany Zeithammer; Eduardo Alexandre de Oliveira <i>Microbiological quality of milk obtained by machine and manual milking</i>	P-029

Genetics and genomics

Francesca Bertolini, Claudia Geraci, Vincenzo Chiofalo, Luca Fontanesi <i>High throughput SNP discovery in cultivated European sea bass (<i>Dicentrarchus labrax</i>) and comparison of genetic stocks of two hatcheries</i>	P-030
Francesca Bertolini, Cettina Scimone, Claudia Geraci, Giuseppina Schiavo, Vincenzo Chiofalo, Luca Fontanesi <i>Next generation semiconductor based sequencing of the donkey (<i>Equus asinus</i>) genome</i>	P-031
Silvia Bongiorno, Cesare E.M. Gruber, Giovanni Chillemi, Fabrizio Ferrè, Bianca Moioli, Sebastiana Failla, Alessio Valentini <i>Transcriptome-Wide comparison of sequence variation in skeletal muscle of Chianina and Maremmana</i>	P-032
Ada Braghieri, Gennaro Catillo, Francesco Napolitano, Andrea Bragaglio, Giuseppe Malvasi, Giovanni Notarnicola, Fabio Napolitano <i>Genetic evaluation of behavioural and morphological traits in Murghese horse</i>	P-033
Francesca Cecchi, Andrea Spaterna, Marco Ragatzu, Roberta Ciampolini <i>Genetic variability of the Braque Français type Pyrénées dog breed assessed by pedigree data</i>	P-034
Elena Ciani, Vlatka Cubirc-Curik, Mojca Simčič, Bozidarka Markovic, Igor Esmerov, Dragana Ružić-Muslić, Ondřej Štěpánek, Elisa Pieragostini, Fabio Sallustio, Johannes A. Lenstra <i>Genetic structure and admixture in Western Balkans and Central European sheep: preliminary results from 50K SNP genotypic data</i>	P-035
Francesca Ciotola, Sara Albarella, Giuseppe Scopino, Deborah Frate, Giuseppe Albero, Vincenzo Peretti <i>Relation between chromosome stability and <i>rob(1;29)</i> in Agerolese cattle</i>	P-036
Beatrice Coizet, Stefano Frattini, Letizia Nicoloso, Andrea Talenti, Alessandra Tamiozzo-Calligarich, Giulio Pagnacco, Paola Crepaldi <i>Study of the Doublesex and <i>Mab-3</i> related transcription factor 3 gene in Italian trotters</i>	P-037

Licia Colli, Marco Milanese, Lorenzo Bomba, Elia Vajana, Riccardo Negrini, Elisa Eufemi, Stefano Capomaccio, Raffaele Mazza, Alessandra Stella, Stephane Joost, Sylvie Stucki, Pierre Taberlet, François Pompanon, Fred Kabi, Vincent Muwanika, Charles Masembe, Paolo Ajmone Marsan, The NEXTGEN Consortium <i>Genomic diversity and population structure of Ugandan taurine and zebuine vattle breeds</i>	P-038
Gianfranco Cosenza, Elisa Apicella, Angelo Coletta, Boipuso Alpheus Pico, Nicolò P. P. Macciotta, Luigi Ramunno, Alfredo Pauciullo <i>Genetic variants of CSN1S1 gene in Italian Mediterranean river buffalo: an association with milk yield</i>	P-039
Cristina Costa, Erika Frigo, Maria Cristina Cozzi, Maria Giuseppina Strillacci, Fausta Schiavini, Raphaelle Teresa Matilde Maria Prinsen, Mario Vevey, Alessandro Bagnato <i>Imputation of microsatellite from dense SNP in the Valdostana Red Pied cattle - A Master thesis in Animal Production</i>	P-040
Maria Cristina Cozzi, Marta Bottagisio, Erika Frigo, Maria Giuseppina Strillacci, Fausta Schiavini, Raphaelle Teresa Matilde Maria Prinsen, Alessandro Bagnato <i>Molecular tests for horse coat color determination</i>	P-041
Enrico D'Alessandro, Antonino Siclari, Luigi Liotta <i>Genetic diversity in three Italian donkey populations assessed by microsatellite markers</i>	P-042
Roberta Davoli, Caterina Incoronato, Mariaconsiglia Occidente, Luigina Rillo, Laura Santoro, Martina Zappaterra, Donato Matassino <i>Effect of genetic polymorphisms at stearyl-CoA desaturase and fatty acid synthase loci on subcutaneous adipose tissue of Casertana pig ancient autochthonous genetic type: preliminary results</i>	P-043
