

# 100 % organic feedstuffs for laying hens

## Problem

In 2022, it will become compulsory under EU Regulations (EC) no 889/2008 to provide all organic adult livestock with feed derived from 100% organic origins. However, the creation of diets that fulfil laying hen requirements and the associated technical-economic impacts remain unclear.

## Solution

The on-farm trial evaluated the impact of 100% organic feed on egg laying (peak and single laying phase) and feed intake. To maintain egg production, soya and sunflower cake are important ingredients that cannot be replaced or significantly reduced with pea and faba bean.

## Applicability box

### Theme

Layers

### Context

Mountain climate (Jura)

### Application time

All laying period

### Required time

Time to feed the animals

### Period of impact

Laying period

### Equipment

Existing feeding equipment

## Benefits

100 % organic feed with more utilization of sunflower and soya limits the loss of productivity while meeting regulatory requirements.

## Practical recommendation

- Increasing organic soya- and sunflower cake in the diet limits the decrease of egg production in 100% organic feedstuffs for layer production (Figure 1). Total eggs per bird was 300 with 95% organic feeding (2017) and 290 eggs per bird with 100% organic feeding.
- If 100 % organic diet is only based on regionally produced feedstuffs (soya from France), the price is 6% higher.

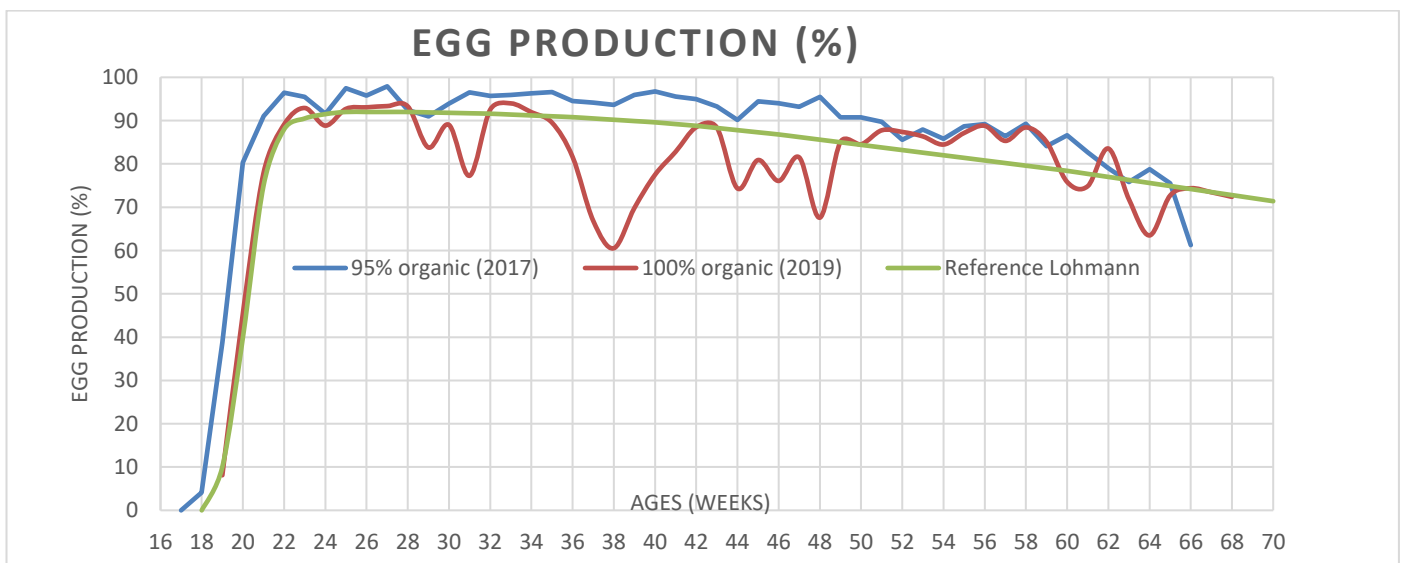


Figure 1: Egg production over time with 95 % and 100 % organic.

- With 100% organic feed, total farm costs per layer are below the national reference (ITAVI). This result must be put into context since the test farmer works strongly to manage all costs and already had a very good margin before testing 100% organic feeding.
- With the higher feed costs and reduced egg production, the farm sale price was increased to 48 cents per egg. Consumers have accepted the price increase so the farmer can continue feeding 100% organic feed to his layers.
- This trial demonstrates that changing to 100% organic feed is possible for a laying hen system. Here, a reduction in egg numbers was observed but this was partly due to adverse weather conditions. Overall, layer performance was similar to the national reference (mortality, feed conversion ratio, culling weight). In the context of the test farm, technical-economic results are better than the national reference for layers fed with 100% organic. Farmer decisions were a trade-off between organic ethics and egg sale price. It could be interesting to evaluate results from this trial in other systems. Breeders need guidelines for carrying out adaptations to comply with updated organic regulations. Finally, further study of the feasibility of 100% organic feed from regional production is required.

## Further information

### Video

- Check the video "[100% organic feedstuffs for laying hens](#)"

### Further reading

Crawley, K., Van Krimpe, M. (2015): ICOPP Technical note 1: Fulfilling 100% organic poultry diets: Concentrates (Organic Research Centre, UK and Wageningen University, NL). Available [here](#).

Roinsard, A., Bordeaux, C., Lubac, S., Juin, H., Bourin, M. (2015): Cahier d'alimentation des volailles biologiques (ITAB, IBB, INRAE, ITAVI, CA). Available [here](#).

### Weblinks

- Check the [Organic Farm Knowledge platform](#) for more practical recommendations.
- [AVIALIM Bio](#) : tools to guide 100% organic feeding transition.
- [SECALIBIO](#) : secure organic monogastric feeding systems.

## About this practice abstract and OK-Net EcoFeed

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**OK-Net EcoFeed:** This practice abstract was elaborated in the Organic Knowledge Network on Monogastric Animal Feed project. The project is running from January 2018 to December 2020. The overall aim of OK-Net EcoFeed is to help farmers, breeders and the organic feed processing industry in achieving the goal of 100% use of organic and regional feed for monogastrics.

**Project website:** [ok-net-ecofeed.eu](http://ok-net-ecofeed.eu)

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