Sustainable Enhancement of Poultry Health and Egg Quality Using Silybum marianum Extracts: Evaluating Environmental and Economic Impacts

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Introduction

Milk thistle is a native plant of the Mediterranean region, which has been used as a medicine since ancient times. Its active ingredient, silymarin, has hepatoprotective properties. As good liver function is therefore a particular and important challenge for the health of hens in egg production farms, the use of milk thistle extract is expected to contribute to improving the health and well-being of hens, contributing to the quality of the eggs, whose formation and development depends completely from liver function.

Material and Methods

Expected environmental impacts

Using Milk Thistle (Silybum marianum) in egg production can positively impact the environment by reducing the need for synthetic chemicals in poultry farming. The natural hepatoprotective properties of silymarin improve liver health and overall well-being of poultry, which can lead to a reduced use of antibiotics and other pharmaceuticals that often contaminate waterways (Abenavoli et al., 2010). Moreover, healthier birds produce less waste and more efficiently convert feed, lowering the ecological footprint of farms (Polyak et al., 2013).

Economic impacts

Economic assessments suggest that using natural additives like Milk Thistle can reduce the reliance on synthetic chemicals in poultry farming, thereby lowering long-term feed costs and enhancing marketability of the eggs as premium, sustainably-produced products (Polyak et al., 2013).

Conclusions

Milk Thistle in poultry diets improves health and egg quality while protecting the environment. This practice supports hen liver function, which is essential for high-quality egg production, and supports sustainable agricultural goals by reducing chemical inputs and improving farm resilience by using silymarin's hepatoprotective properties. Farmers, consumers, and the environment will benefit from this holistic approach

References

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