Liliana Di Stasio, Lucia Bruni, Rossella Lo Presti <i>Towards molecular traceability of Tinca Gobba Dorata del Pianalto di Poirino</i>	P-044
Diana Luise, Roberta Davoli, Mila Bigi, Andrea Serra, Paolo Zambonelli <i>Association study of FASN, ACLY, ACACA, SCD, ELOVL6 genes with backfat fatty acid profile and intramuscular fat in Italian Large White pigs</i>	P-045
Vittoria Dickinson Bocchi, Fulvio Gandolfi, Cesare Galli, Alfonso Zecconi, Giuseppe Stradaoli, Maria Giuseppina Strillacci, Alessandro Bagnato <i>Differential expression analysis for fertility in Italian Rep Pied cattle - A Master Thesis in Veterinary Biotechnology</i>	P-046
Luca Fontanesi, Francesca Bertolini, Giuseppina Schiavo <i>The founder signature: sequencing the genome of "Olimpo", the most important boar of the Italian Large White selection program</i>	P-047
Luca Fontanesi, Giuseppe Sparacino, Valerio Joe Utzeri, Emilio Scotti, Daniela Fornasini, Stefania Dall'Olio, Andrea Frabetti <i>Identification of polymorphisms in the GHR gene and association with finishing weight in a commercial meat rabbit line</i>	P-048
Tiziana Sechi, Mario Graziano Usai, Letizia Nicoloso, Andrea Talenti, Beatrice Coizet, Frattini Stefano, Giulio Pagnacco, Sara Casu, Antonello Carta, Paola Crepaldi, the Italian Goat Consortium <i>Genetic variability of the Sardinian goat population assessed by the GoatsNP50 BeadChip</i>	P-049
Federica Gabbianelli, Francesca Alhaique, Licia Romano, Franco D'Agostino, Alessio Valentini <i>mtDNA analysis for the characterisation of Sumerian equids</i>	P-050
Federica Gabbianelli, Maria Gargani, Lorraine Pariset, Marco Mariotti, Francesca Alhaique, Elisabetta De Minicis, Lia Barelli, Erika Ciammetti, Fabio Redi, Alessio Valentini <i>mtDNA analysis of medieval sheep (Ovis aries) in Central Italy and comparison with modern breeds</i>	P-051
Maria Gargani, Lorraine Pariset, Johannes Arjen Lenstra, Elisabetta De Minicis, European Cattle Genetic Diversity Consortium, Alessio Valentini, <i>Microsatellite genotyping of medieval cattle from central Italy suggests an old origin of Chianina and Romagnola cattle</i>	P-052
Giustino Gaspa, Silvia Sorbolini, Corrado Dimauro, Massimo Cellesi, Alessio Valentini, Nicolò P.P. Macciotta <i>Genomic selection of Marchigiana carcass traits</i>	P-053
Giustino Gaspa, Daniela Iamartino, Ezequiel Nicolazzi, Stefano Biffani, Paola Rammelli, Rolando Pasquariello, Massimo Cellesi, John Williams, Nicolò P.P. Macciotta, the International Buffalo Genome Consortium <i>A preliminary survey on distribution of Runs of Homozygosity in Italian Water buffalo</i>	P-054
Denis Guiatti, Elena Pomari, Slobodanka Radovic, Alessandro Spadotto, Nataliya Poscic, Bruno Stefanon <i>Application of human-based exome capture method to analyze the pig exome</i>	P-055
Hovirag Lancioni, Piera Di Lorenzo, Simone Ceccobelli, Irene Cardinali, Ugo Perego, Antony Gruppetta, George Attard, Alessandro Achilli, Emiliano Lasagna <i>An overview of Maltese breed of cattle through mitochondrial DNA</i>	P-056
Emiliano Lasagna, Simone Ceccobelli, Piera Di Lorenzo, Marco Caffarelli, Francesco Panella, Francesca Maria Sarti <i>Ethnological survey on autochthonous goat populations in Umbria</i>	P-057
Pier Luigi Martelli, Antonino Martorana, Giuseppe Profiti, Rosalia Di Gerlando, Lina Tortorici, Giuseppina Schiavo, Rita Casadio, Baldassare Portolano, Luca Fontanesi	

