



Defence of PhD Thesis by MSc Olga Popovic

Time and Place: Thursday 1st of March 2012 at 14:00 in Lecture Hall
A1-01.15 (1-15), Bülowsvej 17, 1st floor, Frederiksberg

Subject Area: Plant Nutrition and Soil Fertility – Agricultural waste management

**Title of PhD Thesis:
/ Title of Lecture** **Pig slurry separation and storage – Effects on P, Cu and Zn
distribution between separation fractions and particle size classes**

Summary: Pig slurry separation into solid and liquid fractions is a relatively simple and environmentally friendly treatment technique. In areas with intensive livestock production, animal slurry is one of the major sources of P and some trace metals (Cu and Zn), to soils and waters. Slurry separation can be performed as simple mechanical separation or can include chemical pretreatment. Slurry (or separation fractions) can only be applied to arable land in certain periods of the year, therefore storage prior to land application is necessary. This PhD investigated the effects of different separation methods and storage time and temperature on P, Cu, and Zn distribution between separation fractions and particle size classes. The results from this thesis indicate how slurry separation and storage may contribute to the improvement of slurry management thus minimizing the environmental problems related to slurry application to arable land. Results showed that separation methods and long-term storage at different temperatures can be viewed as a powerful tool for lowering loads of P, Cu, and Zn to arable land.

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Yours sincerely
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