



ICAR

2023

TOLEDO

SPAIN

22nd to 26th May 2023



Breeding for resilience:
transitioning diverse livestock farming systems into the future

PROGRAM



Join us in Toledo for the 2023 ICAR Conference

May 21st to May 26th, 2023

“BREEDING FOR RESILIENCE: TRANSITIONING DIVERSE LIVESTOCK FARMING SYSTEMS INTO THE FUTURE”

We invite you to visit the Program and Call for Abstracts pages for more details.

The Royal Spanish Federation of Purebred Associations (RFEAGAS), is honoured to be your host for the 2023 ICAR Conference. This world-class event will be held in the old and historical city of Toledo, in the region of Castilla La Mancha in Spain. Toledo is 1h south from Madrid and can be reached by bus, train or car. We provide all the information needed to move from the airport to the hotels in Toledo on the Information tab.

It will be a unique opportunity to share our expertise, connect with international collaborators and transform animal production by linking science, data and farming practices.

We invite you to join us and we can't wait to see you in person!

PROGRAM

Wednesday 24th May 2023

08:30 AUDITORIUM
GENERAL ASSEMBLY

10:00 – 10:30 COFFEE BREAK

10:30 AUDITORIUM
PLENARY SESSION
Chair: **Clara Díaz**

THE DIVERSITY OF SPANISH PRODUCTIONS SYSTEMS

Pablo Bernardos

Ministry of Agriculture, Fisheries and Food

RESILIENCE: FROM SCIENCE TO THE LIVESTOCK INDUSTRY

Nicholas Friggens¹ and Peter Amer²

¹AgroParis Tech, ²Abacus Bio.

13:00 – 14:00 LUNCH

14:00 AUDITORIUM
MANUFACTURERS' SHOWCAS.
Chair: **Steven Sievert**

14:00 ROOM B
SESSION 13: BREED ASSOCIATIONS & QUALITY CERTIFICATION
Chairs: **Suzanne Harding and Juho Kyntäjä**

S13.O-01

VALUING THE CERTIFICATE OF QUALITY AT HOLSTEIN UK

Darren Todd

Holstein UK, Telford, United Kingdom.

S13.O-02

THE USEFULNESS OF THE COQ FOR A LOCAL BEEF CATTLE BREED: THE CASE OF AVILEÑA-NEGRA IBÉRICA.

M. Mar González¹, Javier López-Cordero¹, Cristina Meneses², Clara Díaz², Pedro L. Herraiz¹.

¹RAEANI, Ávila, Spain; ²INIA, CSIC, Madrid, Spain.

S13.O-03

“WE ARE WHAT WE REPEATEDLY DO” THE EXPERIENCE OF ASSAF BREEDERS ASSOCIATION WITH ICAR CERTIFICATION OF QUALITY

Fernando Freire Fernández¹, Noelia Domínguez Merino¹, Laura Casas Álvarez¹, María Ángeles Jimenez Hernando², Tarsicio Merino Barby³.

¹ASSAFE, Toro, Spain; ²INIA-CSIC, Madrid, Spain; ³Almanor, Madrid, Spain.

S13.O-04

SPANISH DAIRY SHEEP BREED ASSOCIATIONS WERE GRANTED WITH THE ICAR CERTIFICATE OF QUALITY

Jean-Michel Astruc¹, Fernando Freire², Roberto Gallego³, Teodoro Lopez⁴, Lourdes Mintegi⁵, Elena Couto⁶, Fernando Tejerina⁷, Clara Diaz⁸.

¹IDELE, Toulouse, France; ²ASSAFE, Zamora, Spain; ³AGRAMA, Albacete, Spain; ⁴ANCHE, Palencia, Spain; ⁵CONFELAC, Vitoria - Arkaute, Spain; ⁶ICAR, Utrecht, Netherlands; ⁷Ministry of Agriculture, Madrid, Spain; ⁸INIA-CSIS, Madrid, Spain.

S13.O-05

AUDITING FIVE SPANISH BEEF CATTLE BREEDERS’ ASSOCIATIONS FOR THE ICAR CERTIFICATE OF QUALITY; EXPERIENCES OF AN AUDITOR.

Japie Van Der Westhuizen.

SA Stud Book, Pretoria, South Africa.

14:00 ROOM C1

SESSION 7: LATEST TOOLS USING MIR-SPECTRA IN THE ICAR WORL.

Chairs: **Christian F. Baumgartner and Aser García González**

S07.O-01

INFRARED MODELS FOR THE PREDICTION OF COW COLOSTRUM IMMUNOGLOBULINS G CONCENTRATION: PHENOTYPIC VARIABILITY AND RELATIONSHIP WITH COLOSTRUM YIELD

Massimo De Marchi¹, Arianna Goi¹, Marta Pozza¹, Elena Chiarin¹, Angela Costa².

¹University of Padova, Legnaro, Italy; ²University of Bologna, Bologna, Italy.

S07.O-02

CORTISOL DETERMINATION IN DAIRY COWS HAIRS BY NEAR-INFRARED (NIR), MID-INFRARED (MIR) AND RAMAN SPECTROSCOPY.

Octave Christophe¹, Clément Grelet¹, Huzaifa Simon¹, José Wavreile¹, Julie Leblois², Vincent Baeten¹, Frédéric Dehareng¹.

¹Walloon Agricultural Research Center (CRA-W), Gembloux, Belgium; ²Elevéo asbl, AWE groupe, Ciney, Belgium.

S07.O-03

NEAR INFRA-RED SPECTRUM OF RAW MILK, RAW OR HOMOGENISED?

Hafiz Muhammad Hussain Khan¹, Ultan Mccarthy², Norah O'shea¹.

¹Food Chemistry & Technology Department, Food Research Center, Teagasc Moorepark, Fermoy, Republic of Ireland; ²South East Technological University, Waterford, Republic of Ireland.

S07.O-04

CONSIDERATION OF FECAL NEAR-INFRARED SPECTRA TO ESTIMATE METHANE ERUCTED BY DAIRY OR BEEF CATTLE

Amélie Vanlierde¹, Frédéric Dehareng¹, Alexandre Mertens¹, Michaël Mathot¹, Adeline Lefèvre¹, Isabelle Morel², Gilles Renand³, Yvanne Rochette⁴, Fabienne Picard⁴, Cécile Martin⁴, Donato Andueza⁴.

¹CRA-W, Gembloux, Belgium; ²Agroscope, Posieux, Switzerland; ³INRAE, Jouy-en-Josas, France; ⁴INRAE, Saint-Genès-Champagnelle, France.

