



Põllumajanduskoda
Eesti Põllumajandus-Kaubanduskoda

PÕLLU- MAJANDUSES ON TULEVIK



PROJECT „SUSTAINABLE SILAGE“

**SILJA LEHTPUU
ESTONIAN CHAMBER OF AGRICULTURE AND COMMERCE**

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Interreg



Co-funded by
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Sustainable Silage

GENERAL INFORMATION

- *Project "Sustainable Silage" is focusing on reducing silage effluents in full silage production cycle in farm level*
- *Implementation period 01.01.2023 – 31.12.2025*
- *Partners:*
 - *The Estonian Chamber of Agriculture and Commerce (LP)*
 - *NGO Latvian Farmers Parliament*
 - *Centre of Estonian Rural Research and Knowledge*
 - *Estonian University of Life Sciences*
 - *ProAgria Western Finland*
 - *Natural Resources Institute Finland*
 - *Latvian University of Life Sciences and Technologies*



TARGET GROUPS AND PLANNED RESULTS

MAIN TARGET GROUPS

- **26 pilot farms**
 - 10 from Estonia
 - 10 from Latvia
 - 6 from West-Finland
- **Ca 200 farms from 3 countries** actively taking part in capacity building events (field days, practical seminars, exchange of experience visits). Already achieved 190!



PLANNED RESULTS

- **Ca 25 pilot farms** are involved to the project from 3 countries.
- **Pilot farms implement the farming practices and technologies for testing different new and innovative agri-environmental solutions and methods in silage production.** It is expected that ca 20 pilot farms can demonstrate real results in reducing nutrient runoffs from silage production cycle.



MAIN TOPICS

- *How to minimize the silage effluents production in storages*
- *How to minimize silage effluents leakage from storages / farm territory*
- *How to minimize nutrient leakages from grasslands / corn fields*
- *How to avoid rotten silage occurrence in storages / farm territory*
- *How to improve silage quality/nutrition value, so that less tons and hectars needed*
- *How to handle/clean silage plastics without nutrient leakages*
- *How to collect silage effluents efficiently, potential to use in fertilization*



PILOT PROGRAMME

- *Practical approach, action plan designed for each pilot farm*
- *Clear motivation of farmers*
- *Decisions are based on soil, silage, plant etc samples taken from demo fields/farms*
- *Some examples of pilot actions:*
 - *Grass silage effluent analyses- juice directly squeezed from silage (without rain water) and compared to silage analysis*
 - *Test with corn cutting high 25 vs 45 cm, analyzing difference in nutritional value*
 - *Grassland observations, manure fertilization trials*
 - *Analysing the potential of grass silage effluents and corn silage effluents for biogas production etc etc*



EXPERIMENT FOR EVALUATING DIFFERENT SILAGE MANAGEMENT FACTORS ON EFFLUENT PRODUCTION

- *Pilot scale ensiling experiment was conducted in summer 2023 by LUKE*
- *3 different raw materials, 3 different additives, 3 replicates = 27 silos*
- *Analyses of effluent production of silos with different dry matter, acid additives etc*



ACTIVITIES IN PROCESS

- *Field trial in Estonia for evaluating the possibilities to use the silage effluent as grassland fertilizer*
- *Analyses of pilot programme results, composing report*
- *Practical manual of available agri-environmental technologies in silage production, incl. recommendations about handling silage effluents and plastic*
- *Analysis of legislation regulating silage production and policy recommendations*
- *Practical seminars, field days, exchange of experience visits for farmers*



Thank you!

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