



PPILOW

Poultry and Pig Low-input and Organic
production systems' Welfare



PPILOW, a European project dedicated to Welfare in Poultry and Pig Low-input outdoor and Organic production systems (2019-2024)

Newsletter - Issue 4

November 2021



The PPILOW project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement N°816172.



SUMMARY

| | |
|---|----------|
| Two years of co-creation of innovations with the European practitioners, consumers and citizens in the PPILOW project! - by Anne Collin (INRAE) | 2 |
| Review: What are the challenges facing the table egg industry in the next decades and what can be done to address them? – by Joel Gautron and Sophie Rehault-Godbert (INRAE) | 3 |
| PPILOW Italian meeting “Innovative strategies to promote the welfare and products quality of extensive chickens: environmental enrichment and role of genetic strain” - by Cesare Castellini (UNIPG) | 4 |
| Flemish NPG starts up an additional project – by Laura Van Vooren (BioForum) | 5 |
| Webseries 1st Video | 5 |
| Poultry and Pig Welfare Applications! | 5 |
| Current PPILOW experiments for improving poultry welfare | 5 |
| Contributions of PPILOW partners to the dissemination of the project outputs – by Anne Collin (INRAE) | 6 |
| Contribute to the Public consultation of the European Commission on Animal Welfare! – by Anne Collin (INRAE) | 6 |
| Coming events | 7 |

Two years of co-creation of innovations with the European practitioners, consumers and citizens in the PPILOW project! - by Anne Collin (INRAE)

The second annual meeting of the European [PPILOW project](#) (Poultry and PIG Low-input and Organic production systems' Welfare, 2019-2024) was held from the 21st to the 23rd of September, 2021. During this 3-day online meeting, the PPILOW partners from 9 European countries shared with members of the project European Multiactor Board and National Practitioner Groups (NPGs) on PPILOW advances. Thanks to its multiactor participative approach, and despite the COVID-19 pandemic and sanitary difficulties due to the avian flu, interactions of PPILOW partners with European farmers and representatives of the low-input outdoor and organic pig and poultry production systems, consumers and citizens were very rich. The project advances this year elicited the qualitative and quantitative preferences of practitioners and consumers concerning the PPILOW-proposed levers of welfare improvements in the target systems, and their potential economic impacts. The project partners released the mobile phone applications for welfare assessment on-farm co-created with the PPILOW National Practitioner Groups: [PIGLOW](#) for pigs and an extended version of the [EBENE](#)

application for poultry. The PPILOW data collection framework further enabling the One Welfare sustainability assessments and the building of business models was also discussed with practitioners. The participants to the annual meeting could discover the set-up and first results of PPILOW experiments aiming at avoiding feather pecking in hens with intact beaks and piglet castration. The PPILOW partners also presented first results on the impacts of rearing dual-purpose genotypes able to produce both eggs and meat in Denmark, France and Germany, and they are currently developing an in-ovo sexing method, hence avoiding the elimination of male day-old layer chicks. Strategies enabling to enhance the robustness and health of pigs and poultry are also under investigation. They deal with the rearing of new genotypes of slow-growing broilers favoring the free range exploration, the selection of pig genotypes and improving of hut designs for sows reared outdoor for decreasing piglet mortality rates. Feeding pigs and laying hens with plant extracts or fermented components as a strategy for decreasing parasitism or bacterial diseases is also explored, whereas studies on early life management levers for increasing broiler resilience are prepared to be launched in 2022. The first results obtained in experimental facilities have enabled to set up with the PPILOW National Practitioner Groups the first PPILOW field studies for evaluating the levers of welfare improvement according to the local preferences and expertise. During this second annual meeting the members of the European Multiactor Board and project National Practitioner Groups reflected on the project multiactor approach involving practitioners and associations, on the PPILOW results and contributed to the project communication strategy towards the practitioners, citizens, consumers and policy makers.



