

EIP-AGRI practice abstract

Short title:

Urine from pig manure by "VeDoWS" adapted stable constructions system

In a VeDoWS adapted stable construction there is less odour, ammonia and GHG emission in the stable. Also, due to the primary separation of pig manure in the stable, the farmer produces a good liquid fertilizer for free: pig urine. The VeDoWS pig urine contains most of the nitrogen and potassium, while the phosphorus is mainly found in the solid manure. The N/P ratio is high. Therefore the pig urine is suitable as a good fertilizer which application is not limited by the phosphorus content. It can be used in organic and conventional farming, open fields and greenhouses, in all crops. Due to the liquid composition, field application and dose is easy to set. As the nitrogen content is limited, not more than 50 tonnes/ha can be applied. Product features are: Organic carbon content (g/kg): 7.86 – 10.92 ; Total Nitrogen content (g/kg): 3.28 – 3.70 ; N-Kjehl content (g/kg): 3.32 ; C/N: 1.3 - 1.9 ; Phosphorus content (g/kg): 0.01 – 0.19 ; Other macro and micro elements (g/kg): K: 4.21 / Na: 2.15 / Ca: 0.42 / Mg: 0.42 Dry matter content: 0.6% – 2.7% pH: 8.70 – 9.26 EC (mS/cm): 24.2.

The solid manure is suitable as biomass feed for a digester because it is kept fresh due to a daily removal of the manure. Product features are: Organic carbon content (g/kg): 214 – 384; NKjehl content (g/kg): 11.97 – 16.8; C/N: 10.7 – 12.7 Phosphorus content (g/kg): 6.33 – 18.87; Other macro and micro elements (g/kg): K: 5.51 / Na: 2.06 / Ca: 8.23 / Mg: 3.54; Dry matter content (g/kg): 263 – 472.

The disposal cost for separated collection of manure and urine is also less expensive compared to non-separated manure.

In Belgium farmers are paid to come and collect pig urine on a pig farm with a VeDoWS stable construction.

For more information, <https://nutriman.net/farmer-platform/product/id 322>