Nutrient Transport from Land Application Areas

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Current Cooperators and Coauthors

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Research Goal

Identify cropping and management practices that incorporate the use of manure as a valuable nutrient source and soil amendment without causing adverse environmental impacts.

Factors Affecting Nutrient Transport in Runoff

Manure Application Rate

Incorporation

Time Since Manure Application

Residual Soil Nutrient Content

Conservation Practices

Remediation Efforts

Other Factors Affecting Nutrient Transport

- Multi-year Application of Manure
- Manure from Ethanol By-products
- Wheat Strip Effects on Nutrient Transport

HOW is this work being done?

National Phosphorus Research Project

- USDA – Agriculture Research Service
- USDA – Natural Resources Conservation Service
- USDA – Cooperative Extension Service
- US – Environmental Protection Agency
- University Cooperators


RAIDERS


FURMAN

Long Term Goal

Develop procedures for predicting nutrient transport at field and watershed scales. Use this information to develop comprehensive nutrient management planning materials.

Future Activities

- Continue collaborative work with Lisa Durso on microbial transport in runoff
- Expand field studies to include “emerging” contaminants such as steroid hormones and antibiotics from beef cattle and swine production facilities and land application areas