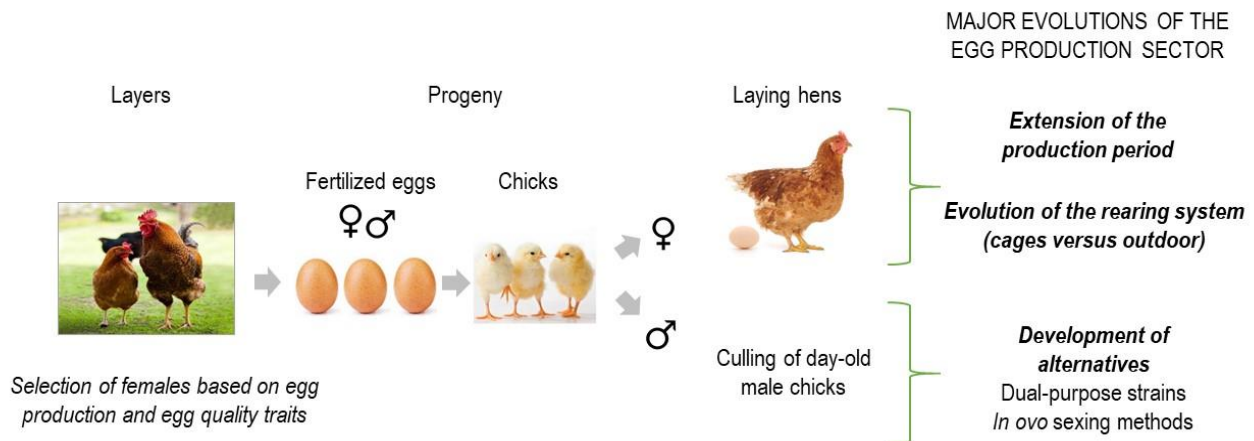
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Review: What are the challenges facing the table egg industry in the next decades and what can be done to address them? – by Joel Gautron and Sophie Rehault-Godbert (INRAE)

There has been a strong consumer demand to take welfare into account in animal production, including table eggs. This is particularly true in Europe and North America but increasingly around the world. We reviewed the main demands that is facing the egg industry driven by economic, societal and sustainability goals. We reported how table egg consumption patterns have already seen a major shift from cage to non-cage

production systems because of societal pressures and how it still challenging the layer sector. We also described the development of extending laying period to reduce the number of replacement layers and improve the economics and sustainability. Finally, we reviewed the two main alternatives to the culling of male day-old chicks of actual layer breeds. Hence, the development of dual-purpose strains and *in ovo* sexing approaches are extensively discussed. Most of these changes are in progress and seem likely inevitable, at least in European markets.

Graphical abstract



Review: What are the challenges facing the table egg industry in the next decades and what can be done to address them? - J. Gautron, S. Réhault-Gobert, T.G.H. Van de Braak, I. C. Dunn. *Animal*, Issue 15, Vol. 7, July 2021. Available at: <https://doi.org/10.1016/j.animal.2021.100282>

PPILOW Italian meeting “Innovative strategies to promote the welfare and products quality of extensive chickens: environmental enrichment and role of genetic strain” - by Cesare Castellini (UNIPG)

The Italian preliminary-PPILOW meeting will be held on 15 December 2021 at OSCARD BUSINESS CENTER BOLOGNA, SALA XL, Spazio Business Center, via Boldrini 18/A, Bologna. The meeting will propose innovative strategies to improve the welfare of chickens reared in extensive systems provided or not with environmental enrichments. Furthermore, a focus on behaviours, productive performance, physiology and carcass and meat characteristics of slow growing chicken strains will be done. During the meeting the PPILOW poultry National Practitioner Groups will be also involved in order to share with them the first results of the project and to collect their feedback. For more details and the program [read the flyer](#). To register please [fill the form](#).

Flemish NPG starts up an additional project – by *Laura Van Vooren (BioForum)*



Search for worms in the guts sampled from laying hens during autopsy - © BioForum

Bioforum facilitates two PPILOW National Practitioner Groups, one on layers and one on pigs. Both NPGs focus on organic production. The layer NPG, consisting of laying hen farmers, veterinarians, feed producers, breeders and retailers, expressed the need to work together on the topic of natural feed additives to promote health and robustness in layers and more specifically to suppress worm infections. During a NPG meeting in 2020, scientists were invited to discuss this topic and a first idea for a research project was launched. Last months, several NPG members, Bioforum and ILVO started a two-year project to investigate the role of several plant-based products. In this project, two plant-based products will be supplied to organic layers and worm infection pressure will be monitored by means of egg counts, autopsies and blood samples. Progress and results of this project are shared on regular basis with the NPG.

