

SLURRY SEPARATION AND DEWATERING BY PRESS SCREW SEPARATOR

Young farmer Gerben Gäting and his family manage a dairy farm with 130 ha grassland and 145 dairy cows including young stock in a coastal area in Northern Germany. During the last years they invested in a more efficient slurry management. A barn cleaner for the slatted floor improves hoof health and keeps the cow's udder and tail clean. To reduce the need for costly synthetic N fertiliser they started to separate and dewater the slurry. Twice a year, they contract a company to separate excess moisture from the slurry by a press screw separator. The liquid phase can be used as fertilizer with higher nitrogen efficiency and a reduced risk of forage contamination. The solid phase can be sold to a biogas plant for producing energy. Another opportunity is to spread the solid phase of the slurry as manure with a manure spreader on the 12-ha crop land for maize. This also improves the soil fertility by adding organic material to the soil.

The farm also invested in slurry techniques with a trailing shoe, which was to 40% subsidised by the government. The slurry is deposited in a thin strip beneath the shoots, which reduces gaseous losses and fosters a more efficient nitrogen uptake by the roots. In the future, they would like to invest in an own separation system with dewatering to be more independent. They also want to use the solid and dewatered phase of the manure as bedding material for cubicles in the cow barn. They believe that this might increase animal welfare and improve lying behaviour. However, the technology is expensive.

Farmer Interview

https://www.youtube.com/watch?v=uux7IELYhsE



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