

Acidification of digestate with sulfuric acid: interests for researchers and farmers

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Acidification is widely used only in Denmark for several years and the regulatory incentives have helped to implement this technology. VERA test in Denmark is in reality not used by other countries in their assessment of the technology. For digestate acidification or acid use, the following Danish, French and German regulations are established: Agriculture and Market control, Environment, French Standards, European regulation for animal by products and European regulation for diseases control (bovine tuberculosis and paratuberculosis, influenza). There is an interest in digestates acidification by using H₂SO₄ to reduce NH₃ losses and explore: i) impact on microbiological parameters at pH 5.0 with or without additives in digestates; ii) impact on sulfur, pH and others physico-chemical parameters in the soils. This works are an issue from the INEMAD project. This project has received funding from the European Union's Seventh Framework Programme (FP7/2007-2013) under grant agreement n° 289712 (www.inemad.eu). The INEMAD project has a distinct focus on management strategies to improve the use of nutrients from manure and digestate in European agriculture. This research aims at reviewing the current acidification in selected areas in order to propose its improvement in the exchange and local use of digestate as an organic fertilizer. High livestock density is found in the Flemish region of Belgium, the Netherlands and the parts of France and Italy. Each year 2-5 million tons of organic fertilizers or raw materials are exported from Belgium and the Netherlands to France or Germany, and a further increase is expected.