S07.O-05

IN-LINE REAL-TIME MILK COMPOSITION ANALYSIS BY TUNABLE LASER SPECTROSCOPY FOR DAIRY FARMS

Tadas Bučiūnas, Benediktas Bilinskas, Ieva Šimonytė, Tomas Žukauskas, Arūnas Miasojedovas, Vladislavas Čerkasovas, Augustas Baltrėnas, Augustinas Vizbaras, Kristijonas Vizbaras, Dominykas Vizbaras.

Brolis Sensor technology, Vilnius, Lithuania.

S07.O-06

DEVELOPMENT OF A PORTABLE MIR INSTRUMENT FOR IN-FARM MILK ANALYSIS - WHAT ARE THE NEEDS AND EXPECTATIONS OF THE DAIRY SECTOR

Clément Grelet¹, Maxime Joissains¹, Quentin Arlould¹, Delphine Delhotte¹, Frédéric Dehareng¹, Vincent Baeten¹, Alessandro Giusti², Panayiota Demosthenous², Consortium Bromedir², Juan Antonio Fernández Pierna¹.

¹Walloon Agricultural Research Center (CRA-W), Gembloux, Belgium; ²Cyprus Research & Innovation Center Ltd (CyRIC), Nicosia, Cyprus.

14:00 ROOM C2

SESSION 1: DRIVERS AND CHALLENGES FOR NEW UPTAKES OF NEW SOURCES AND USES OF DATA RECORDING

Chairs: **Isabel Casasús and Noureddine Charfeddine**

S01.O-01

LIVESTOCK RECORDING AND IMPROVEMENT IN SOUTH AFRICA: CHALLENGES AND MAJOR DRIVERS

Japie Van Der Westhuizen¹, Bobbie Van Der Westhuizen².

¹*South African Stud Book & Animal Improvement Association, Bloemfontein, South Africa;* ²*SA Stud Book, Pretoria, South Africa.*

S01.O-02

PRACTICAL LESSONS FROM DATA HUB IMPLEMENTATION

Johannes Frandsen¹, Chris Murphy².

¹*Seges Innovation, Aarhus, Denmark;* ²*Chris Murphy Advisory, Richmond, Australia.*

S01.O-03

PERFORMANCE RECORDING IN BOVINES UNDER THE SMALLHOLDERS DAIRY PRODUCTION SYSTEM IN INDIA: CHALLENGES AND SUITABLE INTERVENTIONS

Sujit Saha, Nilesh Nayee, A Sudhakar, Swapnil Gajjar, Atul Mahajan, Kishore G, Rajesh O Gupta.

National Dairy Development Board, Anand, India.

S01.O-04

DEVELOPMENT OF AN AUTOMATED QUALITY CONTROL PIPELINE TO FACILITATE THE REPORTING OF MAJOR GENE GENOTYPES

Katie Quigley¹, Thomas Browne¹, Karl O' Connell¹, Paul Flynn², Ross D Evans³, Michael P Mullen⁴.

¹*Irish Cattle Breeding Federation, Link Rd, Ballincollig, Co. Cork. P31 D452, Republic of Ireland;* ²*Weatherbys Scientific, Unit F1 M7 Business Park Newhall, Naas Co. Kildare W91 VX86, Republic of Ireland;* ³*Irish Cattle Breeding Federation, Link Rd, Ballincollig, Co. Cork. P31 D452, Afghanistan;* ⁴*AgriGenomics Ltd., Cloonmweelaun, Menlough, Ballinasloe, Co. Galway, Republic of Ireland.*

S01.O-05

AGRI-FOOD DATA CANADA: A DATA ECOSYSTEM SERVING AGRI-FOOD SUSTAINABILITY

Lucas M. Alcantara, Carly Huitema, A. Michelle Edwards.

University of Guelph, Guelph, Canada.

S01.O-06

DATA INVESTMENT STRATEGY - THE CORE ISSUE FOR GENETICS ORGANISATIONS IN THE GENOMICS ERA

Robert Banks¹, Siobhan Ring², Ross Evans².

¹AGBU, Armidale, Australia; ²ICBF, Cork, Republic of Ireland.

14:00 ROOM D1

SESSION 10: BRIAN WICKHAM YOUNG PERSONS EXCHANGE PROGRAM (BWYPEx) “BEEF ON DAIRY, SENSORS IN WELFARE MONITORING; EXTRAMIR, SUSTAINABILITY TRAITS”

Chairs: **Martín Burke and Andrew Cromie**

S10.O-01

THE STATE OF THE ART ABOUT THE DEVELOPMENT OF MID-INFRARED BASED FATTY ACIDS PREDICTIONS AND THEIR APPLICATIONS ALONG THE DAIRY FOOD CHAIN.

Michael Whittaker¹, Silvia Orlandini², Christian Baumgartner², Steve Holroyd³, Gavin Scott³, Paul Jamieson³, Débora Santschi⁴, Mazen Bahadi⁴, Bevin Harris⁵, Kathryn Sanders⁵, Hélène Soyeurt⁶.

¹The Cattle Information Service, Telford, United Kingdom; ²ICAR, Utrecht, Netherlands; ³Fonterra Co-Operative Group limited, Ruakura, New Zealand; ⁴Lactanet, Quebec, Canada; ⁵Livestock Improvement Corporation, Newstead, New Zealand; ⁶University of Liège, Gembloux, Belgium.

S10.O-02

BEEF FROM DAIRY: THE ROLE OF GENETIC IMPROVEMENT IN CREATING GREATER INTEGRATION BETWEEN OUR DAIRY AND BEEF INDUSTRIES.

Jo Newton¹, Matthew Shaffer², Andrew Cromie³.

¹Agriculture Victoria, Bundoora, Australia; ²DataGene Limited, Bundoora, Australia; ³ST Genetics, Cork, Republic of Ireland.

S10.O-03

SENSOR DATA FOR ANIMAL HEALTH AND WELFARE – ICAR MEMBERS’ PRESENT PERSPECTIVES AND FUTURE APPLICATIONS

Katharina Schodl¹, Martin Burke², René Van Der Linde³, Christa Egger-Danner¹.

¹ZuchtData EDV-Dienstleistungen GmbH, Vienna, Austria; ²ICAR, Utrecht, Netherlands; ³ICAR, Utrecht, Netherlands.

S10.O-04

CONNECTING INDUSTRY, RESEARCH AND FARMERS TO TACKLE SUSTAINABILITY: FEED EFFICIENCY AND METHANE IN THE SPOTLIGHT

Caeli Richardson¹, Peter Amer², Filippo Miglior³, Michael Aldridge⁴, Oscar Gonzalez-Recio⁵, Ross Evans⁶, Jan Lassen⁷, Jennie Pryce⁸, Amélie Vanlierde Vanlierde⁹, Birgit Gredler-Grandl⁴.