<i>Identification of putative adaptive variability in the bovine genome using whole genome resequencing data of Cinisara cattle</i>	P-058
Salvatore Mastrangelo, Marco Tolone, Rosalia Di Gerlando, Maria Teresa Sardina, Baldassare Portolano <i>The Sicilian cattle breeds in a global context: genome-wide relationship with other worldwide cattle</i>	P-059
Donato Matassino, Carmela Maria Assunta Barone, Caterina Incoronato, Mariaconsiglia Occidente, Luigina Rillo, Laura Santoro, Bettino Siciliani, Antonio Zullo <i>Italian autochthonous Grey Cows (BovGrAI) yet Podolian: factors affecting milk production and composition</i>	P-060
Sven Menčik, Marija Špehar, Anamaria Ekert Kabalin, Željko Mahnet, Valentino Beretti, Paola Superchi, Alberto Sabbioni <i>Estimates of litter size traits in two local pig populations in the Mediterranean region</i>	P-061
Fabio Mosca, Manuela Madeddu, Elena Colombo, Cristina Cozzi, Alessandro Bagnato, Maria Grazia Mangiagalli, Luisa Zaniboni, Silvia Cerolini <i>Phenotypic characterization of the Italian chicken breed Milanino</i>	P-062
Alfredo Pauciuolo, Elisa Apicella, Luigi Ramunno, Gianfranco Cosenza <i>Genetic variability at the FASN locus in the Italian Mediterranean river buffalo (Bubalus bubalis, 2n=50)</i>	P-063
Raphaelle Teresa Matilde Maria Prinsen, Maria Giuseppina Strillacci, Karin Schlangen, Frank Panitz, Moshe Soller, Enrico Santus, Alessandro Bagnato, Marlies Alexandra Dolezal <i>A high-resolution CNVR map in Brown Swiss dairy cattle according to PIC and LD with SNPs</i>	P-064
Roberto Puglisi, Graziella Bongiorno, Silvia Cenadelli, Katia Parati, Andrea Galli <i>Spermatozoal transcript profiles as estimated at thawing and after thermal stress in bulls of contrasting field fertility</i>	P-065
Celia Raquel Quirino, Gleice Rangel Silveira Lima, Claudia Caixeta Franco Andrade, Aline Pacheco, Wilder Hernando Ortiz Vega, Júlia Gazzoni Jardim, Thiago da Silva Corrêa, Aylton Bartholazzi Junior, Miguel Alejandro Silva Rua, Ana Carolina Barros de Freitas <i>Analysis of polymorphisms of MC1R gene in Santa Inês sheep</i>	P-066
Antonia B. Samorè, Stefania Dall'Olio, Tanya Muratori, Luca Fontanesi <i>Genetic aspects of haematological parameters in Italian Large White pigs</i>	P-067
Maria Teresa Sardina, Lina Tortotici, Rosalia Di Gerlando, Marco Tolone, Salvatore Mastrangelo, Baldassare Portolano <i>Use of microsatellite markers for genetic traceability of Girgentana dairy products</i>	P-068
Maria Teresa Sardina, Lina Tortorici, Rosalia Di Gerlando, Marco Tolone, Roberta Segreto, Vita Alba Grammatico, Salvatore Mastrangelo, Baldassare Portolano <i>Analysis of acetyl-CoA carboxylase gene polymorphisms in Valle del Belice dairy breeds</i>	P-069
Giuseppina Schiavo, Francesca Bertolini, Giuliano Galimberti, Daniela Giovanna Calò, Emilio Scotti, Donato Matassino, Vincenzo Russo, Stefania Dall'Olio, Leonardo Nanni Costa, Luca Fontanesi <i>Combined principal component analysis and random forest approaches identified population informative SNPs in several Italian pig breeds</i>	P-070
Jessica Serdino, Antonio Puledda, Giustino Gaspa, Maria Grazia Manca, Pancrazio Fresi, Riccardo Negrini, Nicolò P.P. Macciotta <i>Estimation of genetic parameters of milk coagulation properties in Sarda dairy sheep</i>	P-071
Ariel Shabtay, Ehud Lipkin, Harel Eitam, Moran Yishay, Maria Giuseppina Strillacci, Fausta Schiavini, Alessandro Bagnato, Moshe Soller <i>Genome-wide association study for BRD susceptibility using a selective DNA pooling approach</i>	P-072
Dominga Soglia, Stefano Sartore, Sandra Maione, Elvira Pepe, Alice Gallino, Roberto Rasero, Paola Sacchi <i>Bovine serum amyloid A3: analysis of the genomic region</i>	P-073
Andrea Talenti, Letizia Nicoloso, Stefano Frattini, Beatrice Coizet, Mariasilvia D'Andrea, Fabio Pilla, Paolo Ajmone Marsan, Giulio Pagnacco, Paola Crepaldi, Italian Goat Consortium <i>Analysis of Single Nucleotide Polymorphisms in Alpine ibex using the GoatsNP50 BeadChip</i>	P-074
Lina Tortorici, Rosalia Di Gerlando, Salvatore Mastrangelo, Maria Teresa Sardina, Baldassare Portolano <i>Development of multiplex-PCR protocol to amplify 12S and 16S rRNA genes of mitochondrial DNA for traceability of Sicilian mono-species dairy products</i>	P-075
Valerio Joe Utzeri, Anisa Ribani, Stefania Dall'Olio, Emilio Scotti, Nevena Veličković, Luca Fontanesi <i>Evidence of introgression of domesticated genes in several European wild boar populations</i>	P-076
Valerio Joe Utzeri, Francesca Bertolini, Anisa Ribani, Stefania Dall'Olio, Luca Fontanesi <i>Identification of the causative mutation of the albinism determining the white coat colour of the Asinara donkey breed</i>	P-077
Carmelisa Valluzzi, Antonino Di Grigoli, Paola Di Gregorio, Adriana Di Trana, Francesca Vitale, Marco Alabiso, Adriana Bonanno <i>Effect of β-lactoglobulin (LGB) and k-casein (CSN3) alleles on some characteristics of milk produced by Cinisara cows</i>	P-078
Carmelisa Valluzzi, Annamaria Perna, Emilio Gambacorta, Daniela Finizio, Paola Di Gregorio, Andrea Rando <i>Variability of the IGF2 locus in the Nero Lucano pig population and its effect on quality and colourimetric characteristics of meat</i>	P-079