Webseries 1st Video

One of the PPILOW project activities is to create a web series of 10 episodes. The 1st video has been thought as a teaser with the goal to present, in general, the objectives and targets of the project. [Enjoy this nice video!](#)

Poultry and Pig Welfare Applications!

One of the aims of the PPILOW project is to develop tools for organic and free-range farmers to monitor the welfare of their own animals. For this purpose, two apps have been developed: 1) the EBENE app for poultry farmers and 2) the PIGLOW app for pig farmers. With this two apps, poultry and pig farmers can conduct welfare assessments of their animals and view their results, which include automated feedback and an anonymous comparison with the results of other app users. The apps and their functionalities are introduced in the following videos: [EBENE](#) and [PIGLOW](#). Watch the videos presentation of these new and original apps!

Current PPILOW experiments for improving poultry welfare

PPILOW project has realized a video to present the first experiments carried out by some partners. The video highlights the concept of “welfare” in extensive poultry systems. [Enjoy the video to know more!](#)

Contributions of PPILOW partners to the dissemination of the project outputs – *by Anne Collin (INRAE)*

The PPILOW partners have presented the outputs of the project in several scientific and professional events this summer. Especially we can mention:

- Two communications in a specific session of European Association of European Economists 2021, XVI EAAE Congress, July 20-23, 2021, Prague, Czech Republic (2020 postponed). They reviewed on the one hand “European pig and poultry Productions systems and marketing labels elaborating animal welfare”, and proposed on the other hand an economic comparison of laying hens’ husbandry systems on Different Animal Welfare Levels.
- Two communications and a workshop at the Organic World Congress OWC 2021, 20th Organic World Congress, 6-10 September 2021 in Rennes, France (2020 postponed). These communications presented the PPILOW project multiactor approach and reviewed the barriers to welfare and levers for improvement in pig and poultry organic production systems. The PPILOW partners AIAB and INRAE also moderated a workshop entitled “How to improve poultry and pig welfare in organic production systems?” In this session were invited Monique Bestman from the Louis Bolk Institute and Christine Leeb from the University of Natural Resources and Life Science Vienna who presented Challenges for pig and poultry organic production systems for improving welfare on a scientific and practical point of view. After a short presentation of the PPILOW project, an Interactive demonstration of the functionalities of welfare self-assessment tools for improving animal welfare on-farm in organic and outdoor systems was proposed by ILVO. This communication was followed by a World Café moderated by AIAB on “What will be the impacts of the new regulations for advancing on animal welfare for pig and poultry organic systems and practitioners”, with the participation of a pig farmer (Jacopo Goracci, Tenuta di Paganico farm, Italy) and a poultry farmer (IJsbrand Snoeij, ‘t Paradijs farm, The Netherlands) currently contributing to PPILOW National Practitioner Groups, and ITAB.
We are grateful to all the contributors for their great involvement to this workshop!
- The two applications EBENE[®] and PIGLOW respectively extended and co-built with practitioners within the PPILOW project were also presented at the last WAFL 8th International Conference on the assessment of Animal Welfare at farm and group level, 16th-19th August 2021, Cork, Ireland (2020 postponed)
- Finally, the PPILOW project approach, especially for evaluation the levers of welfare improvement in accordance with the One Welfare concept was presented by the project partners at the One Welfare World Conference, 15-16 of September 2021.

Additionally to these communications in international conferences, the PPILOW partners participated to national scientific congresses and professional events.

Contribute to the Public consultation of the European Commission on Animal Welfare! – *by Anne Collin (INRAE)*

The European Commission has launched a public consultation in relation to the revision of the Animal Welfare legislation planned to be completed by the end of 2023. You can consult the first results of the **Inception impact assessment** and provide your feedback [by following this link](#) and filling the EC survey **before the 21st of January, 2022**.

Coming events

List of the upcoming events with PPILOW project partners attendance.

| Event  | Date  | Location  | Partners  |
|---|--|---|---|
| World Poultry Congress 2022 | 7-11 August 2022 | Paris, France | Specific session on Animal Welfare in outdoor and organic production systems with several partners involved |



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www.ppilow.eu



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