¹AbacusBio International Ltd, Edinburgh, United Kingdom; ²AbacusBio Ltd, Dunedin, New Zealand; ³Lactanet Canada, Guelph, Canada; ⁴Wageningen University and Research, Wageningen, Netherlands; ⁵Instituto Nacional de Investigación y Tecnología Agraria y Alimentaria, Madrid, Spain; ⁶Irish Cattle Breeding Federation, Ballinacollig, Republic of Ireland; ⁷Aarhus University, Aarhus, Denmark; ⁸Agriculture Victoria, Bunboora, Australia; ⁹Walloon Agricultural Research Centre CRA-W, Gembloux, Belgium.

14:00 SALA D 2

SESSION 5.1: PLF TECHNOLOGY DEVELOPMENT AND DATA ACCESSIBILITY

Chairs: **Bert Van't Land and Daniel Villalba**

S05.O-01

PREDICTION OF PERSISTENCY AT DAY 305 IN LACTATION AT THE MOMENT OF THE INSEMINATION DECISION

Yongyan Chen, Wilma Steeneveld, Mirjam Nielen, Miel Hostens, Utrecht University, Utrecht, Netherlands.

S05.O-02

PROTOTYPING A REMOTE SENSING DECISION SUPPORT TOOL FOR GRASSLAND MONITORING IN SOUTHERN BELGIUM : VERSATILE FEATURES TO MEET THE DIVERSITY OF FARMERS' PRACTICES.

Killian Dichou¹, David Mathy², Charles Nickmilder¹, Olivier Debauche³, Amine Roukh³, Astrid Bughin¹, Théo Lefèvre¹, Loïs Penasse¹, Sébastien Van Laeken², Viviane Planchon², Cozmin Lucau-Danila², Héléne Soyeurt¹.

¹ULiège - Gembloux Agro-Bio Tech, Liège, Belgium; ²Walloon Agricultural Research Centre, Gembloux, Belgium; ³University of Mons, Faculty of engineering, Computer Science, Software and Artificial Intelligence Service, Mons, Belgium.

S05.O-03

FARM-TO-TABLE SCIENCE: DAIRY DATA MINING FOR FUTURE RESILIENCE

Ingemar Ohlsson, Tomas Klingström.

Swedish University of Agricultural Sciences, Uppsala, Sweden.

S05.O-04

PREDICTION OF BODY CONDITION IN JERSEY DAIRY CATTLE FROM 3D IMAGES USING MACHINE LEARNING TECHNIQUES.

Rasmus Bak Stephansen¹, Coralia I. V. Manzanilla-Pech¹, Grum Gebreyesus¹, Goutam Sahana¹, Jan Lassen².

¹Aarhus University, Aarhus, Denmark; ²VikingGenetics, Randers, Denmark.

S05.O-05

PHENO3D : VALIDATION OF A HIGH-THROUGHPUT MOVABLE 3D DEVICE FOR THE ACQUISITION OF THE WHOLE CATTLE BODY

Maxence Bruyas¹, Adrien Lebreton², Laurent Griffon³, Laurent Delattre⁴, Clement Allain².

¹ELIANCE, Paris, France; ²IDELE, Paris, France; ³Races de France, PARIS, France; ⁴3D Ouest, Lannion, France.

S05.O-06

FAT AND PROTEIN CORRECTION - ESTIMATING DAILY FAT PERCENTAGE FROM SINGLE SAMPLE IN AMS HERDS USING A REGRESSION MODEL

Julia Sophia Gerke, Florian Grandl, Jürgen Duda.

LKV Bayern, Munich, Germany.

15:30 - 16:00 COFFEE BREAK

16:00 AUDITORIUM

ROUND TABLE: DATA OWNERSHIP AND DATA ACCESSIBILITY

Chairs: **Fernando Estellés and Reinhart Reents**

Thursday 25th May 2023

08:30 ROOM C1

OPEN WORKSHOP: USING SENSOR DATA FOR ANIMAL HEALTH AND WELFARE IMPROVEMENT ALONG THE DAIRY VALUE CHAIN: MERITS AND REQUIREMENT

08:30 ROOM D1

SESSION 6: CHALLENGES AND DEVELOPMENTS IN RECORDING AND SAMPLING FOR SHEEP AND GOATS

Chairs: **Jean Michel Astruc and Steven Sievert**

S06.O-01

MILK RECORDING IN SHEEP AND GOATS: STATE OF THE ART AND MATERIALS USED FOR RECORDING AND SAMPLING

Jean-Michel Astruc¹, Antonello Carta², Mojca Simcic³, Marija Spehar⁴, Eva Ugarte⁵, Cesare Mosconi⁶.

¹IDELE, Toulouse, France; ²Agris Sardegna, Sassari, Italy; ³University of Ljubljana, Ljubljana, Slovenia; ⁴Centre for Livestock Breeding, Zagreb, Croatia; ⁵NEIKER, Vitoria, Spain; ⁶ICAR, Utrecht, Netherlands.

S06.O-02

CHALLENGES ON MILK RECORDING AND SAMPLING IN THE LATXA DAIRY SHEEP BREEDING PROGRAM

Maite Lasarte¹, Lourdes Mintegi², Jon Bizkarralegorra³, Aiora Cenitagoya⁴, Ana Díez⁵.

¹ASLANA, Iza, Spain; ²CONFELAC, Arkaute, Spain; ³ACOL, Durango, Spain; ⁴ELE, Azpeitia, Spain; ⁵AGORALA, Arkaute, Spain.

S06.O-03

CERTIFICATION OF MILK METERS FOR SMALL RUMINANTS: CHALLENGES AND POSSIBILITIES

Guillaume Hamon, Clément Allain, Jean-Louis Poulet.

Institut de l'Élevage, Le Rheu, France.

S06.O-04

OVERVIEWS OF MILK RECORDING AND RECORDING DEVICES IN SHEEP AND GOATS IN ITALY

Mauro Fioretti¹, Lorenzo Pascarella¹, Riccardo Negrini², Giulio Malvezzi³.

¹Associazione Italiana Allevatori (A.I.A.), Roma, Italy; ²Associazione Italiana Allevatori (A.I.A.)/ Università Cattolica del Sacro Cuore, Roma/Piacenza, Italy; ³Associazione Regionale Allevatori della Toscana (A.R.A.T.), Sesto Fiorentino, Italy.

