



Technical leaflet

# Slurry tank equipped with a drag hose unit on grasslands



## 1 Description of the innovation

With the aim to improve the management of the manure produced in their farms, some farmers tested different machines provided by machine dealers. Finally, a slurry tank equipped with a drag hose unit was selected as best option. This particular innovative equipment has been carefully selected based on the following factors:

- objective and need of farmers to reduce costs of production,
- getting most production of high quality grassland,
- volume of manure production on a farm,
- distance to grassland,
- environment restrictions,
- social issues related to bed smell and negative people reactions to this problem.



The main reason that induced farmers to choose this kind of equipment was that manure is not spread over the grass but goes directly into ground. In this solution slurry is pumped from a tank and is injected via drag hose directly on the soil surface. Innovative electronic solutions allows for all data to be recorded and saved. During application it can be distributed fully automatically and exactly according to the desired N

values. Phosphate and potassium levels are also recorded and all of this could be georeferenced if there is a GPS system.

Due to the high system efficiency, the production of grass has improved by about 20% after applying new technology. Unfortunately, the investment has very high costs, especially because the equipment is not fully used on the farm.

This disadvantage could be overcome by sharing costs and equipment among several farmers.



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Inno4Grass



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### 2 Results obtained with the adoption of innovation

Implementation of the innovation resulted in increased production of grass of better quality, increased effectiveness of slurry spreading because of less nitrogen losses and elimination of social issues regarding unpleasant odors.

Renata Matysiak, where the innovation is adopted, runs her family dairy farm together with her husband and two sons. Farm is purely specialized in production of milk. At the moment there are 240 milking cows with average milk yield of 10 500 litres per year. Farmer has decided to implement innovation based on slurry trailer equipped with drag hose. Equipment has been carefully selected based on a following factors: objective and need of farmers to reduce costs of production, getting most production of high quality grassland, volume of manure production on a farm, distance to grassland, environment restrictions, social issues related to odors and negative people reactions to this problem. Before particular equipment was selected farmers tested different machines provided by machine dealers. Finally, a slurry trailer equipped with a drag hose unit was selected as the best option.

The strategy of the farmer is based on a maximisation of milk production per cow achieved from production of maize silage and good quality grass.



#### Advantages

- higher grass yields
- low manure emissions
- improved control of odors



#### Disadvantages

- very high cost of investment especially when equipment is not fully used on one farm

#### More information

[www.encyclopediapratisensis.eu](http://www.encyclopediapratisensis.eu)— case study section/Renata Matysiak Farm

[www.agrofakt.pl/aplikatory-doglebowe-gnojowicy-warto/](http://www.agrofakt.pl/aplikatory-doglebowe-gnojowicy-warto/)

[www.bing.com/videos/search?](http://www.bing.com/videos/search?q=gr+matysiak+youtube&&view=detail&mid=5161BE17FA72A0AAFAB75161BE17FA72A0AFAB7&&FORM=VRDGAR)

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