Alice Varotto, Raffaella Finocchiaro, Jan-Thijs van Kaam, Maurizio Marusi, Giorgio Civati, Martino Cassandro <i>Analysis of patterns of peaks in somatic cells count of Italian Holstein Friesian cows</i>	P-080
Silvia Francesca Volpi, Maria Giuseppina Strillacci, Aldo Vezzoni, Anna Brandstetter, Erika Frigo, Maria Cristina Cozzi, Fausta Schiavini, Armand Sanchez, Alessandro Bagnato <i>Canine hip dysplasia - Understanding the genetic basis to apply Genomic Selection – A Master Thesis in Veterinary Medicine</i>	P-081
Alessandro Crovetti, Silvia Ghezzi, Stefano Biffani, Antonio Bonelli, Riccardo Bozzi <i>Effect of genes related to meat quality traits on progeny of selected bulls of Italian Limousine breed</i>	P-081 bis

Livestock and environment

Deniz Alic <i>The investigation on Sakiz ewes (Chios) from different age groups in Aegean Region, Turkey</i>	P-082
Deniz Alic <i>Research of relationships between some udder traits and milk yield of Maltiz x Saanen</i>	P-083
Paolo Bani, Isabella Grecchi, Sadek Ahmed, Luigi Calamari <i>Effect of simulated hail damage on yield and quality in forage maize</i>	P-084
Gianni Battacone, Chiara Sulas, Anna Nudda, Salvatore Pier Giacomo Rasso, Giuseppe Pulina <i>Effect of birth weight on growth of piglets of Sarda breed during suckling time</i>	P-085
Leonardo Boselli, Armelle Gac, Luciana Bava, Luciano Migliorati, Alberto Tamburini <i>Environmental performances of the main Italian beef production systems</i>	P-086
Stefania Chessa, Omar Bulgari, Federica Turri, Paola Cremonesi, Riccardo Moretti, Sara Costa, Stefania Colombini, Anna Caroli, Luca Rapetti, Bianca Castiglioni <i>Goat milk technological properties: milk coagulation properties and cheese yield</i>	P-087
Salvatore Claps, Lucia Sepe, Giuseppe Morone, Maria Antonietta Di Napoli, Anna Rocchina Caputo, Adele Lanza, Emilio Sabia <i>Life cycle assessment of dairy sheep production system in Appennino Lucano val d'Agri-Lagonegrese National Park</i>	P-088
Pier Paolo Danieli, Francesca Tulli, Giuliana Parisi, Giovanni Piccolo, Paolo Bani, Antonella Dalle Zotte, Genciana Terova, Anna De Angeli, Riccardo Fortina, Luciano Pinotti, Rosaria Marino, Aldo Prandini, Achille Schiavone, Alessandra Roncarati, Gabriele Acuti, Laura Gasco <i>Environmental impact of insect rearing for food and feed: state of the art and perspectives</i>	P-089
Antonino Di Grigoli, Francesca Vitale, Francesca Mazza, Giuseppe Maniaci, Paolo Ruisi, Giuseppe Di Miceli, Adriana Bonanno <i>The effects of slaughter age and restricted feeding on growth, carcass and meat quality traits of dairy breed lambs</i>	P-090
Erika Frigo, Liliana Reghenzani, Nicola Bergomi, Antonia Bianca Samorè, Maria Giuseppina Strillacci, Fausta Schiavini, Raphaelle Teresa Matilde Maria Prinsen, Maria Cristina Cozzi, Marco Serra, Attilio Rossoni, Alessandro Bagnato <i>Variation of casein and fatty acids milk contents in Italian Browns Swiss cows</i>	P-091
Laura Garavaglia, Doriana Tedesco <i>Food waste valorization: mango peels enhance in vitro rumen microbial fermentation</i>	P-092
Laura Garavaglia, Valerio Bronzo, Doriana Tedesco <i>Food waste valorization: the effectiveness of mango peels in mid-lactating dairy cows</i>	P-093
Anna Gaviglio, Mattia Bertocchi, Maria Elena Marescotti, Eugenio Demartrini, Alberto Pirani <i>Environmental assessment of different livestock systems in the peri-urban areas: a farm level approach</i>	P-094
Francesco Giannico, Maria Antonietta Colonna, Anila Hoda, Anna Maria Russo, Francesco Toteda, Anna Maria Facciolongo, Carmine Cocca, Anna Caputi Jambrenghi <i>Chemical and nutritional characterization of natural pasture in an Apulian Trojan oak wood and effects of Podolian cattle grazing on grass consumption</i>	P-095
Lorella Giulioti, Maria N. Benvenuti, Claudia Lotti, Pier Attilio Accorsi, Olivia Paganelli, Carmen A. Petrulli, Andrea Martini <i>Index of welfare, housing systems and hair cortisol level in dairy cows</i>	P-096
Carla Lazzaroni, Davide Biagini <i>Mineral supplementation and bone characteristics in beef calves</i>	P-097

Maria Lucia Pereira Lima, Flavia Fernanda Simili, Alessandra Giacomini, Aanibal Eugênio Versesi Filho, Enilson Geraldo Ribeiro, Jane Maria C. Silveira <i>Effect of different rotational stocking management of Brachiaria brizantha on productivity of system</i>	P-098
Luigi Liotta, Antonio Marino, Maria Elena Furfaro, Stefano Simonella, Biagina Chiofalo <i>Effect of feeding systems on growth performances and meat traits of suckling Messinese kids</i>	P-099
Raafat Mahmoud Mohamed Gomaa, Manuel González-Ronquillo, Jorge Arredondo-Ramos, Luisa Tan Molina, Octavio Alonso Castelán-Ortega <i>Potentiality of five tanniferous plants for reducing methane production in the rumen</i>	P-100
Luca Rapetti, Stefania Colombini, Bianca Castiglioni, Gianluca Galassi, G. Matteo Crovetto, Luca Malagutti <i>Methane production in dairy goats fed flax or hemp seeds supplemented diets</i>	P-101
Alberto Sabbioni, Valentino Beretti, Elisa Pedernana, Paola Superchi <i>Preliminary study on morphologic characteristics of the Pezzata Mochena goat breed</i>	P-102
Sandy Sgorlon, Marta Fanzago, Brigitta Gaspardo, Erminio Trevisi, Paolo Ajmone Marsan, Bruno Stefanon <i>Cortisol measurement in milk but not in hair is related to dairy cow health</i>	P-103
Marisanna Speroni, Alessandro Gastaldo, Maurizio Capelletti, Antonio Bruni, Luigi Degano, Alberto Menghi, Paolo Rossi <i>Who pays for animal welfare?</i>	P-104
Marisanna Speroni, Alessandro Gastaldo <i>How much does it cost to improve comfort in dairy barns? A case of rubber flooring</i>	P-105
Anna Maria Sutura, Marco Tolone, Salvatore Mastrangelo, Maria Teresa Sardina, Baldassare Portolano <i>Loss in milk yield and related composition changes resulting from different levels of somatic cell count in Valle del Belice dairy sheep</i>	P-106
Elia Vajana, Licia Colli, Marco Milanese, Lorenzo Bomba, Riccardo Negrini, Stefano Capomaccio, Elisa Eufemi, Raffaele Mazza, Alessandra Stella, Stephane Joost, Sylvie Stucki, Pierre Taberlet, François Pompanon, Fred Kabi, Vincent Muwanika, Charles Masembe, Paolo Ajmone Marsan, The NEXTGEN Consortium <i>Modelling the spatial distribution of Theileria parva (Theiler 1904), causative agent of East Coast Fever disease in cattle</i>	P-107
Maria Luisa Varricchio, Felicia Masucci, Francesco Serrapica, Pinar Uzun, Diana Agrelli, Paola Adamo, Antonio Di Francia <i>Influence of mycorrhizal fungi on sorghum and maize crops: preliminary results</i>	P-108