S06.O-05

ICAR PERSPECTIVES ON DEVICES IN SMALL RUMINANTS

Steven Sievert¹, René Van Der Linde², Jean-Michel Astruc³.

¹National DHIA USA, Red Wing, MN, United States; ²ICAR, Utrecht, Netherlands; ³IDELE, Toulouse, France.

S06.O-06

RELIABLE MILK PERFORMANCE TESTING USING MILK FLOW METERS EQUIPPED WITH A REPRESENTATIVE ONLINE SAMPLER DURING TIMESENSITIVE MILKING OF SMALL RUMINANTS

Tilman Hoefelmayr, Axel Prediger, Ansgar Adriany, Sabine Büchel.

WMB, Balgach, Switzerland.

08:30 ROOM D2

SESSION 4.1: CLIMATE CHANGE MITIGATION STRATEGIES

Chairs: **Birgit Gredler-Grandl and David R. Yáñez-Ruiz**

S04.O-01

THE SPANISH STRATEGY TO REDUCE METHANE EMISSIONS THROUGH BREEDING IN DAIRY CATTLE

Oscar Gonzalez-Recio¹, Javier López-Paredes², Aser García-Rodríguez³.

¹INIA, Madrid, Spain; ²CONAFE, Valdemoro, Spain; ³NEIKER, Arkaute, Spain.

S04.O-02

THE SUSTAINABILITY INDEX: A NEW TOOL TO BREED FOR REDUCED GREENHOUSE GAS EMISSIONS INTENSITY IN AUSTRALIAN DAIRY CATTLE

Thuy Nguyen¹, Caeli Richardson², Madeline Post³, Peter Amer³, Gert Nieuwhof¹, Peter Thurn¹, Matthew Shaffer¹.

¹DataGene, Bundoora, Australia; ²AbacusBio, Edinburgh, United Kingdom;

³AbacusBio, Dunedin, New Zealand.

S04.O-03

SUCKLER CARBON EFFICIENCY PROGRAMME

Craig Vigors, Christopher Daly.

ICBF, Ballinacollig, Republic of Ireland.

S04.O-04

A NOVEL FRAMEWORK FOR ESTIMATING THE CARBON FOOTPRINT OF BEEF ANIMALS IN A NATIONAL DATABASE BASED ON GENETIC AND PERFORMANCE DATA

Colm O'Dwyer¹, John Crowley².

¹ICBF, Cork, Republic of Ireland; ²AbacusBio, Edinburgh, United Kingdom.

S04.O-05

ESTIMATION OF ENTERIC METHANE EMISSION IN ITALIAN DAIRY HERDS: APPLICATION OF IPCC EQUATIONS USING DHI DATA.

Federica Luisi¹, Mesfin Mekonnen Moliso², Mauro Fioretti³, Alessia Tondo³, [Riccardo Negrini](#)⁴.

¹Associazione Italiana Allevatori (A.I.A.); Università Cattolica del Sacro Cuore, Roma/Piacenza, Italy; ²Università Cattolica del Sacro Cuore; Associazione Italiana Allevatori, Piacenza/Roma, Italy; ³Associazione Italiana Allevatori (A.I.A.), Roma, Italy; ⁴Associazione Italiana Allevatori (A.I.A.); Università Cattolica del Sacro Cuore, Roma/Piacenza, Italy.

S04.O-06

NEU.RIND - DIGITAL FARM ASSISTANT FOR ASSESSING SUSTAINABILITY, EFFICIENCY AND ENVIRONMENTAL IMPACT ON THE DAIRY FARM

[Franz Steininger](#)¹, Stefan Hörtenhuber², Markus Herndl³, Kristina Linke¹, Martin Stegellner⁴, Johannes Schmid⁵, Marco Horn⁶, Franz-Josef Auer⁷, Christa Egger-Danner¹.

¹ZuchtData, Vienna, Austria; ²University of Natural Resources and Life Sciences, Vienna, Institute of Livestock Sciences, Vienna, Austria; ³HBLFA Raumberg-Gumpenstein, Altrudning, Austria; ⁴Rinderzucht Austria, Vienna, Austria; ⁵Chamber of Agriculture Austria, Vienna, Austria; ⁶Chamber of Agriculture Lower Austria, St. Pölten, Austria; ⁷LKV-Austria, Vienna, Austria.

S04.O-07

Implementation of Genomic Evaluation for Methane Efficiency in Holsteins

[Brian Van Doormaal](#)¹, Hinayah Oliveira², Saranya Narayana¹, Allison Fleming¹, Hannah Sweett¹, Saeed Shadpour³, Francesca Malchiodi⁴, Janusz Jamrozik¹, Gerrit Kistemaker¹, Peter Sullivan¹, Flavio Schenkel³, Christine Baes⁵, Filippo Miglior⁶.

¹Lactanet Canada, Guelph, Canada; ²Lactanet Canada & Purdue University, Guelph, Canada; ³University of Guelph, Guelph, Canada; ⁴Semex, Guelph, Canada; ⁵University of Guelph & University of Bern, Guelph, Canada; ⁶Lactanet Canada & University of Guelph, Guelph, Canada.

10:30 – 11:00 COFFEE BREAK**11:00 ROOM C1**

OPEN WORKSHOP: USING SENSOR DATA FOR ANIMAL HEALTH AND WELFARE IMPROVEMENT ALONG THE DAIRY VALUE CHAIN: MERITS AND REQUIREMENT

11:00 ROOM D1

SESSION 11: RECENT DEVELOPMENTS IN GENOMIC EVALUATIONS: NEW TRAITS, NEW POPULATIONS

Chairs: **M^{re} Jesús Carabaño and Andrew Cromie**

S11.O-01

THE APPLICATION OF GENOMIC SELECTION IN SOUTH AFRICA; IMPLEMENTATION, ADOPTION, CHALLENGES AND FUTURE PROSPECTS.

Bobbie Van Der Westhuizen¹, Japie Van Der Westhuizen², Helena Theron¹, Bernice Mostert¹, Jason Reding¹.

¹SA Stud Book, Bloemfontein, South Africa; ²SA Stud Book, Pretoria, South Africa.

S11.O-02

GENOMIC SELECTION IN SPANISH DAIRY SHEEP BREEDS

Eva Ugarte¹, Itsasne Granado-Tajada¹, Malena Serrano².

¹NEIKER, Vitoria-Gasteiz, Spain; ²INIA-CSIC, Madrid, Spain.

S11.O-03

INCORPORATING GENOMIC INFORMATION ON THE GENETIC EVALUATION OF SPANISH LOCAL BEEF CATTLE BREEDS.

