

EIP-AGRI practice abstract

Short title:

Organic soil improver from calves manure by "Geamix" separation at source

Summary:

The soil improver is produced by separation at source of solid manure and urine. The calves stay on a steel slatted coated floor. The manure falls through the slatted floor on a perforated, urine permeable manure belt that lies under the grid floor. The urine falls completely through the perforated manure belt. The solid manure contains 40 % dry matter due to the direct way of separating. Almost no energy is needed to achieve this percentage (only electricity costs for running the manure belt).

For the further processing of the solid fraction, a device is being developed that adds quicklime to the manure and further dries the manure with stable air (on a belt dryer) and then crumbles it. This creates an exportable crumb with a high dry matter percentage. Dry matter: 818 g/kg; Organic matter: 535 g/kg; N: 13 g/kg; P2O5: 9,4 g/kg; K2O: 8,2 g/kg; C/N: 23.

This high-quality soil improver can be sold both regionally and internationally (because it is hygienic). The product can be applied before sowing or planting of the crops with the same machines which are now being used for spreading solid manure. The fertilizer can be used at the cost of approximately €30/ton ex works. The product can be pelletized for easier handling and spreading (optional).

For more information: https://nutriman.net/farmer-platform/product/id_593