New technologies in animal sciences

Alberto Brugiapaglia, Gianluigi Destefanis <i>Meat texture of Piemontese young bulls measured by two physical methods</i>	P-109
Massimo Capuano, Giovanna Bifulco, Antonio Limone, Francesco Iannaccone, Domenico Vecchio, Giuseppe Campanile, Luigi Zicarelli <i>Efficiency of AI in adult buffaloes synchronized by Ovsynch and progesterone-TAI protocols</i>	P-110
Antonella Chiariotti, David Meo Zilio, Giacomo Contò, Sabrina Di Giovanni, Carmela Tripaldi <i>Effects of mycorrhized maize grain on milk and on rumen environment of Italian Holstein dairy cows</i>	P-111
Sebastiao Ferreira Magagnin, Eduardo Alexandre de Oliveira, Emanuella Aparecida Pierozan, Marcia de Souza Vieira, Marson Bruck Warpechowski <i>Influence of animal profile performance parameters of INRAPORC® on simulation errors</i>	P-112
Sebastiao Ferreira Magagnin, Eduardo Alexandre de Oliveira, Marcia de Souza Vieira, Marson Bruck Warpechowski <i>Standard error increment percentage influenced by INRAPORC simulations to extrapolate their results as means of a known population</i>	P-113
Sebastiao Ferreira Magagnin, Eduardo Alexandre de Oliveira, Marcia de Souza Vieira, Marson Bruck Warpechowski <i>Validating a calibration of INRAPORC® based on a small population applying it to greater business population</i>	P-114
Giuseppina Monteleone, Vita Alba Grammatico, Rosalia Di Gerlando, Salvatore Mastrangelo, Maria Teresa Sardina, Baldassare Portolano <i>Two-dimensional difference in gel electrophoresis (2D-DIGE) for milk proteins characterization in Girgentana goat breed</i>	P-115
Fabio Mosca, Manuela Madeddu, Ahmad Abdel Sayed, Maria Grazia Mangiagalli, Elena Colombo, Luisa Zaniboni, Silvia Cerolini <i>Combined effect of dimethylacetamide and non-permeating cryoprotectants on quality of frozen/thawed sperm</i>	P-116
Gianluca Neglia, Massimo Capuano, Roberta Cimmino, Luca De Luise, Anna Balestrieri, Mariangela Caroprese, Rossella Di Palo <i>Artificial insemination in buffalo heifers</i>	P-117
Rolando Pasquariello, Riccardo Giannico, Raffaele Mazza, Beatriz Fernandez-Fuertes, Francesco Strozzi, Chiara Ferrandi, Fulvio Gandolfi, Patrick Lonergan, John L. Williams <i>Analysis of small RNAs in bovine blastocysts using deep sequencing</i>	P-118

Grazia Pastorelli, Raffaella Rossi, Stefano Cornetti, Carlo Corino <i>Hepatoprotective substances in sow's feeding</i>	P-119
Giorgio Antonio Presicce, Giuseppe Albero, Gianluigi Zullo, Angela Salzano, Valentina Longobardi, Carolina De Canditiis, Antonio Limone, Bianca Gasparini <i>Effect of season on the ovum pick-up efficiency in Calabrian Podolic cattle</i>	P-120
Mohamed Sadoud, Foued Chehat, Hadjer Sadoud <i>Management of reproduction in cattle breeding farms in the Greater Cheliff Algerian</i>	P-121
Mônica Teixeira, Eduardo Alexandre de Oliveira, Sebastiao Ferreira Magagnin, Lucélia Hauptli, Renato Irgang <i>Body weight gain comparison between suckling piglets and piglets on a transition feeder</i>	P-122
Federica Turri, Teresa Maria Gliozzi, Gustavo Gandini, Flavia Pizzi <i>Constitution of Nero Siciliano pig breed genetic reserve: flow cytometry evaluation of epididymal sperm cells</i>	P-123

Physiology and metabolism

Fabio Abeni, Francesca Petrera, Aldo Dal Prà, Luciano Migliorati, Riccardo Aleandri <i>Effects of dietary phosphorous supplementation during the rearing phase of Italian Friesian dairy heifers</i>	P-124
Luigi Calamari, Fiorenzo Piccioli Cappelli, Laura Gobbi, Andrea Minuti <i>Relationships between rumination time with metabolic status and inflammatory conditions around calving in dairy cows</i>	P-125
Raffaella Cardinali, Michele Balzano, Alessandro Dal Bosco, Massimo Tralbalza Marinucci, Deborah Pacetti, Cesare Castellini, Natale G. Frega <i>Effect of different dietary aromatic essences on fatty acid profile and oxidative status of rabbit meat</i>	P-126
Raffaella Cardinali, Livia Moscati, Mariano Pauselli, Alessandro Fantini <i>Effect of diet supplementation with linseed as linolenic acid source on native immunity and oxidative traits of dairy cattle</i>	P-127
Stefania Colombini, Luca Rapetti, Paola Amodeo, Matteo G. Crovotto <i>Ketosis risk and milk loss in commercial dairy farms</i>	P-128
Nicola De Riu, Roberto Cappuccinelli, Daniela Chessa, Silas S.O. Hung, Giuseppe Moniello <i>Chronic toxicity and bioaccumulation of Selenomethionine in juvenile mullet (Liza aurata)</i>	P-129
Mariella Ferroni, Donata Cattaneo, Alessandro Agazzi, Jessica Caputo, Guido Invernizzi, Federica Bellagamba, Fabio Caprino, Giovanni Savoini <i>Colostrum, n-3 FA status and immune response of newborn kids as influenced by maternal lipid supplementation</i>	P-130
Amanda Festa Sabes, Annita Moraes Girardi, Darcio Zangirolami Filho, Joao Ademir de Oliveira, Luiz Carlos Marques <i>Arterial blood gas analysis on agute lactic ruminal acidosis induced experimentally on Santa Inês sheep (Ovis aries)</i>	P-131
Mattia Fustini, Alberto Palmonari, Giorgia Canestrari, Ester Grilli, Andrea Formigoni <i>Effects of replacing flaked corn with sorghum meal as the main energy source in lactating dairy cows diets</i>	P-132
Kamila Gravena, Antônio Fernando Bariani Junior, Vinícius Athaydes Canello, Lina Maria Wehrle Gomide, Nara Saraiva Bernardi, Amanda Festa Sabes, Daniela Junqueira Queiroz, Deborah Penteadó Martins Dias, Alceu Afonso Jordão-Junior, José Corrêa Lacerda-Neto <i>Oxidative stress in horses with experimental small colon intraluminal obstruction – preliminary results</i>	P-133
Luigi Liotta, Giovanni Majolino <i>Physiological growth performances in new born puppies of Labrador Retriever breed. Preliminary results</i>	P-134
Diana Luise, Giuseppina Schiavo, Giuliano Galimberti, Daniela Giovanna Calò, Samuele Bovo, Gianluca Mazzoni, Flaminia Fanelli, Emilio Scotti, Marco Mezzullo, Stefania Dall'Olio, Uberto Pagotto, Paolo Bosi, Luca Fontanesi, Paolo Trevisi <i>Metabolomics information provides potential predictive internal phenotypes for production and performance traits in Italian Duroc pigs</i>	P-135
Damiano Magistrelli, Fabia Rosi <i>Milk and plasma IgG levels in primiparous and multiparous cows, during the first week of lactation</i>	P-136
Damiano Magistrelli, Fabia Rosi <i>Effect of cocoa husks diet on lipid metabolism and liver composition in fattening pigs during the hot season</i>	P-137
Andrea Martini, Roberto Tocci, Abel José Guerrini Garcia, Pier Attilio Accorsi, Clara Sargentini, Alessandro Giorgetti, Claudia Lotti <i>Use of prolactin as an indicator of stress in purebred and crossbred cattle in a farm of Yucatán (Mexico)</i>	P-138
Andrea Minuti, Arnulf H.A. Tröscher, Annarita Ferrari, Erminio Trevisi <i>Administration of conjugated linoleic acid in late dry period and early lactation: effects on blood, rumination and productive performance of primiparous and pluriparous dairy cows</i>	P-139