Clara Diaz¹, Cristina Meneses¹, Javier Cañon², Carlos Carleos³, Rosa Morales⁴, Antonio Molina⁴, Daniel Villalba⁵, Juan Carlos Parejo⁶, Juan Altarriva⁷, Luis Varona⁷.

¹INIA-CSIC, Madrid, Spain; ²UCM, Madrid, Spain; ³UNIOvi, Oviedo, Spain; ⁴UCO, Cordoba, Spain; ⁵UdLe, Lerida, Spain; ⁶UEX, Cáceres, Spain; ⁷UNIZAR, Zaragoza, Spain.

S11.O-04

GENETIC PARAMETERS AND SINGLE STEP EVALUATION OF SEXUAL PRECOCITY TRAITS IN CHAROLAIS BEEF CATTLE

Romain Saintilan¹, Manon Gicquel², Aurelia Baur¹, Helene Leclerc¹, François Guillaume².

¹Eliance - INRAE, Paris, France; ²Synetics - Charolais Univers, Noyal sur Vilaine, France.

S11.O-05

GENETIC CORRELATIONS BETWEEN PRODUCTIVE AND REPRODUCTIVE COW-SISTERS PERFORMANCE AND FEED EFFICIENCY AND GREENHOUSE GASSES EMISSIONS IN GROWING BROTHERS-BULLS

Francesco Tiezzi¹, Raffaella Finocchiaro², Jan-Thijs Van Kaam², Lorenzo Benzoni², Marcos Paulo G. Rezende², Riccardo Bozzi¹, Martino Cassandro².

¹Department of Agriculture, Food, Environment and Forestry (DAGRI), University of Florence, Firenze, Italy; ²Anafibj, CREMONA, Italy.

S11.O-06

EXPLORING OPPORTUNITIES TO EVALUATE GENOMICALLY MIR-PREDICTED RESIDUAL CH₄ EXPLOITING CORRELATIONS TO MAKE TRAITS

Hadi Atashi¹, Amélie Vanlierde², Frédéric Dehareng², Hélène Soyeurt³, Nicolas Gengler³.

¹Shiraz University, Shiraz, Iran; ²CRA-W, Gembloux, Belgium; ³ULiège-GxABT, Gembloux, Belgium.

11:00 **ROOM D2**

SESSION 4.2: CLIMATE CHANGE MITIGATION STRATEGIES

Chairs: **Birgit Gredler-Grandl and David R. Yáñez-Ruiz**

S04.O-08

GREENFEED AND SNIFFER STANDARD OPERATING PROCEDURE (SOP) IN DAIRY AND BEEF CATTLE

Lorenzo Benzon¹, Donagh Berry², Elizabeth Dressler³, Roger Hegarty⁴, Lisanne Koning⁵, Ciarán Mc Donnell⁶, Lorna Mcnaughton⁷, Gail Ritchie⁸, Raffaella Finocchiaro¹, Anouk Van Breukelen⁵, Aser García-Rodríguez⁹, Oscar Gonzalez-Reco⁹, Caeli Richardson¹⁰, Trine Michelle Villumsen¹¹, Birgit Gredler-Grandl⁵.

¹ANAFIBJ, Cremona, Italy; ²TEAGASC, Fermoy, Republic of Ireland; ³Kansas State University, Manhattan, United States; ⁴University of New England, Armidale, Australia; ⁵Wageningen University & Research, Wageningen, Netherlands; ⁶Irish Cattle Breeding Federation, Cork, Republic of Ireland; ⁷Livestock Improvement Corporation (LIC), Hamilton, New Zealand; ⁸University of Guelph, Guelph, Canada; ⁹Instituto Nacional de Investigación y Tecnología Agraria y Alimentaria (INIA), Madrid, Spain; ¹⁰ICAR, Utrecht, Netherlands; ¹¹Aarhus University, Aarhus, Denmark.

S04.O-09

RE-LIVESTOCK - FACILITATING INNOVATIONS FOR RESILIENT LIVESTOCK FARMING SYSTEMS

Birgit Gredler-Grandl¹, John Newbold², Laurence Smith³, Hannah Van Zanten¹, Carolina Ramos⁴, Fernando Estellés⁵, Elin Rööös⁶, Ignacio Fernández-Figares⁷, Rosa Nieto⁷, Catherine Pfeifer⁸, Alejandro Parodi Parodi¹, Luca Fontanesi⁹, Michele Moretti¹⁰, Antonio Lopez Francos¹¹, Anne Grete Kongsted¹², Manuel Romero⁷, Andrés Schlageter-Tello¹¹, Ines Rivelli⁷, David Yáñez-Ruiz⁷.

¹Wageningen University & Research, Wageningen, Netherlands; ²SRUC, Dumfries, United Kingdom; ³University of Reading, Reading, United Kingdom; ⁴CONSULAI, Lisbon, Portugal; ⁵Universitat Politècnica de València, Valencia, Spain; ⁶Swedish University of Agricultural Sciences, Uppsala, Sweden; ⁷Estación Experimental del Zaidín, CSIC, Granada, Spain; ⁸Forschungsinstitut für biologische Landwirtschaft, Frick, Switzerland; ⁹University of Bologna, Bologna, Italy; ¹⁰University of Pisa, Pisa, Italy; ¹¹CIHEAM Zaragoza, Zaragoza, Spain; ¹²Aarhus University, Tiele, Denmark.

S04.O-10

INTEGRATING GENETICS AND NUTRITION STRATEGIES TO DEVELOP A ROADMAP FOR GREENHOUSE GAS MANAGEMENT IN RUMINANT SPECIES

Christine Baes¹, Rachel Gervais², Paul Stothard³, Flavio Schenkel¹, Ermias Kebreab⁴, Jennifer Ellis¹, Debora Santschi⁵, Michael Von Massow¹, Caeli Richardson⁶, Graham Plastow³, Leluo Guan³, Katherine Wood¹, Francesca Malchiodi⁷, Angela Canovas¹, Tom Wright⁸, Kent Weigel⁹, Francisco Peñagaricano⁹, Oscar Gonzales-Recio¹⁰, Jan Lassen¹¹, Donagh Berry¹², Raffaella Finocchiaro¹³, Adrien Butty¹⁴, Steven Miller¹⁵, Sam Clark¹⁵, Reinhardt Reents¹⁶, Douglas Macdonald¹⁷, Filippo Miglior¹.

