

Silage feeding for laying hens

Problem

Feeding silage to organic laying hens is practised on a daily basis by many egg producers (see figure 1). Since hens can eat large amounts of silage, it is important to use high-quality silage.

Solution

Different types of silage can be used. However, e.g. grass, clover grass, alfalfa, hemp, horse beans, lupines and sunflower silage often have a higher protein content than e.g. barley/pea (see figure 2) or maize silage (whole plant or the cobs only). A chemical analysis of the harvested silage is important in order to estimate the quality.

Benefits

High-quality silage can provide nutrients for the hen and encourage natural foraging behaviour, thus reducing the risk for feather pecking. Growing protein-rich silage helps increase self-sufficiency and improve the crop rotation of the organic poultry farms.



Figure 1: Laying hens on a veranda feeding silage distributed by an automatic system (robot). Photo: Sanna Steinfeldt, AU

Applicability box

Theme

Layers, feeding and ration planning

Geographical coverage

Global

Application time

Feeding silage on a daily basis all year. The amount given depends on hen age and silage type.

Required time

Harvest time during spring, summer or autumn, depending on the silage type.

Period of impact

During the entire laying period.

Equipment

Silage chopper, automatic system (robot) to feed the silage 1-3 times per day in the barn.

Best in

Choice of silage will depend on the soil type and if the land is often dry or waterlogged. The silages should be harvested as whole crops.



Figure 2: Barley-pea silage for laying hens. Photo: Niels Finn Johansen, SEGES

Practical recommendation

- Choose the silage type(s) that provides the best yield and quality, depending on soil type and weather conditions.
- The silage has to be finely chopped.
- Silage generally has to be preserved under proper conditions to optimize the fermentation process.

- Analyse the protein content of the silage and other nutrients if possible.
- Avoid silage with anti-nutritional factors.
- Investing in an automatic feeding system (robot) is recommended for larger flocks to distribute the silage evenly and encourage the hens to eat it.
- Including the chemical content of the silage in the feed formulation could be an advantage, when feeding more than 20 g silage (wet weight) per hen per day.

Further information

Link

- [This video](#) provides further instructions on feeding silage to layers (in Danish).
- On the website of [Økologisk Landsforening 2019](#), there is an overview of the most important feed materials for self-supply of organic poultry with dry feed and silage. You can download and print listings of data on each crop and information on cultivation, crop rotation, harvesting, storage, nutrient content and nutritional considerations (in Danish).
- Check the Organic Farm Knowledge platform for more [practical recommendation on animal husbandry](#).

About this practice abstract and OK-Net EcoFeed

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