Annita Morais Girardi, Amanda Festa Sabes, Darcio Zangirolami Filho, Joao Ademir de Oliveira, Luiz Carlos Marques, Kamilla Gravena <i>Hemogasometric variables of sheep (Ovis aries) induced to lactic ruminal acidosis by feeding high concentrate diet</i>	P-140
Annita Morais Girardi, Amanda Festa Sabes, João Ademir de Oliveira, Renata Lemos Nagib Jorge, Cláudia Aparecida da Silva Nogueira, Luiz Carlos Marques <i>Serum enzyme activities of sheep (Ovis aries) induced to lactic ruminal acidosis by feeding high concentrate diet</i>	P-141
Annita Morais Girardi, Amanda Festa Sabes, João Ademir de Oliveira, Renata Lemos Nagib Jorge, Cláudia Aparecida da Silva Nogueira, Luiz Carlos Marques <i>Serum electrolyte variables of sheep (Ovis aries) induced to lactic ruminal acidosis by feeding high concentrate diet</i>	P-142
Francesca Murru, Erica Mura, Jakub Mrazek, Katerina Fliegerova, Giuseppe Moniello <i>Archaeal population in the horse gastrointestinal tract</i>	P-143
Leonardo Nanni Costa, Eduardo Alexandre de Oliveira, Francesco Tassone, Stefania Dall'Olio, Roberta Davoli, Luca Fontanesi, Paolo Zambonelli, Vincenzo Russo <i>The effect of the genetic type and handling immediately prior to stunning on pro- and macro- glycogen in two porcine muscles</i>	P-144
Rebecca Ricci, Marco Cullere, Alberto Sartori, Giorgio Marchesini, Antonella Dalle Zotte <i>Effect of dietary inclusion of Spirulina on nutrient apparent digestibility in chinchillas</i>	P-145
Paolo Trevisi, Michela Colombo, Davide Priori, Sietse Jan Koopmans, Alfons J.M. Jansman, Paolo Bosi <i>Influence of early microbial association and dietary medium chain triglycerides on development of gastric function in pig</i>	P-146
Federica Turri, Bianca Castiglioni, Paola Cremonesi, Stefania Chessa, Luca Rapetti, Teresa Maria Gliozzi <i>Microscopic differential cell counting and viability evaluation of milk somatic cells during lactation in goat</i>	P-147

Research and development in animal science

Paolo Bani, Vincenzo Lopreiato, Olga Gachiuta, Simone Cogrossi, Valentina Ficuciello <i>Estimation of dry matter intake in dairy cows fed TMR using different markers</i>	P-148
Valentina Caprarulo, Matteo Ottoboni, Antonella Baldi, Carlotta Giromini, Eleonora Fusi, Luciano Pinotti <i>Fat and fiber in natural ingredient diets and purified diets for laboratory animals</i>	P-149
Angela Cassone, Pasqua Loizzo, Antonio Trani, Elisa Pieragostini <i>A proteomic approach in biomarker discovery for paratuberculosis, in sheep and goats</i>	P-150
Aniello Catapano, Antonio Luca Langellotti, Doriana Iaccarino, Carmela Maria Assunta Barone <i>Effects of dietary microalgae (Phaeodactylum tricornutum) supplementation on some nutritional characteristics of tilapia (Oreochromis niloticus)</i>	P-151
Biagina Chiofalo, Loredana Vaccaro, Vincenzo Chiofalo, Giuseppe Camera, Fabio Gresta, Carmelo Santonoceto <i>Productive and nutritional traits of recent released varieties of cotton grown in Southern Italy</i>	P-152
Biagina Chiofalo, Maria Elena Furfaro, Rossella Bonfiglio, Vincenzo Chiofalo, Giuseppe Camera, Fabio Gresta, Carmelo Santonoceto <i>Qualitative traits of different varieties of guar grown in Southern Italy</i>	P-153
Roberta Cimmino, Domenico Rufrano, Roberto Di Matteo, Gianluca Neglia, Finizia Russo, Maria Carmela Polese, Valentina Campanile, Carmela Maria Assunta Barone, Salvatore Claps, Ettore Varricchio <i>Infra-vitam and post-mortem performance of Italian Merino derived lambs fed with polyphenols; preliminary results</i>	P-154
Riccardo Compiani, Gianluca Baldi, Grazia Pastorelli, Alessia Giordano, Gabriele Rossi, Michele Muraro, Saverio Paltrinieri, Vittorio Dell'Orto, Carlo Angelo Sgoifo Rossi <i>Plant extracts against transport stress in newly received beef cattle</i>	P-155
Alessia D'Agata, Giuseppe Carcione, Giuseppe D'Angelo, Riccardo Fiumanò, Filippo Giarratana, Giuseppe Magazzù, Alessandro Margiotta, Massimiliano Pagliaro, Giuseppe Spanò, Vincenzo Chiofalo <i>Chemical and microbiological characterization of fruit and vegetable by-products silage</i>	P-156
Ambra Di Rosa, Filippo Giarratana, Rossella Bonfiglio, Alessia D'Agata, Graziella Ziino, Alessandro Giuffrida, Vincenzo Chiofalo <i>Production of single cell protein from Orange Molasses using indigenous Candida krusei</i>	P-157
Ambra Di Rosa, Luigi Liotta, Alessia D'Agata, Giuseppe Carcione, Loredana Vaccaro, Giuseppe Spanò, Giuseppe D'Angelo, Stefano Simonella, Biagina Chiofalo <i>Nutritional traits and phenolic content of dried Olive Cake from three different cultivars of Olea Europea grown in Sicily (Italy) for livestock feed</i>	P-158
Riccardo Fortina, Laura Gasco, Genciana Terova, Alessandra Roncarati, Giuliana Parisi, Giovanni Piccolo, Francesca Tulli, Achille Schiavone,	