¹University of Guelph, Guelph, Canada; ²Université Laval, Montreal, Canada;

³University of Alberta, Edmonton, Canada; ⁴University of California Davis, Davis, United States; ⁵Lactanet, Montreal, Canada; ⁶Abacus Bio, Edinburgh, United Kingdom; ⁷Semex, Guelph, Canada; ⁸OMAFRA, Guelph, Canada;

⁹University of Wisconsin, Madison, United States; ¹⁰INIA, Madrid, Spain;

¹¹Aarhus University, Tjele, Denmark; ¹²Teagasc, Moorepark, Republic of Ireland;

¹³ANAFIBJ, Cremona, Italy; ¹⁴Qualitas AG, Zug, Switzerland; ¹⁵University of New England, Armidale, Australia; ¹⁶VIT, Verden, Germany; ¹⁷Environment and Climate Change Canada, Ottawa, Canada.

S04.O-11

ICAR HARMONISATION OF SUSTAINABILITY RELATED MILK TRAITS

Tone Roalkvam¹, Birgit Gredler-Grandl², Christa Egger-Danner³, Robert Fourdraine⁴, Debora Santschi⁵, Fabian Bernal⁶, Caeli Richardson⁷, Martin Burke⁸, Rene Van Der Linde⁸.

¹TINE, Oslo, Norway; ²WUR, Wageningen, Netherlands; ³Zuchtdata, Vienna, Austria; ⁴DRMS, Madison, United States; ⁵Lactanet, Montreal, Canada;

⁶DeLaval Group, Tumba, Sweden; ⁷AbacusBio, Hamilton, New Zealand; ⁸ICAR, Utrecht, Netherlands.

S04.O-12

IS THE DIGITAL TRANSITION OF FARM A KEY FOR SUSTAINABILITY? THE PARMALAT LACTALIS ITALIA SCENARIO

Paolo Bulgarelli, Alice Comparelli.

Parmalat Lactalis Italia, Collecchio, Italy.

13:00 - 14:00 LUNCH

14:00 ROOM B

SESSION 9: IMPLEMENTING RFID INTO NATIONAL IDENTIFICATION PROGRAMS

Chairs: **Ken Evers and Andie Dimitriadou**

S09.O-01

THE IMPLEMENTATION OF NATIONAL ANIMAL IDENTIFICATION SYSTEMS IN DEVELOPING COUNTRIES

Alexander Toto.

SATOTO Livestock Projects, Windhoek, Namibia.

S09.O-02

CHALLENGES FACED IN THE IMPLEMENTATION OF A LIVESTOCK IDENTIFICATION SYSTEM - CANADA'S EXPERIENCE

Heather Brown.

Canadian Food Inspection Agency / Government of Canada, Canada.

S09.O-03

AUSTRALIA'S NATIONAL LIVESTOCK IDENTIFICATION SYSTEM (NLIS) - VICTORIA'S EXPERIENCE

Tony Britt.

Agriculture Victoria, Victoria, Australia.

14:00 ROOM C1

SESSION 5.2: PLF TECHNOLOGY DEVELOPMENT AND DATA ACCESSIBILITY

Chairs: **Bert Van't Land and Daniel Villalba**

S05.O-07

HOW TO OPTIMIZE FEED EFFICIENCY BY AUTOMATIC DATA EXCHANGE

Johannes Frandsen.

SEGES Innovation PS, Aarhus, Denmark.

S05.O-08

SYSTEM AND BIOLOGICAL EFFECTS ON QUANTITATIVE MILKING SPEED PHENOTYPES FROM INLINE MILK METERS

Asha Miles¹, Jana Hutchison¹, Robert Fourdraine², Steven Sievert³, Sophie Eaglen⁴, Kristen Gaddis⁵, Jeffrey Bewley⁶, Joao Durr⁵, Jay Weiker⁴.

¹USDA-ARS, Beltsville, United States; ²DRMS, Raleigh, United States; ³NDHIA QCS, Verona, United States; ⁴NAAB, Madison, United States; ⁵CDCB, Bowie, United States; ⁶Holstein Association USA, Brattleboro, United States.

S05.O-09

FRENCH EXPERIENCE OF USING ICAR APPROVED METHOD FOR PREDICTING 24-HOUR FAT PERCENTAGE AND YIELD FROM ONE SAMPLED MILKINGS IN AUTOMATIC MILKING SYSTEMS

Xavier Bourrigan¹, Gabriel Augier², Roxane Vallee¹.

¹Institut de l'Elevage, Paris, France; ²Eliance, Paris, France.

S05.O-10

COMPARING PEAK OF LACTATION FROM AUTOMATIC MILKING SYSTEMS AND CONVENTIONAL MILKING SYSTEMS

Liliana Fadul, Gervais Bisson, Débora Santschi.

Lactanet, Montreal, Canada.

S05.O-11

360 INNOVATIVE SOLUTIONS FOR THE SUSTAINABILITY OF AMS DAIRY FARMS IN SPAIN

Noureddine Charfeddine.

CONAFE, Valdemoro, Spain.

S05.O-12

MIGRATING ICAR'S GUIDELINES TO A WIKI

Bruce Golden¹, Robert Banks², Andrew Cromie³, Martin Burke⁴.

¹Retired, Lacey, WA, United States; ²Retired, Tasmania, Australia; ³Sexing Technologies, Gouda, Netherlands; ⁴ICAR, Utrecht, Netherlands.

14:00 ROOM C2

OPEN WORKSHOP: EXTRA-MIR

CREATING A WORLD REPRESENTATIVE MILK MID-INFRARED SPECTRAL DATABASE TO LIMIT THE SPECTRAL EXTRAPOLATION WHEN A PREDICTION IS REALIZED

Hélène Soyeurt¹, Charles Nickmilder¹, Sébastien Franceschini¹, Michael Whittaker², Frédéric Dehareng³, Mazen Bahadi⁴, Julie Leblois⁵, Clément Grelet⁵.

¹University of Liège - Gembloux Agro-Bio Tech, Gembloux, Belgium; ²The Cattle Information Service, Telfort, United Kingdom; ³Walloon Research Centre, Gembloux, Belgium; ⁴Lactanet, Sainte-Anne-de-Bellevue, Canada; ⁵European Milk Recording, Ciney, Belgium.

WHAT IS THE BEST MODELLING APPROACH TO PREDICT SKEWED DISTRIBUTED HEALTH BIOMARKERS FROM MIR, A CASE STUDY WITH THE HAPTOGLOBIN IN MILK?

