

Drag hoses for slurry application



1 Description of the innovation



The farmer aimed to improve liquid manure application on grassland by drag hosing and thus to reduce soil pressure and optimize the timing of slurry application on wet grassland.

The technique contributes considerably to increase nutrient efficiency, as the slurry can be applied in optimal weather conditions and exactly at the best moment considering the nutrient demand of the plants. It is therefore also well suited to better fulfil the requirements of the amended fertilization ordinance. The technique takes into account that the soil is a valuable good that has to be protected the best possible way.



Environment quality

Grassland quality

Farmer's strategy: Increase nitrogen efficiency and minimize gaseous nitrogen losses

The first year of the implementation phase was very difficult as only experiences from Austria were available. The system had to be adopted from the small field sizes there, and the knowledge transfer for larger fields without slope inclination was not easy. In the beginning a cooperation with a machinery contractor had been envisaged, but as the contractor decided not to implement the new technique it was decided to buy the drag hosing system and to offer it as a contractor instead.

2 Farm description

ENVIRONMENT

Temperate oceanic climate

Average altitude: 2.5 meters a.s.l.

Soil-type: mainly marshland

GRASSLAND MANAGEMENT:

10 % of permanent grassland are exclusively grazed by some breeding mares.

90 % of the permanent grassland are exclusively mowed

STRUCTURE

Annual Work Units: 2 AWU

Agricultural Area : 500 ha

Arable land: 480 ha

Permanent grassland: 20 ha

ANIMAL PERFORMANCE

Change from dairy farming to biogas production

WHY IT IS WORKING

The technique could be established successfully as the farm manager had a high motivation for the implementation of the drag hosing technique. There are no other requirements and the technique could be used on any farm applying slurry.

The advantages of the technique come into effect especially clearly on sites, where slurry application is often limited by soil conditions, for example on wet and heavy soils.