

PPiLOW: innovations for improving animal welfare and human well-being in low input outdoor and organic poultry and pig production systems

Lucia Rocchi¹, Anne Collin², Meloni G.¹, Bonnefous C.², Re M.^{3,4}, van Vooren L.⁵, Jamart A.⁵, Niemi J.⁶, Väre M.⁶, Lähänen K.⁶, Tuytens F.⁷, Thys M.⁷, Graat E.⁷, Van den Hole C.⁷, Rodenburg T.B.⁸, Kliphuis S.⁸, Giersberg M.F.⁸, Roinsard A.⁹, Tavares O.⁹, Desaint B.⁹, Steinfeldt S.¹⁰, Pedersen L.J.¹⁰, Engberg R.¹⁰, Almadani M.I.¹¹, Carelli R.¹², Sciarretta M.¹², Rosati A.¹², Guilloteau L.A.², Réhault-Godbert S.², Gautron J.², Le Bihan-Duval E.², Mignon-Grasteau S.², Berri C.², Barbin A.², Guettier E.², Baéza E.², Chartrin P.², Bordeau T.², Raynaud E.², Couroussé N.², Cailleau-Audouin N.², Crochet S.², Bodin P.¹³, Tourneur L.¹³, Guichaoua A.¹³, Van den Brand H.¹⁴, Kemp B.¹⁴, Castellini C.¹, Reverchon M.¹⁵, Guémené D.¹⁵, Sourdioux M.¹⁵, Brard-Fudulea S.¹⁵, Akakpo R.¹⁵, Renard-Dewinter F.¹⁵, Rangel Pedersen N.¹⁶, Brunsgaard G.¹⁶, Shepens R.¹⁶, Amind M.¹⁶, Depraetere S.¹⁷, Grenier K.¹⁸, Dubuc D.¹⁸, Le Lann M.-V.¹⁸, Ponzio R.¹⁹, Mainardi M.¹⁹, Accotto C.², Coletta M.², Guesdon V.²⁰, Leruste H.²⁰, Billiard B.²⁰, Bessa Ferreira V.²⁰, Walley K.²¹, Parrott P.²¹, Allan S.²¹, Baldinger L.²², Pluschke H.²², Delanoue E.²³, Macherez F.²³, Warin L.²⁴, Hercule J.²⁴, Pertusa M.²⁴, Stomp M.²⁴, Travel A.²⁴, Bouvarel I.²⁴, Germain K.²⁵, Ravon L.²⁵, Calandreau L.²⁶, Labas V.²⁶, Prunier A.²⁷, Merlot E.²⁷, Tallet C.²⁷, Perruchot M.-H.²⁷, Louveau I.²⁷, Van Milgen J.²⁷, Dessauge F.²⁷, Clouard C.²⁷, Meunier-Salaün M.-C.²⁷, Lebreton B.²⁷, Montagne L.²⁷, Faure J.²⁷, Zuliani A.²⁸, Venezia P.²⁸, Canario L.²⁹, Ferchaud S.³⁰, Cozma V.³¹, Spinu M.³¹, Băieș M.H.³¹, Courboulay V.³², Roguet C.³², Gaudré D.³², Chevillon P.³², Alibert L.³², Decruyenaere V.³³, Herremans S.³³, Wavreille J.³³, Vanggaard P.³⁴, Vanggaard J.B.³⁴, Micheloni C.³, Thobe P.¹¹

Presenter: Lucia Rocchi or Anne Collin

1, Department of Agricultural, Environmental and Food Science, University of Perugia, Borgo XX Giugno 74, 06121 Perugia, Italy;

lucia.rocchi@unipg.it;

2- INRAE, Université de Tours, BOA, 37380 Nouzilly, France; Anne.Collin@inrae.fr

1, Department of Agricultural, Environmental and Food Science, University of Perugia, Borgo XX Giugno 74, 06121 Perugia, Italy; 2, INRAE, Université de Tours, BOA, 37380 Nouzilly, France; 3, AIAB-FVG, Via dei tigli 2, Fagagna (UD), Italy; 4, Scuola Superiore Sant'Anna (SSSA), Pisa, Italy; 5, BioForum Vlaanderen, Regine Beerplein 1 bus E305, 2018 Antwerpen, Belgium; 6, Natural Resources Institute Finland (Luke), Kampusranta 9, 60320 Seinäjoki, Finland; 7, Animal Sciences Unit, Flanders Research Institute for Agriculture, Fisheries and Food (ILVO), Scheldeweg 68, B-9090 Melle, Belgium; 8, Faculty of Veterinary Medicine, Utrecht University, Yalelaan 2, 3584 CM Utrecht, Netherlands; 9, ITAB, 9, rue André Brouard – BP 70510 – 49 100 Angers Cedex 02, France; 10, Aarhus University, Department of Animal Science, DK-8830 Tjele, Denmark; 11, Thuenen Institute, Institute of Farm Economics, Bundesallee 63, 38116 Braunschweig, Germany; 12, EAAP, Via Giuseppe Tomassetti, 3 A/1, 00161 Roma RM, Italy; 13, ACTA, 149 rue de Bercy, 75595 Paris CEDEX 12, France; 14, Adaptation Physiology Group, Wageningen University and Research, Wageningen, The Netherlands; 15, SYSAAF, 37380 Nouzilly, France; 16, Fermentationexperts AS, Vorbassevej 12, DK-6622 Bække, Denmark; 17, Circular Organics nv, Slachthuisstraat 120/6, 2300 Turnhout, Belgium; 18, LAAS-CNRS, Université de Toulouse, CNRS, UPS, INSA, 31031 Toulouse, France; 19, Slow Food Biodiversity, Piazzale Degli Uffizi Accademia Dei Georgofili, Firenze 50122, Italy; 20, JUNIA, CASE 59000, Lille, France; 21, Harper-Adams University, Newport TF10 8NB, United Kingdom; 22, Thuenen Institute, Institute of Organic Farming, Trenthorst 32, 23847 Westerau, Germany; 23, ITAVI, IDELE, IFIP, MNE, 149 rue de Bercy, 75595 PARIS cedex 12, France; 24, ITAVI, 37380 Nouzilly, France; 25, INRAE, EASM, Le Magneraud, Saint-Pierre-d'Amilly, BP 52, 17700 Surgères, France; 26, INRAE, CNRS, IFCE, Université de Tours, PRC, 37380 Nouzilly, France; 27, INRAE, Institut Agro - Agrocampus-Ouest, PEGASE, 35590 Saint Gilles, France; 28, SIVtro VSF Italia, Sede c/o Istituto Zooprofilattico Sperimentale delle Venezie viale dell'Università, 10 - 35020 Legnaro, Italy; 29, INRAE, Université de Toulouse, ENVT, GenPhySE, 31326 Castanet-Tolosan, France; 30, INRAE, GenESI, 86480 Rouillé, France; 31, Department of Parasitology and Parasitic Disease, Faculty of Veterinary Medicine, USAMV Cluj-Napoca, Mănăştur street, 3-5, 400372 Cluj-Napoca, Romania; 32, IFIP, B.P. 35104, 35651 Le Rheu Cedex, France; 33, Production and Sectors Department, Walloon Agricultural Research Centre, 8 rue de Liroux, 5030 Gembloux, Belgium; 34, Vanggaard Staldmontage, Elmevej 50 - 9700 Brønderslev, Denmark.