Sebastien Franceschini¹, Marion Calmels², Clement Grelet³, Julie Leblois⁴, Yves Brostaux¹, Happymoo Consortium⁵, Nicolas Gengler¹, Helene Soyeurt¹.
¹ULiège - Gembloux Agro-Bio Tech, Liège, Belgium; ²Seenovia, Saint-Berthevin, France; ³Walloon Agricultural Research Center, Gembloux, Belgium; ⁴Wallon Breeders Association Group, Ciney, Belgium; ⁵Consortium, Ciney, Belgium.

14:00 ROOM D1

SESSION 2.1: ADVANCES ON MONITORING WELFARE AT GROUP AND INDIVIDUAL LEVEL

Chairs: **Katharina Friederike Stock and Pol Llonch Obiols**

S02.O-01

EXPLORATION OF USING ANIMAL-BASED PARAMETERS (ACTIVITY LEVEL AND RESPIRATORY HEALTH STATUS) COLLECTED BY SENSORS TO MONITOR PIG WELFARE ON FARM

Heng-Lun Ko¹, Damián Escribano², Marina López-Arjona¹, María Botia², Alba Ortín-Bustillo², Fernando Tecles², Pablo Fuentes Pardo³, José Cerón², Xavier Manteca¹, Pol Llonch¹.

¹Universitat Autònoma de Barcelona, Cerdanyola del Vallès, Spain;

²Universidad de Murcia, Murcia, Spain; ³CEFU, S.A., Murcia, Spain.

S02.O-02

IDENTIFICATION OF BEHAVIORAL PATTERNS ASSOCIATED WITH ACIDOSIS IN DAIRY COWS

Lucile Herve¹, Yaneth Gómez², Kevin Chow³, Anna H. Stygar⁴, Greta V. Berteselli⁵, Emanuela Dalla Costa⁵, Elisabetta Canali⁵, Xavier Manteca², Pol Llonch⁶.

¹PEGASE, INRAE, Institut Agro, Saint-Gilles, France; ²Department of Animal and Food Science, Universitat Autònoma de Barcelona, Cerdanyola del Vallès, Spain; ³Department of Information and Communications Engineering, Universitat Autònoma de Barcelona, Cerdanyola del Vallès, Spain; ⁴Natural Resources Institute Finland (Luke), Helsinki, Finland; ⁵Università degli Studi di Milano, Dipartimento di Medicina Veterinaria e Scienze Animali, Lodi, Italy; ⁶Department of Animal and Food Science, Universitat Autònoma de Barcelona, Cerdanyola del Vallès, France.

S02.O-03

A PREDICTIVE MODEL FOR HYPOCALCEMIA IN DAIRY COWS UTILIZING BEHAVIOURAL SENSOR DATA COMBINED WITH DEEP LEARNING

Meike Van Leerdam¹, Arno Liseune², Peter Hut¹, Elena Slavco¹, Jan Hulsen³, Miel Hostens⁴.

¹Utrecht University, Utrecht, Netherlands; ²Ghent University, Ghent, Belgium; ³Vetvice/Cowsignals, Bergen op Zoom, Netherlands; ⁴Utrecht University and Ghent University, Utrecht and Ghent, Netherlands.

S02.O-04

AUXILIARY TRAITS FOR LAMENESS IN AUSTRIAN FLECKVIEH COWS

Astrid Köck¹, Katharina Schodl¹, Birgit Fuerst-Waltl², Marlene Suntinger¹, Kristina Linke¹, Johann Kofler³, Franz Steiniger¹, Hermann Schwarzenbacher¹, Lena Lemmens³, Franz-Josef Auer⁴, Christa Egger-Danner¹.

¹ZuchtData EDV-Dienstleistungen GmbH, Vienna, Austria; ²University of Natural Resources and Life Sciences, Vienna, Institute of Livestock Sciences, Vienna, Austria; ³University of Veterinary Medicine, Vienna, Austria; ⁴LKV Austria, Vienna, Austria.

S02.O-05

EVALUATION OF CAMERA-BASED DAIRY CATTLE LAMENESS DETECTION TECHNOLOGY PAIRED WITH ARTIFICIAL INTELLIGENCE

Drew Swartz¹, Elise Shepley¹, Duane Norman², Javier Burchard², Asha Miles³, Xiao-Lin Wu², Kristen P. Gaddis², Gerard Cramer¹.

¹College of Veterinary Medicine, University of Minnesota, St. Paul, MN, United States; ²Council on Dairy Cattle Breeding, Bowie, MD, United States; ³Animal Genomics and Improvement Laboratory (AGIL) USDA, USA, Beltsville, MD, United States.

14:00 ROOM D2

SESSION 3: BREEDING FOR RESILIENCE TO CLIMATE CHANGE: ADAPTATION STRATEGIES

Chairs: **Manuel Ramón Fernández and Thuy Nguyen**

S03.O-01

TOWARDS NEW BREEDING TOOLS IN A CONTEXT OF CLIMATE CHANGE: FERTILITY RESULTS OF THE RUMIGEN PROJECT ON NEW PHENOTYPES FOR HEAT TOLERANCE TRAITS

Maria Carabaño¹, Aurelie Vinet², Hans Mulder³, Mario Calus³, Jeremie Vandenplas³, Manuel Ramón⁴, Clara Díaz¹, Beatriz Cuyabano², Didier Boichard², Eric Pailhoux², Sophie Mattalia².

¹INIA-CSIC, Madrid, Spain; ²INRAE, Jouy-en-Josas, France; ³Wageningen University & Research, Wageningen, Netherlands; ⁴IRIAF, Valdepeñas, Spain.

S03.O-02

DEVELOPMENT OF A GLOBAL HEAT STRESS ASSESSMENT FOR GENETIC EVALUATION OF HEAT STRESS IN DAIRY CATTLE

Pauline Lemal¹, Marie-Nguyet Tran², Martine Schroyen¹, Nicolas Gengler¹.

¹Gembloux Agro-Bio Tech / University of Liège, Gembloux, Belgium; ²Elevéo / Association Wallonne des Eleveurs, Ciney, Belgium.

S03.O-03

MODELLING OF GENETIC HEAT TOLERANCE IN ITALIAN HOLSTEIN COWS

Raffaella Finocchiaro, Jan-Thijs Van Kaam, Ferdinando Galluzzo, Maurizio Marusi, Martino Cassandro.

Anafibj, Cremona, Italy.

S03.O-04

GENETIC ANALYSIS OF LACTATION CONSISTENCY USING DAILY MILK WEIGHTS IN U.S. HOLSTEINS

Fiona Louise Guinan¹, Robert Fourdraine², Francisco Peñagaricano¹, Kent Weigel¹.

¹University of Wisconsin-Madison, Madison, United States; ²Dairy Records Management Systems, Raleigh, United States.