Luciano Pinotti, Anna De Angelis, Antonella Dalle Zotte, Pier Paolo Danieli, Paolo Bani, Gabriele Acuti, Rosaria Marino, Aldo Prandini <i>Farming insects for feeding pigs: constraints and opportunities</i>	P-159
Laura Gasco, Genciana Terova, Gabriele Acuti, Paolo Bani, Pier Paolo Danieli, Antonella Dalle Zotte, Anna De Angelis, Riccardo Fortina, Giuliana Parisi, Giovanni Piccolo, Luciano Pinotti, Aldo Prandini, Rosaria Marino, Achille Schiavone, Francesca Tulli, Alessandra Roncarati <i>Insects as innovative protein source for fish feeds: a brief review</i>	P-160
Gianluca Giuberti, Antonio Gallo, Maurizio Moschini, Francesco Masoero <i>Role of resistant starch from different sources on the in vitro production of short-chain fatty acids in a pig model</i>	P-161
Mehmet Gultekin, Canberk Balıkcı, Kerem Ural <i>Hyperlipidemia in African Grey parrots; case series with Isikli, Aydin experience and limited literature review</i>	P-162
Rosa Loponte, Stefania Marono, Fulvia Bovera, Laura Gasco, Giovanni Piccolo, Carmelo Di Meo, Antonino Nizza <i>Insect meal (Tenebrio molitor larvae) as protein source in broiler: effect on growth rate from 30 to 62 days of age</i>	P-163
Anna Nudda, Maria Grazia Manca, Gianni Battacone, Giuseppe Pulina <i>Effect of dietary linseed supplementation on milk coagulation properties of dairy goats with different CSN1S1 genotype</i>	P-164
Marco Ragni, Felice Vizzielli, Liborio Melodia, Maria Antonietta Colonna, Anna Caputi Jambrenghi, Nicolò De Vito, Simona Tarricone, Giuseppe Marsico <i>Effect of feeding extruded linseed (Linum usitatissimum L.) and oregano (Origanum vulgare L.) on meat production and quality in Jonica kids</i>	P-165
Marco Ragni, Giuseppe Scarpa, Arcangelo Vicenti, Felice Vizzielli, Francesco Giannico, Massimo Lacitignola, Giuseppe Marsico <i>Performances, carcass and some meat quality traits in lambs fed with extruded linseed (Linum usitatissimum L.) and oregano (Origanum vulgare L.)</i>	P-166
Achille Schiavone, Antonella Dalle Zotte, Genciana Terova, Paolo Bani, Pier Paolo Danieli, Anna De Angelis, Riccardo Fortina, Giuliana Parisi, Giovanni Piccolo, Luciano Pinotti, Aldo Prandini, Rosaria Marino, Francesca Tulli, Gabriele Acuti, Alessandra Roncarati, Laura Gasco <i>Improving sustainability of poultry production by feeding insects: state of the art and perspectives</i>	P-167
Francesco Serrapica, Felicia Masucci, Giuseppe De Rosa, Fernando Grasso, Pinar Uzun, Antonio Di Francia <i>Use of a whey-based milk replacer and an high-fiber starter concentrate during the weaning period of buffalo calves</i>	P-168
Carlo Angelo Sgoifo Rossi, Riccardo Compiani, Gianluca Baldi, Vittorio Dell'Orto, Stefano Vandoni <i>Effect of controlled release NPN on beef performance and meat quality</i>	P-169
Doriana Tedesco, Claudia Balzaretto, Erica Tirloni, Laura Garavaglia <i>Vegetable food waste valorization to earthworms production: preliminary evaluation for strategic decision-support in rearing system</i>	P-170
Doriana Tedesco, Claudia Balzaretto, Erica Tirloni, Claudia Penati, Laura Garavaglia <i>Vegetable food waste bioconversion to earthworms as novel protein source</i>	P-171
Doriana Tedesco, Claudia Balzaretto, Laura Garavaglia <i>Vegetable food waste bioconversion to earthworms as novel feed/food: earthworms fatty acid profile</i>	P-172
Deniz Alic, Adnan Ayan, Nuran Aysul, Canberk Balıkcı, Kerem Ural <i>Secnidazol treatment to improve milk yield in sheep with giardiasis</i>	P-173
Pinar Uzun, Felicia Masucci, Fabio Napolitano, Francesco Serrapica, Ada Braghieri, Antonio Di Francia <i>Use of fresh forage in buffalo cows' feeding: effect on sensory properties of Mozzarella cheese</i>	P-174

P-007

Microencapsulated fish oil to enrich yoghurt with omega-3 fatty acids: evaluation of fatty acid composition and volatile compounds