S03.O-05

PREDICTION OF HEAT STRESS STATUS BY INFRARED SPECTROSCOPY IN DAIRY SHEEP

Manuel Ramon¹, Clara Diaz², María Jesús Carabaño³.

¹CERSYRA-IRIAF, Valdepeñas, Spain; ²INIA-CSIC, Madrid, Spain; ³CSIC-INIA, Madrid, Spain.

15:30 - 16:00 COFFEE BREAK

16:00 ROOM C2

OPEN WORKSHOP: EXTRA-MIR

Thursday 25th May 2023

16:00 ROOM D1

SESSION 2.2: ADVANCES ON MONITORING WELFARE AT GROUP AND INDIVIDUAL LEVEL.

Chairs: **Katharina Friederike Stock and Pol Llonch Obiols**

S02.O-06

ASSESSING THE IMPACT OF BODY CONDITION SCORE DYNAMICS FROM DRY-OFF TO CALVING ON THE INCIDENCE OF EARLY LACTATION DISEASE IN HOLSTEIN COWS

Pablo Pinedo¹, Diego Manriquez², Joaquin Azocar³, Albert De Vries⁴.

¹Colorado State University, Fort Collins, CO, United States; ²Colorado State University, Fort Collins, United States; ³DeLaval Inc, Bannockburn, United States; ⁴University of Florida, Gainesville, FL, United States.

S02.O-07

USE OF VOCALIZATIONS TO DETECT PAIN AND DISCOMFORT IN DAIRY COWS AT DRY-OFF

Joana Miranda¹, Cristian Larrondo², Raúl Guevara², Ester Vidaña-Vila³, Jordi Malé³, Marc Freixes³, Rosa M. Alsina-Pagès³, Leticia Duboc³, Eva Mainau², Pol Llonch⁴.

¹AWEC Advisors S. L., Cerdanyola del Valles, Spain; ²AWEC Advisors S.L., Cerdanyola del Valles, Spain; ³Human-Environment Research (HER) - La Salle - Universitat Ramon Llull, Barcelona, Spain; ⁴Universitat Autònoma de Barcelona, Cerdanyola del Valles, Spain.

S02.O-08

A NEW MEASURE TO RANK COW PRODUCTION PERFORMANCE USING LIFETIME INCOME VALUES.

Mario Séguin, Robert Moore, René Lacroix, Débora Santschi.

Lactanet, Ste-Anne-de-Bellevue, Canada.

S02.O-09

SEARCHING FOR PHENOTYPES TO IMPROVE WELFARE IN AVILEÑA-NEGRA IBÉRICA BEEF CATTLE BREED: PRELIMINARY RESULTS

Carmen Giné¹, Cristina Meneses¹, M. Jesús Carabaño¹, M. Mar González², Alba Hernández², Carmen González¹, Fátima Vicente¹, Marta Álvarez³, Jesús De La Fuente⁴, Clara Díaz¹.

¹INIA, CSIC, Madrid, Spain; ²RAEANI, Ávila, Spain; ³ULE, León, Spain; ⁴UCM, Madrid, Spain.

16:00 ROOM D2

SESSION 8: ADAPTATION, RESILIENCE AND AGROECOLOGICAL TRANSITION IN SMALL RUMINANTS AND CAMELIDS.

Chairs: **Jean Michel Astruc and Eva Ugarte**

S08.O-01

DTREO, A FLEXIBLE CLOUD-BASED DATA-RECORDING PLATFORM FOR DATA-DRIVEN DECISIONS IN SHEEP AND GOAT INDUSTRIES

Simone Savoia¹, Bruno Santos², Mark Teviotdale², Sharl Liebergreen², Peter Amer², Tim Byrne¹.

¹AbacusBio Int. Limited, Edinburgh, United Kingdom; ²AbacusBio Limited, Dunedin, New Zealand.

S08.O-02

A TIME-SERIES ANALYSIS OF ALPINE AND SAANEN GOAT MILK PRODUCTIVITY TRENDS IN TAIWAN

Po-An Tu¹, Jen-Wen Shiau¹, Shui-Tsai Chen², Ming-Che Wu², Jih-Tay Hsu³, Ming-Kuei Yang¹, Jen-Fang Huang².

¹Hsinchu Branch, Livestock Research Institute, Miaoli, Taiwan; ²Livestock Research Institute, Tainan, Taiwan; ³National Taiwan University, Taipei, Taiwan.

S08.O-03

GENOCELLS FOR DAIRY GOATS: IDENTIFICATION OF THE MOST CONTRIBUTING GOATS TO THE BULK TANK SOMATIC CELL COUNT BY GENOTYPING TANK MILK.

Jean-Bernard Daviere¹, Antoine Vivier¹, Pierre Lenormand¹, Tanguy Lallemand¹, Florent Perrin², Marion Calmels¹, Magali Foucher².

¹Seenovia, Saint Bertevin, France; ²Agranis, Saint Bertevin, France.

S08.O-04

SELECTIVE PEDIGREE BREEDING EFFICIENCY OF IMPORTED BREEDS OF DAIRY GOAT IN TROPICAL TAIWAN

Mingche Wu¹, Yungyu Lai¹, Shuitsai Chen¹, Deryuh Lin¹, Hsiuluan Chang².

¹Taiwan Livestock Research Institute, Tainan, Taiwan; ²National Pingtung University of Science and Technology, Pingtung, Taiwan.

Thursday 25th May 2023

S08.O-05

VALORIZATION OF EXTENSIVE BREEDING OF THE SPANISH MERINO SHEEP THROUGH THE QUALITY WOOL IMPROVEMENT: PRELIMINARY RESULTS OF GWAS OF FIBER DIAMETER FROM WHOLE GENOME SEQUENCES

Gabriel Anaya Calvo-Rubio¹, Nora Laseca¹, Andrés Domingo², Antonio Granero³, Francisco Arrebola⁴, Chiraz Ziadi¹, Antonio Molina¹.

¹University of Córdoba, Córdoba, Spain; ²Center of Selection and Reproduction Animals (CENSYRA), Badajoz, Spain; ³National Association of Merino Sheep Breeders (ACME), Madrid, Spain; ⁴Agriculture, Livestock and Fisheries Research Institute (IFAPA), Córdoba, Spain.

S08.O-06

THE POTENTIAL OF BREEDING CASHMERE GOATS IN EUROPE

Nora Kravis¹, Lapo Tardelli², Cristina Nocelli³.

¹Azienda Agricola la Penisola, Radda in Chianti, Italy; ²Universita di Firenze, Firenze, Italy; ³Universita di Camerino, Camerino, Italy.