Francesca Ciucci^{1,2}, Cairtriona Long-Smith², Ruairi Roberston², Catherine Stanton², Kieran Kilcawley², Andrea Serra¹, Giuseppe Conte¹, Marcello Mele¹

¹Dipartimento di Scienze Agrarie, Alimentari e Agro-ambientali, Università degli Studi di Pisa, Italy

²Teagasc Moorepark Food Research Centre, Fermoy, Co. Cork, Ireland

Corresponding author: francesca.ciucci88@gmail.com

According to the European Food Safety Agency, human dietary intake of long chain n-3 fatty acids (EPA and DHA) is lower than that recommended (250 mg/d), so the Food Industry is interested to produce functional foods enriched with these fatty acids (FA). However, enriching food with EPA and DHA may increase the risk of lipid oxidation and off-flavour development. Microcapsules (MC) obtained by spray-drying may help to avoid this issue, by including fish oil (FO) in a dry powder ready to be integrated into the food. Recently, several dairy products have been proposed as functional foods, by enriching milk with functional lipids or probiotic and prebiotic substances. The aim of this work was to evaluate the FA and volatile compounds (VOCs) profile and the lipid oxidation of yoghurt enriched with fish oil MC. Four types of MC containing FO were produced using whey protein isolate plus gum arabic (GA) or maltodextrin (MD), with (GAQ; MDQ) or without quercetin as antioxidant. MC were used to obtain four different types of yoghurt that were compared with non-enriched yoghurt (CY) or with yoghurt enriched with unprotected FO (CO), during a 21 days storage period at 4°C. FA composition of yoghurts was determined by gas chromatography (GC) analysis, while the oxidative stability was characterized through the analysis of thiobarbituric acid reactive substances (TBARS). Volatile compounds were determined by solid phase microextraction (SPME) coupled with GC/MS. The VOCs composition was evaluated by a multivariate analysis. Yoghurts enriched with 15 g/L of MC resulted in a significant increase of EPA (0.082 to 2.012 g/100 g total lipids) and DHA (0.011 to 1.649 g/100 total lipids), irrespective of the presence of quercetin as an antioxidant. At the end of the storage period, the value of TBARS significantly increased only in CO and CY samples, suggesting a protective role of MC against FA oxidation. Nevertheless, the MD yoghurt was associated with an oxidative aromatic profile, (2-hexenal, 2-methyl furan) whereas the presence of quercetin eliminated this aspect. GA, GAQ and MDQ yoghurt were associated with an acid flavour profile. CO and CY yoghurts were associated with sweet and fruit flavour profiles (2-nonanone). In conclusion, MC could be an effective strategy to enrich yoghurt with n-3 PUFA and simultaneously preserve FO from oxidation, however some differences in the oxidative stability and VOCs profile were observed depending on the properties of the MC wall.

P-008

Comparison of Canestrato Pugliese cheese quality between native and non-native sheep breeds

Salvatore Claps¹, Lucia Sepe¹, Anna Rocchina Caputo¹, Maria Antonietta Di Napoli¹, Daniela Giorgio¹, Giuseppe Morone¹, Giovanni Annicchiarico¹, Adriana Di Trana²

¹Unità di Ricerca per la Zootecnia Estensiva, Consiglio per la ricerca in agricoltura e l'analisi dell'economia agraria, Muro-Lucano (PZ), Italy

²Scuola di Scienze Agrarie, Forestali, Alimentari ed Ambientali Università degli Studi della Basilicata, Potenza, Italy

Corresponding author: salvatore.claps@entecra.it

Local breeds represent an important resource for a sustainable pastoral system in Mediterranean areas. The aim of the study was to investigate the effect of native and non-native sheep breeds on gross composition, fatty acid (FA) profile, health promoting index (HPI), thrombogenic index (TI) and volatile organic compounds (VOC) of Canestrato Pugliese cheese two months ripened. The experiment was carried out at the experimental farm of CRA-ZOE (Southern Italy) in spring. A flock set up of two native endangered breeds, Altamurana (A) and Leccese (L), and one non-native breed, Sarda (S), was used. All animals were fed on native pasture supplemented with concentrate at each milking. For each breed, three cheese-makings of Canestrato Pugliese were carried out for three consecutive days following the traditional technology. Cheeses were ripened for two months in a natural cave. All analyses were performed in duplicate. On cheese samples, gross composition was measured according to FIL-IDF standard procedures, FA profile was determined by gas chromatography and VOC profile and content by GC-MS analysis. The results were analysed by one-way ANOVA procedure with genotype (A, L and S) as the main factor. Means were computed by Fisher's LSD test. Cheese gross composition, nutritional indexes, FA and VOC profile were affected by breed ($P \leq 0.05$). L and S cheeses were characterized by higher dry matter content than A cheese (69.4 and 71.8 vs. 63% respectively; $P \leq 0.05$) due to their fat content (35.3 and 35.8 vs. 29.3%; $P \leq 0.05$), despite milk fat percentage was not significantly different among breeds. A and L cheeses exhibited significantly higher HPI (0.50 and 0.51 vs. 0.40; $P \leq 0.01$) and lower TI (2.64 vs. 3; $P \leq 0.01$) values than S cheese, due to their higher unsaturated FA (26.21 and 25.61 vs. 24.19 g/100 g FA; $P \leq 0.05$) and lower saturated FA (73.78 and 73.39 vs. 75.80 g/100 g FA; $P \leq 0.01$) contents. The class of n-3 FA was higher in A and S cheeses than L cheese (0.88, 0.73 vs. 0.69 g/100 g FA; $P \leq 0.05$). No significant differences in conjugated linoleic acid content were found. A and L cheeses showed higher total VOC content than non-native S breed (1,852 and 2,297 vs. 1,452 arbitrary unit; $P \leq 0.05$). Cheeses obtained from both native breeds were characterized by some peculiarities that are considered beneficial for human health. The results indicated that native sheep breeds had potentiality for adding value to cheese products for sustainable use.